

DigitalMedia PUF 2.61.00 Release Notes

Included Firmware – DM midpoints and switches

Device name	Device model number	Firmware included
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.102.291100063
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.133
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.102.291100063
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.133
DigitalMedia™ switcher main firmware	DM-MD6x1	4.102.245600045
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.77
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	2.002.0026
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.114
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.1498.00021
DigitalMedia™ switcher main firmware	DM-MD6x6 & DM-MD6x4	4.102.291100011
DigitalMedia™ switcher operational config	DM-MD6x6 & DM-MD6x4	1.0.77
DigitalMedia™ switcher front panel application	DM-MD6x6 & DM-MD6x4	1.0.72
DigitalMedia™ switcher front panel firmware	DM-MD6x6 & DM-MD6x4	1.1498.00021

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 4K 8G+ room controller	DM-RMC-4K-100-C	1.2911.00046	329
DigitalMedia™ 8G+ room controller	DM-RMC-100-C	1.2911.00046	329
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.1498.00021	268
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.1498.00021	268
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.2456.00045	268
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-150-S	1.2456.00045	268
DigitalMedia™ advanced 8G fiber RMC FPGA	DM-RMC-150-S	4	
DigitalMedia™ advanced 8G+ room controller	DM-RMC-200/SCALER-C	1.2911.00046	329
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-200/SCALER-S	1.2625.00028	268
DigitalMedia™ advanced 4K 8G+ room controller	DM-RMC-4K-SCALER-C	1.2911.00057	329
DigitalMedia™ advanced 4K 8G+ room controller DSP	DM-RMC-4K-SCALER-C	5.5	
DigitalMedia™ advanced 4K 8G+ room controller core	DM-RMC-4K-SCALER-C	3.30.1.169	
DigitalMedia™ 4K 8G+ single gang room controller	DM-RMC-4K-100-C-1G	1.3209.00023	343
DigitalMedia™ single gang room controller	DM-RX1-1G	1.1498.00021	69
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.1498.00021	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.2456.00045	268
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.2456.00045	268
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.2625.00028	105
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G+ 2G TX	DM-TX-200-C-2G	1.2911.00047	329
DigitalMedia™ HDMI + RGB 8G+ 2G TX FPGA	DM-TX-200-C-2G	19	
DigitalMedia™ HDMI + RGB 8G+ transmitter	DM-TX-201-C	1.2911.00046	329
DigitalMedia™ HDMI + RGB 8G+ TX FPGA	DM-TX-201-C	48	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.2911.00027	322
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	64	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.2625.00013	268
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.2456.00045	268
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.2625.00028	268
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-C	1.2911.00046	329
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-S	1.2911.00027	322
DigitalMedia™ 4K dual HDMI + RGB 8G+ transmitter	DM-TX-4K-302-C	1.2911.00067	350
DigitalMedia™ 4K HDMI + RGB 8G+ transmitter	DM-TX-4K-202-C	1.2911.00067	350
DigitalMedia™ 4K 8G+ single gang transmitter	DM-TX-4K-100-C-1G	1.3209.00023	343
DigitalMedia™ repeater, DM-CAT	DM-DR	1.1498.00021	69

* Denotes new or updated firmware compared to PUF 2.60 (see revision history for details)

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 4K HDMI input card	DMC-4K-HD & DMC-4K-HD-DSP	1.2911.00057	329
DigitalMedia™ 4K HDMI input card DSP code	DMC-4K-HD-DSP	5.5.0	
DigitalMedia™ 4K HDMI output card	DMC-4K-HDO	1.2911.00054	329
DigitalMedia™ 4K HDMI output card core	DMC-4K-HDO	1.114.1.188	
DigitalMedia™ 4K 8G+ output card	DMC-4K-CO-HD	1.2911.00054	329
DigitalMedia™ 4K 8G+ input card	DMC-4K-C & DMC-4K-C-DSP	1.2911.00057	329
DigitalMedia™ 8G+ input card	DMC-C and DMC-C-DSP	1.2911.00057	329
DigitalMedia™ 8G+ input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G+ input card DSP code	DMC-C-DSP	3.4.5	
DigitalMedia™ 8G+ output card	DMC-CO-HD	1.2625.00031	268
DigitalMedia™ 8G+ output card FPGA	DMC-CO-HD	40	
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.2456.00031	69
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	3.4.5	
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.1498.00021	69
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.2625.00013	268
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.2456.00045	69
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	3.4.5	
DigitalMedia™ fiber output card	DMC-FO	1.1498.00021	69
DigitalMedia™ HDMI input card	DMC-HD & DMC-HD-DSP	1.2911.00057	329
DigitalMedia™ HDMI input card FPGA	DMC-HD & DMC-HD-DSP	56	
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	3.4.5	
DigitalMedia™ HDMI output card	DMC-HDO	1.2761.00017	78
DigitalMedia™ 8G fiber input card	DMC-S/S2 & DMC-S/S2-DSP	1.2911.00057	329
DigitalMedia™ 8G fiber input card FPGA	DMC-S/S2 & DMC-S/S2-DSP	3	
DigitalMedia™ 8G fiber input card DSP code	DMC-S/S2-DSP	3.4.5	
DigitalMedia™ SDI input card	DMC-SDI	1.2911.00003	322
DigitalMedia™ SDI input card FPGA	DMC-SDI	40	
DigitalMedia™ 8G fiber output card	DMC-SO/S2O-HD	1.2911.00020	322
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO/S2O-HD	14	
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO/S2O-HD	15	
DigitalMedia™ Streaming input card	DMC-STR	1.2911.00043*	329*
DigitalMedia™ Streaming input codec OS	DMC-STR	1.0002.00026*	
DigitalMedia™ Streaming output card	DMC-STRO	1.2911.00043*	329*
DigitalMedia™ Streaming output card codec	DMC-STRO	1.001.0000*	
DigitalMedia™ Streaming output card scaler	DMC-STRO	3	
DigitalMedia™ analog video input card	DMC-VGA	1.2911.00017	322
DigitalMedia™ analog video input card FPGA	DMC-VGA	11	
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.1592.00036	69
DigitalMedia™ security camera input card	DMC-VID4	1.1498.00021	69

Software Tool Compatibility

The following SW Tool versions (or higher) are recommended:

Device Database	83.00.001.00
Crestron Database	62.00.002.00
SIMPL Windows	4.07.03.00
Crestron Toolbox	2.43.434.00

* Denotes new or updated firmware compared to PUF 2.60 (see revision history for details)

DigitalMedia PUF 2.61.00 is a bug fix/maintenance release primarily targeted at DMC-STR and DMC-STRO cards.

Important Upgrade and Downgrade Notes

Please be aware of the following before upgrading to this PUF:

- 1) Special steps must be taken to downgrade DM-MD32x32 CPU cards from DM PUF 2.50 or later to PUF 2.48 or prior. Please see Crestron OLH ID 1285 for details. Other DM products are unaffected.
- 2) Several DM cards have large firmware files and can take longer to update than previous DM products:
DMC-STR: Up to 30 minutes per group of 4 cards.
DMC-STRO: Up to 17 minutes per group of 4 cards.
- 3) To minimize upgrade time, it is recommended to stop active DMC-STR/STRO streams prior to performing a PUF upgrade and ensure the PC is on the same network as the streaming cards.

Recommended Streaming Settings

When pairing the DMC-STR with the DMC-STRO, it is recommended to stream via RTP with initiation by receiver. Previous bandwidth and format restrictions have been removed.

With the release of PUF 2.51, the default ports used by the DMC-STRO have changed. Port numbers used in existing installations will not change on firmware upgrade, but they will change on card or system restore. Also, new port numbers applied to systems upgrading from pre-PUF 2.51 code will not be applied until after card restore. Please see OLH 5552 for details.

If the DMC-STR is unable to connect to a third-party encoder (e.g., an IP Camera), re-attempt to connect by adding “?rtsp_tcp=yes” at the end of the URL (without quotations).

New Features

- Crestron Toolbox™ v2.43.434.00 now supports SFTP upgrades via PUF Tool for the DMC-STR codec which will allow faster upgrade speeds.

Issues Fixed

- Improved streaming stability of the DMC-STR and DMC-STRO.
- Improved DMC-STR and DMC-STRO MPEG-2 TS compatibility and performance.
- Improved stability issues with DMC-STRO and DMC-STR Multicast via UDP streams.
- Streaming unsupported audio formats (e.g., G.711) can cause the DMC-STR to lock up.
- Network problems can sometimes cause the DMC-STR to stop decoding a stream.
- Improved compatibility with IC Realtime ICIP-B2000 Camera.
- Fixed Audio/Video sync issues in By Transmitter mode.

Open Issues

- The DMC-STR may report a resolution of 0x0@0 when streaming from certain third-party IP cameras.
- Apple keyboard does not connect reliably to RMCs.
- All TXs (except TX-401-XX): HDMI audio unreliable with 480i video. All other resolutions are ok.
- On streaming cards, support for elapsed seconds, bitrate and initiator feedbacks have been removed to work around Toolbox stability issues.

DigitalMedia PUF 2.60.00 Release Notes

Included Firmware – DM midpoints and switches

Device name	Device model number	Firmware included
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.102.291100063*
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.133*
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.102.291100063*
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.133*
DigitalMedia™ switcher main firmware	DM-MD6x1	4.102.245600045
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.77
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	2.002.0026
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.114
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.1498.00021
DigitalMedia™ switcher main firmware	DM-MD6x6 & DM-MD6x4	4.102.291100011
DigitalMedia™ switcher operational config	DM-MD6x6 & DM-MD6x4	1.0.77
DigitalMedia™ switcher front panel application	DM-MD6x6 & DM-MD6x4	1.0.72
DigitalMedia™ switcher front panel firmware	DM-MD6x6 & DM-MD6x4	1.1498.00021

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 4K 8G+ room controller	DM-RMC-4K-100-C	1.2911.00046*	329*
DigitalMedia™ 8G+ room controller	DM-RMC-100-C	1.2911.00046*	329*
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.1498.00021	268
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.1498.00021	268
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.2456.00045	268
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-150-S	1.2456.00045	268
DigitalMedia™ advanced 8G fiber RMC FPGA	DM-RMC-150-S	4	
DigitalMedia™ advanced 8G+ room controller	DM-RMC-200/SCALER-C	1.2911.00046*	329*
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-200/SCALER-S	1.2625.00028	268
DigitalMedia™ advanced 4K 8G+ room controller	DM-RMC-4K-SCALER-C	1.2911.00057*	329*
DigitalMedia™ advanced 4K 8G+ room controller DSP	DM-RMC-4K-SCALER-C	5.5	
DigitalMedia™ advanced 4K 8G+ room controller core	DM-RMC-4K-SCALER-C	3.30.1.169	
DigitalMedia™ 4K 8G+ single gang room controller	DM-RMC-4K-100-C-1G	1.3209.00023*	343*
DigitalMedia™ single gang room controller	DM-RX1-1G	1.1498.00021	69
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.1498.00021	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.2456.00045	268
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.2456.00045	268
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.2625.00028	105
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G+ 2G TX	DM-TX-200-C-2G	1.2911.00047	329
DigitalMedia™ HDMI + RGB 8G+ 2G TX FPGA	DM-TX-200-C-2G	19	
DigitalMedia™ HDMI + RGB 8G+ transmitter	DM-TX-201-C	1.2911.00046*	329*
DigitalMedia™ HDMI + RGB 8G+ TX FPGA	DM-TX-201-C	48	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.2911.00027	322
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	64	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.2625.00013	268
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.2456.00045	268
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.2625.00028	268
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-C	1.2911.00046*	329*
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-S	1.2911.00027	322
DigitalMedia™ 4K dual HDMI + RGB 8G+ transmitter	DM-TX-4K-302-C	1.2911.00067*	350*
DigitalMedia™ 4K HDMI + RGB 8G+ transmitter	DM-TX-4K-202-C	1.2911.00067*	350*
DigitalMedia™ 4K 8G+ single gang transmitter	DM-TX-4K-100-C-1G	1.3209.00023*	343*
DigitalMedia™ repeater, DM-CAT	DM-DR	1.1498.00021	69

* Denotes new or updated firmware compared to PUF 2.59 (see revision history for details)

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 4K HDMI input card	DMC-4K-HD & DMC-4K-HD-DSP	1.2911.00057*	329*
DigitalMedia™ 4K HDMI input card DSP code	DMC-4K-HD-DSP	5.5.0	
DigitalMedia™ 4K HDMI output card	DMC-4K-HDO	1.2911.00054*	329*
DigitalMedia™ 4K HDMI output card core	DMC-4K-HDO	1.114.1.188	
DigitalMedia™ 4K 8G+ output card	DMC-4K-CO-HD	1.2911.00054*	329*
DigitalMedia™ 4K 8G+ input card	DMC-4K-C & DMC-4K-C-DSP	1.2911.00057*	329*
DigitalMedia™ 8G+ input card	DMC-C and DMC-C-DSP	1.2911.00057*	329*
DigitalMedia™ 8G+ input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G+ input card DSP code	DMC-C-DSP	3.4.5	
DigitalMedia™ 8G+ output card	DMC-CO-HD	1.2625.00031	268
DigitalMedia™ 8G+ output card FPGA	DMC-CO-HD	40	
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.2456.00031	69
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	3.4.5	
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.1498.00021	69
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.2625.00013	268
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.2456.00045	69
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	3.4.5	
DigitalMedia™ fiber output card	DMC-FO	1.1498.00021	69
DigitalMedia™ HDMI input card	DMC-HD & DMC-HD-DSP	1.2911.00057*	329*
DigitalMedia™ HDMI input card FPGA	DMC-HD & DMC-HD-DSP	56	
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	3.4.5	
DigitalMedia™ HDMI output card	DMC-HDO	1.2761.00017	78
DigitalMedia™ 8G fiber input card	DMC-S/S2 & DMC-S/S2-DSP	1.2911.00057*	329*
DigitalMedia™ 8G fiber input card FPGA	DMC-S/S2 & DMC-S/S2-DSP	3	
DigitalMedia™ 8G fiber input card DSP code	DMC-S/S2-DSP	3.4.5	
DigitalMedia™ SDI input card	DMC-SDI	1.2911.00003	322
DigitalMedia™ SDI input card FPGA	DMC-SDI	40	
DigitalMedia™ 8G fiber output card	DMC-SO/S2O-HD	1.2911.00020	322
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO/S2O-HD	14	
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO/S2O-HD	15	
DigitalMedia™ Streaming input card	DMC-STR	1.2625.00021	268
DigitalMedia™ Streaming input codec OS	DMC-STR	1.0000.00102	
DigitalMedia™ Streaming output card	DMC-STRO	1.2625.00022	268
DigitalMedia™ Streaming output card codec	DMC-STRO	1.000.0075	
DigitalMedia™ Streaming output card scaler	DMC-STRO	3	
DigitalMedia™ analog video input card	DMC-VGA	1.2911.00017	322
DigitalMedia™ analog video input card FPGA	DMC-VGA	11	
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.1592.00036	69
DigitalMedia™ security camera input card	DMC-VID4	1.1498.00021	69

Software Tool Compatibility

The following SW Tool versions (or higher) are recommended:

Device Database	83.00.001.00
Crestron Database	62.00.002.00
SIMPL Windows	4.07.03.00
Crestron Toolbox	2.43.335.00

* Denotes new or updated firmware compared to PUF 2.59 (see revision history for details)

DigitalMedia PUF 2.60.00 includes several new feature and bug fixes.

Important Upgrade and Downgrade Notes

Please be aware of the following before upgrading to this PUF:

- 4) Special steps must be taken to downgrade DM-MD32x32 CPU cards from DM PUF 2.50 or later to PUF 2.48 or prior. Please see Crestron OLH ID 1285 for details. Other DM products are unaffected.
- 5) Several newer DM cards have large firmware files and can take longer to update than previous DM products:
 - DMC-STR: Up to 30 minutes per group of 4 cards.
 - DMC-STRO: Up to 17 minutes per group of 4 cards.
- 6) To minimize upgrade time, it is recommended to stop active DMC-STR/STRO streams prior to performing a PUF upgrade.

Recommended Streaming Settings

When pairing the DMC-STR with the DMC-STRO, it is recommended to stream via RTP with initiation by receiver. Previous bandwidth and format restrictions have been removed. Use of TS encapsulation at the DMC-STRO is not recommended due to compatibility issues with many streaming decoders on the market.

With the release of PUF 2.51, the default ports used by the DMC-STRO have changed. Port numbers used in existing installations will not change on firmware upgrade, but they will change on card or system restore. Also, new port numbers applied to systems upgrading from pre-PUF 2.51 code will not be applied until after card restore. Please see OLH 5552 for details.

If the DMC-STR is unable to connect to a third-party encoder (e.g., an IP Camera), re-attempt to connect by adding “?rtsp_tcp=yes” at the end of the URL (without quotations).

New Features

- DigitalMedia™ 4K outputs now support ability to pass audio from an HDCP2 source to an HDCP1.4 AVR. Video will be blanked in accordance with the HDCP specification.
- DM-RMC-4K-SCALER-C/-DSP now outputs green flat frame video when under powered via PoDM.

Issues Fixed

- Fixed issue where HDCP failure could occur on DMC-4K-CO-HD or DM-RMC-4K-SCALER-C/-DSP.
- DMC-4K-HD/-DSP detects incorrect video resolution from specific Tandberg camera.
- Fixed issue where DM-TX-4K-100-C-1G doesn't pass video from certain Windows laptops.
- Fixed issue where DMC-4K-HD/-DSP will not pass video to HP-LA2206 monitor.
- Fixed issue where DM-TX-4K-302/202-C VGA input was passing incorrect RGB quantization.
- Audio controls are no longer grayed out in DM Tool for various DigitalMedia™ DSP input cards.
- Down mixed audio delay now works via **<Delay>** join in SIMPL Windows program for DigitalMedia™ DSP input cards.
- DM Tool EDID templates now include several improvements. Crestron Toolbox version 2.43.335 or higher required.

Open Issues

- The DMC-STR may report a resolution of 0x0@0 when streaming from certain third-party IP cameras.
- Apple keyboard does not connect reliably to RMCs.
- All TXs (except TX-401-XX): HDMI audio unreliable with 480i video. All other resolutions are ok.
- On streaming cards, support for elapsed seconds, bitrate and initiator feedbacks have been removed to work around Toolbox stability issues.
- Streaming unsupported audio formats (e.g., G.711) can cause the DMC-STR to lock up. Use AAC audio.
- Network problems can sometimes cause the DMC-STR to stop decoding a stream. Stop and restart the stream to recover.

** Denotes new or updated firmware compared to PUF 2.59 (see revision history for details)*

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DigitalMedia™ switcher main firmware	DM-MD6x1	4.102.245600045
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Included Firmware – DM endpoints

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DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.1498.00021	268
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DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.2456.00045	268
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-150-S	1.2456.00045	268
DigitalMedia™ advanced 8G fiber RMC FPGA	DM-RMC-150-S	4	
DigitalMedia™ advanced 8G+ room controller	DM-RMC-200/SCALER-C	1.2911.00027	322
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-200/SCALER-S	1.2625.00028	268
DigitalMedia™ advanced 4K 8G+ room controller	DM-RMC-4K-SCALER-C	1.2911.00013	322
DigitalMedia™ advanced 4K 8G+ room controller DSP	DM-RMC-4K-SCALER-C	5.5	
DigitalMedia™ advanced 4K 8G+ room controller core	DM-RMC-4K-SCALER-C	3.30.1.169	
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.1498.00021	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.2456.00045	268
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.2456.00045	268
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.2625.00028	105
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G+ 2G TX	DM-TX-200-C-2G	1.2911.00047*	329*
DigitalMedia™ HDMI + RGB 8G+ 2G TX FPGA	DM-TX-200-C-2G	19*	
DigitalMedia™ HDMI + RGB 8G+ transmitter	DM-TX-201-C	1.2911.00027	322
DigitalMedia™ HDMI + RGB 8G+ TX FPGA	DM-TX-201-C	48	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.2911.00027	322
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	64	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.2625.00013	268
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.2456.00045	268
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.2625.00028	268
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-C	1.2911.00027	322
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-S	1.2911.00027	322
DigitalMedia™ 4K dual HDMI + RGB 8G+ transmitter	DM-TX-4K-302-C	1.2911.00027	322
DigitalMedia™ 4K HDMI + RGB 8G+ transmitter	DM-TX-4K-202-C	1.2911.00027	322
DigitalMedia™ repeater, DM-CAT	DM-DR	1.1498.00021	69

* Denotes new or updated firmware compared to PUF 2.58.01 (see revision history for details)

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 4K HDMI input card	DMC-4K-HD & DMC-4K-HD-DSP	1.2911.00036*	329*
DigitalMedia™ 4K HDMI input card DSP code	DMC-4K-HD-DSP	5.5.0	
DigitalMedia™ 4K HDMI output card	DMC-4K-HDO	1.2911.00020	322
DigitalMedia™ 4K HDMI output card core	DMC-4K-HDO	1.114.1.188	
DigitalMedia™ 4K 8G+ output card	DMC-4K-CO-HD	1.2911.00024	322
DigitalMedia™ 4K 8G+ input card	DMC-4K-C & DMC-4K-C-DSP	1.2911.00036*	329*
DigitalMedia™ 8G+ input card	DMC-C and DMC-C-DSP	1.2911.00020	322
DigitalMedia™ 8G+ input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G+ input card DSP code	DMC-C-DSP	3.4.5	
DigitalMedia™ 8G+ output card	DMC-CO-HD	1.2625.00031	268
DigitalMedia™ 8G+ output card FPGA	DMC-CO-HD	40	
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.2456.00031	69
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	3.4.5	
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.1498.00021	69
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.2625.00013	268
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.2456.00045	69
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	3.4.5	
DigitalMedia™ fiber output card	DMC-FO	1.1498.00021	69
DigitalMedia™ HDMI input card	DMC-HD & DMC-HD-DSP	1.2911.00017	322
DigitalMedia™ HDMI input card FPGA	DMC-HD & DMC-HD-DSP	56	
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	3.4.5	
DigitalMedia™ HDMI output card	DMC-HDO	1.2761.00017	78
DigitalMedia™ 8G fiber input card	DMC-S/S2 & DMC-S/S2-DSP	1.2911.00017	322
DigitalMedia™ 8G fiber input card FPGA	DMC-S/S2 & DMC-S/S2-DSP	3	
DigitalMedia™ 8G fiber input card DSP code	DMC-S/S2-DSP	3.4.5	
DigitalMedia™ SDI input card	DMC-SDI	1.2911.00003	322
DigitalMedia™ SDI input card FPGA	DMC-SDI	40	
DigitalMedia™ 8G fiber output card	DMC-SO/S2O-HD	1.2911.00020	322
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO/S2O-HD	14	
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO/S2O-HD	15	
DigitalMedia™ Streaming input card	DMC-STR	1.2625.00021	268
DigitalMedia™ Streaming input codec OS	DMC-STR	1.0000.00102	
DigitalMedia™ Streaming output card	DMC-STRO	1.2625.00022	268
DigitalMedia™ Streaming output card codec	DMC-STRO	1.000.0075	
DigitalMedia™ Streaming output card scaler	DMC-STRO	3	
DigitalMedia™ analog video input card	DMC-VGA	1.2911.00017	322
DigitalMedia™ analog video input card FPGA	DMC-VGA	11	
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.1592.00036	69
DigitalMedia™ security camera input card	DMC-VID4	1.1498.00021	69

Software Tool Compatibility

The following SW Tool versions (or higher) are recommended:

Device Database	75.07.002.00
Crestron Database	56.05.001.00
SIMPL Windows	4.03.20.00
Crestron Toolbox	2.41.513.00

* Denotes new or updated firmware compared to PUF 2.58.01 (see revision history for details)

DigitalMedia PUF 2.59.00 is a tightly targeted bug fix release.

Important Upgrade and Downgrade Notes

Please be aware of the following before upgrading to this PUF:

- 1) Special steps must be taken to downgrade DM-MD32x32 CPU cards from DM PUF 2.50 or later to PUF 2.48 or prior. Please see Crestron OLH ID 1285 for details. Other DM products are unaffected.
- 2) Several newer DM cards have large firmware files and can take longer to update than previous DM products:
 - DMC-STR: Up to 30 minutes per group of 4 cards.
 - DMC-STRO: Up to 17 minutes per group of 4 cards.
- 3) To minimize upgrade time, it is recommended to stop active DMC-STR/STRO streams prior to performing a PUF upgrade.

Recommended Streaming Settings

When pairing the DMC-STR with the DMC-STRO, it is recommended to stream via RTP with initiation by receiver. Previous bandwidth and format restrictions have been removed. Use of TS encapsulation at the DMC-STRO is not recommended due to compatibility issues with many streaming decoders on the market.

With the release of PUF 2.51, the default ports used by the DMC-STRO have changed. Port numbers used in existing installations will not change on firmware upgrade, but they will change on card or system restore. Also, new port numbers applied to systems upgrading from pre-PUF 2.51 code will not be applied until after card restore. Please see OLH 5552 for details.

If the DMC-STR is unable to connect to a third-party encoder (e.g., an IP Camera), re-attempt to connect by adding “?rtsp_tcp=yes” at the end of the URL (without quotations).

New Features

No new features are included in this PUF release.

Issues Fixed

- Fixed issue where DMC-4K-C/-DSP and DMC-4K-HD/-DSP sporadically will not pass video.
- Fixed DM-TX-200-C-2G VGA video stability issues.
- Fixed issue where connecting DMTool may reboot DM-TX-200-C-2G.

Open Issues

- The DMC-STR may report a resolution of 0x0@0 when streaming from certain third-party IP cameras.
- Apple keyboard does not connect reliably to RMCs.
- All TXs (except TX-401-XX): HDMI audio unreliable with 480i video. All other resolutions are ok.
- On streaming cards, support for elapsed seconds, bitrate and initiator feedbacks have been removed to work around Toolbox stability issues.
- Streaming unsupported audio formats (e.g., G.711) can cause the DMC-STR to lock up. Use AAC audio.
- Network problems can sometimes cause the DMC-STR to stop decoding a stream. Stop and restart the stream to recover.

* Denotes new or updated firmware compared to PUF 2.58.01 (see revision history for details)

DigitalMedia PUF 2.58.01 Release Notes

Included Firmware – DM midpoints and switches

Device name	Device model number	Firmware included
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.102.291100011
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.131
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.102.291100011
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.131
DigitalMedia™ switcher main firmware	DM-MD6x1	4.102.245600045
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.77
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	2.002.0026
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.114
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.1498.00021
DigitalMedia™ switcher main firmware	DM-MD6x6 & DM-MD6x4	4.102.291100011
DigitalMedia™ switcher operational config	DM-MD6x6 & DM-MD6x4	1.0.77
DigitalMedia™ switcher front panel application	DM-MD6x6 & DM-MD6x4	1.0.72
DigitalMedia™ switcher front panel firmware	DM-MD6x6 & DM-MD6x4	1.1498.00021

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 4K 8G+ room controller	DM-RMC-4K-100-C	1.2625.00021*	268*
DigitalMedia™ 8G+ room controller	DM-RMC-100-C	1.2625.00021*	268*
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.1498.00021	268
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.1498.00021	268
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.2456.00045	268
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-150-S	1.2456.00045	268
DigitalMedia™ advanced 8G fiber RMC FPGA	DM-RMC-150-S	4	
DigitalMedia™ advanced 8G+ room controller	DM-RMC-200/SCALER-C	1.2911.00027	322
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-200/SCALER-S	1.2625.00028*	268*
DigitalMedia™ advanced 4K 8G+ room controller	DM-RMC-4K-SCALER-C	1.2911.00013*	322*
DigitalMedia™ advanced 4K 8G+ room controller DSP	DM-RMC-4K-SCALER-C	5.5	
DigitalMedia™ advanced 4K 8G+ room controller core	DM-RMC-4K-SCALER-C	3.30.1.169	
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.1498.00021	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.2456.00045	268
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.2456.00045	268
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.2625.00028	105
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G+ 2G TX	DM-TX-200-C-2G	1.2911.00027	322
DigitalMedia™ HDMI + RGB 8G+ 2G TX FPGA	DM-TX-200-C-2G	14	
DigitalMedia™ HDMI + RGB 8G+ transmitter	DM-TX-201-C	1.2911.00027	322
DigitalMedia™ HDMI + RGB 8G+ TX FPGA	DM-TX-201-C	48	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.2911.00027	322
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	64	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.2625.00013	268
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.2456.00045	268
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.2625.00028	268
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-C	1.2911.00027	322
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-S	1.2911.00027	322
DigitalMedia™ 4K dual HDMI + RGB 8G+ transmitter	DM-TX-4K-302-C	1.2911.00027	322
DigitalMedia™ 4K HDMI + RGB 8G+ transmitter	DM-TX-4K-202-C	1.2911.00027	322
DigitalMedia™ repeater, DM-CAT	DM-DR	1.1498.00021	69

* Denotes new or updated firmware compared to PUF 2.56 (see revision history for details)

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 4K HDMI input card	DMC-4K-HD & DMC-4K-HD-DSP	1.2911.00027	322
DigitalMedia™ 4K HDMI input card DSP code	DMC-4K-HD-DSP	5.5.0	
DigitalMedia™ 4K HDMI output card	DMC-4K-HDO	1.2911.00020	322
DigitalMedia™ 4K HDMI output card core	DMC-4K-HDO	1.114.1.188	
DigitalMedia™ 4K 8G+ output card	DMC-4K-CO-HD	1.2911.00024	322
DigitalMedia™ 4K 8G+ input card	DMC-4K-C & DMC-4K-C-DSP	1.2911.00027	322
DigitalMedia™ 8G+ input card	DMC-C and DMC-C-DSP	1.2911.00020	322
DigitalMedia™ 8G+ input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G+ input card DSP code	DMC-C-DSP	3.4.5	
DigitalMedia™ 8G+ output card	DMC-CO-HD	1.2625.00031	268
DigitalMedia™ 8G+ output card FPGA	DMC-CO-HD	40	
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.2456.00031	69
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	3.4.5	
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.1498.00021	69
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.2625.00013	268
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.2456.00045	69
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	3.4.5	
DigitalMedia™ fiber output card	DMC-FO	1.1498.00021	69
DigitalMedia™ HDMI input card	DMC-HD & DMC-HD-DSP	1.2911.00017	322
DigitalMedia™ HDMI input card FPGA	DMC-HD & DMC-HD-DSP	56	
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	3.4.5	
DigitalMedia™ HDMI output card	DMC-HDO	1.2761.00017	78
DigitalMedia™ 8G fiber input card	DMC-S/S2 & DMC-S/S2-DSP	1.2911.00017	322
DigitalMedia™ 8G fiber input card FPGA	DMC-S/S2 & DMC-S/S2-DSP	3	
DigitalMedia™ 8G fiber input card DSP code	DMC-S/S2-DSP	3.4.5	
DigitalMedia™ SDI input card	DMC-SDI	1.2911.00003	322
DigitalMedia™ SDI input card FPGA	DMC-SDI	40	
DigitalMedia™ 8G fiber output card	DMC-SO/S2O-HD	1.2911.00020	322
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO/S2O-HD	14	
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO/S2O-HD	15	
DigitalMedia™ Streaming input card	DMC-STR	1.2625.00021	268
DigitalMedia™ Streaming input codec OS	DMC-STR	1.0000.00102	
DigitalMedia™ Streaming output card	DMC-STRO	1.2625.00022	268
DigitalMedia™ Streaming output card codec	DMC-STRO	1.000.0075	
DigitalMedia™ Streaming output card scaler	DMC-STRO	3	
DigitalMedia™ analog video input card	DMC-VGA	1.2911.00017	322
DigitalMedia™ analog video input card FPGA	DMC-VGA	11	
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.1592.00036	69
DigitalMedia™ security camera input card	DMC-VID4	1.1498.00021	69

Software Tool Compatibility

The following SW Tool versions (or higher) are recommended:

Device Database	75.07.002.00
Crestron Database	56.05.001.00
SIMPL Windows	4.03.20.00
Crestron Toolbox	2.41.513.00

* Denotes new or updated firmware compared to PUF 2.56 (see revision history for details)

DigitalMedia PUF 2.58.01 is identical to DM PUF 2.56 but reverts the code for DM-RMC-4K-100-C, DM-RMC-100-C & DM-RMC-SCALER/200-S to DM PUF 2.55. There have been reports of upgrade failures with these products and DM PUF 2.56.

DM PUF 2.58.01 also reverts the DM-RMC-4K-SCALER-C firmware to previously released firmware due to HDCP issues found in certain configuration.

Important Upgrade and Downgrade Notes

Please be aware of the following before upgrading to this PUF:

- 1) Special steps must be taken to downgrade DM-MD32x32 CPU cards from DM PUF 2.50 or later to PUF 2.48 or prior. Please see Crestron OLH ID 1285 for details. Other DM products are unaffected.
- 2) Several newer DM cards have large firmware files and can take longer to update than previous DM products:
 - DMC-STR: Up to 30 minutes per group of 4 cards.
 - DMC-STRO: Up to 17 minutes per group of 4 cards.
- 3) To minimize upgrade time, it is recommended to stop active DMC-STR/STRO streams prior to performing a PUF upgrade.

Recommended Streaming Settings

When pairing the DMC-STR with the DMC-STRO, it is recommended to stream via RTP with initiation by receiver. Previous bandwidth and format restrictions have been removed. Use of TS encapsulation at the DMC-STRO is not recommended due to compatibility issues with many streaming decoders on the market.

With the release of PUF 2.51, the default ports used by the DMC-STRO have changed. Port numbers used in existing installations will not change on firmware upgrade, but they will change on card or system restore. Also, new port numbers applied to systems upgrading from pre-PUF 2.51 code will not be applied until after card restore. Please see OLH 5552 for details.

If the DMC-STR is unable to connect to a third-party encoder (e.g., an IP Camera), re-attempt to connect by adding “?rtsp_tcp=yes” at the end of the URL (without quotations).

Open Issues

- The DMC-STR may report a resolution of 0x0@0 when streaming from certain third-party IP cameras.
- Apple keyboard does not connect reliably to RMCs.
- All TXs (except TX-401-XX): HDMI audio unreliable with 480i video. All other resolutions are ok.
- On streaming cards, support for elapsed seconds, bitrate and initiator feedbacks have been removed to work around Toolbox stability issues.
- Streaming unsupported audio formats (e.g., G.711) can cause the DMC-STR to lock up. Use AAC audio.
- Network problems can sometimes cause the DMC-STR to stop decoding a stream. Stop and restart the stream to recover.

DigitalMedia PUF 2.56.00 Release Notes

Included Firmware – DM midpoints and switches

Device name	Device model number	Firmware included
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.102.291100011*
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.131*
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.102.291100011*
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.131*
DigitalMedia™ switcher main firmware	DM-MD6x1	4.102.245600045
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.77
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	2.002.0026
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.114
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.1498.00021
DigitalMedia™ switcher main firmware	DM-MD6x6 & DM-MD6x4	4.102.291100011*
DigitalMedia™ switcher operational config	DM-MD6x6 & DM-MD6x4	1.0.77
DigitalMedia™ switcher front panel application	DM-MD6x6 & DM-MD6x4	1.0.72
DigitalMedia™ switcher front panel firmware	DM-MD6x6 & DM-MD6x4	1.1498.00021

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 4K 8G+ room controller	DM-RMC-4K-100-C	1.2911.00027*	322*
DigitalMedia™ 8G+ room controller	DM-RMC-100-C	1.2911.00027*	322*
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.1498.00021	268
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.1498.00021	268
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.2456.00045	268
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-150-S	1.2456.00045	268
DigitalMedia™ advanced 8G fiber RMC FPGA	DM-RMC-150-S	4	
DigitalMedia™ advanced 8G+ room controller	DM-RMC-200/SCALER-C	1.2911.00027*	322*
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-200/SCALER-S	1.2911.00027*	322*
DigitalMedia™ advanced 4K 8G+ room controller	DM-RMC-4K-SCALER-C	1.2911.00027*	322*
DigitalMedia™ advanced 4K 8G+ room controller DSP	DM-RMC-4K-SCALER-C	5.5	
DigitalMedia™ advanced 4K 8G+ room controller core	DM-RMC-4K-SCALER-C	3.30.1.169*	
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.1498.00021	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.2456.00045	268
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.2456.00045	268
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.2625.00028	105
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G+ 2G TX	DM-TX-200-C-2G	1.2911.00027*	322*
DigitalMedia™ HDMI + RGB 8G+ 2G TX FPGA	DM-TX-200-C-2G	14	
DigitalMedia™ HDMI + RGB 8G+ transmitter	DM-TX-201-C	1.2911.00027*	322*
DigitalMedia™ HDMI + RGB 8G+ TX FPGA	DM-TX-201-C	48	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.2911.00027*	322*
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	64	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.2625.00013	268
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.2456.00045	268
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.2625.00028	268
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-C	1.2911.00027*	322*
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-S	1.2911.00027*	322*
DigitalMedia™ 4K dual HDMI + RGB 8G+ transmitter	DM-TX-4K-302-C	1.2911.00027*	322*
DigitalMedia™ 4K HDMI + RGB 8G+ transmitter	DM-TX-4K-202-C	1.2911.00027*	322*
DigitalMedia™ repeater, DM-CAT	DM-DR	1.1498.00021	69

* Denotes new or updated firmware compared to PUF 2.55 (see revision history for details)

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 4K HDMI input card	DMC-4K-HD & DMC-4K-HD-DSP	1.2911.00027*	322*
DigitalMedia™ 4K HDMI input card DSP code	DMC-4K-HD-DSP	5.5.0	
DigitalMedia™ 4K HDMI output card	DMC-4K-HDO	1.2911.00020*	322*
DigitalMedia™ 4K HDMI output card core	DMC-4K-HDO	1.114.1.188	
DigitalMedia™ 4K 8G+ output card	DMC-4K-CO-HD	1.2911.00024*	322*
DigitalMedia™ 4K 8G+ input card	DMC-4K-C & DMC-4K-C-DSP	1.2911.00027*	322*
DigitalMedia™ 8G+ input card	DMC-C and DMC-C-DSP	1.2911.00020*	322*
DigitalMedia™ 8G+ input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G+ input card DSP code	DMC-C-DSP	3.4.5	
DigitalMedia™ 8G+ output card	DMC-CO-HD	1.2625.00031	268
DigitalMedia™ 8G+ output card FPGA	DMC-CO-HD	40	
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.2456.00031	69
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	3.4.5	
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.1498.00021	69
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.2625.00013	268
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.2456.00045	69
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	3.4.5	
DigitalMedia™ fiber output card	DMC-FO	1.1498.00021	69
DigitalMedia™ HDMI input card	DMC-HD & DMC-HD-DSP	1.2911.00017*	322*
DigitalMedia™ HDMI input card FPGA	DMC-HD & DMC-HD-DSP	56	
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	3.4.5	
DigitalMedia™ HDMI output card	DMC-HDO	1.2761.00017	78
DigitalMedia™ 8G fiber input card	DMC-S/S2 & DMC-S/S2-DSP	1.2911.00017*	322*
DigitalMedia™ 8G fiber input card FPGA	DMC-S/S2 & DMC-S/S2-DSP	3	
DigitalMedia™ 8G fiber input card DSP code	DMC-S/S2-DSP	3.4.5	
DigitalMedia™ SDI input card	DMC-SDI	1.2911.00003*	322*
DigitalMedia™ SDI input card FPGA	DMC-SDI	40	
DigitalMedia™ 8G fiber output card	DMC-SO/S2O-HD	1.2911.00020*	322*
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO/S2O-HD	14	
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO/S2O-HD	15	
DigitalMedia™ Streaming input card	DMC-STR	1.2625.00021	268
DigitalMedia™ Streaming input codec OS	DMC-STR	1.0000.00102	
DigitalMedia™ Streaming output card	DMC-STRO	1.2625.00022	268
DigitalMedia™ Streaming output card codec	DMC-STRO	1.000.0075	
DigitalMedia™ Streaming output card scaler	DMC-STRO	3	
DigitalMedia™ analog video input card	DMC-VGA	1.2911.00017*	322*
DigitalMedia™ analog video input card FPGA	DMC-VGA	11	
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.1592.00036	69
DigitalMedia™ security camera input card	DMC-VID4	1.1498.00021	69

Software Tool Compatibility

The following SW Tool versions (or higher) are recommended:

Device Database	75.05.001.00
Crestron Database	56.05.001.00
SIMPL Windows	4.03.20.00
Crestron Toolbox	2.41.513.00

* Denotes new or updated firmware compared to PUF 2.55 (see revision history for details)

DigitalMedia PUF 2.56 includes several new features and bug fixes. DigitalMedia PUF 2.56 is the first public release to include firmware for the DM-TX-4K-302/202-C.

Important Upgrade and Downgrade Notes

Please be aware of the following before upgrading to this PUF:

- 1) Special steps must be taken to downgrade DM-MD32x32 CPU cards from DM PUF 2.50 or later to PUF 2.48 or prior. Please see Crestron OLH ID 1285 for details. Other DM products are unaffected.
- 2) Several newer DM cards have large firmware files and can take longer to update than previous DM products:
 - DMC-STR: Up to 30 minutes per group of 4 cards.
 - DMC-STRO: Up to 17 minutes per group of 4 cards.
- 3) To minimize upgrade time, it is recommended to stop active DMC-STR/STRO streams prior to performing a PUF upgrade.

Recommended Streaming Settings

When pairing the DMC-STR with the DMC-STRO, it is recommended to stream via RTP with initiation by receiver. Previous bandwidth and format restrictions have been removed. Use of TS encapsulation at the DMC-STRO is not recommended due to compatibility issues with many streaming decoders on the market.

With the release of PUF 2.51, the default ports used by the DMC-STRO have changed. Port numbers used in existing installations will not change on firmware upgrade, but they will change on card or system restore. Also, new port numbers applied to systems upgrading from pre-PUF 2.51 code will not be applied until after card restore. Please see OLH 5552 for details.

If the DMC-STR is unable to connect to a third-party encoder (e.g., an IP Camera), re-attempt to connect by adding “?rtsp_tcp=yes” at the end of the URL (without quotations).

New Features

- DMC-4K-HDO now supports scaling, arbitrary video wall configuration and bezel compensation.
- DM-MD6x4/6x6 now supports programmatic control of the DM-RMC-4K-100-C-1G.
- Added support for applying custom EDID to the input of all the scaler RMCs.
- Added programmatic control to change scaler state for all the scaler RMCs.
- Added programmatic control to enable/disable analog audio output for all applicable RMCs.
- All scaling outputs now support freeze frame switching. 2K scaling products will still have black frame when switching between inputs with different resolutions.

Issues Fixed

- DMC-4K-HDO will report incorrect refresh rate on the output.
- Several DMC-4K-HDO stability issues.
- Fixed issue where DMC-4K-HD-HDCP2 will not pass video from certain 4K HDCP 2 sources.
- Fixed issue where DM-RMC-4K-SCALER-C has color fringe on certain text.
- Added ability to detect input source sync for DM-TX-4K-302/202-C without having to switch to that input.
- Fixed issue where DM-RMC-4K-100-C-1G does not get the DM link after DM-TX-200-C-2G power cycles.
- Fixed color space issue when passing YCbCr 422 source through DM-TX-201-C.
- DMC-SDI input card passes 1080p59.94 resolution.
- Fixed issue where certain HDBaseT projectors were uncommunicative in standby.
- Scaling outputs will release HDCP if input content is non-HDCP and connected sink does not support HDCP.
- Fixed issue where DM-RMC-200/SCALER/100-C endpoints may become unresponsive with excessive serial (RS-232) join traffic for extended time period.

** Denotes new or updated firmware compared to PUF 2.55 (see revision history for details)*

Open Issues

- The DMC-STR may report a resolution of 0x0@0 when streaming from certain third-party IP cameras.
- Apple keyboard does not connect reliably to RMCs.
- All TXs (except TX-401-XX): HDMI audio unreliable with 480i video. All other resolutions are ok.
- On streaming cards, support for elapsed seconds, bitrate and initiator feedbacks have been removed to work around Toolbox stability issues.
- Streaming unsupported audio formats (e.g., G.711) can cause the DMC-STR to lock up. Use AAC audio.
- Network problems can sometimes cause the DMC-STR to stop decoding a stream. Stop and restart the stream to recover.

DigitalMedia PUF 2.55.00 Release Notes

Included Firmware – DM midpoints and switches

Device name	Device model number	Firmware included
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.102.276100016
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.128*
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.102.276100016
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.128*
DigitalMedia™ switcher main firmware	DM-MD6x1	4.102.245600045
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.77
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	2.002.0026
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.114
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.1498.00021
DigitalMedia™ switcher main firmware	DM-MD6x6 & DM-MD6x4	4.102. 245600045
DigitalMedia™ switcher operational config	DM-MD6x6 & DM-MD6x4	1.0.77
DigitalMedia™ switcher front panel application	DM-MD6x6 & DM-MD6x4	1.0.72
DigitalMedia™ switcher front panel firmware	DM-MD6x6 & DM-MD6x4	1.1498.00021

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 4K 8G+ room controller	DM-RMC-4K-100-C	1.2625.00021	268
DigitalMedia™ 8G+ room controller	DM-RMC-100-C	1.2625.00021	268
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.1498.00021	268
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.1498.00021	268
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.2456.00045	268
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-150-S	1.2456.00045	268
DigitalMedia™ advanced 8G fiber RMC FPGA	DM-RMC-150-S	4	
DigitalMedia™ advanced 8G+ room controller	DM-RMC-200/SCALER-C	1.2625.00031	268
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-200/SCALER-S	1.2625.00028	268
DigitalMedia™ advanced 4K 8G+ room controller	DM-RMC-4K-SCALER-C	1.2761.00051*	
DigitalMedia™ advanced 4K 8G+ room controller DSP	DM-RMC-4K-SCALER-C	5.5	
DigitalMedia™ advanced 4K 8G+ room controller core	DM-RMC-4K-SCALER-C	3.14.1.148*	
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.1498.00021	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.2456.00045	268
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.2456.00045	268
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.2625.00028	105
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G+ 2G TX	DM-TX-200-C-2G	1.2625.00028	268
DigitalMedia™ HDMI + RGB 8G+ 2G TX FPGA	DM-TX-200-C-2G	14	
DigitalMedia™ HDMI + RGB 8G+ transmitter	DM-TX-201-C	1.2625.00026	268
DigitalMedia™ HDMI + RGB 8G+ TX FPGA	DM-TX-201-C	48	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.2625.00013	268
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	64	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.2625.00013	268
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.2456.00045	268
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.2625.00028	268
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-C	1.2761.00011	268
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-S	1.2761.00011	268
DigitalMedia™ repeater, DM-CAT	DM-DR	1.1498.00021	69

* Denotes new or updated firmware compared to PUF 2.54 (see revision history for details)

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 4K HDMI input card	DMC-4K-HD & DMC-4K-HD-DSP	1.2625.00032	268
DigitalMedia™ 4K HDMI input card DSP code	DMC-4K-HD-DSP	5.5.0	
DigitalMedia™ 4K HDMI output card	DMC-4K-HDO	1.2625.00035*	270
DigitalMedia™ 4K HDMI output card core	DMC-4K-HDO	0.23.0.0	
DigitalMedia™ 4K 8G+ output card	DMC-4K-CO-HD	1.2625.00031	268
DigitalMedia™ 4K 8G+ input card	DMC-4K-C & DMC-4K-C-DSP	1.2625.00032	268
DigitalMedia™ 8G+ input card	DMC-C and DMC-C-DSP	1.2625.00026	268
DigitalMedia™ 8G+ input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G+ input card DSP code	DMC-C-DSP	3.4.5	
DigitalMedia™ 8G+ output card	DMC-CO-HD	1.2625.00031	268
DigitalMedia™ 8G+ output card FPGA	DMC-CO-HD	40	
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.2456.00031	69
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	3.4.5	
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.1498.00021	69
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.2625.00013	268
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.2456.00045	69
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	3.4.5	
DigitalMedia™ fiber output card	DMC-FO	1.1498.00021	69
DigitalMedia™ HDMI input card	DMC-HD & DMC-HD-DSP	1.2625.00026	268
DigitalMedia™ HDMI input card FPGA	DMC-HD & DMC-HD-DSP	56	
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	3.4.5	
DigitalMedia™ HDMI output card	DMC-HDO	1.2761.00017	78
DigitalMedia™ 8G fiber input card	DMC-S/S2 & DMC-S/S2-DSP	1.2625.00026	268
DigitalMedia™ 8G fiber input card FPGA	DMC-S/S2 & DMC-S/S2-DSP	3	
DigitalMedia™ 8G fiber input card DSP code	DMC-S/S2-DSP	3.4.5	
DigitalMedia™ SDI input card	DMC-SDI	1.1592.00041	268
DigitalMedia™ SDI input card FPGA	DMC-SDI	40	
DigitalMedia™ 8G fiber output card	DMC-SO/S20-HD	1.1592.00092	268
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO/S20-HD	14	
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO/S20-HD	15	
DigitalMedia™ Streaming input card	DMC-STR	1.2625.00021	268
DigitalMedia™ Streaming input codec OS	DMC-STR	1.0000.00102	
DigitalMedia™ Streaming output card	DMC-STRO	1.2625.00022	268
DigitalMedia™ Streaming output card codec	DMC-STRO	1.000.0075	
DigitalMedia™ Streaming output card scaler	DMC-STRO	3	
DigitalMedia™ analog video input card	DMC-VGA	1.2456.00045	268
DigitalMedia™ analog video input card FPGA	DMC-VGA	11	
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.1592.00036	69
DigitalMedia™ security camera input card	DMC-VID4	1.1498.00021	69

Software Tool Compatibility

The following SW Tool versions (or higher) are recommended:

Device Database	70.00.004.00
Crestron Database	52.05.013.00
SIMPL Windows	4.03.08.00
Crestron Toolbox	2.40.731.0

* Denotes new or updated firmware compared to PUF 2.54 (see revision history for details)

DigitalMedia PUF 2.55 is a tightly targeted release for new product support, bug fix and maintenance.

New Features

- Added support for new I/O cards with HDCP 2.2 support. This support is for these cards: DMC-4K-HDO (all vintages), DMC-4K-HD (and DSP) with “HDCP2” label, DMC-4K-C (and DSP) with “HDCP2” label, DMC-4K-CO-HD with “HDCP2” label.
- Added support for applying custom EDID to input of DM-RMC-4K-SCALER-C. This is useful when pairing this RMC in a standalone configuration with DM-TX-4K-100-C-1G.

Issues Fixed

- Improved support of DM-RMC-4K-SCALER-C for certain previously problematic resolutions, including 2560x1440, 2560x1600, and 1366x768
- Fixed issue where DM-RMC-4K-SCALER-C would output black image to certain Samsung and LG displays
- Fixed incompatibility between DM-RMC-4K-SCALER-C and X/Y position adjustment on DM-TX VGA inputs

Recommended Streaming Settings

When pairing the DMC-STR with the DMC-STRO, it is recommended to stream via RTP with initiation by receiver. Previous bandwidth and format restrictions have been removed. Use of TS encapsulation at the DMC-STRO is not recommended due to compatibility issues with many streaming decoders on the market.

With the release of PUF 2.51, the default ports used by the DMC-STRO have changed. Port numbers used in existing installations will not change on firmware upgrade, but they will change on card or system restore. Also, new port numbers applied to systems upgrading from pre-PUF 2.51 code will not be applied until after card restore. Please see OLH 5552 for details.

If the DMC-STR is unable to connect to a third-party encoder (e.g., an IP Camera), re-attempt to connect by adding “?rtsp_tcp=yes” at the end of the URL (without quotations).

Open Issues

- It is possible to manually attempt to load HDCP2 firmware to HDCP1 cards. These cards are not compatible and the update attempt will (safely) fail.
- The DMC-STR may report a resolution of 0x0@0 when streaming from certain third-party IP cameras.
- Apple keyboard does not connect reliably to RMCs.
- All TXs (except TX-401-XX): HDMI audio unreliable with 480i video. All other resolutions are ok.
- On streaming cards, support for elapsed seconds, bitrate and initiator feedbacks have been removed to work around Toolbox stability issues.
- Streaming unsupported audio formats (e.g., G.711) can cause the DMC-STR to lock up. Use AAC audio.
- Network problems can sometimes cause the DMC-STR to stop decoding a stream. Stop and restart the stream to recover.

Important Upgrade and Downgrade Notes

Please be aware of the following before upgrading to this PUF:

- 1) Special steps must be taken to downgrade DM-MD32x32 CPU cards from DM PUF 2.50 or later to PUF 2.48 or prior. Please see Crestron OLH ID 1285 for details. Other DM products are unaffected.
- 2) Several newer DM cards have large firmware files and can take longer to update than previous DM products:
 - DMC-STR: Up to 30 minutes per group of 8 cards.
 - DMC-STRO: Up to 17 minutes per group of 8 cards.Crestron is working to develop mechanisms to decrease upgrade times for these and future products. The DMC-4K-HDO had been on this list but as of this PUF is in line with other DM product upgrade times.
- 3) To minimize upgrade time, it is recommended to stop active DMC-STR/STRO streams prior to performing a PUF upgrade.

** Denotes new or updated firmware compared to PUF 2.54 (see revision history for details)*

DigitalMedia PUF 2.54.00 Release Notes

Included Firmware – DM midpoints and switches

Device name	Device model number	Firmware included
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.102.276100016
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.122
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.102.276100016
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.122
DigitalMedia™ switcher main firmware	DM-MD6x1	4.102.245600045
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.77
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	2.002.0026
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.114
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.1498.00021
DigitalMedia™ switcher main firmware	DM-MD6x6 & DM-MD6x4	4.102. 245600045
DigitalMedia™ switcher operational config	DM-MD6x6 & DM-MD6x4	1.0.77
DigitalMedia™ switcher front panel application	DM-MD6x6 & DM-MD6x4	1.0.72
DigitalMedia™ switcher front panel firmware	DM-MD6x6 & DM-MD6x4	1.1498.00021

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 4K 8G+ room controller	DM-RMC-4K-100-C	1.2625.00021	268
DigitalMedia™ 8G+ room controller	DM-RMC-100-C	1.2625.00021	268
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.1498.00021	268
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.1498.00021	268
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.2456.00045	268
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-150-S	1.2456.00045	268
DigitalMedia™ advanced 8G fiber RMC FPGA	DM-RMC-150-S	4	
DigitalMedia™ advanced 8G+ room controller	DM-RMC-200/SCALER-C	1.2625.00031	268
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-200/SCALER-S	1.2625.00028	268
DigitalMedia™ advanced 4K 8G+ room controller	DM-RMC-4K-SCALER-C	1.2761.00018	
DigitalMedia™ advanced 4K 8G+ room controller DSP	DM-RMC-4K-SCALER-C	5.5	
DigitalMedia™ advanced 4K 8G+ room controller core	DM-RMC-4K-SCALER-C	2.179.1.76	
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.1498.00021	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.2456.00045	268
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.2456.00045	268
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.2625.00028	105
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G+ 2G TX	DM-TX-200-C-2G	1.2625.00028	268
DigitalMedia™ HDMI + RGB 8G+ 2G TX FPGA	DM-TX-200-C-2G	14	
DigitalMedia™ HDMI + RGB 8G+ transmitter	DM-TX-201-C	1.2625.00026	268
DigitalMedia™ HDMI + RGB 8G+ TX FPGA	DM-TX-201-C	48	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.2625.00013	268
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	64	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.2625.00013	268
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.2456.00045	268
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.2625.00028	268
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-C	1.2761.00011	268
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-S	1.2761.00011	268
DigitalMedia™ repeater, DM-CAT	DM-DR	1.1498.00021	69

* Denotes new or updated firmware compared to PUF 2.53 (see revision history for details)

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 4K HDMI input card	DMC-4K-HD & DMC-4K-HD-DSP	1.2625.00032	268
DigitalMedia™ 4K HDMI input card DSP code	DMC-4K-HD-DSP	5.5.0	
DigitalMedia™ 4K HDMI output card	DMC-4K-HDO	1.2625.00031	270
DigitalMedia™ 4K HDMI output card core	DMC-4K-HDO	0.23.0.0	
DigitalMedia™ 4K 8G+ output card	DMC-4K-CO-HD	1.2625.00031	268
DigitalMedia™ 4K 8G+ input card	DMC-4K-C & DMC-4K-C-DSP	1.2625.00032	268
DigitalMedia™ 8G+ input card	DMC-C and DMC-C-DSP	1.2625.00026	268
DigitalMedia™ 8G+ input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G+ input card DSP code	DMC-C-DSP	3.4.5	
DigitalMedia™ 8G+ output card	DMC-CO-HD	1.2625.00031	268
DigitalMedia™ 8G+ output card FPGA	DMC-CO-HD	40	
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.2456.00031	69
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	3.4.5	
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.1498.00021	69
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.2625.00013	268
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.2456.00045	69
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	3.4.5	
DigitalMedia™ fiber output card	DMC-FO	1.1498.00021	69
DigitalMedia™ HDMI input card	DMC-HD & DMC-HD-DSP	1.2625.00026	268
DigitalMedia™ HDMI input card FPGA	DMC-HD & DMC-HD-DSP	56	
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	3.4.5	
DigitalMedia™ HDMI output card	DMC-HDO	1.2761.00017	78
DigitalMedia™ 8G fiber input card	DMC-S/S2 & DMC-S/S2-DSP	1.2625.00026	268
DigitalMedia™ 8G fiber input card FPGA	DMC-S/S2 & DMC-S/S2-DSP	3	
DigitalMedia™ 8G fiber input card DSP code	DMC-S/S2-DSP	3.4.5	
DigitalMedia™ SDI input card	DMC-SDI	1.1592.00041	268
DigitalMedia™ SDI input card FPGA	DMC-SDI	40	
DigitalMedia™ 8G fiber output card	DMC-SO/S20-HD	1.1592.00092	268
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO/S20-HD	14	
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO/S20-HD	15	
DigitalMedia™ Streaming input card	DMC-STR	1.2625.00021	268
DigitalMedia™ Streaming input codec OS	DMC-STR	1.0000.00102	
DigitalMedia™ Streaming output card	DMC-STRO	1.2625.00022	268
DigitalMedia™ Streaming output card codec	DMC-STRO	1.000.0075	
DigitalMedia™ Streaming output card scaler	DMC-STRO	3	
DigitalMedia™ analog video input card	DMC-VGA	1.2456.00045	268
DigitalMedia™ analog video input card FPGA	DMC-VGA	11	
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.1592.00036	69
DigitalMedia™ security camera input card	DMC-VID4	1.1498.00021	69

Software Tool Compatibility

The following SW Tool versions (or higher) are recommended:

Device Database	67.00.001.00
Crestron Database	52.05.013.00
SIMPL Windows	4.03.08.00
Crestron Toolbox	2.40.325.0

* Denotes new or updated firmware compared to PUF 2.53 (see revision history for details)

DigitalMedia PUF 2.54 is identical to DM PUF 2.53 but removes code for the DM-TX-4K-100-C-1G or DM-RMC-4K-100-C-1G since these products have not been updated since their initial release. There have been reports of upgrade failures with these products and PUF 2.53.

Important Upgrade and Downgrade Notes

Please be aware of the following before upgrading to this PUF:

- 1) Special steps must be taken to downgrade DM-MD32x32 CPU cards from DM PUF 2.50 or later to PUF 2.48 or prior. Please see Crestron OLH ID 1285 for details. Other DM products are unaffected.
- 2) Several newer DM cards have large firmware files and can take longer to update than previous DM products:
 - DMC-STR: Up to 30 minutes per group of 8 cards.
 - DMC-STRO: Up to 17 minutes per group of 8 cards.

Crestron is working to develop mechanisms to decrease upgrade times for these and future products. The DMC-4K-HDO had been on this list but as of this PUF is in line with other DM product upgrade times.

- 3) To minimize upgrade time, it is recommended to stop active DMC-STR/STRO streams prior to performing a PUF upgrade.

Recommended Streaming Settings

When pairing the DMC-STR with the DMC-STRO, it is recommended to stream via RTP with initiation by receiver. Previous bandwidth and format restrictions have been removed. Use of TS encapsulation at the DMC-STRO is not recommended due to compatibility issues with many streaming decoders on the market.

With the release of PUF 2.51, the default ports used by the DMC-STRO have changed. Port numbers used in existing installations will not change on firmware upgrade, but they will change on card or system restore. Also, new port numbers applied to systems upgrading from pre-PUF 2.51 code will not be applied until after card restore. Please see OLH 5552 for details.

If the DMC-STR is unable to connect to a third-party encoder (e.g., an IP Camera), re-attempt to connect by adding “?rtsp_tcp=yes” at the end of the URL (without quotations).

Open issues

- The DMC-STR may report a resolution of 0x0@0 when streaming from certain third-party IP cameras.
- Apple keyboard does not connect reliably to RMCs.
- All TXs (except TX-401-XX): HDMI audio unreliable with 480i video. All other resolutions are ok.
- On streaming cards, support for elapsed seconds, bitrate and initiator feedbacks have been removed to work around Toolbox stability issues.
- Streaming unsupported audio formats (e.g., G.711) can cause the DMC-STR to lock up. Use AAC audio.
- Network problems can sometimes cause the DMC-STR to stop decoding a stream. Stop and restart the stream to recover.

DigitalMedia PUF 2.53.00 Release Notes

Included Firmware – DM midpoints and switches

Device name	Device model number	Firmware included
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.102.276100016*
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.122
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.102.276100016*
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.122
DigitalMedia™ switcher main firmware	DM-MD6x1	4.102.245600045
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.77
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	2.002.0026
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.114
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.1498.00021
DigitalMedia™ switcher main firmware	DM-MD6x6 & DM-MD6x4	4.102. 245600045
DigitalMedia™ switcher operational config	DM-MD6x6 & DM-MD6x4	1.0.77
DigitalMedia™ switcher front panel application	DM-MD6x6 & DM-MD6x4	1.0.72
DigitalMedia™ switcher front panel firmware	DM-MD6x6 & DM-MD6x4	1.1498.00021

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 4K 8G+ room controller	DM-RMC-4K-100-C	1.2625.00021	268
DigitalMedia™ 8G+ room controller	DM-RMC-100-C	1.2625.00021	268
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.1498.00021	268
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.1498.00021	268
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.2456.00045	268
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-150-S	1.2456.00045	268
DigitalMedia™ advanced 8G fiber RMC FPGA	DM-RMC-150-S	4	
DigitalMedia™ advanced 8G+ room controller	DM-RMC-200/SCALER-C	1.2625.00031	268
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-200/SCALER-S	1.2625.00028	268
DigitalMedia™ advanced 4K 8G+ room controller	DM-RMC-4K-SCALER-C	1.2761.00018*	
DigitalMedia™ advanced 4K 8G+ room controller DSP	DM-RMC-4K-SCALER-C	5.5	
DigitalMedia™ advanced 4K 8G+ room controller core	DM-RMC-4K-SCALER-C	2.179.1.76	
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.1498.00021	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.2456.00045	268
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.2456.00045	268
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.2625.00028	105
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G+ 2G TX	DM-TX-200-C-2G	1.2625.00028	268
DigitalMedia™ HDMI + RGB 8G+ 2G TX FPGA	DM-TX-200-C-2G	14	
DigitalMedia™ HDMI + RGB 8G+ transmitter	DM-TX-201-C	1.2625.00026	268
DigitalMedia™ HDMI + RGB 8G+ TX FPGA	DM-TX-201-C	48	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.2625.00013	268
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	64	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.2625.00013	268
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.2456.00045	268
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.2625.00028	268
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-C	1.2761.00011*	268
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-S	1.2761.00011*	268
DigitalMedia™ repeater, DM-CAT	DM-DR	1.1498.00021	69

* Denotes new or updated firmware compared to PUF 2.52 (see revision history for details)

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 4K HDMI input card	DMC-4K-HD & DMC-4K-HD-DSP	1.2625.00032	268
DigitalMedia™ 4K HDMI input card DSP code	DMC-4K-HD-DSP	5.5.0	
DigitalMedia™ 4K HDMI output card	DMC-4K-HDO	1.2625.00031	270
DigitalMedia™ 4K HDMI output card core	DMC-4K-HDO	0.23.0.0	
DigitalMedia™ 4K 8G+ output card	DMC-4K-CO-HD	1.2625.00031	268
DigitalMedia™ 4K 8G+ input card	DMC-4K-C & DMC-4K-C-DSP	1.2625.00032	268
DigitalMedia™ 8G+ input card	DMC-C and DMC-C-DSP	1.2625.00026	268
DigitalMedia™ 8G+ input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G+ input card DSP code	DMC-C-DSP	3.4.5	
DigitalMedia™ 8G+ output card	DMC-CO-HD	1.2625.00031	268
DigitalMedia™ 8G+ output card FPGA	DMC-CO-HD	40	
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.2456.00031	69
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	3.4.5	
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.1498.00021	69
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.2625.00013	268
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.2456.00045	69
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	3.4.5	
DigitalMedia™ fiber output card	DMC-FO	1.1498.00021	69
DigitalMedia™ HDMI input card	DMC-HD & DMC-HD-DSP	1.2625.00026	268
DigitalMedia™ HDMI input card FPGA	DMC-HD & DMC-HD-DSP	56	
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	3.4.5	
DigitalMedia™ HDMI output card	DMC-HDO	1.2761.00017*	78
DigitalMedia™ 8G fiber input card	DMC-S/S2 & DMC-S/S2-DSP	1.2625.00026	268
DigitalMedia™ 8G fiber input card FPGA	DMC-S/S2 & DMC-S/S2-DSP	3	
DigitalMedia™ 8G fiber input card DSP code	DMC-S/S2-DSP	3.4.5	
DigitalMedia™ SDI input card	DMC-SDI	1.1592.00041	268
DigitalMedia™ SDI input card FPGA	DMC-SDI	40	
DigitalMedia™ 8G fiber output card	DMC-SO/S20-HD	1.1592.00092	268
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO/S20-HD	14	
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO/S20-HD	15	
DigitalMedia™ Streaming input card	DMC-STR	1.2625.00021	268
DigitalMedia™ Streaming input codec OS	DMC-STR	1.0000.00102	
DigitalMedia™ Streaming output card	DMC-STRO	1.2625.00022	268
DigitalMedia™ Streaming output card codec	DMC-STRO	1.000.0075	
DigitalMedia™ Streaming output card scaler	DMC-STRO	3	
DigitalMedia™ analog video input card	DMC-VGA	1.2456.00045	268
DigitalMedia™ analog video input card FPGA	DMC-VGA	11	
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.1592.00036	69
DigitalMedia™ security camera input card	DMC-VID4	1.1498.00021	69

Software Tool Compatibility

The following SW Tool versions (or higher) are recommended:

Device Database	67.00.001.00
Crestron Database	52.05.013.00
SIMPL Windows	4.03.08.00
Crestron Toolbox	2.40.325.0

* Denotes new or updated firmware compared to PUF 2.52 (see revision history for details)

DigitalMedia PUF 2.53 is a limited bug fix and maintenance release.

Important Upgrade and Downgrade Notes

Please be aware of the following before upgrading to this PUF:

- 1) Special steps must be taken to downgrade DM-MD32x32 CPU cards from DM PUF 2.50 or later to PUF 2.48 or prior. Please see Crestron OLH ID 1285 for details. Other DM products are unaffected.
- 2) Several newer DM cards have large firmware files and can take longer to update than previous DM products:
 - DMC-STR: Up to 30 minutes per group of 8 cards.
 - DMC-STRO: Up to 17 minutes per group of 8 cards.

Crestron is working to develop mechanisms to decrease upgrade times for these and future products. The DMC-4K-HDO had been on this list but as of this PUF is in line with other DM product upgrade times.

- 3) To minimize upgrade time, it is recommended to stop active DMC-STR/STRO streams prior to performing a PUF upgrade.

Recommended Streaming Settings

When pairing the DMC-STR with the DMC-STRO, it is recommended to stream via RTP with initiation by receiver. Previous bandwidth and format restrictions have been removed. Use of TS encapsulation at the DMC-STRO is not recommended due to compatibility issues with many streaming decoders on the market.

With the release of PUF 2.51, the default ports used by the DMC-STRO have changed. Port numbers used in existing installations will not change on firmware upgrade, but they will change on card or system restore. Also, new port numbers applied to systems upgrading from pre-PUF 2.51 code will not be applied until after card restore. Please see OLH 5552 for details.

If the DMC-STR is unable to connect to a third-party encoder (e.g., an IP Camera), re-attempt to connect by adding “?rtsp_tcp=yes” at the end of the URL (without quotations).

Issues Fixed

- Several DM-RMC-4K-SCALER-C video stability issues.
- DMC-CPU card issue that could cause cards to not report properly.
- DM-TX-401-C/S video stability issue.
- DMC-HDO initialization issue that could cause excess traffic on internal communications bus.

Open issues

- The DMC-STR may report a resolution of 0x0@0 when streaming from certain third-party IP cameras.
- Apple keyboard does not connect reliably to RMCs.
- All TXs (except TX-401-XX): HDMI audio unreliable with 480i video. All other resolutions are ok.
- On streaming cards, support for elapsed seconds, bitrate and initiator feedbacks have been removed to work around Toolbox stability issues.
- Streaming unsupported audio formats (e.g., G.711) can cause the DMC-STR to lock up. Use AAC audio.
- Network problems can sometimes cause the DMC-STR to stop decoding a stream. Stop and restart the stream to recover.

DigitalMedia PUF 2.52.00 Release Notes

Included Firmware – DM midpoints and switches

Device name	Device model number	Firmware included
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.102.262500023*
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.122*
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.102.262500023*
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.122*
DigitalMedia™ switcher main firmware	DM-MD6x1	4.102.245600045
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.77
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	2.002.0026
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.114
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.1498.00021
DigitalMedia™ switcher main firmware	DM-MD6x6 & DM-MD6x4	4.102. 245600045
DigitalMedia™ switcher operational config	DM-MD6x6 & DM-MD6x4	1.0.77
DigitalMedia™ switcher front panel application	DM-MD6x6 & DM-MD6x4	1.0.72
DigitalMedia™ switcher front panel firmware	DM-MD6x6 & DM-MD6x4	1.1498.00021

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 4K 8G+ room controller	DM-RMC-4K-100-C	1.2625.00021*	268
DigitalMedia™ 8G+ room controller	DM-RMC-100-C	1.2625.00021*	268
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.1498.00021	268
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.1498.00021	268
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.2456.00045	268
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-150-S	1.2456.00045	268
DigitalMedia™ advanced 8G fiber RMC FPGA	DM-RMC-150-S	4	
DigitalMedia™ advanced 8G+ room controller	DM-RMC-200/SCALER-C	1.2625.00031*	268
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-200/SCALER-S	1.2625.00028*	268
DigitalMedia™ advanced 4K 8G+ room controller	DM-RMC-4K-SCALER-C	1.2625.00033*	
DigitalMedia™ advanced 4K 8G+ room controller DSP	DM-RMC-4K-SCALER-C	5.5*	
DigitalMedia™ advanced 4K 8G+ room controller core	DM-RMC-4K-SCALER-C	2.179.1.76*	
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.1498.00021	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.2456.00045	268
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.2456.00045	268
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.2625.00028*	105
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G+ 2G TX	DM-TX-200-C-2G	1.2625.00028*	268
DigitalMedia™ HDMI + RGB 8G+ 2G TX FPGA	DM-TX-200-C-2G	14	
DigitalMedia™ HDMI + RGB 8G+ transmitter	DM-TX-201-C	1.2625.00026*	268
DigitalMedia™ HDMI + RGB 8G+ TX FPGA	DM-TX-201-C	48	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.2625.00013*	268
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	64	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.2625.00013*	268
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.2456.00045	268
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.2625.00028*	268
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-C	1.2625.00028*	268
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-S	1.2625.00028*	268
DigitalMedia™ repeater, DM-CAT	DM-DR	1.1498.00021	69

* Denotes new or updated firmware compared to PUF 2.51 (see revision history for details)

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 4K HDMI input card	DMC-4K-HD & DMC-4K-HD-DSP	1.2625.00032*	268
DigitalMedia™ 4K HDMI input card DSP code	DMC-4K-HD-DSP	5.5.0	
DigitalMedia™ 4K HDMI output card	DMC-4K-HDO	1.2625.00031*	270*
DigitalMedia™ 4K HDMI output card core	DMC-4K-HDO	0.23.0.0*	
DigitalMedia™ 4K 8G+ output card	DMC-4K-CO-HD	1.2625.00031*	268
DigitalMedia™ 4K 8G+ input card	DMC-4K-C & DMC-4K-C-DSP	1.2625.00032*	268
DigitalMedia™ 8G+ input card	DMC-C and DMC-C-DSP	1.2625.00026*	268
DigitalMedia™ 8G+ input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G+ input card DSP code	DMC-C-DSP	3.4.5	
DigitalMedia™ 8G+ output card	DMC-CO-HD	1.2625.00031*	268
DigitalMedia™ 8G+ output card FPGA	DMC-CO-HD	40	
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.2456.00031	69
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	3.4.5	
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.1498.00021	69
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.2625.00013*	268
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.2456.00045	69
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	3.4.5	
DigitalMedia™ fiber output card	DMC-FO	1.1498.00021	69
DigitalMedia™ HDMI input card	DMC-HD & DMC-HD-DSP	1.2625.00026*	268
DigitalMedia™ HDMI input card FPGA	DMC-HD & DMC-HD-DSP	56	
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	3.4.5	
DigitalMedia™ HDMI output card	DMC-HDO	1.2456.00045	78
DigitalMedia™ 8G fiber input card	DMC-S/S2 & DMC-S/S2-DSP	1.2625.00026*	268
DigitalMedia™ 8G fiber input card FPGA	DMC-S/S2 & DMC-S/S2-DSP	3	
DigitalMedia™ 8G fiber input card DSP code	DMC-S/S2-DSP	3.4.5	
DigitalMedia™ SDI input card	DMC-SDI	1.1592.00041	268
DigitalMedia™ SDI input card FPGA	DMC-SDI	40	
DigitalMedia™ 8G fiber output card	DMC-SO/S20-HD	1.1592.00092	268
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO/S20-HD	14	
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO/S20-HD	15	
DigitalMedia™ Streaming input card	DMC-STR	1.2625.00021*	268
DigitalMedia™ Streaming input codec OS	DMC-STR	1.0000.00102*	
DigitalMedia™ Streaming output card	DMC-STRO	1.2625.00022*	268
DigitalMedia™ Streaming output card codec	DMC-STRO	1.000.0075*	
DigitalMedia™ Streaming output card scaler	DMC-STRO	3	
DigitalMedia™ analog video input card	DMC-VGA	1.2456.00045	268
DigitalMedia™ analog video input card FPGA	DMC-VGA	11	
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.1592.00036	69
DigitalMedia™ security camera input card	DMC-VID4	1.1498.00021	69

Software Tool Compatibility

The following SW Tool versions (or higher) are recommended:

Device Database	66.00.004.00 (available now; adds scaler functionality)
	66.02.000.00 (available soon; adds HDBaseT COM control capability)
Crestron Database	51.05.007.00
SIMPL Windows	4.03.08.00
Crestron Toolbox	2.40.325.0

* Denotes new or updated firmware compared to PUF 2.51 (see revision history for details)

DigitalMedia PUF 2.52 includes several new features and bug fixes.

Important Upgrade and Downgrade Notes

Please be aware of the following before upgrading to this PUF:

- 1) Special steps must be taken to downgrade DM-MD32x32 CPU cards from DM PUF 2.50 or later to PUF 2.48 or prior. Please see Crestron OLH ID 1285 for details. Other DM products are unaffected.
- 2) Several newer DM cards have large firmware files and can take longer to update than previous DM products:
 - DMC-STR: Up to 30 minutes per group of 8 cards.
 - DMC-STRO: Up to 17 minutes per group of 8 cards.

Crestron is working to develop mechanisms to decrease upgrade times for these and future products. The DMC-4K-HDO had been on this list but as of this PUF is in line with other DM product upgrade times.

- 3) To minimize upgrade time, it is recommended to stop active DMC-STR/STRO streams prior to performing a PUF upgrade.

New EDID Mechanism

Starting with DM PUF 2.50 (along with Toolbox 2.38.7xx), DM switches employ a new EDID mechanism. The latest DM Tool provides several pre-configured EDIDs that will be useful in most installations without further customization. For those instances where further customization is required, the DM Tool will also accept EDIDs generated by the EDID Tool in Toolbox. The EDID tool can also be used to inspect or customize the pre-configured EDIDs.

Any EDIDs currently configured on DM systems will remain unchanged after this firmware update. Auto EDID mode no longer exists, so the last stored EDID will remain in use until it is manually updated via Toolbox. In lieu of auto mode, the new default EDIDs are much more useful to the average installation.

For more detail on the updated DM Tool and EDID tool please see DM Tool help in Toolbox.

Recommended Streaming Settings

When pairing the DMC-STR with the DMC-STRO, it is recommended to stream via RTP with initiation by receiver. Previous bandwidth and format restrictions have been removed. Use of TS encapsulation at the DMC-STRO is not recommended due to compatibility issues with many streaming decoders on the market.

With the release of PUF 2.51, the default ports used by the DMC-STRO have changed. Port numbers used in existing installations will not change on firmware upgrade, but they will change on card or system restore. Also, new port numbers applied to systems upgrading from pre-PUF 2.51 code will not be applied until after card restore. Please see OLH 5552 for details.

If the DMC-STR is unable to connect to a third-party encoder (e.g., an IP Camera), re-attempt to connect by adding “?rtsp_tcp=yes” at the end of the URL (without quotations).

New features

- 4K60 video pass-through support on all 4K products.
- Video wall mode added for DM-RMC-4K-SCALER-C.
- New video wall join interface for all scaler RMCs allows for arbitrary wall configurations.
- Bezel compensation has been added to video wall functionality for all scaler RMCs.
- Third-party HDBaseT devices (e.g., displays, projectors) that support the HDBaseT RS232 feature may now be controlled directly over the HDBaseT interface from HDBaseT input and output cards (no RMC required!). Programming support is also required and will come in the 66.02.xxx.xx database release due out in August 2015.
- A new behind-the-scenes update mechanism for the DMC-4K-HDO drastically reduces upgrade time.

Issues Fixed

- Various DMC-STR and DMC-STRO streaming quality and stability issues.
- HDCP could become enabled on HDMI outputs even if HDCP is disabled at the input.
- USB mouse presses would not propagate to Mac Mini running OSX 10.10. After firmware update, use "hidmode apple" command at RMC to enable functionality. Use "hidmode pc" to restore traditional functionality.
- Audio could become inadvertently muted on analog audio outputs.
- Using composite video inputs with DVI displays may result in a magenta image.
- DM-RMC-4K-SCALER-C may fail to establish connection to control system if IPT uses hostnames rather than IP addresses.
- Audio pop issues on analog outputs of DMC-HDO and DMC-4K-HDO cards.
- Color spaces issues on RMC-200/SCALER-S.
- DMC-STRO PUF upgrade will hang and/or the DM Tool codec controls will be greyed out if codec is in DHCP mode (default setting) and no DHCP server available. See OLH ID 5550 for details.
- DM-RMC-100: May fail to establish control system connection if hostname is used in IP table; use IP address.

Open issues

- The DMC-STR may report a resolution of 0x0@0 when streaming from certain third-party IP cameras.
- Apple keyboard does not connect reliably to RMCs.
- All TXs (except TX-401-XX): HDMI audio unreliable with 480i video. All other resolutions are ok.
- On streaming cards, support for elapsed seconds, bitrate and initiator feedbacks have been removed to work around Toolbox stability issues.
- Streaming unsupported audio formats (e.g., G.711) can cause the DMC-STR to lock up. Use AAC audio.
- Network problems can sometimes cause the DMC-STR to stop decoding a stream. Stop and restart the stream to recover.

DigitalMedia PUF 2.51.01 Release Notes

Included Firmware – DM midpoints and switches

Device name	Device model number	Firmware included
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.102.245600075*
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.120*
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.102.245600075*
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.120*
DigitalMedia™ switcher main firmware	DM-MD6x1	4.102.245600045
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.77
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	2.002.0026
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.114
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.1498.00021
DigitalMedia™ switcher main firmware	DM-MD6x6 & DM-MD6x4	4.102. 245600045
DigitalMedia™ switcher operational config	DM-MD6x6 & DM-MD6x4	1.0.77
DigitalMedia™ switcher front panel application	DM-MD6x6 & DM-MD6x4	1.0.72
DigitalMedia™ switcher front panel firmware	DM-MD6x6 & DM-MD6x4	1.1498.00021

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 4K 8G+ room controller	DM-RMC-4K-100-C	1.2456.00057	268
DigitalMedia™ 8G+ room controller	DM-RMC-100-C	1.2456.00057	268
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.1498.00021	268
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.1498.00021	268
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.2456.00045	268
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-150-S	1.2456.00045	268
DigitalMedia™ advanced 8G fiber RMC FPGA	DM-RMC-150-S	4	
DigitalMedia™ advanced 8G+ room controller	DM-RMC-200/SCALER-C	1.2456.00057	268
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-200/SCALER-S	1.2617.00004*	268
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.1498.00021	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.2456.00045	268
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.2456.00045	268
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.2456.00045	105
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G+ 2G TX	DM-TX-200-C-2G	1.2456.00052	268
DigitalMedia™ HDMI + RGB 8G+ 2G TX FPGA	DM-TX-200-C-2G	14	
DigitalMedia™ HDMI + RGB 8G+ transmitter	DM-TX-201-C	1.2456.00052	268
DigitalMedia™ HDMI + RGB 8G+ TX FPGA	DM-TX-201-C	48	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.2456.00052	268
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	64	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.2456.00052	268
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.2456.00045	268
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.2456.00052	268
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-C	1.2456.00062	268
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-S	1.2456.00062	268
DigitalMedia™ repeater, DM-CAT	DM-DR	1.1498.00021	69

* Denotes new or updated firmware compared to PUF 2.50 (see revision history for details)

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 4K HDMI input card	DMC-4K-HD & DMC-4K-HD-DSP	1.2456.00045	268
DigitalMedia™ 4K HDMI input card DSP code	DMC-4K-HD-DSP	5.5.0	
DigitalMedia™ 4K HDMI output card	DMC-4K-HDO	1.2613.00004*	270*
DigitalMedia™ 4K 8G+ output card	DMC-4K-CO-HD	1.2456.00045	268
DigitalMedia™ 4K 8G+ input card	DMC-4K-C & DMC-4K-C-DSP	1.2456.00052	268
DigitalMedia™ 8G+ input card	DMC-C and DMC-C-DSP	1.2456.00045	268
DigitalMedia™ 8G+ input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G+ input card DSP code	DMC-C-DSP	3.4.5	
DigitalMedia™ 8G+ output card	DMC-CO-HD	1.2456.00045	268
DigitalMedia™ 8G+ output card FPGA	DMC-CO-HD	40	
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.2456.00031	69
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	3.4.5	
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.1498.00021	69
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.2456.00045	268
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.2456.00045	69
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	3.4.5	
DigitalMedia™ fiber output card	DMC-FO	1.1498.00021	69
DigitalMedia™ HDMI input card	DMC-HD & DMC-HD-DSP	1.2456.00045	268
DigitalMedia™ HDMI input card FPGA	DMC-HD & DMC-HD-DSP	56	
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	3.4.5	
DigitalMedia™ HDMI output card	DMC-HDO	1.2456.00045	78
DigitalMedia™ 8G fiber input card	DMC-S/S2 & DMC-S/S2-DSP	1.2456.00057	268
DigitalMedia™ 8G fiber input card FPGA	DMC-S/S2 & DMC-S/S2-DSP	3	
DigitalMedia™ 8G fiber input card DSP code	DMC-S/S2-DSP	3.4.5	
DigitalMedia™ SDI input card	DMC-SDI	1.1592.00041	268
DigitalMedia™ SDI input card FPGA	DMC-SDI	40	
DigitalMedia™ 8G fiber output card	DMC-SO/S20-HD	1.1592.00092	268
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO/S20-HD	14	
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO/S20-HD	15	
DigitalMedia™ Streaming input card	DMC-STR	1.2617.0004*	268
DigitalMedia™ Streaming input codec OS	DMC-STR	1.0000.00081*	
DigitalMedia™ Streaming output card	DMC-STRO	1.2617.0004*	268
DigitalMedia™ Streaming output card codec	DMC-STRO	1.000.0072*	
DigitalMedia™ Streaming output card scaler	DMC-STRO	3	
DigitalMedia™ analog video input card	DMC-VGA	1.2456.00045	268
DigitalMedia™ analog video input card FPGA	DMC-VGA	11	
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.1592.00036	69
DigitalMedia™ security camera input card	DMC-VID4	1.1498.00021	69

Software Tool Compatibility

The following SW Tool versions (or higher) are recommended:

Device Database	63.00.002.00
Creston Database	49.06.005.00
SIMPL Windows	4.02.56.01
Creston Toolbox	2.38.823.14

* Denotes new or updated firmware compared to PUF 2.50 (see revision history for details)

DigitalMedia PUF 2.51 is a bug fix/maintenance release primarily targeted at DMC-STR and DMC-STRO, with a few other fixes included as well. DigitalMedia PUF 2.51 also introduces the DMC-4K-HDO card.

Note that the DMPS products are not included in this PUF release. Please continue to use DM PUF 2.48 for the 2-series DMPS products, which is available on their respective product pages.

Important Upgrade and Downgrade Notes

Please be aware of the following before upgrading to this PUF.

- 1) Special steps must be taken to downgrade DM-MD32x32 CPU cards from DM PUF 2.50 or later to PUF 2.48 or prior. Please see Crestron OLH ID 1285 for details. Other DM products are unaffected.
- 2) If upgrading a DM system with a DMC-STRO card, please ensure that the codec has a DHCP address or has been configured to use a static IP address. If the DMC-STRO codec is configured for DHCP mode (default configuration) and no DHCP server is available, the PUF Tool will hang during the codec upgrade. This will be addressed in the next release. Please see OLH ID 5550 for further detail.
- 3) Several newer DM cards have large firmware files and can take longer to update than previous DM products:
 - DMC-4K-STR: Up to 30 minutes per group of 8 cards.
 - DMC-4K-STRO: Up to 17 minutes per group of 8 cards.
 - DMC-4K-HDO: Up to 40 minutes per group of 8 cards.Crestron is working to develop mechanisms to decrease upgrade times for these and future products.
- 4) To minimize upgrade time, it is recommended to stop active DMC-STR/STRO streams prior to performing a PUF upgrade.

New EDID Mechanism

Starting with DM PUF 2.50 (along with Toolbox 2.38.7xx), DM switches employ a new EDID mechanism. The latest DM Tool provides several pre-configured EDIDs that will be useful in most installations without further customization. For those instances where further customization is required, the DM Tool will also accept EDIDs generated by the EDID Tool in Toolbox. The EDID tool can also be used to inspect or customize the pre-configured EDIDs.

Any EDIDs currently configured on DM systems will remain unchanged after this firmware update. Auto EDID mode no longer exists, so the last stored EDID will remain in use until it is manually updated via Toolbox. In lieu of auto mode, the new default EDIDs are much more useful to the average installation.

For more detail on the updated DM Tool and EDID tool please see DM Tool help in Toolbox.

Updated Recommended Streaming Settings

When pairing the DMC-STR with the DMC-STRO, it is recommended to stream via RTP with initiation by receiver. Previous bandwidth and format restrictions have been removed. Use of TS encapsulation at the DMC-STRO is not recommended due to compatibility issues with many streaming decoders on the market.

With the release of PUF 2.51, the default ports used by the DMC-STRO have changed. Port numbers used in existing installations will not change on firmware upgrade, but they will change on card or system restore. Please see OLH 5552 for details.

Issues Fixed

- Endpoint IPIDs were being cleared if not defined in the control system program.
- Timing problem could sometimes result in cards not being controllable from the front panel.
- RMC-200-S IR problems on certain hardware revisions.
- Video compatibility issue between DMC-VID4/DMC-SDI and DMC-4K-HDO.
- Streaming at data rates greater than 10Mbps to DMC-STR would cause stream performance issues.
- Various DMC-STR and DMC-STRO streaming and stability issues.
- CEC not working on output 1 of DMC-4K-HDO.
- Sending advanced audio formats to DMC-4K-HDO would send invalid audio to analog output.

Open issues

- HDCP may be enabled on HDMI outputs even if HDCP is disabled at the input.
- DMC-STRO PUF upgrade will hang and/or the DM Tool codec controls will be greyed out if codec is in DHCP mode (default setting) and no DHCP server available. See OLH ID 5550 for details.
- USB mouse presses will not propagate to Mac Mini running OSX 10.10.
- Using composite video inputs with DVI displays may result in a magenta image.
- Apple keyboard does not connect reliably to RMCs.
- DM-RMC-100: May fail to establish control system connection if hostname is used in IP table; use IP address.
- All TXs (except TX-401-XX): HDMI audio unreliable with 480i video. All other resolutions are ok.
- On streaming cards, support for elapsed seconds, bitrate and initiator feedbacks have been removed to work around Toolbox stability issues.
- Streaming unsupported audio formats (e.g., G.711) can cause the DMC-STR to lock up. Use AAC audio.
- Network problems can sometimes cause the DMC-STR to stop decoding a stream. Stop and restart the stream to recover.

DigitalMedia PUF 2.50.01 Release Notes

Included Firmware – DM midpoints and switches

Device name	Device model number	Firmware included
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.102.245600062*
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.117*
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.102.245600062*
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.116*
DigitalMedia™ switcher main firmware	DM-MD6x1	4.102.245600045*
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.77
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	2.002.0026
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.114*
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.1498.00021
DigitalMedia™ switcher main firmware	DM-MD6x6 & DM-MD6x4	4.102. 245600045*
DigitalMedia™ switcher operational config	DM-MD6x6 & DM-MD6x4	1.0.77
DigitalMedia™ switcher front panel application	DM-MD6x6 & DM-MD6x4	1.0.72
DigitalMedia™ switcher front panel firmware	DM-MD6x6 & DM-MD6x4	1.1498.00021

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 4K 8G+ room controller	DM-RMC-4K-100-C	1.2456.00057*	268*
DigitalMedia™ 8G+ room controller	DM-RMC-100-C	1.2456.00057*	268*
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.1498.00021	268*
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.1498.00021	268*
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.2456.00045*	268*
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-150-S	1.2456.00045*	268*
DigitalMedia™ advanced 8G fiber RMC FPGA	DM-RMC-150-S	4	
DigitalMedia™ advanced 8G+ room controller	DM-RMC-200/SCALER-C	1.2456.00057*	268*
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-200/SCALER-S	1.2456.00052*	268*
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.1498.00021	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.2456.00045*	268*
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.2456.00045*	268*
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.2456.00045*	105
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G+ 2G TX	DM-TX-200-C-2G	1.2456.00052*	268*
DigitalMedia™ HDMI + RGB 8G+ 2G TX FPGA	DM-TX-200-C-2G	41	
DigitalMedia™ HDMI + RGB 8G+ transmitter	DM-TX-201-C	1.2456.00052*	268*
DigitalMedia™ HDMI + RGB 8G+ TX FPGA	DM-TX-201-C	48	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.2456.00052*	268*
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	64	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.2456.00052*	268*
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.2456.00045*	268*
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.2456.00052*	268*
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-C	1.2456.00062*	268*
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-S	1.2456.00062*	268*
DigitalMedia™ repeater, DM-CAT	DM-DR	1.1498.00021	69

* Denotes new or updated firmware compared to PUF 2.48 (see revision history for details)

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 4K HDMI input card	DMC-4K-HD & DMC-4K-HD-DSP	1.2456.00045*	268*
DigitalMedia™ 4K HDMI input card DSP code	DMC-4K-HD-DSP	5.5.0	
DigitalMedia™ 4K 8G+ output card	DMC-4K-CO-HD	1.2456.00045*	268*
DigitalMedia™ 4K 8G+ input card	DMC-4K-C & DMC-4K-C-DSP	1.2456.00052*	268*
DigitalMedia™ 8G+ input card	DMC-C and DMC-C-DSP	1.2456.00045*	268*
DigitalMedia™ 8G+ input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G+ input card DSP code	DMC-C-DSP	3.4.5*	
DigitalMedia™ 8G+ output card	DMC-CO-HD	1.2456.00045*	268*
DigitalMedia™ 8G+ output card FPGA	DMC-CO-HD	40	
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.2456.00031*	69
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	3.4.5*	
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.1498.00021	69
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.2456.00045*	268*
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.2456.00045*	69
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	3.4.5	
DigitalMedia™ fiber output card	DMC-FO	1.1498.00021	69
DigitalMedia™ HDMI input card	DMC-HD & DMC-HD-DSP	1.2456.00045*	268*
DigitalMedia™ HDMI input card FPGA	DMC-HD & DMC-HD-DSP	56	
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	3.4.5*	
DigitalMedia™ HDMI output card	DMC-HDO	1.2456.00045*	78
DigitalMedia™ 8G fiber input card	DMC-S/S2 & DMC-S/S2-DSP	1.2456.00057*	268*
DigitalMedia™ 8G fiber input card FPGA	DMC-S/S2 & DMC-S/S2-DSP	3	
DigitalMedia™ 8G fiber input card DSP code	DMC-S/S2-DSP	3.4.5	
DigitalMedia™ SDI input card	DMC-SDI	1.1592.00041	268*
DigitalMedia™ SDI input card FPGA	DMC-SDI	40	
DigitalMedia™ 8G fiber output card	DMC-SO/S20-HD	1.1592.00092	268*
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO/S20-HD	14	
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO/S20-HD	15	
DigitalMedia™ Streaming input card	DMC-STR	1.2456.00019	268*
DigitalMedia™ Streaming input codec	DMC-STR	1.0000.00028	
DigitalMedia™ Streaming input codec OS	DMC-STR	1.0000.00026	
DigitalMedia™ Streaming output card	DMC-STRO	1.1996.00017	268*
DigitalMedia™ Streaming output card codec	DMC-STRO	1.000.0053	
DigitalMedia™ Streaming output card scaler	DMC-STRO	3	
DigitalMedia™ analog video input card	DMC-VGA	1.2456.00045	268*
DigitalMedia™ analog video input card FPGA	DMC-VGA	11	
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.1592.00036	69
DigitalMedia™ security camera input card	DMC-VID4	1.1498.00021	69

Software Tool Compatibility

The following SW Tool versions (or higher) are recommended:

Device Database	61.05.000
Creston Database	49.00.006.00
SIMPL Windows	4.02.56.01
Creston Toolbox	2.38.700

* Denotes new or updated firmware compared to PUF 2.48 (see revision history for details)

New Products

DigitalMedia PUF 2.50 introduces the DMC-STR, DMC-4K-C, and DMC-4K-C-DSP.

Note that the DMPS products are not included in this PUF release. Please continue to use DM PUF 2.48 for the DMPS, which is available on the DMPS product pages.

Important Downgrade Note

Special steps must be taken to downgrade DM-MD32x32 CPU cards from DM PUF 2.50 to any prior version. Please see Crestron OLH ID 4821 for details.

Other DM products are unaffected.

New EDID Mechanism

DM PUF 2.50 (along with Toolbox 2.38.7xx) introduces the new EDID mechanism to the DM switches. The latest DM Tool provides several pre-configured EDIDs that will be useful in most installations without further customization. For those instances where further customization is required, the DM Tool will also accept EDIDs generated by the EDID Tool in Toolbox. The EDID tool can also be used to inspect or customize the pre-configured EDIDs.

Any EDIDs currently configured on DM systems will remain unchanged after this firmware update. Auto EDID mode no longer exists, so the last stored EDID will remain in use until it is manually updated via Toolbox. In lieu of auto mode, the new default EDIDs are much more useful to the average installation.

For more detail on the updated DM Tool and EDID tool please see DM Tool help in Toolbox.

Issues Fixed

- Powering up DM transmitters via PoDM while system is in use could cause video flashing on system outputs.
- TSD-2020 touch support added to DM-RMC products with USB ports.
- DM-RMC-200-C, DM-RMC-SCALER-C: horizontal line artifact with 1080p input, 1600x1200 output.
- On DM TX endpoints, certain sync detect signals were not reported when input not selected. Note: VGA input source type must be set to "auto" to ensure signal proper signal detection feedback.
- Audio pop on DMC-HDO analog audio output on upstream audio format changes.
- DM endpoints could experience Ethernet connectivity issues on their courtesy LAN ports.
- DM endpoints could experience control system connectivity issues if quickly power cycled while communicating with the control system.
- Video and audio auto-selection issues with DM-TX-401-C/S.
- Updating DM RMC endpoints through a DM TX Ethernet connection in a standalone endpoint configuration could result in a loss of Ethernet connectivity until RMC reboot.
- The DMC-4K-C could report intermittently in the report dm command response.
- DisplayPort audio incompatibility with DM-TX-401-C/S and certain versions of OSX.
- The DMC-4K-HD had video compatibility issues with a DirecTV source.
- DSP input cards could generate an audible tone when no signal connected.
- Various innocuous errors were being added to the error log.
- The DM switch would inconsistently propagate Ethernet setting to the V24.

Open issues

- A network loop may be created (and unbroken) if the DMC-STRO content LAN port is connected to the same network as the DM switch CPU's LAN port, *with PNM disabled*. This is not a supported configuration. Best practice is to never connect the content LAN port to the same network as the DM switch CPU, regardless of PNM setting.
- USB mouse presses will not propagate to Mac Mini running OSX 10.10
- Using composite video inputs with DVI displays may result in a magenta image.

- Upgrading the DMC-STRO codec may fail if upgrading more than four units simultaneously. Limit PUF upgrades to four DMC-STRO codecs at a time.
- Apple keyboard does not connect reliably to RMCs.
- DM-RMC-100: May fail to establish control system connection if hostname is used in IP table. Use IP address.
- All TXs (except TX-401-XX): HDMI audio unreliable with 480i video. All other resolutions are ok.
- DMC-STR audio/video may glitch or become unsynchronized if streaming for an extended time period (e.g., over multiple days).
- MPEG-TS encapsulation mode is not recommended with the DMC-STR in this firmware release.
- Enabling statistics on the DMC-STR is not recommended for normal run-time operation.

DigitalMedia PUF 2.48.00 Release Notes

Included Firmware – DM midpoints and switches

Device name	Device model number	Firmware included
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.102.214300057*
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.89*
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.102.214300057*
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.89*
DigitalMedia™ switcher main firmware	DM-MD6x1	4.102.214300057*
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.77
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	2.002.0026
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.67
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.1498.00021
DigitalMedia™ switcher main firmware	DM-MD6x6 & DM-MD6x4	4.102. 214300048
DigitalMedia™ switcher operational config	DM-MD6x6 & DM-MD6x4	1.0.77
DigitalMedia™ switcher front panel application	DM-MD6x6 & DM-MD6x4	1.0.72
DigitalMedia™ switcher front panel firmware	DM-MD6x6 & DM-MD6x4	1.1498.00021
DMPs control board firmware	DMPs-300(-AEC)/200/100-C	4.007.0032
DMPs default program	DMPs-300-C-AEC	1.3.00
DMPs default program	DMPs-300-C	1.3.00
DMPs default program	DMPs-200-C	1.3.00
DMPs default program	DMPs-100-C	2.1.03*
DMPs front panel firmware	DMPs-300(-AEC)/200/100-C	1.001.0004
DMPs audio board firmware	DMPs-300(-AEC)/200/100-C	1.1842.00026
DMPs video board firmware	DMPs-300(-AEC)/200/100-C	4.102. 214300049
DMPs video board out of the box firmware	DMPs-300/200/100-C	1.0.88

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 4K 8G+ room controller	DM-RMC-4K-100-C	1.2141.00044*	219
DigitalMedia™ 8G+ room controller	DM-RMC-100-C	1.2141.00044*	124
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.1498.00021	105
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.1498.00021	105
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.1592.00079	105
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-150-S	1.2143.00056*	105
DigitalMedia™ advanced 8G fiber RMC FPGA	DM-RMC-150-S	4	
DigitalMedia™ advanced 8G+ room controller	DM-RMC-200/SCALER-C	1.2143.00055*	124
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-200/SCALER-S	1.2143.00055*	167
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.1498.00021	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.1592.00051	105
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.1498.00021	105
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.1592.00036	105
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G+ 2G TX	DM-TX-200-C-2G	1.2143.00035	167
DigitalMedia™ HDMI + RGB 8G+ 2G TX FPGA	DM-TX-200-C-2G	14	
DigitalMedia™ HDMI + RGB 8G+ transmitter	DM-TX-201-C	1.2143.00035	124
DigitalMedia™ HDMI + RGB 8G+ TX FPGA	DM-TX-201-C	48	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.1592.00079	167
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	64	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.1592.00036	105
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.1592.00036	105
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.1592.00036	105
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-C	1.2143.00035	167
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-S	1.2143.00055*	167

* Denotes new or updated firmware compared to PUF 2.47 (see revision history for details)

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 4K HDMI input card	DMC-4K-HD & DMC-4K-HD-DSP	1.2141.00045*	219
DigitalMedia™ 4K HDMI input card DSP code	DMC-4K-HD-DSP	5.5.0*	
DigitalMedia™ 4K 8G+ output card	DMC-4K-CO	1.2141.00045*	219
DigitalMedia™ 8G+ input card	DMC-C and DMC-C-DSP	1.2143.00035	105
DigitalMedia™ 8G+ input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G+ input card DSP code	DMC-C-DSP	1.0.1	
DigitalMedia™ 8G+ output card	DMC-CO-HD	1.2143.00035	105
DigitalMedia™ 8G+ output card FPGA	DMC-CO-HD	40	
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.1498.00021	69
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	1.0.1	
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.1498.00021	69
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.1592.00059	167
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.1498.00021	69
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	1.0.1	
DigitalMedia™ fiber output card	DMC-FO	1.1498.00021	69
DigitalMedia™ HDMI input card	DMC-HD & DMC-HD-DSP	1.1592.00041	167
DigitalMedia™ HDMI input card FPGA	DMC-HD & DMC-HD-DSP	56	
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	1.0.1	
DigitalMedia™ HDMI output card	DMC-HDO	1.2143.00035	78
DigitalMedia™ 8G fiber input card	DMC-S/S2 & DMC-S/S2-DSP	1.1592.00079	105
DigitalMedia™ 8G fiber input card FPGA	DMC-S/S2 & DMC-S/S2-DSP	3	
DigitalMedia™ 8G fiber input card DSP code	DMC-S/S2-DSP	1.0.1	
DigitalMedia™ SDI input card	DMC-SDI	1.1592.00041	105
DigitalMedia™ SDI input card FPGA	DMC-SDI	40	105
DigitalMedia™ 8G fiber output card	DMC-SO/S20-HD	1.1592.00092	112
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO/S20-HD	14	
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO/S20-HD	15	
DigitalMedia™ Streaming output card	DMC-STRO	1.1996.00017	205
DigitalMedia™ Streaming output card codec	DMC-STRO	1.000.0053	
DigitalMedia™ Streaming output card scaler	DMC-STRO	3	
DigitalMedia™ analog video input card	DMC-VGA	1.1592.00051	167
DigitalMedia™ analog video input card FPGA	DMC-VGA	11	
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.1592.00036	69
DigitalMedia™ security camera input card	DMC-VID4	1.1498.00021	69

Software Tool Compatibility

The following SW Tool versions (or higher) are recommended:

Device Database	54.05.001
Crestron Database	44.00.001
SIMPL Windows	4.02.20
Crestron Toolbox	2.36.6xx

* Denotes new or updated firmware compared to PUF 2.47 (see revision history for details)

DigitalMedia PUF 2.48 introduces the first DM 4K products and includes several bug fixes.

New Products

These are the first 4K products in the DigitalMedia product line:

- DM-RMC-4K-100-C: 4K 8G+ room controller
- DMC-4K-HD: 4K HDMI input card
- DMC-4K-HD-DSP: 4K HDMI input card with downmixing DSP
- DMC-4K-CO: 4K 8G+ output card

Notes on 4K

- All 4K DM products are backwards-compatible with non-4K DM products.
- No programming changes are required when upgrading non-4K cards to 4K.
- Manual EDID mode must be used to configure support for 4K resolutions.

Issues fixed

- The last few cards in a fully-loaded system could fail to provide live status updates in DM Tool.
- Improved video compatibility with certain marginal 4K sources.
- 4K video resolutions misreported on DM switch front panel.
- 4K video resolutions could mistakenly appear in DMC-4K-HD EDID when not desired.
- With certain compressed audio formats downmixed audio would mistakenly be sent to downstream AVRs.
- The DMC-4K-CO could go missing from the "reportdm" command response.
- Some endpoints could become unresponsive on reboot when connected to a 64x64 or 128x128.
- The RMC-SCALER-S would sometimes display a red video image when connected to a 64x64 or 128x128.
- Corrected video loss at high resolutions on some DM-MD6x1 units.

Open issues

- A network loop may be created (and unbroken) if the DMC-STRO content LAN port is connected to the same network as the DM switch CPU's LAN port, *with PNM disabled*. This is not a supported configuration. Best practice is to never connect the content LAN port to the same network as the DM switch CPU, regardless of PNM setting.
- Upgrading the DMC-STRO codec may fail if upgrading more than four units simultaneously. Limit PUF upgrades to four DMC-STRO codecs at a time.
- DMC-HD-DSP: Problem decoding AC-3 audio from Kaleidascope media server. Workaround: Set K'scope to output multichannel PCM.
- Apple keyboard does not connect reliably to RMCs.
- DM-RMC-200-C, DM-RMC-SCALER-C: horizontal line artifact with 1080p input, 1600x1200 output.
- DM-RMC-100: May fail to establish control system connection if hostname is used in IP table. Use IP address.
- All TXs (except TX-401-XX): HDMI audio unreliable with 480i video. All other resolutions are ok.

* Denotes new or updated firmware compared to PUF 2.47 (see revision history for details)

DigitalMedia PUF 2.47.02 Release Notes

Included Firmware – DM midpoints and switches

Device name	Device model number	Firmware included
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.102.214300048*
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.86
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.102. 214300048*
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.87
DigitalMedia™ switcher main firmware	DM-MD6x1	4.102. 214300048*
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.77
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	2.002.0026
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.67
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.1498.00021
DigitalMedia™ switcher main firmware	DM-MD6x6 & DM-MD6x4	4.102. 214300048*
DigitalMedia™ switcher operational config	DM-MD6x6 & DM-MD6x4	1.0.77
DigitalMedia™ switcher front panel application	DM-MD6x6 & DM-MD6x4	1.0.72
DigitalMedia™ switcher front panel firmware	DM-MD6x6 & DM-MD6x4	1.1498.00021
DMPs control board firmware	DMPs-300(-AEC)/200/100-C	4.007.0032
DMPs default program	DMPs-300-C-AEC	1.3.00
DMPs default program	DMPs-300-C	1.3.00
DMPs default program	DMPs-200-C	1.3.00
DMPs default program	DMPs-100-C	1.3.00
DMPs front panel firmware	DMPs-300(-AEC)/200/100-C	1.001.0004
DMPs audio board firmware	DMPs-300(-AEC)/200/100-C	1.1842.00026
DMPs video board firmware	DMPs-300(-AEC)/200/100-C	4.102. 214300049*
DMPs video board out of the box firmware	DMPs-300/200/100-C	1.0.88*

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 8G+ room controller	DM-RMC-100-C	1.2143.00035*	124
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.1498.00021	105
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.1498.00021	105
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.1592.00079	105
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-150-S	1.1592.00079	105
DigitalMedia™ advanced 8G fiber RMC FPGA	DM-RMC-150-S	4	
DigitalMedia™ advanced 8G+ room controller	DM-RMC-200/SCALER-C	1.2143.00035*	124
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-200/SCALER-S	1.2143.00036*	167
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.1498.00021	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.1592.00051	105
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.1498.00021	105
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.1592.00036	105
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G+ 2G TX	DM-TX-200-C-2G	1.2143.00035*	167
DigitalMedia™ HDMI + RGB 8G+ 2G TX FPGA	DM-TX-200-C-2G	14	
DigitalMedia™ HDMI + RGB 8G+ transmitter	DM-TX-201-C	1.2143.00035*	124
DigitalMedia™ HDMI + RGB 8G+ TX FPGA	DM-TX-201-C	48	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.1592.00079	167
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	64	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.1592.00036	105
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.1592.00036	105
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.1592.00036	105
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-C	1.2143.00035*	167
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-S	1.2143.00048*	167
DigitalMedia™ repeater, DM-CAT	DM-DR	1.1498.00021	69

* Denotes new or updated firmware compared to PUF 2.46 (see revision history for details)

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 8G+ input card	DMC-C and DMC-C-DSP	1.2143.00035*	105
DigitalMedia™ 8G+ input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G+ input card DSP code	DMC-C-DSP	1.0.1	
DigitalMedia™ 8G+ output card	DMC-CO-HD	1.2143.00035*	105
DigitalMedia™ 8G+ output card FPGA	DMC-CO-HD	40	
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.1498.00021	69
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	1.0.1	
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.1498.00021	69
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.1592.00059	167
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.1498.00021	69
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	1.0.1	
DigitalMedia™ fiber output card	DMC-FO	1.1498.00021	69
DigitalMedia™ HDMI input card	DMC-HD and DMC-HD-DSP	1.1592.00041	167
DigitalMedia™ HDMI input card FPGA	DMC-HD and DMC-HD-DSP	56	
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	1.0.1	
DigitalMedia™ HDMI output card	DMC-HDO	1.2143.00035*	78
DigitalMedia™ 8G fiber input card	DMC-S/S2 and DMC-S/S2-DSP	1.1592.00079	105
DigitalMedia™ 8G fiber input card FPGA	DMC-S/S2 and DMC-S/S2-DSP	3	
DigitalMedia™ 8G fiber input card DSP code	DMC-S/S2-DSP	1.0.1	
DigitalMedia™ SDI input card	DMC-SDI	1.1592.00041	105
DigitalMedia™ SDI input card FPGA	DMC-SDI	40	105
DigitalMedia™ 8G fiber output card	DMC-SO/S20-HD	1.1592.00092	112
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO/S20-HD	14	
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO/S20-HD	15	
DigitalMedia™ Streaming output card	DMC-STRO	1.1996.00017	205
DigitalMedia™ Streaming output card codec	DMC-STRO	1.000.0053*	
DigitalMedia™ Streaming output card scaler	DMC-STRO	3	
DigitalMedia™ analog video input card	DMC-VGA	1.1592.00051	167
DigitalMedia™ analog video input card FPGA	DMC-VGA	11	
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.1592.00036	69
DigitalMedia™ security camera input card	DMC-VID4	1.1498.00021	69

Software Tool Compatibility

The following SW Tool versions (or higher) are recommended:

Device Database	54.05.001
Crestron Database	44.00.001
SIMPL Windows	4.02.20
Crestron Toolbox	2.36.6xx

* Denotes new or updated firmware compared to PUF 2.46 (see revision history for details)

PUF 2.47.02 vs. PUF 2.47.01

PUF 2.47.02 changes no firmware as compared to PUF 2.47.01. It incorporates an update script change to prevent RMC-100-C firmware from being loaded to a RMC-4K-100-C. Future firmware will be compatible with both devices.

PUF 2.47.01 is a maintenance release from the PUF 2.40 series. No new devices are supported.

New Features (compared to PUF 2.46.00)

- Support for switching control via Crestron Connect It devices such as the TT-100. Currently only HDBaseT transmitters are supported: DM-TX-401-C, DM-TX-201-C, DM-TX-200-C-2G and DM-TX-401-S.
- Third-party HDBaseT devices connected to a DM or DMPS switch will be added to the corporate LAN rather than DM internal private network.
 - o These devices may obtain their IP addresses from a DHCP server on the corporate LAN or should be assigned static addresses as per their manufacturer's instructions.
 - o Some older third-party HDBaseT devices may not be recognized automatically. Use the `hdbaset c` command to force (see OLH for details).
- New Scaler Standby Timeout feature on scaler RMC products disables the HDMI output after a user-specified period of no video. The output enables itself again automatically when video resumes.

Issues fixed

- Communications issue with Epson HDBaseT projectors while in standby. (Updated HDBaseT firmware adds support for low power mode.)
- Video compatibility issues with certain displays and the RMC-100-C. (Updated HDBaseT firmware fixes various issues.)
- Primeview HDBaseT display lock up. (Updated HDBaseT firmware adds support for detecting third-party device functionality support. Certain Primeview displays may pre-date this HDBaseT build and will require firmware upgrade or use of the `hdbaset c` command (see OLH for details).
- MacBook keeps HDCP active on DisplayPort output even when disabled by DM.
- Video compatibility issues with TX-401-C and certain sources.
- Heavy IR traffic could cause network issues with RMC-200/SCALER-C.
- Audio pop when switching inputs at TX upstream of DMPS.
- The DMC-STRO card can report as missing in the `reportdm` response.

Open issues

- A network loop may be created (and unbroken) if the DMC-STRO content LAN port is connected to the same network as the DM switch CPU's LAN port, *with PNM disabled*. This is not a supported configuration. Best practice is to never connect the content LAN port to the same network as the DM switch CPU, regardless of PNM setting.
- Upgrading the DMC-STRO codec may fail if upgrading more than four units simultaneously. Limit PUF upgrades to four DMC-STRO codecs at a time.
- DMC-HD-DSP: Problem decoding AC-3 audio from Kaleidascap media server. Workaround: Set K'scape to output multichannel PCM.
- Apple keyboard does not connect reliably to RMCs.
- DM-RMC-200-C, DM-RMC-SCALER-C: horizontal line artifact with 1080p input, 1600x1200 output.
- DM-RMC-100: May fail to establish control system connection if hostname is used in IP table. Use IP address.
- All TXs (except TX-401-XX): HDMI audio unreliable with 480i video. All other resolutions are ok.
- DMPS HDMI input audio compensation feedback is wrong: feedback for input 5 shows up on input 4, etc. The actual compensation adjustment applies to the correct channel.

* Denotes new or updated firmware compared to PUF 2.46 (see revision history for details)

DMPS-300-C specific issues

There is no new data in this section, but it's important, so it is copied from previous release notes.

- Any DMPS program compiled against a Device Database built before v41.00.001, released April 5, 2012 will need to be recompiled against a more current database. **Note:** *this is a simple recompilation; you do not need to create a new program or copy any logic.*
 - o Please see Online Help Answer ID 5147 for more details.
- Crestron Database v34.05.008.00 (and the default program included in this PUF) includes an upgrade to the DMPS-300-C protected module (v1.2). This module will be used whenever you create a new DMPS-300-C program. The new protected module now supports the faster compile times already supported on the DMPS-100-C and DMPS-200-C.

Compile times were improved by changing how joins are stored in non-volatile memory (NVMEM). **If you wish to preserve your non-volatile settings after upgrading the protected module you will need to run your DMPS-300-C through a one-time NVMEM conversion process.** This is accomplished via a special SIMPL-based transition program. This program and its usage instructions are available in Crestron Online Help Answer ID 5147

DigitalMedia PUF 2.46.00 Release Notes

Included Firmware – DM midpoints and switches

Device name	Device model number	Firmware included
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.102.159200084
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.86*
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.102.159200082
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.87*
DigitalMedia™ switcher main firmware	DM-MD6x1	4.102.159200059
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.77
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	2.002.0026
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.67
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.1498.00021
DigitalMedia™ switcher main firmware	DM-MD6x6 & DM-MD6x4	4.102.159200079
DigitalMedia™ switcher operational config	DM-MD6x6 & DM-MD6x4	1.0.77
DigitalMedia™ switcher front panel application	DM-MD6x6 & DM-MD6x4	1.0.72
DigitalMedia™ switcher front panel firmware	DM-MD6x6 & DM-MD6x4	1.1498.00021
DMPs control board firmware	DMPs-300(-AEC)/200/100-C	4.007.0032*
DMPs default program	DMPs-300-C-AEC	1.3.00*
DMPs default program	DMPs-300-C	1.3.00*
DMPs default program	DMPs-200-C	1.3.00*
DMPs default program	DMPs-100-C	1.3.00*
DMPs front panel firmware	DMPs-300(-AEC)/200/100-C	1.001.0004
DMPs audio board firmware	DMPs-300(-AEC)/200/100-C	1.1842.00026*
DMPs video board firmware	DMPs-300(-AEC)/200/100-C	4.102.159200093*
DMPs video board out of the box firmware	DMPs-300/200/100-C	1.0.74

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 8G+ room controller	DM-RMC-100-C	1.1498.00021	124
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.1498.00021	105
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.1498.00021	105
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.1592.00079	105
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-150-S	1.1592.00079	105
DigitalMedia™ advanced 8G fiber RMC FPGA	DM-RMC-150-S	4	
DigitalMedia™ advanced 8G+ room controller	DM-RMC-200/SCALER-C	1.1592.00079	124
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-200/SCALER-S	1.1592.00079	167
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.1498.00021	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.1592.00051	105
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.1498.00021	105
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.1592.00036	105
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G+ 2G TX	DM-TX-200-C-2G	1.1592.00079	167
DigitalMedia™ HDMI + RGB 8G+ 2G TX FPGA	DM-TX-200-C-2G	14	
DigitalMedia™ HDMI + RGB 8G+ transmitter	DM-TX-201-C	1.1592.00079	124
DigitalMedia™ HDMI + RGB 8G+ TX FPGA	DM-TX-201-C	48	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.1592.00079	167
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	64	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.1592.00036	105
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.1592.00036	105
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.1592.00036	105
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-C	1.1592.00083	167
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-S	1.1592.00083	167
DigitalMedia™ repeater, DM-CAT	DM-DR	1.1498.00021	69

* Denotes new or updated firmware compared to PUF 2.45 (see revision history for details)

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 8G+ input card	DMC-C and DMC-C-DSP	1.1498.00021	105
DigitalMedia™ 8G+ input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G+ input card DSP code	DMC-C-DSP	1.0.1	
DigitalMedia™ 8G+ output card	DMC-CO-HD	1.1592.00092*	105
DigitalMedia™ 8G+ output card FPGA	DMC-CO-HD	40	
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.1498.00021	69
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	1.0.1	
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.1498.00021	69
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.1592.00059	167
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.1498.00021	69
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	1.0.1	
DigitalMedia™ fiber output card	DMC-FO	1.1498.00021	69
DigitalMedia™ HDMI input card	DMC-HD and DMC-HD-DSP	1.1592.00041	167
DigitalMedia™ HDMI input card FPGA	DMC-HD and DMC-HD-DSP	56	
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	1.0.1	
DigitalMedia™ HDMI output card	DMC-HDO	1.1592.00053	78
DigitalMedia™ 8G fiber input card	DMC-S/S2 and DMC-S/S2-DSP	1.1592.00079	105
DigitalMedia™ 8G fiber input card FPGA	DMC-S/S2 and DMC-S/S2-DSP	3	
DigitalMedia™ 8G fiber input card DSP code	DMC-S/S2-DSP	1.0.1	
DigitalMedia™ SDI input card	DMC-SDI	1.1592.00041	105
DigitalMedia™ SDI input card FPGA	DMC-SDI	40	105
DigitalMedia™ 8G fiber output card	DMC-SO/S20-HD	1.1592.00092*	112
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO/S20-HD	14	
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO/S20-HD	15	
DigitalMedia™ Streaming output card	DMC-STRO	1.1996.00017*	205
DigitalMedia™ Streaming output card codec	DMC-STRO	1.000.0052*	
DigitalMedia™ Streaming output card scaler	DMC-STRO	3*	
DigitalMedia™ analog video input card	DMC-VGA	1.1592.00051	167
DigitalMedia™ analog video input card FPGA	DMC-VGA	11	
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.1592.00036	69
DigitalMedia™ security camera input card	DMC-VID4	1.1498.00021	69

Software Tool Compatibility

The following SW Tool versions (or higher) are recommended:

Device Database	52.00.001
Crestron Database	41.05.001
SIMPL Windows	4.02.20
Crestron Toolbox	2.36.318.32

* Denotes new or updated firmware compared to PUF 2.45 (see revision history for details)

PUF 2.46 is a maintenance-only release from the PUF 2.40 series. It includes a few specifically targeted bug fixes and integrates one recently introduced product not previously included in a PUF release. Only the DMPS, the 8x8/16x16/32x32 OOTBFs and two output cards have updated firmware as compared to PUF 2.45.

New Features (compared to PUF 2.45.00)

- **New device support:** DMC-STRO. Important note: The DM switch OOTBF code must be updated to PUF 2.46 in order to control the DMC-STRO from the control system program.
- Mic master gain control on all DMPS models. Mic levels can be controlled as a unit for any output mix.
- Firmware support for the ability to save and load a DMPS system configuration. DMPS Tool support is also required and will be included in the forthcoming Crestron Toolbox 2.36.5xx release.

Issues fixed

- An RSTP issue on DMC-CO and DMC-SO cards could cause long periods of network inactivity upon topology changes in large cascaded systems. Cable/fiber Infrastructure problems exacerbate the issue.
- Improved DMC-STRO streaming compatibility when using the "multicast via RTSP" session initiation mode.

Open issues

- A network loop may be created (and unbroken) if the DMC-STRO content LAN port is connected to the same network as the DM switch CPU's LAN port, *with PNM disabled*. This is not a supported configuration. Best practice is to never connect the content LAN port to the same network as the DM switch CPU, regardless of PNM setting.
- Upgrading the DMC-STRO codec may fail if upgrading more than four units simultaneously. Limit PUF upgrades to four DMC-STRO codecs at a time.
- DMC-HD-DSP: Problem decoding AC-3 audio from Kaleidascape media server. Workaround: Set K'scape to output multichannel PCM.
- Apple keyboard does not connect reliably to RMCs.
- DM-RMC-200-C, DM-RMC-SCALER-C: horizontal line artifact with 1080p input, 1600x1200 output.
- DM-RMC-100: May fail to establish control system connection if hostname is used in IP table. Use IP address.
- All TXs (except TX-401-XX): HDMI audio unreliable with 480i video. All other resolutions are ok.
- DMPS HDMI input audio compensation feedback is wrong: feedback for input 5 shows up on input 4, etc. The actual compensation adjustment applies to the correct channel.

DMPS-300-C specific issues

There is no new data in this section, but it's important, so it is copied from previous release notes.

- Any DMPS program compiled against a Device Database built before v41.00.001, released April 5, 2012 will need to be recompiled against a more current database. **Note:** *this is a simple recompilation; you do not need to create a new program or copy any logic.*
 - o Please see Online Help Answer ID 5147 for more details.
- Crestron Database v34.05.008.00 (and the default program included in this PUF) includes an upgrade to the DMPS-300-C protected module (v1.2). This module will be used whenever you create a new DMPS-300-C program. The new protected module now supports the faster compile times already supported on the DMPS-100-C and DMPS-200-C.
Compile times were improved by changing how joins are stored in non-volatile memory (NVMEM). **If you wish to preserve your non-volatile settings after upgrading the protected module you will need to run your DMPS-300-C through a one-time NVMEM conversion process.** This is accomplished via a special SIMPL-based transition program. This program and its usage instructions are available in Crestron Online Help Answer ID 5147

DigitalMedia PUF 2.45.01 Release Notes

Included Firmware – DM midpoints and switches

Device name	Device model number	Firmware included
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.102.159200084*
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.77
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.102.159200082*
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.77
DigitalMedia™ switcher main firmware	DM-MD6x1	4.102.159200059
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.77
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	2.002.0026
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.67
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.1498.00021
DigitalMedia™ switcher main firmware	DM-MD6x6 & DM-MD6x4	4.102.159200079*
DigitalMedia™ switcher operational config	DM-MD6x6 & DM-MD6x4	1.0.77
DigitalMedia™ switcher front panel application	DM-MD6x6 & DM-MD6x4	1.0.72
DigitalMedia™ switcher front panel firmware	DM-MD6x6 & DM-MD6x4	1.1498.00021
DMPs control board firmware	DMPs-300(-AEC)/200/100-C	4.007.0021*
DMPs default program	DMPs-300-C-AEC	1.2.37*
DMPs default program	DMPs-300-C	1.2.37*
DMPs default program	DMPs-200-C	1.2.37*
DMPs default program	DMPs-100-C	1.2.37*
DMPs front panel firmware	DMPs-300(-AEC)/200/100-C	1.001.0004
DMPs audio board firmware	DMPs-300(-AEC)/200/100-C	1.1842.00022*
DMPs video board firmware	DMPs-300(-AEC)/200/100-C	4.102.159200079*
DMPs video board out of the box firmware	DMPs-300/200/100-C	1.0.74

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 8G+ room controller	DM-RMC-100-C	1.1498.00021	124
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.1498.00021	105
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.1498.00021	105
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.1592.00079*	105
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-150-S	1.1592.00079*	105
DigitalMedia™ advanced 8G fiber RMC FPGA	DM-RMC-150-S	4	
DigitalMedia™ advanced 8G+ room controller	DM-RMC-200/SCALER-C	1.1592.00079*	124
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-200/SCALER-S	1.1592.00079*	167
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.1498.00021	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.1592.00051	105
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.1498.00021	105
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.1592.00036	105
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G+ 2G TX	DM-TX-200-C-2G	1.1592.00079*	167
DigitalMedia™ HDMI + RGB 8G+ 2G TX FPGA	DM-TX-200-C-2G	14	
DigitalMedia™ HDMI + RGB 8G+ transmitter	DM-TX-201-C	1.1592.00079*	124
DigitalMedia™ HDMI + RGB 8G+ TX FPGA	DM-TX-201-C	48	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.1592.00079*	167
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	64	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.1592.00036	105
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.1592.00036	105
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.1592.00036	105
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-C	1.1592.00083*	167
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-S	1.1592.00083*	167
DigitalMedia™ repeater, DM-CAT	DM-DR	1.1498.00021	69

* Denotes new or updated firmware compared to PUF 2.44 (see revision history for details)

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 8G+ input card	DMC-C and DMC-C-DSP	1.1498.00021	105
DigitalMedia™ 8G+ input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G+ input card DSP code	DMC-C-DSP	1.0.1	
DigitalMedia™ 8G+ output card	DMC-CO-HD	1.1498.00021	105
DigitalMedia™ 8G+ output card FPGA	DMC-CO-HD	40	
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.1498.00021	69
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	1.0.1	
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.1498.00021	69
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.1592.00059	167
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.1498.00021	69
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	1.0.1	
DigitalMedia™ fiber output card	DMC-FO	1.1498.00021	69
DigitalMedia™ HDMI input card	DMC-HD and DMC-HD-DSP	1.1592.00041	167
DigitalMedia™ HDMI input card FPGA	DMC-HD and DMC-HD-DSP	56	
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	1.0.1	
DigitalMedia™ HDMI output card	DMC-HDO	1.1592.00053	78
DigitalMedia™ 8G fiber input card	DMC-S/S2 and DMC-S/S2-DSP	1.1592.00079*	105
DigitalMedia™ 8G fiber input card FPGA	DMC-S/S2 and DMC-S/S2-DSP	3	
DigitalMedia™ 8G fiber input card DSP code	DMC-S/S2-DSP	1.0.1	
DigitalMedia™ SDI input card	DMC-SDI	1.1592.00041	105
DigitalMedia™ SDI input card FPGA	DMC-SDI	40	105
DigitalMedia™ 8G fiber output card	DMC-SO/S20-HD	1.1592.00079*	112
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO/S20-HD	14	
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO/S20-HD	15	
DigitalMedia™ analog video input card	DMC-VGA	1.1592.00051	167
DigitalMedia™ analog video input card FPGA	DMC-VGA	11	
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.1592.00036	69
DigitalMedia™ security camera input card	DMC-VID4	1.1498.00021	69

Software Tool Compatibility

The following SW Tool versions (or higher) are recommended:

Device Database	48.05.005
Crestron Database	38.00.006
SIMPL Windows	4.02.08
Crestron Toolbox	2.35.239.14

* Denotes new or updated firmware compared to PUF 2.44 (see revision history for details)

PUF 2.45 is a maintenance-only release from the PUF 2.40 series. It includes a few specifically targeted bug fixes, and integrates two recently introduced products not previously included in a PUF release. Only one quarter of the firmware files receive an update in PUF 2.45 compared to PUF 2.44.

New Features (compared to PUF 2.44.00)

- **New device support**
DMPS-300-C-AEC
DM-TX-401-C
- Updated fiber optic module firmware to match 64x64 release package (no functionality change in smaller switch systems).
- Improved HDMI receiver algorithms specific to Apple HDMI outputs
- DMPS supports "replace control system" function in SIMPL Windows (4.02.08).

Issues fixed

- DMPS may lock up when scanned by certain IT security scanners
- Added PUF logic to avoid DMPS include4.dat incompatibilities with PUF 2.41 and earlier
- At boot up, DMPS may fail to establish Ethernet link to endpoints, causing loss of IR/232 control
- DM-RMC-200-C and SCALER-C could lock up under certain types of heavy IR traffic
- DM-MD6x6 and 6x4 lock ups with Ethernet disabled
- DMPS could lose some NV memory settings if rebooted improperly
- Initial DM-TX-401-C release (not included in PUF 2.44):
 - o Infrared port unreliable on DM-TX-401-C
 - o TX-401-C failed to pass some 3D formats
- Improvements to PUF detection of devices in bootloader
- Enabling high levels of debug print-outs could lock up 8x8 through 32x32.

Open issues

- DMC-HD-DSP: Problem decoding AC-3 audio from Kaleidascap media server. Workaround: Set K'scape to output multichannel PCM.
- Apple keyboard does not connect reliably to RMCs.
- DM-RMC-200-C, DM-RMC-SCALER-C: horizontal line artifact with 1080p input, 1600x1200 output.
- DM-RMC-100: May fail to establish control system connection if hostname is used in IP table. Use IP address.
- All TX's (except TX-401-XX): HDMI audio unreliable with 480i video. All other resolutions are ok.
- DMPS HDMI input audio compensation feedback is wrong: feedback for input 5 shows up on input 4, etc. The actual compensation adjustment applies to the correct channel.

DMPS-300-C specific issues

- Any DMPS program compiled against a Device Database built before v41.00.001, released April 5, 2012 will need to be recompiled against a more current database. **Note:** *this is a simple recompilation; you don't need to create a new program or copy any logic.*
 - o Please see Online Help Answer ID 5147 for more details.
- Crestron Database v34.05.008.00 (and the default program included in this PUF) includes an upgrade to the DMPS-300-C protected module (v1.2). This module will be used whenever you create a new DMPS-300-C program. The new protected module now supports the faster compile times already supported on the DMPS-100-C and DMPS-200-C.
Compile times were improved by changing how joins are stored in non-volatile memory (NVMEM). **If you wish to preserve your non-volatile settings after upgrading the protected module you will need to run your DMPS-300-C through a one-time NVMEM conversion process.** This is accomplished via a special SIMPL-based transition program. This program and its usage instructions are available in Crestron Online Help Answer ID 5147

DigitalMedia PUF 2.44.00 Release Notes

Included Firmware – DM midpoints and switches

Device name	Device model number	Firmware included
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.102.159200059*
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.77*
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.102.159200059*
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.77*
DigitalMedia™ switcher main firmware	DM-MD6x1	4.102.159200059*
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.77*
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	2.002.0026
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.67
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.1498.00021
DigitalMedia™ switcher main firmware	DM-MD6x6 & DM-MD6x4	4.102.159200059*
DigitalMedia™ switcher operational config	DM-MD6x6 & DM-MD6x4	1.0.77*
DigitalMedia™ switcher front panel application	DM-MD6x6 & DM-MD6x4	1.0.72
DigitalMedia™ switcher front panel firmware	DM-MD6x6 & DM-MD6x4	1.1498.00021
DMPs control board firmware	DMPs-300/200/100-C	4.007.0009*
DMPs default program	DMPs-300-C	1.2.21*
DMPs default program	DMPs-200-C	1.2.21*
DMPs default program	DMPs-100-C	1.2.21*
DMPs front panel firmware	DMPs-300/200/100-C	1.001.0004
DMPs audio board firmware	DMPs-300/200/100-C	1.1592.00053*
DMPs video board firmware	DMPs-300/200/100-C	4.102.159200059*
DMPs video board out of the box firmware	DMPs-300/200/100-C	1.0.74*

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 8G+ room controller	DM-RMC-100-C	1.1498.00021	124
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.1498.00021	105
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.1498.00021	105
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.1498.00021	105
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-150-S	1.1592.00053*	105
DigitalMedia™ advanced 8G fiber RMC FPGA	DM-RMC-150-S	4	
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-200/SCALER-S	1.1592.00053*	167*
DigitalMedia™ advanced 8G+ room controller	DM-RMC-200/SCALER-C	1.1592.00053*	124
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.1498.00021	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.1592.00051*	105
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.1498.00021	105
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.1592.00036*	105
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G+ 2G TX	DM-TX-200-C-2G	1.1592.00036*	167*
DigitalMedia™ HDMI + RGB 8G+ 2G TX FPGA	DM-TX-200-C-2G	14*	
DigitalMedia™ HDMI + RGB 8G+ transmitter	DM-TX-201-C	1.1592.00036*	124
DigitalMedia™ HDMI + RGB 8G+ TX FPGA	DM-TX-201-C	48	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.1592.00041*	167*
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	64	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.1592.00036*	105
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.1592.00036*	105
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.1592.00036*	105
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ HDMI + DP +RGB transmitter	DM-TX-401-S	1.1592.00059*	167*
DigitalMedia™ repeater, DM-CAT	DM-DR	1.1498.00021	69

* Denotes new or updated firmware compared to PUF 2.41 (see revision history for details)

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 8G+ input card	DMC-C and DMC-C-DSP	1.1498.00021	105
DigitalMedia™ 8G+ input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G+ input card DSP code	DMC-C-DSP	1.0.1	
DigitalMedia™ 8G+ output card	DMC-CO-HD	1.1498.00021	105
DigitalMedia™ 8G+ output card FPGA	DMC-CO-HD	40	
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.1498.00021	69
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	1.0.1	
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.1498.00021	69
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.1592.00059*	167*
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.1498.00021	69
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	1.0.1	
DigitalMedia™ fiber output card	DMC-FO	1.1498.00021	69
DigitalMedia™ HDMI input card	DMC-HD and DMC-HD-DSP	1.1592.00041*	167*
DigitalMedia™ HDMI input card FPGA	DMC-HD and DMC-HD-DSP	56	
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	1.0.1	
DigitalMedia™ HDMI output card	DMC-HDO	1.1592.00053*	78
DigitalMedia™ 8G fiber input card	DMC-S/S2 and DMC-S/S2-DSP	1.1498.00021	105
DigitalMedia™ 8G fiber input card FPGA	DMC-S/S2 and DMC-S/S2-DSP	3	
DigitalMedia™ 8G fiber input card DSP code	DMC-S/S2-DSP	1.0.1	
DigitalMedia™ SDI input card	DMC-SDI	1.1592.00041*	105
DigitalMedia™ SDI input card FPGA	DMC-SDI	40	105
DigitalMedia™ 8G fiber output card	DMC-SO/S20-HD	1.1498.00021	112
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO/S20-HD	14	
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO/S20-HD	15	
DigitalMedia™ analog video input card	DMC-VGA	1.1592.00051*	167*
DigitalMedia™ analog video input card FPGA	DMC-VGA	11*	
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.1592.00036*	69
DigitalMedia™ security camera input card	DMC-VID4	1.1498.00021	69

Software Tool Compatibility Requirements

The following SW Tool versions (or higher) are required:

Device Database	46.00.002
Crestron Database	34.05.008.00
SIMPL Windows	3.11.06
Crestron Toolbox	2.34.065

* Denotes new or updated firmware compared to PUF 2.41 (see revision history for details)

PUF 2.44 is a maintenance-only release from the PUF 2.40 series. It includes a few specifically targeted bug fixes, integrates several recently introduced products not previously included in a PUF release, and makes a few changes to improve production test efficiency, with no effect on user-facing behavior. Only about half of the DM devices receive an update in PUF 2.44 compared to PUF 2.41. This PUF brings the DMPS control system in line with all other 2-series control platforms on the 4.7.x feature set.

New Features (compared to PUF 2.41.00)

- **New device support**

DMPS-100-C	DM-TX-401-S	DM-RMC-SCALER-S2
DMPS-200-C	DM-TX-201-S2	DM-RMC-200-S2
DMC-VGA	DM-TX-401-S2	
- DMPS control processor updated to 2-series version 4.007. This brings several key new features:
 - o Secure connection for Mobile Pro devices
 - o Core3UI Smart Objects support
- CEC support added to all DMPS models.
- Improved RGB locking algorithm for problematic VGA sources (some issues with specific Dell PC's, others). Previously these sources could take a long time to lock, or display black video.
- DMPS module core logic all unified at 1.2 level. Dramatic improvements to DMPS-300-C compile time

Issues fixed

- RMC-200-*, RMC-SCALER-*, RMC-150-S may drop Ethernet communications unexpectedly
- Non-field issue: RMC-200-*, RMC-SCALER-*, TX-401-S changes to improve hardware production yield
- DM-MD6x1: audible "snap" when switching between multichannel S/PDIF and analog audio
- DMC-CATO stops responding to rcon commands
- Issue communicating with standalone TX after it has been removed from PNM-enabled switch
- Cards disappear from front panel display list (only)

Open issues

- DMC-HD-DSP: Problem decoding AC-3 audio from Kaleidascope media server. Workaround: Set K'scope to output multichannel PCM.
- Apple keyboard does not connect reliably to RMCs.
- DM-RMC-200-C, DM-RMC-SCALER-C: horizontal line artifact with 1080p input, 1600x1200 output.
- DM-RMC-100: May fail to establish control system connection if hostname is used in IP table. Use IP address.
- All TX's: HDMI audio unreliable with 480i video. All other resolutions are ok.

DMPS-300-C specific issues

- Any DMPS program compiled against a Device Database built before v41.00.001, released April 5 will need to be recompiled against a more current database. **Note:** *this is a simple recompilation; you don't need to create a new program or copy any logic.*
 - o Please see Online Help Answer ID 5147 for more details.
- Crestron Database v34.05.008.00 (and the default program included in this PUF) includes an upgrade to the DMPS-300-C protected module (v1.2). This module will be used whenever you create a new DMPS-300-C program. The new protected module now supports the faster compile times already supported on the DMPS-100-C and DMPS-200-C.

Compile times were improved by changing how joins are stored in non-volatile memory (NVMEM). **If you wish to preserve your non-volatile settings after upgrading the protected module you will need to run your DMPS-300-C through a one-time NVMEM conversion process.** This is accomplished via a special SIMPL-based transition program. This program and its usage instructions are available in Crestron Online Help Answer ID 5147

DigitalMedia PUF 2.41.00 Release Notes

Included Firmware – DM midpoint switches

Device name	Device model number	Firmware included
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.002.149800021
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.72
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.002.149800021
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.72
DigitalMedia™ switcher main firmware	DM-MD6x1	4.002.149800021
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.72
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	2.002.0026
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.67
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.1498.00021
DigitalMedia™ switcher main firmware	DM-MD6x6 & DM-MD6x4	4.002.1498.00021
DigitalMedia™ switcher operational config	DM-MD6x6 & DM-MD6x4	1.0.74
DigitalMedia™ switcher front panel application	DM-MD6x6 & DM-MD6x4	1.0.72
DigitalMedia™ switcher front panel firmware	DM-MD6x6 & DM-MD6x4	1.1498.00021
DMPs control board firmware	DMPs-300-C	4.004.149800022*
DMPs default program	DMPs-300-C	1.1.23*
DMPs front panel firmware	DMPs-300-C	1.001.0004
DMPs audio board firmware	DMPs-300-C	1.1498.00021*
DMPs video board firmware	DMPs-300-C	4.102.149800027*
DMPs video board out of the box firmware	DMPs-300-C	1.0.73*

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 8G+ input card	DMC-C and DMC-C-DSP	1.1498.00021	105
DigitalMedia™ 8G+ input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G+ input card DSP code	DMC-C-DSP	1.0.1	
DigitalMedia™ 8G+ output card	DMC-CO-HD	1.1498.00021	105
DigitalMedia™ 8G+ output card FPGA	DMC-CO-HD	40	
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.1498.00021	69
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	1.0.1	
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.1498.00021	69
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.1498.00021	105
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.1498.00021	69
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	1.0.1	
DigitalMedia™ fiber output card	DMC-FO	1.1498.00021	69
DigitalMedia™ HDMI input card	DMC-HD and DMC-HD-DSP	1.1498.00021	105
DigitalMedia™ HDMI input card FPGA	DMC-HD and DMC-HD-DSP	56	
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	1.0.1	
DigitalMedia™ HDMI output card	DMC-HDO	1.1498.00021	78
DigitalMedia™ 8G fiber input card	DMC-S/S2 and DMC-S/S2-DSP	1.1498.00021	105
DigitalMedia™ 8G fiber input card FPGA	DMC-S/S2 and DMC-S/S2-DSP	3	
DigitalMedia™ 8G fiber input card DSP code	DMC-S/S2-DSP	1.0.1	
DigitalMedia™ SDI input card	DMC-SDI	1.1498.00021	105
DigitalMedia™ SDI input card FPGA	DMC-SDI	40*	105
DigitalMedia™ 8G fiber output card	DMC-SO/S20-HD	1.1498.00021	112
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO/S20-HD	14	
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO/S20-HD	15	
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.1498.00021	69
DigitalMedia™ security camera input card	DMC-VID4	1.1498.00021	69

* Denotes new or updated firmware compared to PUF 2.40 (see revision history for details)

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader required
DigitalMedia™ 8G+ room controller	DM-RMC-100-C	1.1498.00021	124
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.1498.00021	105
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.1498.00021	105
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.1498.00021	105
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-150-S	1.1498.00021	105
DigitalMedia™ advanced 8G fiber RMC FPGA	DM-RMC-150-S	4	
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-200-S	1.1498.00021	149
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-SCALER-S	1.1498.00021	149
DigitalMedia™ advanced 8G+ room controller	DM-RMC-200-C	1.1498.00021	124
DigitalMedia™ advanced 8G+ room controller	DM-RMC-SCALER-C	1.1498.00021	105
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.1498.00021	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.1498.00021	105
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.1498.00021	105
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.1498.00021	105
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G+ 2G TX	DM-TX-200-C-2G	1.1498.00021	124
DigitalMedia™ HDMI + RGB 8G+ 2G TX FPGA	DM-TX-200-C-2G	7	
DigitalMedia™ HDMI + RGB 8G+ transmitter	DM-TX-201-C	1.1498.00021	124
DigitalMedia™ HDMI + RGB 8G+ TX FPGA	DM-TX-201-C	48	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.1498.00021	105
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	64	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.1498.00021	105
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.1498.00021	105
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.1498.00021	105
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ repeater, DM-CAT	DM-DR	1.1498.00021	69

Software Tool Compatibility Requirements

The following SW Tool versions (or higher) are required:

Device Database	42.00.002.00
Crestron Database	31.00.005.00
SIMPL Windows	3.11.06
Crestron Toolbox	2.32.053.014

* Denotes new or updated firmware compared to PUF 2.40 (see revision history for details)

PUF 2.41 is an update to PUF 2.40 that brings the DMPS-300-C up to date with the rest of DigitalMedia. PUF 2.40 and 2.41 include the new “private network mode” to reduce the consumption of IP addresses. Please see the next page for critical information about PNM.

New Features (compared to PUF 2.37.02)

- **New device support**

DMPS-300-C	DM-MD6x4	DM-RMC-SCALER-S
DM-MD6x6	DM-RMC-200-S	
- CEC support added to DM-MD6x1, DM-MD6x6, and DM-MD6x4
- Version number scheme change. From now on, all pieces of firmware from the same “branch” will have the same sub-version number. For the x.40 series, this number is “1498.” So for example, the TX-201-C firmware is now 1.1498.00021. The switch firmware is 4.002.149800021. This should make it easier to determine that all your firmware matches, at a quick glance. It will also (ideally) simplify determining which PUF version is installed. Please note that the minor version number (“21” in this example) may not always match for all devices in the PUF. In 2.40.00, they do.
- Switching speed improvements
- 16:10 EDID filter on/off integration into toolbox
- Free run on/off integration into toolbox and SIMPL programming
- HDCP on/off integration into toolbox and SIMPL programming. This is useful when connecting a computer (especially a Mac) to a DM system for routing to a VC codec. Without this feature, the computer may enable HDCP and be un-routable to a non-HDCP codec. Note this will NOT “break” HDCP. It will simply report to the source that its downstream device (DM) cannot support HDCP. The source may choose how to proceed.
- Added automatic 5% overscan to RMC’s with scalers when program content is 480i only.
- Added debug information for IR ports: FDEBUG 44 (IR TX) prints out START, STOP, and SERIAL packets
- Speed improvements for PUF detecting and loading
- DMPS-300-C not assigning IP tables to endpoints
- EDID updates from DMPS tool were propagating immediately, not waiting on “Apply” button
- VGA auto-calibrate was not working properly on DMPS-300-C

Issues fixed

- DM-MD6x6, 6x4: Corrected USB routing mechanism. May now route USB “the easy way.”
- DM-RMC-200-C: Cannot send “\0” when handshaking enabled (RS-232)
- Fix for a situation where 8G+ mode could cause video flashing based on interaction between DM EDID controls
- Fix for a situation where extended IR traffic could interrupt control system communication with several TX and RMC products.
- Fixed 1% loss of serial packets to some endpoint devices

Open issues

- DMC-HD-DSP: Problem decoding AC-3 audio from Kaleidascap media server. Workaround: Set K’scape to output multichannel PCM.
- Apple keyboard does not connect reliably to RMCs.
- DM-RMC-200-C, DM-RMC-SCALER-C: horizontal line artifact with 1080p input, 1600x1200 output.
- DM-RMC-100: May fail to establish control system connection if hostname is used in IP table. Use IP address.
- DM-MD6x1: audible “snap” when switching between multichannel S/PDIF and analog audio
- All TX’s: HDMI audio unreliable with 480i video. All other resolutions are ok.

PUF update issues

- On 32x32, firmware upload to output slot X may cause output slot X+16 to fail to report in reportdm. This is recovered with reboot, or console command “cards -f”.

Private Network Mode

Please read carefully! Important new rules!

The long-awaited “single IP address mode” for DM has arrived. To enable this feature, use the System Info tool, or your DM switch’s front panel. Note that you will be prompted to enter a “SystemID” value. The default is “1.” This setting is only relevant if you have multiple DM switches connected to one another via DM links. If you have this situation, then each switch must receive a unique SystemID. Values range from 1-64. If you have more than 64 switches interconnected, this CAN be accommodated via custom mechanisms. Please contact customer support if you have this requirement. The secret password is: “I bought more than 64 DM switches for one job.”

- **You must NEVER connect a DM endpoint (TX/RMC) courtesy LAN port to your LAN.** These ports are ONLY for connecting non-DM Ethernet devices to the LAN. Note that devices connected to these LAN ports will appear in a normal way on the existing LAN. They will not be hidden and will not be a part of the DM network. For example, if you connect a laptop to the TX-201-C Ethernet port, that laptop will communicate normally with the Ethernet LAN that your DM switch is connected to.
- **You MUST connect EACH DM switch to your LAN.** Switch A cannot receive its Ethernet connectivity from switch B if PNM is enabled. With PNM disabled, this works as normal.
- Setting the IP address of your switch is the same as before: choose DHCP or static. Your endpoints will be hidden from the network but may be addressed via Toolbox through the switch’s IP address
- NO PROGRAMMING CHANGES are necessary IF you defined your endpoints as part of the DM sub-slots, and did not attach them directly to your control processor’s Ethernet slot.
- With private network mode enabled, you cannot disable RSTP. However, RSTP traffic (BPDUs) will never escape DM to the public network.
- The DMPS-300-C consumes two IP addresses – one for the control processor, and one for all DM gear
- **Caution must be exercised in cascaded multi-switch systems when using PNM.** To upgrade such a system, best practice is the following:
 - o Upgrade all devices’ firmware
 - o Unplug all switches from LAN
 - Alternatively, you may use the new command “rstpconf state 2” to disable ALL Ethernet ports in the system.
 - o Use front panel to enable PNM on each switch (be sure to set unique SystemID for each)
 - o Reconnect all switches to LAN
 - If you used rstp state 2, there is nothing else needed. Upon reboot the cascaded system will be up and running in private network mode.
- Note that SystemID may be set via the control program. This helps to enable problem-free swapping, in the rare event that a DM switch must be replaced.
- **Upgrading your firmware will NOT adjust any network settings. However, as of PUF 2.40, the RESTORE command will enable private network mode.**

DigitalMedia PUF 2.40.00 Release Notes

Included Firmware – DM midpoint switches

Device name	Device model number	Firmware included
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.002.149800021*
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.72*
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.002.149800021*
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.72*
DigitalMedia™ switcher main firmware	DM-MD6x1	4.002.149800021*
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.72*
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	2.002.0026*
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.67*
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.1498.00021*
DigitalMedia™ switcher main firmware	DM-MD6x6 & DM-MD6x4	4.002.1498.00021*
DigitalMedia™ switcher operational config	DM-MD6x6 & DM-MD6x4	1.0.74*
DigitalMedia™ switcher front panel application	DM-MD6x6 & DM-MD6x4	1.0.72*
DigitalMedia™ switcher front panel firmware	DM-MD6x6 & DM-MD6x4	1.1498.00021*

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader
DigitalMedia™ 8G+ input card	DMC-C and DMC-C-DSP	1.1498.00021*	105
DigitalMedia™ 8G+ input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G+ input card DSP code	DMC-C-DSP	1.0.1	
DigitalMedia™ 8G+ output card	DMC-CO-HD	1.1498.00021*	105
DigitalMedia™ 8G+ output card FPGA	DMC-CO-HD	40	
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.1498.00021*	69
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	1.0.1	
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.1498.00021*	69
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.1498.00021*	105
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.1498.00021*	69
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	1.0.1	
DigitalMedia™ fiber output card	DMC-FO	1.1498.00021*	69
DigitalMedia™ HDMI input card	DMC-HD and DMC-HD-DSP	1.1498.00021*	105
DigitalMedia™ HDMI input card FPGA	DMC-HD and DMC-HD-DSP	56	
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	1.0.1	
DigitalMedia™ HDMI output card	DMC-HDO	1.1498.00021*	78
DigitalMedia™ 8G fiber input card	DMC-S/S2 and DMC-S/S2-DSP	1.1498.00021*	105
DigitalMedia™ 8G fiber input card FPGA	DMC-S/S2 and DMC-S/S2-DSP	3*	
DigitalMedia™ 8G fiber input card DSP code	DMC-S/S2-DSP	1.0.1	
DigitalMedia™ SDI input card	DMC-SDI	1.1498.00021*	105
DigitalMedia™ SDI input card FPGA	DMC-SDI	40*	105
DigitalMedia™ 8G fiber output card	DMC-SO/S20-HD	1.1498.00021*	112
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO/S20-HD	14*	
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO/S20-HD	15*	
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.1498.00021*	69
DigitalMedia™ security camera input card	DMC-VID4	1.1498.00021*	69

* Denotes new or updated firmware compared to PUF 2.37 (see revision history for details)

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader required
DigitalMedia™ 8G+ room controller	DM-RMC-100-C	1.1498.00021*	124
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.1498.00021*	105
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.1498.00021*	105
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.1498.00021*	105
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-150-S	1.1498.00021*	105
DigitalMedia™ advanced 8G fiber RMC FPGA	DM-RMC-150-S	4*	
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-200-S	1.1498.00021*	149*
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-SCALER-S	1.1498.00021*	149*
DigitalMedia™ advanced 8G+ room controller	DM-RMC-200-C	1.1498.00021*	124
DigitalMedia™ advanced 8G+ room controller	DM-RMC-SCALER-C	1.1498.00021*	105
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.1498.00021*	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.1498.00021*	105
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.1498.00021*	105
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.1498.00021*	105
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G+ 2G TX	DM-TX-200-C-2G	1.1498.00021*	124
DigitalMedia™ HDMI + RGB 8G+ 2G TX FPGA	DM-TX-200-C-2G	7	
DigitalMedia™ HDMI + RGB 8G+ transmitter	DM-TX-201-C	1.1498.00021*	124
DigitalMedia™ HDMI + RGB 8G+ TX FPGA	DM-TX-201-C	48	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.1498.00021*	105
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	64*	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.1498.00021*	105
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.1498.00021*	105
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.1498.00021*	105
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ repeater, DM-CAT	DM-DR	1.1498.00021*	69

Software Tool Compatibility Requirements

The following SW Tool versions (or higher) are required:

Device Database(DDb)	41.05.005.00
SIMPL Windows	3.11.06
Crestron Toolbox	2.31.034.038

* Denotes new or updated firmware compared to PUF 2.37 (see revision history for details)

The 2.40 series is a major new code release for DM, incorporating the 6x6/6x4 switches into the main DM PUF. Additionally, PUF 2.40 brings the new “private network mode” to reduce the consumption of IP addresses. Please see the next page for critical information about PNM.

New Features

- **New device support**
 - DM-MD6x6
 - DM-MD6x4
 - DM-RMC-200-S
 - DM-RMC-SCALER-S
- CEC support added to DM-MD6x1, DM-MD6x6, and DM-MD6x4
- Version number scheme change. From now on, all pieces of firmware from the same “branch” will have the same sub-version number. For the x.40 series, this number is “1498.” So for example, the TX-201-C firmware is now 1.1498.00021. The switch firmware is 4.002.149800021. This should make it easier to determine that all your firmware matches, at a quick glance. It will also (ideally) simplify determining which PUF version is installed. Please note that the minor version number (“21” in this example) may not always match for all devices in the PUF. In 2.40.00, they do.
- Switching speed improvements
- 16:10 EDID filter on/off integration into toolbox
- Free run on/off integration into toolbox and SIMPL programming
- HDCP on/off integration into toolbox and SIMPL programming. This is useful when connecting a computer (especially a Mac) to a DM system for routing to a VC codec. Without this feature, the computer may enable HDCP and be un-routable to a non-HDCP codec. Note this will NOT “break” HDCP. It will simply report to the source that its downstream device (DM) cannot support HDCP. The source may choose how to proceed.
- Added automatic 5% overscan to RMC’s with scalers when program content is 480i only.
- Added debug information for IR ports: FDEBUG 44 (IR TX) prints out START, STOP, and SERIAL packets
- Speed improvements for PUF detecting and loading

Issues fixed

- DM-MD6x6, 6x4: Corrected USB routing mechanism. May now route USB “the easy way.”
- DM-RMC-200-C: Cannot send “\0” when handshaking enabled (RS-232)
- Fix for a situation where 8G+ mode could cause video flashing based on interaction between DM EDID controls
- Fix for a situation where extended IR traffic could interrupt control system communication with several TX and RMC products.
- Fixed 1% loss of serial packets to some endpoint devices

Open issues

- DMC-HD-DSP: Problem decoding AC-3 audio from Kaleidascope media server. Workaround: Set K’scape to output multichannel PCM.
- Apple keyboard does not connect reliably to RMCs.
- DM-RMC-200-C, DM-RMC-SCALER-C: horizontal line artifact with 1080p input, 1600x1200 output.
- DM-RMC-100: May fail to establish control system connection if hostname is used in IP table. Use IP address.
- DM-MD6x1: audible “snap” when switching between multichannel S/PDIF and analog audio
- All TX’s: HDMI audio unreliable with 480i video. All other resolutions are ok.

PUF update issues

- On 32x32, firmware upload to output slot X may cause output slot X+16 to fail to report in reportdm. This is recovered with reboot, or console command “cards -f”.

Private Network Mode

Please read carefully! Important new rules!

The long-awaited “single IP address mode” for DM has arrived. To enable this feature, use the System Info tool, or your DM switch’s front panel. Note that you will be prompted to enter a “SystemID” value. The default is “1.” This setting is only relevant if you have multiple DM switches connected to one another via DM links. If you have this situation, then each switch must receive a unique SystemID. Values range from 1-64. If you have more than 64 switches interconnected, this CAN be accommodated via custom mechanisms. Please contact customer support if you have this requirement. The secret password is: “I bought more than 64 DM switches for one job.”

- **You must NEVER connect a DM endpoint (TX/RMC) courtesy LAN port to your LAN.** These ports are ONLY for connecting non-DM Ethernet devices to the LAN. Note that devices connected to these LAN ports will appear in a normal way on the existing LAN. They will not be hidden and will not be a part of the DM network. For example, if you connect a laptop to the TX-201-C Ethernet port, that laptop will communicate normally with the Ethernet LAN that your DM switch is connected to.
- **You MUST connect EACH DM switch to your LAN.** Switch A cannot receive its Ethernet connectivity from switch B if PNM is enabled. With PNM disabled, this works as normal.
- Setting the IP address of your switch is the same as before: choose DHCP or static. Your endpoints will be hidden from the network but may be addressed via Toolbox through the switch’s IP address
- NO PROGRAMMING CHANGES are necessary IF you defined your endpoints as part of the DM sub-slots, and did not attach them directly to your control processor’s Ethernet slot.
- With private network mode enabled, you cannot disable RSTP. However, RSTP traffic (BPDUs) will never escape DM to the public network.
- **Caution must be exercised in cascaded multi-switch systems when using PNM.** To upgrade such a system, best practice is the following:
 - o Upgrade all devices’ firmware
 - o Unplug all switches from LAN
 - Alternatively, you may use the new command “rstpconf state 2” to disable ALL Ethernet ports in the system.
 - o Use front panel to enable PNM on each switch (be sure to set unique SystemID for each)
 - o Reconnect all switches to LAN
 - If you used rstp state 2, there is nothing else needed. Upon reboot the cascaded system will be up and running in private network mode.
- Note that SystemID may be set via the control program. This helps to enable problem-free swapping, in the rare event that a DM switch must be replaced.
- **Upgrading your firmware will NOT adjust any network settings. However, as of PUF 2.40, the RESTORE command will enable private network mode.**

DigitalMedia PUF 2.37.02 Release Notes

Included Firmware – DM midpoint switches

Device name	Device model number	Firmware included	Minimum Bootloader required
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.002.0762	70
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.63	
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.002.0762	
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.63	
DigitalMedia™ switcher main firmware	DM-MD6x1	4.002.0762	
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.63	
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	2.002.0024	
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.45	
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.1393.19676	

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader required
DigitalMedia™ 8G+ input card	DMC-C and DMC-C-DSP	1.1393.19135	105
DigitalMedia™ 8G+ input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G+ input card DSP code	DMC-C-DSP	1.0.1	
DigitalMedia™ 8G+ output card	DMC-CO-HD	1.1393.19298	105
DigitalMedia™ 8G+ output card FPGA	DMC-CO-HD	40	
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.1324.31400	69
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	1.0.1	69
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.1393.19285	
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	105
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.1393.19207	
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	69
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.1393.19155	
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	1.0.1	69
DigitalMedia™ fiber output card	DMC-FO	1.1393.19345	
DigitalMedia™ HDMI input card	DMC-HD and DMC-HD-DSP	1.1393.19224	105
DigitalMedia™ HDMI input card FPGA	DMC-HD and DMC-HD-DSP	56	
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	1.0.1	78
DigitalMedia™ HDMI output card	DMC-HDO	1.1393.19315	
DigitalMedia™ 8G fiber input card	DMC-S/S2 and DMC-S/S2-DSP	1.1393.19170	105
DigitalMedia™ 8G fiber input card FPGA	DMC-S/S2 and DMC-S/S2-DSP	1	
DigitalMedia™ 8G fiber input card DSP code	DMC-S/S2-DSP	1.0.1	105
DigitalMedia™ SDI input card	DMC-SDI	1.1393.19262	
DigitalMedia™ 8G fiber output card	DMC-SO/S20-HD	1.1393.19327	112
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO/S20-HD	11	
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO/S20-HD	14	69
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.1393.19251	
DigitalMedia™ security camera input card	DMC-VID4	1.1393.19241	69

* Denotes new or updated firmware compared to PUF 2.37.01 (see revision history for details)

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader required
DigitalMedia™ 8G+ room controller	DM-RMC-100-C	1.1393.19395	124
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.1393.19358	105
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.1393.19411	105
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.1393.19374	105
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-150-S	1.1393.19426	105
DigitalMedia™ advanced 8G fiber RMC FPGA	DM-RMC-150-S	3	
DigitalMedia™ advanced 8G+ room controller	DM-RMC-200-C	1.1393.19449	124
DigitalMedia™ advanced 8G+ room controller	DM-RMC-SCALER-C	1.1393.19449	105
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.1393.19489	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.1393.19498	105
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.1393.19515	105
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.1393.19530	105
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G+ 2G TX	DM-TX-200-C-2G	1.1450.17018*	124
DigitalMedia™ HDMI + RGB 8G+ 2G TX FPGA	DM-TX-200-C-2G	7	
DigitalMedia™ HDMI + RGB 8G+ transmitter	DM-TX-201-C	1.1393.19552	124
DigitalMedia™ HDMI + RGB 8G+ TX FPGA	DM-TX-201-C	48*	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.1393.19575	105
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	46	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.1393.19598	105
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.1393.19623	105
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.1393.19648	105
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ repeater, DM-CAT	DM-DR	1.1393.19275	69

Software Tool Compatibility Requirements

The following SW Tool versions (or higher) are required:

Device Database(DDb)	37.00.001
SIMPL Windows	3.02.04
Crestron Toolbox	2.29.045

PUF 2.37.02 is a minor update to PUF 2.37.01. The only change is a fix for the DM-TX-200-C-2G, addressing an issue where certain “fine phase” settings could lead to intermittent video drop outs on the VGA input.

* Denotes new or updated firmware compared to PUF 2.37.01 (see revision history for details)

DigitalMedia PUF 2.37 Release Notes

Included Firmware – DM midpoint switches

Device name	Device model number	Firmware included	Minimum Bootloader required
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.002.0762*	70
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.63*	
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.002.0762*	
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.63*	
DigitalMedia™ switcher main firmware	DM-MD6x1	4.002.0762*	
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.63*	
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	2.002.0024*	
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.45	
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.1393.19676*	

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader required
DigitalMedia™ 8G+ input card	DMC-C and DMC-C-DSP	1.1393.19135*	105
DigitalMedia™ 8G+ input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G+ input card DSP code	DMC-C-DSP	1.0.1	105
DigitalMedia™ 8G+ output card	DMC-CO-HD	1.1393.19298*	
DigitalMedia™ 8G+ output card FPGA	DMC-CO-HD	40	69
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.1324.31400*	
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	69
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	1.0.1	
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.1393.19285*	105
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.1393.19207*	69
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.1393.19155*	69
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	1.0.1	69
DigitalMedia™ fiber output card	DMC-FO	1.1393.19345*	
DigitalMedia™ HDMI input card	DMC-HD and DMC-HD-DSP	1.1393.19224*	105
DigitalMedia™ HDMI input card FPGA	DMC-HD and DMC-HD-DSP	56	
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	1.0.1	78
DigitalMedia™ HDMI output card	DMC-HDO	1.1393.19315*	
DigitalMedia™ 8G fiber input card	DMC-S/S2 and DMC-S/S2-DSP	1.1393.19170*	105
DigitalMedia™ 8G fiber input card FPGA	DMC-S/S2 and DMC-S/S2-DSP	1	
DigitalMedia™ 8G fiber input card DSP code	DMC-S/S2-DSP	1.0.1	105
DigitalMedia™ SDI input card	DMC-SDI	1.1393.19262*	
DigitalMedia™ 8G fiber output card	DMC-SO/S20-HD	1.1393.19327*	112
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO/S20-HD	11	
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO/S20-HD	14	69
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.1393.19251*	
DigitalMedia™ security camera input card	DMC-VID4	1.1393.19241*	69

* Denotes new or updated firmware compared to PUF 2.36 (see revision history for details)

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader required
DigitalMedia™ 8G+ room controller	DM-RMC-100-C	1.1393.19395*	124*
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.1393.19358*	105
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.1393.19411*	105
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.1393.19374*	105
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-150-S	1.1393.19426*	105
DigitalMedia™ advanced 8G fiber RMC FPGA	DM-RMC-150-S	3	
DigitalMedia™ advanced 8G+ room controller	DM-RMC-200-C	1.1393.19449*	124*
DigitalMedia™ advanced 8G+ room controller	DM-RMC-SCALER-C	1.1393.19449*	105
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.1393.19489*	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.1393.19498*	105
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.1393.19515*	105
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.1393.19530*	105
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G+ 2G TX	DM-TX-200-C-2G	1.1359.20542*	124*
DigitalMedia™ HDMI + RGB 8G+ 2G TX FPGA	DM-TX-200-C-2G	7	
DigitalMedia™ HDMI + RGB 8G+ transmitter	DM-TX-201-C	1.1393.19552*	124*
DigitalMedia™ HDMI + RGB 8G+ TX FPGA	DM-TX-201-C	48*	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.1393.19575*	105
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	46	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.1393.19598*	105
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.1393.19623*	105
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.1393.19648*	105
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ repeater, DM-CAT	DM-DR	1.1393.19275*	69

Software Tool Compatibility Requirements

The following SW Tool versions (or higher) are required:

Device Database(DDb)	37.00.001
SIMPL Windows	3.02.04
Crestron Toolbox	2.29.045

* Denotes new or updated firmware compared to PUF 2.36 (see revision history for details)

PUF 2.37 is a maintenance release based on the same code as PUF 2.35. PUF 2.37 features several key bug fixes and feature enhancements. Unless there is a specific feature or bug you wish to address (as defined by this document), there is no reason to update from PUF 2.35.

New Features

- In comparison to PUF 2.35, the following new products are supported. Note that these products are already supported in PUF 2.36 (production only).
 - o DM-TX-200-C-2G
 - o DMC-S2
 - o DMC-S2-DSP
 - o DMC-S2O-HD (DMCO- type 6)
- New setting allows more 16:10 resolutions into DVI and VGA EDID tables. Note that this may have negative consequences when used with Windows XP and Windows Vista PC's. *This feature is only useful on DVI and VGA inputs.*
For TX's with VGA inputs, use the commands:
 - > joinsetanalog 0 57 1 to disable the 16:10 filter (allow all 16:10 resolutions)
 - > joinsetanalog 0 57 0 to enable the 16:10 filter (disallow 16:10 resolutions in standard timing block)For TX's with DVI inputs, use the commands:
 - > joinsetanalog 0 57 1 to disable the 16:10 filter (allow all 16:10 resolutions)
 - > joinsetanalog 0 57 0 to enable the 16:10 filter (disallow 16:10 resolutions in standard timing block)For DMC-DVI, use these commands *at the DM switch, where "X" is the slot number of your DMC-DVI*:
 - > joinsetanalog X 57 1 to disable the 16:10 filter (allow all 16:10 resolutions)
 - > joinsetanalog X 57 0 to enable the 16:10 filter (disallow 16:10 resolutions in standard timing block)For DM-MD6x1, use the commands:
 - > joinsetanalog 2 27 1 to disable the 16:10 filter (allow all 16:10 resolutions)
 - > joinsetanalog 2 27 0 to enable the 16:10 filter (disallow 16:10 resolutions in standard timing block)
- Support for Hitachi StarBoard USB
- When RSTP is disabled, Ethernet ports between backplane and 8G output cards are configured automatically. User configuration is disabled. To configure Ethernet ports with RSTP disabled, user now needs to ONLY worry about the "8G out" ports, which will be off by default.

Issues fixed

- Spontaneous USB disconnect from RMC-100-F and DM-TX-200
- Improved link initialization for 8G+ (previously, cards could intermittently take up to 3 minutes to connect)
- Removed intermittent audio glitch when changing audio sampling frequencies on 8G fiber link
- Intermittent delay (up to 30 seconds) when making new USB route during heavy USB traffic
- Audio will not pass to DM-RMC-200-C power amp if downstream display is DVI
- 3D setting in manually configured EDID is not saved

Open issues

- DMC-HD-DSP: Problem decoding AC-3 audio from Kaleidascope media server. Workaround: Set K'scape to output multichannel PCM.
- Apple keyboard does not connect reliably to RMCs.
- DM-RMC-200-C, DM-RMC-SCALER-C: horizontal line artifact with 1080p input, 1600x1200 output.
- DM-TX-400-3G: HIDADDR cannot be set via "rcon." Use direct Ethernet connection or symbol cue.
- On 32x32, firmware upload to output slot X may cause output slot X+16 to fail to report in reportdm. This is recovered with reboot, or console command "cards -f".
- DM-RMC-100: May fail to establish control system connection if hostname is used in IP table. Use IP address.
- DM-MD6x1: audible "snap" when switching between multichannel S/PDIF and analog audio
- Using DVPHD as USB host does not work. This will be fixed in future DVPHD firmware.

PUF update issues

- Switch may fail to report version number of FPGA and DSP on cards. PUF updater will report version is "v." (instead of, e.g., "v1.734.54990").

- o Resolution: Firmware will update as normal, but may do so unnecessarily. Uncheck these items in the PUF update list, run the update without them, and re-check after.
- Switch A has inputs and/or outputs connected via DM or fiber cables to switch B. When attempting a PUF update to switch A, user will see the input/output cards of switch B that are connected. They will NOT successfully update. No changes and no harm to switch B.
 - o Resolution: PUF update must be run on switch B to update switch B's firmware. Update to switch B's cards will fail. User may un-check the cards in switch B when updating switch A. Disconnecting cables or powering off switch B will completely eliminate this.

DigitalMedia PUF 2.36 Release Notes

Included Firmware – DM midpoint switches

Device name	Device model number	Firmware included	Minimum Bootloader required
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.002.0754	
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.49	
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.002.0754	
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.49	
DigitalMedia™ switcher main firmware	DM-MD6x1	4.002.0754	
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.49	
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	1.002.0020	
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.45	
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.1267.32854	70

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader required
DigitalMedia™ 8G+ input card	DMC-C and DMC-C-DSP	1.1267.32280	105
DigitalMedia™ 8G+ input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G+ input card DSP code	DMC-C-DSP	1.0.1	
DigitalMedia™ 8G+ output card	DMC-CO-HD	1.1267.32460	105
DigitalMedia™ 8G+ output card FPGA	DMC-CO-HD	40	
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.1225.18255	69
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	1.0.1	
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.1267.32446	69
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.1267.32361	105
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.1267.32303	69
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	1.0.1	
DigitalMedia™ fiber output card	DMC-FO	1.1267.32510	69
DigitalMedia™ HDMI input card	DMC-HD and DMC-HD-DSP	1.1267.32382	105
DigitalMedia™ HDMI input card FPGA	DMC-HD and DMC-HD-DSP	56	
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	1.0.1	
DigitalMedia™ HDMI output card	DMC-HDO	1.1267.32478	78
DigitalMedia™ 8G fiber input card	DMC-S/S2 and DMC-S/S2-DSP	1.1351.27057*	105
DigitalMedia™ 8G fiber input card FPGA	DMC-S/S2 and DMC-S/S2-DSP	1	
DigitalMedia™ 8G fiber input card DSP code	DMC-S/S2-DSP	1.0.1	
DigitalMedia™ SDI input card	DMC-SDI	1.1267.32422	105
DigitalMedia™ 8G fiber output card	DMC-SO/S20-HD	1.1347.16711*	112*
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO/S20-HD	11	
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO/S20-HD	14*	
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.1267.32410	69
DigitalMedia™ security camera input card	DMC-VID4	1.1267.32399	69

* Denotes new or updated firmware compared to PUF 2.35 (see revision history for details)

PUF 2.36 is a production-only release to support new products

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader required
DigitalMedia™ 8G+ room controller	DM-RMC-100-C	1.1267.32563	105
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.1267.32522	105
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.1267.32580	105
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.1267.32540	105
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-150-S	1.1267.32595	105
DigitalMedia™ advanced 8G fiber RMC FPGA	DM-RMC-150-S	3	
DigitalMedia™ advanced 8G+ room controller	DM-RMC-200-C	1.1267.32620	105
DigitalMedia™ advanced 8G+ room controller	DM-RMC-SCALER-C	1.1267.32620	105
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.1267.32661	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.1267.32670	105
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.1267.32688	105
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.1267.32703	105
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G+ 2G TX	DM-TX-200-C-2G	1.1359.20542*	111*
DigitalMedia™ HDMI + RGB 8G+ 2G TX FPGA	DM-TX-200-C-2G	7*	
DigitalMedia™ HDMI + RGB 8G+ transmitter	DM-TX-201-C	1.1267.32725	105
DigitalMedia™ HDMI + RGB 8G+ TX FPGA	DM-TX-201-C	48	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.1267.32748	105
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	46	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.1267.32773	105
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.1267.32798	105
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.1267.32825	105
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ repeater, DM-CAT	DM-DR	1.1267.32436	69

Software Tool Compatibility Requirements

The following SW Tool versions (or higher) are required:

Device Database(DDb)	37.00.001
SIMPL Windows	3.02.04
Crestron Toolbox	2.28.062

* Denotes new or updated firmware compared to PUF 2.35 (see revision history for details)

PUF 2.36 is a production-only release to support new products

New Features

- PUF 2.36 is purely a new product release. There is no change to any existing firmware, with the exception of the DMC-S and DMC-SO-HD. This firmware has been updated because the –S and –S2 cards use the same firmware.

New Features

- PUF 2.36 is purely a new product release. There is no change to any existing firmware, with the exception of the DMC-S and DMC-SO-HD. This firmware has been updated because the –S and –S2 cards use the same firmware.
- Support for new products
 - o DM-TX-200-C-2G
 - o DMC-S2
 - o DMC-S2-DSP
 - o DMC-S2O-HD (DMCO- type 6)

Open issues

- DMC-HD-DSP: Problem decoding AC-3 audio from Kaleidascope media server. Workaround: Set K'scape to output multichannel PCM.
- Apple keyboard does not connect reliably to RMCs.
- DM-RMC-200-C, DM-RMC-SCALER-C: horizontal line artifact with 1080p input, 1600x1200 output.
- DM-TX-400-3G: HIDADDR cannot be set via "rcon." Use direct Ethernet connection or symbol cue.
- On 32x32, firmware upload to output slot X may cause output slot X+16 to fail to report in reportdm. This is recovered with reboot, or console command "cards –f".
- DM-RMC-100: May fail to establish control system connection if hostname is used in IP table. Use IP address.
- DM-MD6x1: audible "snap" when switching between multichannel S/PDIF and analog audio
- Using DVPHD as USB host does not work. This will be fixed in future DVPHD firmware.

PUF update issues

- Switch may fail to report version number of FPGA and DSP on cards. PUF updater will report version is "v." (instead of, e.g., "v1.734.54990").
 - o Resolution: Firmware will update as normal, but may do so unnecessarily. Uncheck these items in the PUF update list, run the update without them, and re-check after.
- Switch A has inputs and/or outputs connected via DM or fiber cables to switch B. When attempting a PUF update to switch A, user will see the input/output cards of switch B that are connected. They will NOT successfully update. No changes and no harm to switch B.
 - o Resolution: PUF update must be run on switch B to update switch B's firmware. Update to switch B's cards will fail. User may un-check the cards in switch B when updating switch A. Disconnecting cables or powering off switch B will completely eliminate this.

DigitalMedia PUF 2.35 Release Notes

Included Firmware – DM midpoint switches

Device name	Device model number	Firmware included	Minimum Bootloader required
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.002.0754*	70
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.49*	
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.002.0754*	
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.49*	
DigitalMedia™ switcher main firmware	DM-MD6x1	4.002.0754*	
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.49*	
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	1.002.0020	
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.45	
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.1267.32854*	

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader required
DigitalMedia™ 8G+ input card	DMC-C and DMC-C-DSP	1.1267.32280*	105*
DigitalMedia™ 8G+ input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G+ input card DSP code	DMC-C-DSP	1.0.1	
DigitalMedia™ 8G+ output card	DMC-CO-HD	1.1267.32460*	105*
DigitalMedia™ 8G+ output card FPGA	DMC-CO-HD	40	
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.1225.18255*	69
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	1.0.1	69
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.1267.32446*	
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	105*
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.1267.32361*	
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	69
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.1267.32303*	
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	69
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	1.0.1	
DigitalMedia™ fiber output card	DMC-FO	1.1267.32510*	105*
DigitalMedia™ HDMI input card	DMC-HD and DMC-HD-DSP	1.1267.32382*	
DigitalMedia™ HDMI input card FPGA	DMC-HD and DMC-HD-DSP	56	78
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	1.0.1	
DigitalMedia™ HDMI output card	DMC-HDO	1.1267.32478*	105*
DigitalMedia™ 8G fiber input card	DMC-S and DMC-S-DSP	1.1267.32319*	
DigitalMedia™ 8G fiber input card FPGA	DMC-S and DMC-S-DSP	1	105*
DigitalMedia™ 8G fiber input card DSP code	DMC-S-DSP	1.0.1	
DigitalMedia™ SDI input card	DMC-SDI	1.1267.32422*	105*
DigitalMedia™ 8G fiber output card	DMC-SO-HD	1.1267.32490*	
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO-HD	11	69
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO-HD	12	
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.1267.32410*	69
DigitalMedia™ security camera input card	DMC-VID4	1.1267.32399*	

* Denotes new or updated firmware compared to PUF 2.32 (see revision history for details)

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader required
DigitalMedia™ 8G+ room controller	DM-RMC-100-C	1.1267.32563*	105*
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.1267.32522*	105*
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.1267.32580*	105*
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.1267.32540*	105*
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-150-S	1.1267.32595*	105*
DigitalMedia™ advanced 8G fiber RMC FPGA	DM-RMC-150-S	3*	
DigitalMedia™ advanced 8G+ room controller	DM-RMC-200-C	1.1267.32620*	105*
DigitalMedia™ advanced 8G+ room controller	DM-RMC-SCALER-C	1.1267.32620*	105*
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.1267.32661*	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.1267.32670*	105*
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.1267.32688*	105*
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.1267.32703*	105*
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G+ transmitter	DM-TX-201-C	1.1267.32725*	105*
DigitalMedia™ HDMI + RGB 8G+ TX FPGA	DM-TX-201-C	48	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.1267.32748*	105*
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	46	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.1267.32773*	105*
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.1267.32798*	105*
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.1267.32825*	105*
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ repeater, DM-CAT	DM-DR	1.1267.32436*	69

Software Tool Compatibility Requirements

The following SW Tool versions (or higher) are required:

Device Database(DDb)	35.05.004
SIMPL Windows	3.02.04
Crestron Toolbox	2.27.038

* Denotes new or updated firmware compared to PUF 2.32 (see revision history for details)

New Features

- Support for new products
 - o DM-RMC-SCALER-C
- Enabled “8G+” – transmission of DM 8G over unshielded CAT5e or better cable
- Improved locking/switch time on 8G fiber products
- Significant broadening of USB HID device compatibility
- Added <Source_disable_free_run> join to TX’s. Use this to disable blackburst when no signal input.
- Added <HDCP_support_on> join on DVI inputs – useful to disable this if source needs to route to non-HDCP VC system (note: sources that require HDCP will disable their output)
- Added <HID_control> join to USB host devices for advanced routing of USB traffic
- DM-RMC-200-C: User may select whether left or right image is extracted from 3D signal when converting to 2D. Setting is non-volatile. Your display must NOT advertise 3D support in EDID.
 - o JOINSETANALOG 3 496 0 (left frame)
 - o JOINSETANALOG 3 496 1 (right frame).
- (Toolbox 2.27) Added “link quality” indicators for 8G+ and 8G fiber.

Issues Fixed

- Playstation3 and Xbox have Ethernet trouble when connected to DM-RMC-200-C or DM-RMC-150-S
- Retrieving FPGA version on DM-RMC-150-S is intermittent.
- DM-MD6x1: advanced audio modes not listed in EDID display in DMtool.
- DMC-HD: Polycom sources shifted by 10-20 pixels.
- USB host devices always report “1 device connected”
- DM-TX-200: RGB auto-calibrate not functioning correctly (5 pixel shift)
- DM-RMC-200-C, DM-RMC-150-S, DMCI-HD, DMCI-SDI: analog volume is not stored in non-volatile memory.

Open issues

- DMC-HD-DSP: Problem decoding AC-3 audio from Kaleidascope media server. Workaround: Set K’scape to output multichannel PCM.
- Apple keyboard does not connect reliably to RMCs.
- DM-RMC-200-C, DM-RMC-SCALER-C: horizontal line artifact with 1080p input, 1600x1200 output.
- DM-TX-400-3G: HIDADDR cannot be set via “rcon.” Use direct Ethernet connection or symbol cue.
- On 32x32, firmware upload to output slot X may cause output slot X+16 to fail to report in reportdm. This is recovered with reboot, or console command “cards –f”.
- DM-RMC-100: May fail to establish control system connection if hostname is used in IP table. Use IP address.
- DM-MD6x1: audible “snap” when switching between multichannel S/PDIF and analog audio
- Using DVPHD as USB host does not work. This will be fixed in future DVPHD firmware.

PUF update issues

- Switch may fail to report version number of FPGA and DSP on cards. PUF updater will report version is “v.” (instead of, e.g., “v1.734.54990”).
 - o Resolution: Firmware will update as normal, but may do so unnecessarily. Uncheck these items in the PUF update list, run the update without them, and re-check after.
- Switch A has inputs and/or outputs connected via DM or fiber cables to switch B. When attempting a PUF update to switch A, user will see the input/output cards of switch B that are connected. They will NOT successfully update. No changes and no harm to switch B.
 - o Resolution: PUF update must be run on switch B to update switch B’s firmware. Update to switch B’s cards will fail. User may un-check the cards in switch B when updating switch A. Disconnecting cables or powering off switch B will completely eliminate this.

DigitalMedia PUF 2.32 Release Notes

Included Firmware – DM midpoint switches

Device name	Device model number	Firmware included	Minimum Bootloader required
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.002.0741*	70
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.46*	
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.002.0741*	
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.45*	
DigitalMedia™ switcher main firmware	DM-MD6x1	4.002.0741*	
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.46*	
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	1.002.0020	
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.45*	
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.1147.31177*	

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader required
DigitalMedia™ 8G STP input card	DMC-C and DMC-C-DSP	1.1147.29665*	100*
DigitalMedia™ 8G STP input card FPGA	DMC-C and DMC-C-DSP	5	100*
DigitalMedia™ 8G STP input card DSP code	DMC-C-DSP	1.0.1	
DigitalMedia™ 8G STP output card	DMC-CO-HD	1.1147.30098*	
DigitalMedia™ 8G STP output card FPGA	DMC-CO-HD	40	69
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.1147.29811*	
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	1.0.1	69
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.1147.30067*	
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.1170.25626*	100*
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	69
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.1147.29718*	
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	1.0.1	69
DigitalMedia™ fiber output card	DMC-FO	1.1147.30228*	
DigitalMedia™ HDMI input card	DMC-HD and DMC-HD-DSP	1.1147.29903*	
DigitalMedia™ HDMI input card FPGA	DMC-HD and DMC-HD-DSP	56	100*
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	1.0.1	
DigitalMedia™ HDMI output card	DMC-HDO	1.1147.30147*	
DigitalMedia™ 8G fiber input card	DMC-S and DMC-S-DSP	1.1147.29753*	100*
DigitalMedia™ 8G fiber input card FPGA	DMC-S and DMC-S-DSP	1	100*
DigitalMedia™ 8G fiber input card DSP code	DMC-S-DSP	1.0.1	
DigitalMedia™ SDI input card	DMC-SDI	1.1147.30001*	
DigitalMedia™ 8G fiber output card	DMC-SO-HD	1.1147.30174*	100*
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO-HD	11	69
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO-HD	12	
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.1147.29973*	
DigitalMedia™ security camera input card	DMC-VID4	1.1147.29949*	69

* Denotes new or updated firmware compared to PUF 2.21 (see revision history for details)

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader required
DigitalMedia™ 8G STP room controller	DM-RMC-100-C	1.1147.30369*	100*
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.1147.30261*	100*
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.1147.30418*	100*
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.1147.30308*	100*
DigitalMedia™ advanced 8G fiber room controller	DM-RMC-150-S	1.1161.19476*	100*
DigitalMedia™ advanced 8G fiber RMC FPGA	DM-RMC-150-S	2*	
DigitalMedia™ advanced 8G STP room controller	DM-RMC-200-C	1.1161.19540*	100*
DigitalMedia™ single gang receiver	DM-RX1-1G	1.1147.30604*	69
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.1147.30627*	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.1147.30650*	100*
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.1147.30702*	100*
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.1147.30745*	100*
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G STP transmitter	DM-TX-201-C	1.1147.30802*	100*
DigitalMedia™ HDMI + RGB 8G STP TX FPGA	DM-TX-201-C	48	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.1147.30862*	100*
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	46	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.1161.22213*	100*
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.1161.22282*	100*
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.1147.31056*	100*
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ repeater, DM-CAT	DM-DR	1.1147.30041*	69

Software Tool Compatibility Requirements

The following SW Tool versions (or higher) are required:

Device Database(DDb)	32.00.016
SIMPL Windows	3.01.24.00
Crestron Toolbox	2.25.061

* Denotes new or updated firmware compared to PUF 2.21 (see revision history for details)

New Features

- Support for new products
 - o DM-RMC-200-C, advanced 8G STP roombox with video scaler, power amplifier, USB
 - o DM-RMC-150-S, advanced 8G fiber roombox with USB, line-level audio
- Audio compensation enabled in DMTool
- Analog audio output volume stored in non-volatile memory for DMCI cards

Issues Fixed

- DM-TX-300N, DM-TX-300N-F: broke connection between HDMI in and HDMI out CEC ports
- DM-TX-201-S: would not load firmware via Ethernet
- Improved DHCP discovery behavior during firmware load procedure
- Cleaned up port names for manual RSTP configuration on 8G output cards
- DM-RMC-100-F: Fixed situation where RMC could lose communication with switch (but video still passes)
- Fixed situation where output cards could “disappear” from system depending on hotplug behavior of display
- DM-MD6x1: Added support for 1920x1200 on VGA input
- DM-MD8x8 *et al*: A certain button sequence could lock up the front panel
- DM-MD8x8 *et al*: Audio frequency not correctly reported on front panel output audio menu
- Improved system performance while field debugging is enabled
- DM-RMC-100: Fixed situation where some update requests did not complete
- Eliminated some snap/pop noises on certain types of audio switches
- Improved video compatibility with Scientific Atlanta cable boxes
- DM-MD32x32: Changed rstpconf command to use same numbering scheme for output cards used by smaller switches
- DMCI-DVI: does not automatically display video after power cycle
- DMCI-DVI: card may get analog/digital EDID mode setting “stuck.”

Open issues

- DM-TX-400-3G: HIDADDR cannot be set via “rcon.” Use direct Ethernet connection or symbol cue.
- DMC-HD-DSP: Problem decoding AC-3 audio from Kaleidascope media server. Workaround: Set K’scape to output multichannel PCM.
- On 32x32, firmware upload to output slot X may cause output slot X+16 to fail to report in reportdm. This is recovered with reboot, or console command “cards -f”.

PUF update issues

- Switch may fail to report version number of FPGA and DSP on cards. PUF updater will report version is “v.” (instead of, *e.g.*, “v1.734.54990”).
 - o Resolution: Firmware will update as normal, but may do so unnecessarily. Uncheck these items in the PUF update list, run the update without them, and re-check after.
- Switch A has inputs and/or outputs connected via DM or fiber cables to switch B. When attempting a PUF update to switch A, user will see the input/output cards of switch B that are connected. They will NOT successfully update. No changes and no harm to switch B.
 - o Resolution: PUF update must be run on switch B to update switch B’s firmware. Update to switch B’s cards will fail. User may un-check the cards in switch B when updating switch A. Disconnecting cables or powering off switch B will completely eliminate this.

DigitalMedia PUF 2.21 Release Notes

Included Firmware – DM midpoint switches

Device name	Device model number	Firmware included	Minimum Bootloader required
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.002.0682	
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.41	
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.002.0682	
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.41	
DigitalMedia™ switcher main firmware	DM-MD6x1	4.002.0683	
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.34	
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	1.002.0020	
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.39	
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.987.39544	70

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader required
DigitalMedia™ 8G STP input card	DMC-C and DMC-C-DSP	1.997.31897	78
DigitalMedia™ 8G STP input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G STP input card DSP code	DMC-C-DSP	1.0.1	
DigitalMedia™ 8G STP output card	DMC-CO-HD	1.997.31950	78
DigitalMedia™ 8G STP output card FPGA	DMC-CO-HD	40	
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.987.38185	69
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	1.0.1	
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.987.38437	69
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.989.27323	78
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.987.38092	69
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	1.0.1	
DigitalMedia™ fiber output card	DMC-FO	1.987.38597	69
DigitalMedia™ HDMI input card	DMC-HD and DMC-HD-DSP	1.987.38278	78
DigitalMedia™ HDMI input card FPGA	DMC-HD and DMC-HD-DSP	56	
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	1.0.1	
DigitalMedia™ HDMI output card	DMC-HDO	1.987.38517	78
DigitalMedia™ 8G fiber input card	DMC-S and DMC-S-DSP	1.1049.22774	78
DigitalMedia™ 8G fiber input card FPGA	DMC-S and DMC-S-DSP	1	
DigitalMedia™ 8G fiber input card DSP code	DMC-S-DSP	1.0.1	
DigitalMedia™ SDI input card	DMC-SDI	1.987.38374	78
DigitalMedia™ 8G fiber output card	DMC-SO-HD	1.1049.22845	78
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO-HD	11	
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO-HD	12	
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.988.30338	69
DigitalMedia™ security camera input card	DMC-VID4	1.987.38319	69

* Denotes new or updated firmware compared to previous version (see revision history for details)

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader required
DigitalMedia™ 8G STP room controller	DM-RMC-100-C	1.987.38736*	78
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.987.38632*	78
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.987.38784*	78
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.1049.22893*	78
DigitalMedia™ single gang receiver	DM-RX1-1G	1.995.18280	69
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.987.38978	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.987.39002	78
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.987.39050	78
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.987.39088	78
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G STP transmitter	DM-TX-201-C	1.997.32104	78
DigitalMedia™ HDMI + RGB 8G STP TX FPGA	DM-TX-201-C	48	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.1049.22950	78
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	46	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.987.39268	78
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.987.39335	78
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.987.39403	78
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ repeater, DM-CAT	DM-DR	1.987.38409	69

Software Tool Compatibility Requirements

The following SW Tool versions (or higher) are required:

Device Database(DDb)	30.05.002.00
SIMPL Windows	2.12.39
Crestron Toolbox	1.22.062

* Denotes new or updated firmware compared to previous version (see revision history for details)

New Features

- None. Maintenance release only.

Issues Fixed

- Fixed issue where 8G fiber products may intermittently fail to connect on startup or plug-in.
- Issue with TX-300 Nagle mode was fixed in PUF 2.20. This was not noted in 2.20 release notes.

Open issues

- If display continuously asserts “hotplug” signal when powered off, continuous HDCP authentication errors may cause output card to fall offline. Workaround: always break routes to powered-down displays.
- On 32x32, firmware upload to output slot X may cause output slot X+16 to fail to report in reportdm. This is recovered with reboot, or console command “cards -f”.

PUF update issues

- Switch may fail to report version number of FPGA and DSP on cards. PUF updater will report version is “v.” (instead of, e.g., “v1.734.54990”).
 - o Resolution: Firmware will update as normal, but may do so unnecessarily. Uncheck these items in the PUF update list, run the update without them, and re-check after.
- Switch A has inputs and/or outputs connected via DM or fiber cables to switch B. When attempting a PUF update to switch A, user will see the input/output cards of switch B that are connected. They will NOT successfully update. No changes and no harm to switch B.
 - o Resolution: PUF update must be run on switch B to update switch B’s firmware. Update to switch B’s cards will fail. User may un-check the cards in switch B when updating switch A. Disconnecting cables or powering off switch B will completely eliminate this.

DigitalMedia PUF 2.20 Release Notes

Included Firmware – DM midpoint switches

Device name	Device model number	Firmware included	Minimum Bootloader required
DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.002.0682*	
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.41*	
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.002.0682*	
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.41*	
DigitalMedia™ switcher main firmware	DM-MD6x1	4.002.0683*	
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.34	
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	1.002.0020	
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.39	
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.987.39544*	70

Included Firmware – DM input/output cards

Device name	Device model number	Firmware included	Minimum Bootloader required
DigitalMedia™ 8G STP input card	DMC-C and DMC-C-DSP	1.997.31897*	78
DigitalMedia™ 8G STP input card FPGA	DMC-C and DMC-C-DSP	5	
DigitalMedia™ 8G STP input card DSP code	DMC-C-DSP	1.0.1	
DigitalMedia™ 8G STP output card	DMC-CO-HD	1.997.31950*	78
DigitalMedia™ 8G STP output card FPGA	DMC-CO-HD	40	
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.987.38185*	69
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60	
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	1.0.1	
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.987.38437*	69
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39	
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.989.27323*	78
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16	
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.987.38092*	69
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58	
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	1.0.1	
DigitalMedia™ fiber output card	DMC-FO	1.987.38597*	69
DigitalMedia™ HDMI input card	DMC-HD and DMC-HD-DSP	1.987.38278*	78
DigitalMedia™ HDMI input card FPGA	DMC-HD and DMC-HD-DSP	56	
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	1.0.1	
DigitalMedia™ HDMI output card	DMC-HDO	1.987.38517*	78
DigitalMedia™ 8G fiber input card	DMC-S and DMC-S-DSP	1.997.31836*	78
DigitalMedia™ 8G fiber input card FPGA	DMC-S and DMC-S-DSP	1*	
DigitalMedia™ 8G fiber input card DSP code	DMC-S-DSP	1.0.1*	
DigitalMedia™ SDI input card	DMC-SDI	1.987.38374*	78
DigitalMedia™ 8G fiber output card	DMC-SO-HD	1.997.31994*	78
DigitalMedia™ 8G fiber output card FPGA1	DMC-SO-HD	11*	
DigitalMedia™ 8G fiber output card FPGA2	DMC-SO-HD	12*	
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.988.30338*	69
DigitalMedia™ security camera input card	DMC-VID4	1.987.38319*	69

* Denotes new or updated firmware compared to previous version (see revision history for details)

Included Firmware – DM endpoints

Device name	Device model number	Firmware included	Minimum Bootloader required
DigitalMedia™ 8G STP room controller	DM-RMC-100-C	1.987.38735*	78
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.987.38631*	78
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.987.38783*	78
DigitalMedia™ 8G fiber room controller	DM-RMC-100-S	1.997.32044*	78
DigitalMedia™ single gang receiver	DM-RX1-1G	1.995.18280*	69
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.987.38978*	69
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.987.39002*	78
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.987.39050*	78
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.987.39088*	78
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41	
DigitalMedia™ HDMI + RGB 8G STP transmitter	DM-TX-201-C	1.997.32104*	78
DigitalMedia™ HDMI + RGB 8G STP TX FPGA	DM-TX-201-C	48*	
DigitalMedia™ HDMI + RGB 8G fiber transmitter	DM-TX-201-S	1.997.32161*	78
DigitalMedia™ HDMI + RGB 8G fiber TX FPGA	DM-TX-201-S	46*	
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.987.39268*	78
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23	
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.987.39335*	78
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23	
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.987.39403*	78
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7	
DigitalMedia™ repeater, DM-CAT	DM-DR	1.987.38409*	69

Software Tool Compatibility Requirements

The following SW Tool versions (or higher) are required:

Device Database(DDb)	30.05.002.00
SIMPL Windows	2.12.39
Crestron Toolbox	1.22.062

** Denotes new or updated firmware compared to previous version (see revision history for details)*

New Features

- New products supported
 - o DMC-S
 - o DMC-S-DSP
 - o DMC-SO-HD ("4-series" output card)
 - o DM-TX-201-S
 - o DM-RMC-100-S
 - o DMCI-DMC-C
- Support for 3D television. Devices that support 3D:
 - o DMC-HD
 - o DMC-HD-DSP
 - o All DM output cards
 - o All DM room boxes
 - o DM-TX-100
 - o DM-TX-100-F
- Added new analog join to control EDID mode of DVI inputs – may be set to use VGA or DVI mode. Force VGA mode if you are using a DVI to VGA adapter.
- Added audio input compensation for all input cards – DM Tool support coming in version 1.23
- Filter low to medium resolutions from automatic EDID table if those resolutions are not exactly 4:3, 16:9, or 16:10 aspect ratios. Some sources cannot output these resolutions.
- "ver -v" command now reports bootloader version on device
- DM-32x32-RPS will enter safety standby mode if two PSU's have failed

Issues Fixed

- Improved compatibility with Intel 4500M chipset on VGA – sometimes image was shifted eight pixels
- Reduced level of switching noise on analog outputs into high gain amplifiers
- Corrected situation where changes to EDID on 6x1 may not be propagated to input TX's
- Cannot upload bootloader to DM-RMC-100-C
- Reduced switching noise when switching audio from analog to S/PDIF input

Open issues

- TX-300 in standalone mode – must enable Nagle mode on control system.
- If display continuously asserts "hotplug" signal when powered off, continuous HDCP authentication errors may cause output card to fall offline. Workaround: always break routes to powered-down displays.
- On 32x32, firmware upload to output slot X may cause output slot X+16 to fail to report in reportdm. This is recovered with reboot, or console command "cards -f".

PUF update issues

- Switch may fail to report version number of FPGA and DSP on cards. PUF updater will report version is "v." (instead of, e.g., "v1.734.54990").
 - o Resolution: Firmware will update as normal, but may do so unnecessarily. Uncheck these items in the PUF update list, run the update without them, and re-check after.
- Switch A has inputs and/or outputs connected via DM or fiber cables to switch B. When attempting a PUF update to switch A, user will see the input/output cards of switch B that are connected. They will NOT successfully update. No changes and no harm to switch B.
 - o Resolution: PUF update must be run on switch B to update switch B's firmware. Update to switch B's cards will fail. User may un-check the cards in switch B when updating switch A. Disconnecting cables or powering off switch B will completely eliminate this.

DigitalMedia PUF 2.10 release notes

Included Firmware

DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.002.0635*
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.39*
DigitalMedia™ switcher main firmware	DM-MD32x32(-RPS)	4.002.0635*
DigitalMedia™ switcher operational config	DM-MD32x32(-RPS)	1.0.39*
DigitalMedia™ switcher main firmware	DM-MD6x1	4.002.0635*
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.34
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	1.002.0020*
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.39*
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.934.28081*
DigitalMedia™ 8G STP input card	DMC-C and DMC-C-DSP	1.934.26825*
DigitalMedia™ 8G STP input card FPGA	DMC-C and DMC-C-DSP	5*
DigitalMedia™ 8G STP input card DSP code	DMC-C-DSP	1.0.1*
DigitalMedia™ 8G STP output card	DMC-CO-HD	1.934.27212*
DigitalMedia™ 8G STP output card FPGA	DMC-CO-HD	40*
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.934.26958*
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	1.0.1
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.934.27181*
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.934.27000*
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.934.26874*
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	1.0.1
DigitalMedia™ fiber output card	DMC-FO	1.934.27327*
DigitalMedia™ HDMI input card	DMC-HD and DMC-HD-DSP	1.934.27040*
DigitalMedia™ HDMI input card FPGA	DMC-HD and DMC-HD-DSP	56
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	1.0.1
DigitalMedia™ HDMI output card	DMC-HDO	1.934.27252*
DigitalMedia™ SDI input card	DMC-SDI	1.934.27124*
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.934.27100*
DigitalMedia™ security camera input card	DMC-VID4	1.934.27077*
DigitalMedia™ repeater, DM-CAT	DM-DR	1.934.27157*
DigitalMedia™ 8G STP room controller	DM-RMC-100-C	1.934.27451*
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.934.27357*
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.934.28081*
DigitalMedia™ single gang receiver	DM-RX1-1G	1.934.27580*
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.934.27603*
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.934.27624*
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.934.27668*
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.934.27702*
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	41*
DigitalMedia™ HDMI + RGB 8G STP transmitter	DM-TX-201-C	1.934.27753*
DigitalMedia™ HDMI + RGB 8G STP TX FPGA	DM-TX-201-C	41*
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.934.27865*
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.934.27990*
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.934.27990*
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	7*

* Denotes new or updated firmware compared to version 2.03 (see revision history for details)

Software Tool Compatibility Requirements

The following SW Tool versions (or higher) are required:

Device Database(DDb)	29.00.000 (27.01 without RPS)
SIMPL Windows	2.12.39
Crestron Toolbox	1.21.046

New Features

- New products supported
 - o DM-MD32x32-RPS (was already supported in v2.04 – RPS only release)
 - o DMC-C
 - o DMC-C-DSP
 - o DMC-CO-HD (“5-series” output card)
 - o DM-TX-201-C
 - o DM-RMC-100-C
- DMC-SDI: Added front panel menu to select audio source

Issues Fixed

- Audio “pops” on HDO card analog outputs if output volume set very low
- DM-TX-100-F provides no CEC feedback
- DM-TX-400-3G, DM-TX-200: repeated USB hot plugging may interrupt TX communication with switch
- DM-TX-300N-F: After certain switching patterns between HDMI and composite video, audio may be muted.
- RSTP may be temporarily disabled during switch boot up process
- Brief flash of “ERROR” on front panel during HDCP authentication on new route
- DM-TX-300N-F may fail to respond to rcon console commands
- Removed non-functional picture controls for DMC-SDI from front panel
- Improved USB HID compatibility with Windows 7

Open issues

- TX-300 in standalone mode – must enable Nagle mode on control system.
- If display continuously asserts “hotplug” signal when powered off, continuous HDCP authentication errors may cause output card to fall offline. Workaround: always break routes to powered-down displays.
- On 32x32, firmware upload to output slot X may cause output slot X+16 to fail to report in reportdm. This is recovered with reboot, or console command “cards –f”.
- In standalone mode, using static IP address, the IP address of a roombox may be lost following the update (set to 0.0.0.0). Workaround is to reassign the IP address.

PUF update issues

- Switch may fail to report version number of FPGA and DSP on cards. PUF updater will report version is “v.” (instead of, e.g., “v1.734.54990”).
 - o Resolution: Firmware will update as normal, but may do so unnecessarily. Uncheck these items in the PUF update list, run the update without them, and re-check after.
- Switch A has inputs and/or outputs connected via DM or fiber cables to switch B. When attempting a PUF update to switch A, user will see the input/output cards of switch B that are connected. They will NOT successfully update.
 - o Resolution: PUF update must be run on switch B to update switch B’s firmware. Update to switch B’s cards will fail. User may un-check the cards in switch B when updating switch A. Disconnecting cables or powering off switch B will completely eliminate this.

DigitalMedia package update file release notes

DM-MD32x32-RPS PUF v2.04

Included Firmware

DigitalMedia™ switcher main firmware	DM-MD32x32-RPS	4.002.0610*
DigitalMedia™ switcher operational config	DM-MD32x32-RPS	1.0.38*
DigitalMedia™ switcher front panel main firmware	DM-MD32x32-RPS	1.002.0020*
DigitalMedia™ switcher front panel application	DM-MD32x32-RPS	1.0.36*
DigitalMedia™ switcher redundant PSU controller	DM-RPS	1.918.22274*
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.848.21726
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	1.0.1
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.848.20889
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.848.21254
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.848.21797
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	1.0.1
DigitalMedia™ fiber output card	DMC-FO	1.848.21850
DigitalMedia™ HDMI input card	DMC-HD and DMC-HD-DSP	1.848.21090
DigitalMedia™ HDMI input card FPGA	DMC-HD and DMC-HD-DSP	56
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	1.0.1
DigitalMedia™ HDMI output card	DMC-HDO	1.848.21043
DigitalMedia™ SDI input card	DMC-SDI	1.871.21680
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.848.21208
DigitalMedia™ security camera input card	DMC-VID4	1.848.20852
DigitalMedia™ repeater, DM-CAT	DM-DR	1.848.21321
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.848.21365
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.848.21506
DigitalMedia™ single gang receiver	DM-RX1-1G	1.848.20739
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.848.20816
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.848.21893
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.848.21965
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.848.22018
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	40
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.891.19590
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.891.19655
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23
DigitalMedia™ HDMI + RGB transmitter 3G	DM-TX-400-3G	1.848.23002
DigitalMedia™ HDMI + RGB transmitter 3G FPGA	DM-TX-400-3G	6

* Denotes new or updated firmware compared to version 2.03 (see revision history for details)

Software Tool Compatibility Requirements

The following SW Tool versions (or higher) are required:

Device Database(DDb)	29.00.000
SIMPL Windows	2.12.39
Crestron Toolbox	1.21.036

New Features

- New products supported
 - o DM-MD32x32-RPS

Issues Fixed

- None

Open issues

- TX-300 in standalone mode – must enable Nagle mode on control system.
- If display continuously asserts “hotplug” signal when powered off, continuous HDCP authentication errors may cause output card to fall offline. Workaround: always break routes to powered-down displays.

PUF update issues

- Switch may fail to report version number of FPGA and DSP on cards. PUF updater will report version is “v.” (instead of, e.g., “v1.734.54990”).
 - o Resolution: Firmware will update as normal, but may do so unnecessarily. Uncheck these items in the PUF update list, run the update without them, and re-check after.
- Switch A has inputs and/or outputs connected via DM or fiber cables to switch B. When attempting a PUF update to switch A, user will see the input/output cards of switch B that are connected. They will NOT successfully update.
 - o Resolution: PUF update must be run on switch B to update switch B’s firmware. Update to switch B’s cards will fail. User may un-check the cards in switch B when updating switch A. Disconnecting cables or powering off switch B will completely eliminate this.

DigitalMedia package update file release notes

PUF v2.03

Included Firmware

DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.002.0609*
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.35*
DigitalMedia™ switcher main firmware	DM-MD32x32	4.002.0609*
DigitalMedia™ switcher operational config	DM-MD32x32	1.0.35*
DigitalMedia™ switcher main firmware	DM-MD6x1	4.002.0608
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.34
DigitalMedia™ switcher front panel main firmware	DM-MD8x8, 16x16, 32x32	1.002.0018
DigitalMedia™ switcher front panel application	DM-MD8x8, 16x16, 32x32	1.0.25
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.848.21726
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	1.0.1
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.848.20889
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.848.21254
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.848.21797
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	1.0.1
DigitalMedia™ fiber output card	DMC-FO	1.848.21850
DigitalMedia™ HDMI input card	DMC-HD and DMC-HD-DSP	1.848.21090
DigitalMedia™ HDMI input card FPGA	DMC-HD and DMC-HD-DSP	56
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	1.0.1
DigitalMedia™ HDMI output card	DMC-HDO	1.848.21043
DigitalMedia™ SDI input card	DMC-SDI	1.871.21680*
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.848.21208
DigitalMedia™ security camera input card	DMC-VID4	1.848.20852
DigitalMedia™ repeater, DM-CAT	DM-DR	1.848.21321
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.848.21365
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.848.21506
DigitalMedia™ single gang receiver	DM-RX1-1G	1.848.20739
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.848.20816
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.848.21893
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.848.21965
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.848.22018
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	40
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.891.19590*
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.891.19655*
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23
DigitalMedia™ HDMI + RGB transmitter, 3 gang	DM-TX-400-3G	1.848.23002
DigitalMedia™ HDMI + RGB transmitter, 3 gang	DM-TX-400-3G	6

* Denotes new or updated firmware compared to previous version (see revision history for details)

Software Tool Compatibility Requirements

The following SW Tool versions (or higher) are required:

Device Database(DDb)	27.01.004
SIMPL Windows	2.11.27
Crestron Toolbox	1.20.047

New Features

- New products supported
 - o DMC-SDI
 - o Fentek Industries model number "kbrmftpmub" wireless keyboard with trackpad

Issues Fixed

- COM port may hang at 115.2kbps on DM-TX-300N and DM-TX-300N-F.
- Intermittent Ethernet link status between DM-MD32x32 and roomboxes.

Open issues

- TX-300 in standalone mode – must enable Nagle mode on control system.
- Toolbox 1.20 does not support audio group selection for DMC-SDI.

PUF update issues

- Switch may fail to report version number of FPGA and DSP on cards. PUF updater will report version is "v." (instead of, e.g., "v1.734.54990").
 - o Resolution: Firmware will update as normal, but may do so unnecessarily. Uncheck these items in the PUF update list, run the update without them, and re-check after.
- Switch A has inputs and/or outputs connected via DM or fiber cables to switch B. When attempting a PUF update to switch A, user will see the input/output cards of switch B that are connected. They will NOT successfully update.
 - o Resolution: PUF update must be run on switch B to update switch B's firmware. Update to switch B's cards will fail. User may un-check the cards in switch B when updating switch A. Disconnecting cables or powering off switch B will completely eliminate this.

Revision History

PUF v2.00

Included Firmware

DigitalMedia™ switcher main firmware	DM-MD8x8 & DM-MD16x16	4.002.0608
DigitalMedia™ switcher operational config	DM-MD8x8 & DM-MD16x16	1.0.34
DigitalMedia™ switcher main firmware	DM-MD32x32	4.002.0608
DigitalMedia™ switcher operational config	DM-MD32x32	1.0.34
DigitalMedia™ switcher main firmware	DM-MD6x1	4.002.0608
DigitalMedia™ switcher operational config	DM-MD6x1	1.0.34
DigitalMedia™ switcher front panel main firmware	DM-MD8x8 & DM-MD16x16	1.002.0018
DigitalMedia™ switcher front panel application	DM-MD8x8 & DM-MD16x16	1.0.25
DigitalMedia™ DM-CAT input card	DMC-CAT and DMC-CAT-DSP	1.848.21726
DigitalMedia™ DM-CAT input card FPGA	DMC-CAT and DMC-CAT-DSP	60
DigitalMedia™ DM-CAT input card DSP code	DMC-CAT-DSP	1.0.1
DigitalMedia™ DM-CAT output card	DMC-CATO-HD	1.848.20889
DigitalMedia™ DM-CAT output card FPGA	DMC-CATO-HD	39
DigitalMedia™ DVI & RGBHV input card	DMC-DVI	1.848.21254
DigitalMedia™ DVI & RGBHV input card FPGA	DMC-DVI	16
DigitalMedia™ fiber input card	DMC-F and DMC-F-DSP	1.848.21797
DigitalMedia™ fiber input card FPGA	DMC-F and DMC-F-DSP	58
DigitalMedia™ fiber input card DSP code	DMC-F-DSP	1.0.1
DigitalMedia™ fiber output card	DMC-FO	1.848.21850
DigitalMedia™ HDMI input card	DMC-HD and DMC-HD-DSP	1.848.21090
DigitalMedia™ HDMI input card FPGA	DMC-HD and DMC-HD-DSP	56
DigitalMedia™ HDMI input card DSP code	DMC-HD-DSP	1.0.1
DigitalMedia™ HDMI output card	DMC-HDO	1.848.21043
DigitalMedia™ analog video input cards	DMC-VID-BNC, -RCA-A, -RCA-D	1.848.21208
DigitalMedia™ security camera input card	DMC-VID4	1.848.20852
DigitalMedia™ repeater, DM-CAT	DM-DR	1.848.21321
DigitalMedia™ DM-CAT room controller	DM-RMC-100	1.848.21365
DigitalMedia™ fiber room controller	DM-RMC-100-F	1.848.21506
DigitalMedia™ single gang receiver	DM-RX1-1G	1.848.20739
DigitalMedia™ single gang transmitter	DM-TX1-1G	1.848.20816
DigitalMedia™ HDMI transmitter, DM-CAT	DM-TX-100	1.848.21893
DigitalMedia™ HDMI transmitter, fiber	DM-TX-100-F	1.848.21965
DigitalMedia™ HDMI + RGB transmitter, DM-CAT	DM-TX-200, DM-TX-200-2G	1.848.22018
DigitalMedia™ HDMI + RGB TX FPGA	DM-TX-200, DM-TX-200-2G	40
DigitalMedia™ 1U transmitter, DM-CAT	DM-TX-300N	1.848.22277
DigitalMedia™ 1U transmitter, DM-CAT FPGA	DM-TX-300N	23
DigitalMedia™ 1U transmitter, fiber	DM-TX-300N-F	1.848.22430
DigitalMedia™ 1U transmitter, fiber FPGA	DM-TX-300N-F	23
DigitalMedia™ HDMI + RGB transmitter, 3 gang	DM-TX-400-3G	1.848.23002
DigitalMedia™ HDMI + RGB transmitter, 3 gang	DM-TX-400-3G	6

Software Tool Compatibility Requirements

The following SW Tool versions (or higher) are required:

Device Database(DDb)	27.00.001
SIMPL Windows	2.11.27
Crestron Toolbox	1.19.146

New Features

- All DigitalMedia products are now supported by a single PUF. This includes all switches, cards, transmitters and receivers.
- New products supported
 - o DM-MD32x32
 - o DM-TX-200-2G
 - o DM-TX-400-3G
- Analog audio outputs default volume level is 0dB.
- Update request does not clear routes.
- Improved handling of advanced Dolby bitstreams.
- Improvement of signal stability in standalone configurations (TX to RMC direct).

Issues Fixed

- Improved TX-300 and RMC-100 serial communication.
- Corrected name of DMC-CATO card in PUF.
- DM-MD6x1 mis-detecting 480i on HDMI3 input.
- S/PDIF input compensation not working without switching away/back to input.
- Joins for HDMI audio format are mis-reported.
- Noisy audio output during input switch on DM-MD6x1.
- When switching between HD and SD sources, TX-200 and TX-300 may fail to recognize HDMI input.
- DM-MD6x1 fails to recognize DM-TX1-1G in bootloader.
- Extra characters transmitted at end of IR transmission.
- HDCP blanks video but not audio.
- No audio when switching from <no route> to input 1 on DM-MD6x1.
- "Restore defaults" not setting default values for contrast, saturation, hue on DMC-VID4.
- DM-TX-200: Audio disable does not work when a video route is active.
- USB routes can be incorrectly cleared.

Open issues

- Intermittent Ethernet link status between DM-MD32x32 and roomboxes. Issue is intermittent between boot-up cycles, never occurs during runtime.
- TX-300 in standalone mode – must enable Nagle mode on control system.
- TX-300 CEC does not work.

PUF update issues

- Toolbox 1.19 can crash when updating DMC-HD-DSP FPGA. FPGA code is unchanged from 1.50, so update is not necessary.
- Switch may fail to report version number of FPGA and DSP on cards. PUF updater will report version is "v." (instead of, e.g., "v1.734.54990")
 - o Resolution: Firmware will update as normal, but may do so unnecessarily. Uncheck these items in the PUF update list, run the update without them, and re-check after.
- Switch A has inputs and/or outputs connected via DM or fiber cables to switch B. When attempting a PUF update to switch A, user will see the input/output cards of switch B that are connected. They will NOT successfully update.
 - o Resolution: PUF update must be run on switch B to update switch B's firmware. Update to switch B's cards will fail. User may un-check the cards in switch B when updating switch A. Disconnecting cables or powering off switch B will completely eliminate this.

Version PUF 1.50.03

New Features

- New Products Supported -- None
- Improved Ethernet uploads for FPGA's and DSP's
- Ethernet port management user settings (RSTP) can be changed while RSTP is on. Changes take effect after RSTP is turned off and system rebooted
- TX-300 can specify "Copy display" EDID mode per input (HDMI, DVI-D, RGB)
- TX transmitters in standalone mode will not force downstream RMC into matching RSTP mode

Issues Fixed

- DSP cards exhibit distorted audio with certain sources
- Drastic volume change between multichannel (Dolby) and PCM audio streams
- Roombox may send spurious Ethernet packets
- TX-300 may miss serial comm change. Will default to 9600/8/N/1 if confused
- Remove master (IP table) command not working
- Improved Ethernet stability
- TX-200: repeated auto-switching can eventually stop auto-switch working
- Improved system stability with DM-DR in line
- TX-200 may lose Ethernet connectivity when "fully loaded" (video, USB, serial, etc in use)
- Improved compatibility with unstable 480i sources (VCRs)

Open issues

- **IMPORTANT:** Analog audio outputs will have their volume set to -80dB. This can be adjusted by a Simpl program, on front panel, or via DM Tool. The new setting will persist through reboots.
- TX-300 in standalone mode – must enable Nagle mode on control system.
- TX-300 CEC does not work.

PUF update issues

- PUF update tool in Toolbox 1.18 will not recognize fiber endpoints (DM-RMC-100-F, DM-TX-100-F, DM-TX-300N-F) when PUF tool is connected to DM switch.
- Switch may fail to report version number of FPGA and DSP on cards. PUF updater will report version is "v." (instead of, e.g., "v1.734.54990")
- Switch A has inputs and/or outputs connected via DM or fiber cables to switch B. When attempting a PUF update to switch A, user will see the input/output cards of switch B that are connected. They will NOT successfully update.
- Some DM-DR will fail to take upload if connected to DM input
- Using Toolbox 1.18, DM-TX-300N-F FPGA must be uploaded via console.

Version PUF v1.49.02

New Features

- New Products Supported
 - o DM-TX-300N
 - o DM-TX-300N-F
 - o DM-TX1-1G
 - o DM-RX1-1G

Issues Fixed

- Component & S-video sources get wrong colorspace through DMC-DVI
- HDCP check hangs and other problems via TX-200
- Standalone TX-100 to RMC USB not working
- Missing USB keystrokes if 1 key held, or multiple keys pressed simultaneously
- Some cards sending spurious Ethernet packets could cause intermittent connectivity
- Room boxes stop responding to third party control systems

Version PUF v1.48.01

New Features

- Video switching time is reduced up to 2 seconds, depending on the display
 - CEC Device control on the following devices
 - o DMC-HD
 - o DMC-HD-DSP
 - o DM-TX-100
 - o DM-TX-100-F
 - o DM-TX-200
 - The DMCO-2 series output cards will automatically convert 480i video to 480p on the first DM output and HDMI output if either of the downstream displays does not indicate support for 480i in the EDID. This helps when some displays will not display the DMC-VID4 video or composite video routed via the DMC-VID products.
 - EDID Configuration Features
 - o The preferred resolution can be selected independently of other resolutions in manual EDID mode
 - o Deep color can be removed from the EDID on the DMC-HD, DMC-HD-DSP
 - Wireless keyboard and mouse support for the FenTek KBMRFTPMUB

Issues resolved

- Some nonstandard resolutions not reported correctly on the front panel
- Misc EDID fixes
- Some RGBHV sources would be miscalibrated and not show up on some displays.

Version PUF v1.47.01

New Features

- Initial release of DM-TX-100-F, DMC-F, DMC-F-DSP

Version PUF v1.38.01

New Features

- CEC support on DMC-HD(-DSP) input cards and DM-RMC-100
- Output cards reformatted
- DAC volume control on HDMI input cards
- DMC-CAT(-DSP) support
- DM-TX-100 and DM-TX-200 support
- DMC-FO support
- DM-RMC-100-F support
- DMC-F(-DSP) support
- DM-TX-100-F support

Issues Resolved

- Removing power from a DM-RMC-100 or DMC-HD(-DSP) card while writing NVram can cause the unit to lose its' MAC address
- A control system program with long bootup times can cause the DM-RMC-100 to reset
- Using a Deep Color HDMI source with the DVI input card will not work
- VID4 input switching is 1-based instead of 0-based
- Source_Type signal on DVI card is nonfunctional

Open Issues

- DM-TX-100 can drop USB when IR is sent on the output

Version PUF v1.22.01

New Features

USB functionality through the Room Controller has been added. This feature distributes USB HID mouse, keyboard, and game controller signals.

The following USB devices have been verified to work with this feature:

Kensington Wireless Keyboard/Mouse C170(composite device) Model K64391US.
“Gene” composite Keyboard/Trackball FSQ-FK760 (However, may have issues when connected through a hub)
Logitech Deluxe 250 Keyboard (composite device)
Microsoft Office Keyboard (composite device) RT 9461
Microsoft Natural Keyboard
Keytronic TRACKBALL-U2
Dell Mouse MO 56UC
Logitech optical mouse M-UAE96
Targus PA055U 4-port hub
IOGear GUH274 4-port hub
DELL L100 Keyboard

The USB devices below have been observed to not work properly with the system:

Dell Keyboard RT7D50
PlayStation 3 Controllers
XBOX 360 controllers
Microsoft Wireless Notebook Optical Mouse 3000
Microsoft Bluetooth Notebook Mouse 5000
Apple M112LL/A Mighty Mouse
Apple keyboard – MB110LL/A

Issues Resolved

- Removing an HDCP source from the input and replacing it with a non-HDCP source can cause white noise on the display.
- EDID parameters set via the Manual Mode will not be preserved through a reboot.
- Audio EDID settings are changed when the Video EDID settings are changed. They are intended to be independently settable functions.
- HDCP Check Feature issues addressed
- RS232 Transmit from the Room Controller will lock up when simultaneous Transmit and Receive occur

Open Issues

- Changes made to the system while using the Installer Tools on the front panel are not saved in non-volatile memory until that menu is exited. It is recommended that Installer Tools be exited prior to rebooting or powering down the system so changes are properly stored. HDCP Check Results, Network Settings, and Restore Values are examples of changes that are not saved until exiting Installer Tools.
- Driving the digital signals DM_Allow_Deep_Color_Enable or DM_Allow_Deep_Color_Disable high or low on the DMC-CATO-HD output card will disable the DM output. The output must be re-enabled by driving the DM_Output_Disable and then the DM_Output_Enable signals.