RELEASE NOTES

DigitalMedia

PUF 2.63.00

Product or Content Description

Included Firmware

DigitalMedia™ Switcher Model Name	Description	Component	Firmware Version	Min. BL
DM-MD8x8 DM-MD8x8-RPS DM-MD16x16 DM-MD16x16-RPS	8x8 or 16x16 DM switcher	Main application	4.102.352400069*	339
		OOTBF	1.0.140*	
		RPS	1.1498.00021	
		FP main application	2.002.0026	
		FP OOTBF	1.0.114	
DM-MD32x32 DM-MD32x32-RPS	32x32 DM switcher	Main application	4.102.352400069*	339
		OOTBF	1.0.140*	
		RPS	1.1498.00021	
		FP main application	2.002.0026	
		FP OOTBF	1.0.114	
DM-MD6x1	6x1 DM switcher	Main application	4.102.245600045	339
		OOTBF	1.0.77	
DM-MD6x4 DM-MD6x6	6x4 or 6x6 DM switcher	Main application	4.102.291100011	339
		OOTBF	1.0.77	
		FP main application	1.2911.00086*	350*
		FP OOTBF	1.0.72	
DigitalMedia™ Endpoints Model Name	**Description**	**Component**	**Firmware version**	**Min. BL**
DM-TX-4KZ-202-C DM-TX-4KZ-302-C	4K60 4:4:4 HDR dual HDMI or dual HDMI+DP 8G+ HDBaseT transmitter	Main application	1.3691.00041*	382*
		HDBT TX application	7.1.19*	
DM-TX-4KZ-302-C	4K60 4:4:4 HDR dual HDMI+DP 8G+ HDBaseT transmitter	DP RX application	11.111.0*	
DM-TX-4K-202-C DM-TX-4K-302-C	4K dual HDMI or dual HDMI+RGB 8G+ HDBaseT transmitter	Main application	1.2911.00086*	350
DM-TX-4K-100-C-1G	4K 8G+ HDBaseT 1G transmitter	Main application	1.3209.00023	343
DM-TX-200-C-2G	HDMI+RGB 8G+ HDBaseT 2G transmitter	Main application	1.2911.00047	329
		FPGA	19	
DM-TX-201-C	HDMI+RGB 8G+ HDBaseT transmitter	Main application	1.2911.00081*	350*
		FPGA	48	

* *Denotes new or updated firmware compared to PUF 2.62.04.*

DM-TX-401-C	HDMI+DP+RGB 8G+ HDBaseT transmitter	Main application	1.2911.00046	329
DM-RMC-4KZ-100-C	4K60 4:4:4 HDR 8G+ HDBaseT receiver	Main application	1.3691.00040*	382*
		HDBT RX application	7.1.19	
DM-RMC-4K-SCALER-C DM-RMC-4K-SCALER-C-DSP	4K 8G+ HDBaseT advanced receiver	Main application	1.2911.00081*	350
		Core	5.5	
		DSP	3.30.1.169	
DM-RMC-4K-100-C DM-RMC-100-C	4K or 2K 8G+ HDBaseT receiver	Main application	1.2911.00046	329
DM-RMC-4K-100-C-1G	4K 8G+ HDBaseT 1G receiver	Main application	1.3209.00023	343
DM-RMC-SCALER-C DM-RMC-200-C	8G+ HDBaseT advanced receiver	Main application	1.2911.00079	350
DM-TX-201-S DM-TX-201-S2	HDMI+RGB 8G fiber transmitter	Main application	1.2911.00027	322
		FPGA	64	
DM-TX-401-S DM-TX-401-S2	HDMI+DP+RGB 8G fiber transmitter	Main application	1.2911.00033*	329*
DM-RMC-200-S DM-RMC-SCALER-S	8G fiber advanced receiver	Main application	1.2625.00028	268
DM-RMC-150-S	8G fiber advanced receiver	Main application	1.2456.00045	268
		FPGA	4	
DM-RMC-100-S	8G fiber receiver	Main application	1.2456.00045	268
DM-TX-300N-F	Multi-format fiber transmitter	Main application	1.2456.00045	268
		FPGA	23	
DM-TX-100-F	HDMI fiber transmitter	Main application	1.2456.00045	268
DM-RMC-100-F	Fiber receiver	Main application	1.1498.00021	268
DM-TX-400-3G	Multi-format CAT 3G transmitter	Main application	1.2625.00028	268
		FPGA	7	
DM-TX-300N	Multi-format CAT 3G transmitter	Main application	1.2625.00013	268
		FPGA	23	
DM-TX-200 DM-TX-200-2G	HDMI+RGB CAT standalone or 2G transmitter	Main application	1.2625.00028	105
		FPGA	41	
DM-TX-100	HDMI CAT transmitter	Main application	1.2456.00045	268
DM-TX1-1G	HDMI CAT 1G transmitter	Main application	1.1498.00021	69
DM-RMC-100	CAT receiver	Main application	1.1498.00021	268
DM-RX1-1G	CAT 1G receiver	Main application	1.1498.00021	69
DM-DR	CAT repeater	Main application	1.1498.00021	69
DigitalMedia™ Cards Model Name	**Description**	**Component**	**Firmware version**	**Min. BL**
DMC-4KZ-HD DMC-4KZ-HD-DSP	4K60 4:4:4 HDR HDMI input card	Main application	1.3691.00040*	382*
		DSP	5.5.0	
DMC-4K-HD DMC-4K-HD-DSP	4K HDMI input card	Main application	1.2911.00082*	350
		DSP	5.5.0	
DMC-HD DMC-HD-DSP	HDMI input card	Main application	1.2911.00082*	329
		FPGA	56	
		DSP	3.4.5	
DMC-4K-HDO	4K HDMI advanced output card	Main application	1.2911.00073	350
		Core	1.114.1.188	

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DMC-4KZ-C DMC-4KZ-C-DSP	4K60 4:4:4 HDR 8G+ HDBaseT input card	Main application	1.3691.00040*	382*
		HDBT RX application	7.1.19*	
		DSP	5.5.0*	
DMC-4K-C DMC-4K-C-DSP	4K 8G+ HDBaseT input card	Main application	1.2911.00084*	350
		DSP	5.5.0	
DMC-C DMC-C-DSP	8G+ HDBaseT input card	Main application	1.2911.00084*	350*
		FPGA	5	
		DSP	3.4.5	
DMC-4KZ-CO-HD	4K60 4:4:4 HDR 8G+ HDBaseT output card	Main application	1.3691.00040*	382*
		HDBT TX application	7.1.19	
DMC-4K-CO-HD	4K 8G+ HDBaseT output card	Main application	1.2911.00076	350
DMC-CO-HD	8G+ HDBaseT output card	Main application	1.2625.00031	268
		FPGA	40	
DMC-DVI	DVI input card	Main application	1.2625.00013	268
		FPGA	16	
DMC-VGA	VGA input card	Main application	1.2911.00017	322
		FPGA	11	
DMC-SDI	SDI input card	Main application	1.2911.00003	322
		FPGA	40	
DMC-S DMC-S2 DMC-S-DSP DMC-S2-DSP	8G fiber input card	Main application	1.2911.00057	329
		FPGA	3	
		DSP	3.4.5	
DMC-SO-HD DMC-S2O-HD	8G fiber output card	Main application	1.2911.00020	322
		FPGA1	14	
		FPGA2	15	
DMC-STR	Streaming input card	Main application	1.2911.00043	329
		Codec OS application	1.0002.00033*	
DMC-STRO	Streaming output card	Main application	1.2911.00043	329
		Codec OS application	1.001.0000	
		Scaler	3	
DMC-VID-BNC DMC-VID-RCA-A DMC-VID-RCA-D	Analog video input card	Main application	1.1592.00036	69
DMC-VID4	Security camera composite input card	Main application	1.1498.00021	69
DMC-F DMC-F-DSP	Fiber input card	Main application	1.2456.00045	69
		FPGA	58	
		DSP	3.4.5	
DMC-FO-HD	Fiber output card	Main application	1.1498.00021	69
DMC-CAT DMC-CAT-DSP	CAT input card	Main application	1.2456.00031	69
		FPGA	60	
		DSP	3.4.5	
DMC-CATO-HD	CAT output card	Main application	1.1498.00021	69
		FPGA	39	

* *Denotes new or updated firmware compared to PUF 2.62.04.*

Notes and Recommendations

DigitalMedia PUF 2.63.00 is maintenance bug fix release. PUF 2.63.00 is the first public release to include firmware for the DMC-4KZ-C, DMC-4KZ-C-DSP, DM-TX-4KZ-302-C and DM-TX-4KZ-202-C.

Important Note:
Please be aware of the following before upgrading/downgrading:

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 larger firmware files and can take longer to upgrade than other DM products:
    a. DM-STR: Up to 30 minutes per group of 4 cards.
    b. 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).

System Requirements and Dependencies

Device Database	94.00.001.00
Crestron Database	64.05.001.00
SIMPL Windows	4.08.15.02
Crestron Toolbox	3.01.481.00

Current Version

2.63.00 Date: 2018-06-08

File name digitalmedia_2.63.00.puf

New Features

- Added support for 4K60 4:4:4 HDR input cards and endpoints. Following devices are now supported:
    - DMC-4KZ-C
    - DMC-4KZ-C-DSP
    - DM-TX-4KZ-302-C
    - DM-TX-4KZ-202-C

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Issues Fixed

- DM-RMC-4KZ-100-C doesn't work with HD-WP-4K-401-C.
- Fixed issue where DM-TX-401-S or DM-TX-401-S2 may sporadically fail to upgrade the firmware.
- A Remote Code Execution vulnerability (Similar to CVE-2018-11229 and CVE-2018-11228) has been addressed in this release of firmware. Crestron recommends updating firmware to prevent this vulnerability from being exploited. For more information see Crestron OLH Answer ID 5471.

Known Issues

- When NVIDIA Quadro P2000 connected as DP input source, DM-TX-4KZ-302-C may sporadically fail to output video after DM-TX-4KZ-302-C power cycles.
- TT-100 "Connect It" indicators don't work when connected to USB HID port of the DM-TX-4KZ-302/202-C, instead use COMPUTER port on the TX if necessary.
- DM-TX-4KZ-302/202-C may report incorrect input audio sampling frequency for non PCM audio formats.
- *Audio_Format_fb*, *Audio_Channel_fb and Audio_Sampling_Freq_fb* joins don't work for DMCI-DMC-4KZ-C/-DSP and DMCI-DMC-4KZ-HD/-DSP symbols.
- When switching upstream, 4K/4KZ outputs may have double audio lock with certain LG/Samsung Blu-Ray players.
- When HDR source is routed to DMC-4K-HDO output card, instead of no video it may output bad video depending on I/O signal video resolution. DMC-4K-HDO output card doesn't support HDR.
- 4K/4KZ DSP input cards do not down-mix DTS:X or Dolby Atmos audio to PCM 2ch audio.
- DMC-4KZ-HD(-DSP) input card setup with DM default 4k 60Hz 2CH/HBR EDID may produce unstable video when connected to certain streaming or Blu-ray players.
- Assigning Global EDID via DM Tool to fully populated DM-MD32x32 chassis may report false failures. Instead assign input EDIDs in batches; 16 inputs at once.
- 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.

Version History

2.62.04

Date: 2018-4-17

File name: digitalmedia_2.62.04.puf

Issues Fixed

- Fixed issue where 4KZ cards may sporadically lose TSID. There is no user facing functionality affected by loss of TSID.
- DM-RMC-4KZ-100-C unable to pass video to certain Samsung xxNUxxxx series displays.

Known Issues

- When switching upstream, 4K/4KZ outputs may have double audio lock with certain LG/Samsung Blu-Ray players.

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- When HDR source is routed to DMC-4K-HDO output card, instead of no video it may output bad video depending on I/O signal video resolution. DMC-4K-HDO output card doesn't support HDR.
- DM-RMC-4KZ-100-C doesn't work with HD-WP-4K-401-C.
- 4K/4KZ DSP input cards do not down-mix DTS:X or Dolby Atmos audio to PCM 2ch audio.
- DMC-4KZ-HD(-DSP) input card setup with DM default 4k 60Hz 2CH/HBR EDID may produce unstable video when connected to certain streaming or Blu-ray players.
- Assigning Global EDID via DM Tool to fully populated DM-MD32x32 chassis may report false failures. Instead assign input EDIDs in batches; 16 inputs at once.
- The DMC-STR may report a resolution of 0x0@0 when streaming from certain third-party IP cameras.
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- 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.

Click here for the *digitalmedia_2.62.04.puf* detailed release notes.

2.62.00

Date: 2018-2-28

File name: digitalmedia_2.62.00.puf

New Features

- Added support for 4K60 4:4:4 HDR I/O cards and endpoint. Following devices are now supported:
  - DMC-4KZ-HD(-DSP)
  - DMC-4KZ-CO-HD
  - DM-RMC-4KZ-100-C
- Added support for 1080p25/30 resolution for DM-RMC-SCALER/200-C.
- Added HDCP Transmitter mode functionality for the HDMI/DM output of the DM-TX-4K-302/202-C and DM-RMC-4K-SCALER-C endpoints. The feature is only available programmatically.

Issues Fixed

- Fixed issue with 4K cards/endpoints and Barco Balder Cinemascope where incorrectly parsed EDID capabilities will output bad video.

Known Issues

- When switching upstream, 4K/4KZ outputs may have double audio lock with certain LG/Samsung Blu-Ray players.
- When HDR source is routed to DMC-4K-HDO output card, instead of no video it may output bad video depending on I/O signal video resolution. DMC-4K-HDO output card doesn't support HDR.
- DM-RMC-4KZ-100-C doesn't work with HD-WP-4K-401-C.
- 4K/4KZ DSP input cards do not down-mix DTS:X or Dolby Atmos audio to PCM 2ch audio.
- DMC-4KZ-HD(-DSP) input card setup with DM default 4k 60Hz 2CH/HBR EDID may produce unstable video when connected to certain streaming or Blu-ray players.
- Assigning Global EDID via DM Tool to fully populated DM-MD32x32 chassis may report false failures. Instead assign input EDIDs in batches; 16 inputs at once.
- 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.

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- 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.

Click here for the *digitalmedia_2.62.00.puf* detailed release notes.

2.61.00 Date: 2017-07-05

File name digitalmedia_2.61.00.puf

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.

Known 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.

Click here for the *digitalmedia_2.61.00.puf* detailed release notes.

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Click here for the release notes revision history.

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