

Crestron Construct | Design Ideas

Basic Template

Device Type: N/A

Connection: N/A

Processor: 3/4-Series

Overview

This guide provides an overview of the Crestron Design Ideas: Basic Template.

Description

This template serves as a core sample project from which additional room designs are derived when the room does not require complex controls or multiple display routing. Ongoing updates will introduce new dialogs and expanded functionality.

This version features statically defined icons and text labels and is designed to provide an approachable, easy-to-digest introduction for first-time Crestron Construct users.

The following hardware has been defined in the project:

- NVX 36x
- Apple TV IR control
- Comcast DVR IR control
- Crestron Intelligent Video Camera control

Included Files:

- “crestron_designideas_basic_template_v1.0.1_compiled.zip”: SIMPL Windows program archive.
- “BasicTemplate.cca”: Crestron Construct user interface project archive.

User Interface Design

This template utilizes two pages with multiple widgets. While this is contrary to the Construct best practices; the DOM node count and lack of complex objects is well suited for this type of design. As additional controls and objects are added to this template, please remember to review the runtime DOM count using the CH5 diagnostics tool.

Note: The Info popup widget on both the Splash and Presentations pages has the ability to launch the integrated CH5 diagnostics tool. While the widget is open, touching the “?” icon in the upper left corner will open the diagnostics dialog.

Background Image Management

The template includes multiple background assets and a background management module. Image assets can be added or removed from the Construct project as needed. The “Config” folder in the SIMPL program provides the logic to manage the background images.

Display Control

The SIMPL program provides a generic display control module that normalizes how displays are controlled. When presentation destination routing is mapped to a specific display, any source routed to that display will start the power on sequence.

The module provides digital signals to trigger commands for the display.

NVX Routing & Configuration

The SIMPL program has been developed to provide an example of how a Crestron control system can be used to configure NVX hardware. When the NVX hardware connects to the control system, the program will set basic configuration, as well as multicast addresses for any connected encoder. This allows field hardware replacements to be performed without requiring devices to be reconfigured.

The program also includes a very simple NVX SIMPL+ routing control module that utilizes the multicast address of the encoders. With this method of control, subscriptions do not need to be managed on physical devices.

Version History

Version 1.0.1 April 24th, 2026

New features:

- Added generic display control modules.
- Updated the way presentation routing is mapped to display control.

Fixed issues:

- Fixed out-of-bounds warnings of various components during project compile.

Known issues:

- None

Version 1.0.0 March 31st, 2026

New features:

- Initial Release of the Basic Template

Fixed Issues:

- None

Known issues:

- Object out-of-bound warnings are shown during user interface compilation. This is a known issue within Construct where invalid out-of-bounds warnings are shown during a project compile. These can be ignored when using the Design Ideas sample projects.