



PinPoint™ UX Software for DM-DGE-200-C

Operations Guide

Crestron Electronics, Inc.

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PinPoint UX for DM-DGE-200-C

Introduction

Crestron® PinPoint™ UX software for the DM-DGE-200-C digital graphics engine provides a collection of room-scheduling and BYOD (bring your own device) presentation capabilities that are performed directly through the DM-DGE-200-C, eliminating the need for a touch screen, a button panel, or a remote. PinPoint UX works with the Crestron Fusion® software service and Microsoft® Exchange software to provide real-time notifications and to intelligently monitor meeting spaces, though it can also be used as a stand-alone meeting room presentation solution.

PinPoint UX for DM-DGE-200-C offers the following features:

- Presents meeting information on the device display that is connected to the DM-DGE-200-C
- Receives AirMedia® presentation gateway information directly so that wireless device connection details automatically appear on-screen
- Presents information about connecting devices to the DM-DGE-200-C
- Switches to full-screen presentation mode when content is connected (Within this mode, unobtrusive pop-ups show the time left in the meeting and other notices.)
- Reports the status of the room and the DM-DGE-200-C to Crestron Fusion or Microsoft Exchange
- Allows system configuration to be performed via Crestron Fusion or a web browser interface

For more information about the DM-DGE-200-C, refer to the DGE-100/DM-DGE-200-C DO Guide (Doc. 7695), and the DGE-100/DM-DGE-200-C Supplemental Guide (Doc. 7696) at www.crestron.com/manuals.

Setup

Connecting the DM-DGE-200-C to the Crestron System

The DM-DGE-200-C must be connected to the system of Crestron components that make up a meeting room solution before the DM-DGE-200-C is put into PinPoint UX mode. The DM-DGE-200-C can be directly connected to AirMedia presentation gateways, Crestron Connected® display control devices, and DM-TX DigitalMedia™ transmitters.

Refer to the following sections for specific setup information regarding each connection method.

AirMedia Presentation Gateways

If using an AirMedia presentation gateway, configure the device to connect directly to the DM-DGE-200-C:

1. Access the AirMedia presentation gateway device's setup screens, and then navigate to the **Crestron Services Setup** menu.
2. Under the **Crestron Control System** section, enter the IP address or hostname of the DM-DGE-200-C device with the IP ID of "B."

For more information, refer to the AirMedia presentation gateway device's documentation at www.crestron.com/manuals.

Crestron Connected Display Control

If using a Crestron Connected display control device, configure the device to connect directly to the DM-DGE-200-C:

1. Access the Crestron Connected device's setup pages through the web-based configuration utility, and then navigate to the **Crestron Services Setup** menu.
2. Under the **Crestron Control System** section, enter the IP address or hostname of the DM-DGE-200-C device with the IP ID of "C."

For more information, refer to the Crestron Connected device's documentation.

DigitalMedia Transmitters

If using a DigitalMedia transmitter, connect the DM® output of the DM-TX transmitter to the DM input of the DM-DGE-200-C. No IP table configuration is necessary.

NOTE: The LAN connection to the DM-DGE-200-C provides LAN to both the DM-DGE-200-C and the DM-TX transmitter via the DigitalMedia connection. For DM-TX transmitters with LAN ports, the LAN port should be used only to provide LAN to connected devices (such as a laptop).

NOTE: The DM-TX transmitter's LAN port should never be connected directly to the same network as the DM-DGE-200-C, as this connection will create a loop on the network.

For more information, refer to the DigitalMedia transmitter's documentation at www.crestron.com/manuals.

NOTE: PinPoint UX mode requires that any devices connected to the DigitalMedia transmitter should stop sending video signal when powered off, as this requirement ensures proper autoswitching behavior in PinPoint UX mode.

Putting the DM-DGE-200-C into PinPoint UX Mode

Before PinPoint UX can be configured for operation on the DM-DGE-200-C, the DM-DGE-200-C needs to be put into PinPoint UX mode through the web browser interface. Use the following steps to put the DM-DGE-200-C into PinPoint UX mode:

1. Open a web browser and enter the IP address of the DM-DGE-200-C. The DM-DGE-200-C's IP address is found on the device's splash page, which appears upon powering on the device.

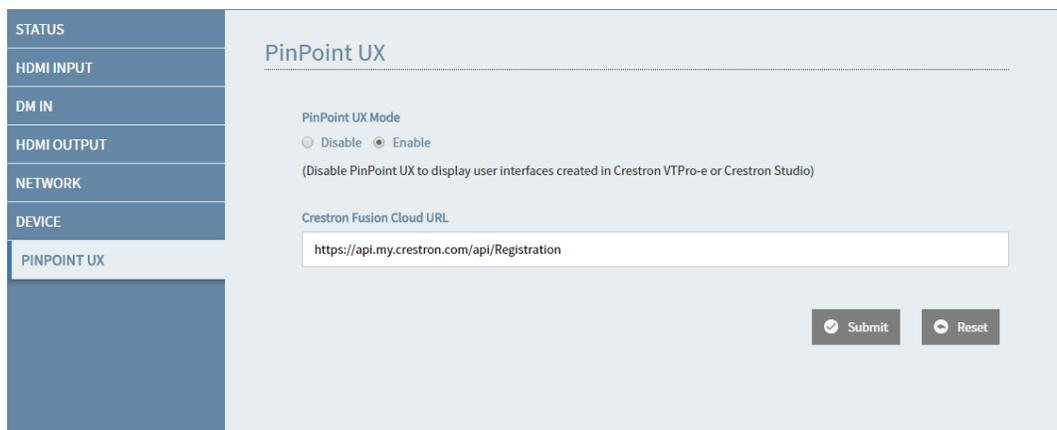
DM-DGE-200-C Splash Page



The DM-DGE-200-C web configuration utility loads in the web browser.

2. Select **PINPOINT UX** from the navigation menu. The **PinPoint UX** page loads.

PinPoint UX Page



The **PinPoint UX** page enables or disables PinPoint UX mode on the DM-DGE-200-C.

NOTE: PinPoint UX mode is disabled by default.

3. Click **Enable** under **PinPoint UX Mode** to enable PinPoint UX mode.
4. If using Crestron Fusion, enter the URL of the Crestron Fusion account in the **Crestron Fusion Cloud URL** text field.

NOTE: If the .AV Framework system is connected to a Crestron Fusion on-premises server, connections are made using either traditional (outbound) or inbound communications via the **Symbol Discovery** utility. For more information, refer to the Crestron Fusion 10 On-Premises Software Getting Started Guide (Doc. 7685) at www.crestron.com/manuals.

5. Click **Submit**. The DM-DGE-200-C automatically reboots into PinPoint UX mode.

NOTE: The DM-DGE-200-C can take up to two minutes to reboot.

NOTE: None of the other PinPoint UX configuration pages are accessible unless PinPoint UX mode is enabled and the DM-DGE-200-C has rebooted into PinPoint UX mode.

Connecting to Schedule Integration Software

PinPoint UX works with schedule integration software to deliver meeting and availability information. Once the DM-DGE-200-C is put into PinPoint UX mode, it can be configured through the web browser to work with Crestron Fusion or Microsoft Exchange.

NOTE: The scheduling integration software must be fully installed and configured before attempting to use it the DM-DGE-200-C.

NOTE: If performing a discovery of the DM-DGE-200-C through Crestron Fusion, ensure that SSH is checked (and not SSL).

NOTE: PinPoint UX can also be used without scheduling integration software by selecting **None** from the **Scheduling Integration** page. For more information, refer to page 19.

Connecting to Crestron Fusion

1. Open a web browser and enter the IP address of the DM-DGE-200-C. The DM-DGE-200-C setup page loads in the web browser.
2. Select **PINPOINT UX > Scheduling Integration** from the left-hand menu of the DM-DGE-200-C setup page. The **Scheduling Integration** page loads.

Scheduling Integration Page

The screenshot shows the 'Scheduling Integration' page. On the left is a navigation menu with the following items: STATUS, HDMI INPUT, DM IN, HDMI OUTPUT, NETWORK, DEVICE, PINPOINT UX, Display Power, Display On/Off, PinPoint UX General, Room Schedule Screen, Presentation Screen, and Scheduling Integration. The main content area is titled 'Scheduling Integration' and includes the following elements: a 'Source' section with radio buttons for 'Fusion' (selected), 'Exchange', and 'None'; a 'Current Status' section with an orange 'Disconnected' button; and a 'Timezone' section with a dropdown menu showing '(UTC-05:00) Eastern time'. At the bottom right are 'Submit' and 'Reset' buttons.

3. Ensure that **Fusion** is selected under **Source** (the page's default setting), and then select the current time zone from the **Timezone** dropdown menu.
4. Click **Submit**. If the connection is successful, the **Current Status** section displays a green "Connected" status.

Connecting to Microsoft Exchange

1. Open a web browser and enter the IP address of the DM-DGE-200-C. The DM-DGE-200-C setup page loads in the web browser.
2. Select **PINPOINT UX > Scheduling Integration** from the left-hand menu of the DM-DGE-200-C setup page. The **Scheduling Integration** page loads.

Scheduling Integration - Exchange Page

Scheduling Integration

Source
 Fusion Exchange None

Current Status
Disconnected

Outlook Web Access URL:

Outlook Domain Name [optional]

Outlook User Name

Outlook password

Calendar Email Address

SNTP Server

Timezone

3. Click the **Exchange** button under **Source**, and then enter the required Microsoft Outlook® software authentication information in the appropriate text fields. For more information about these fields, refer to page 18.
4. Click **Submit**. If the connection is successful, the **Current Status** section displays a green "Connected" status.

Configuration via Web Interface

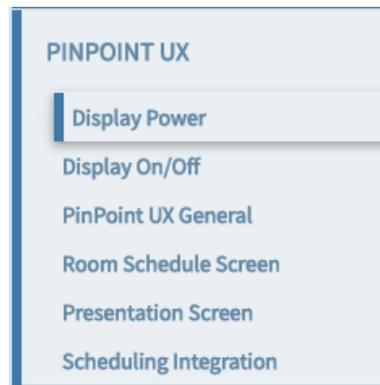
Once the DM-DGE-200-C is placed into PinPoint UX mode, it can be configured via a web browser interface. For more information about putting the DM-DGE-200-C into PinPoint UX mode, refer to page 3.

NOTE: If using Crestron Fusion to configure PinPoint UX mode on the DM-DGE-200-C, skip to "Configuration via Crestron Fusion" on page 20.

To configure PinPoint UX with a web interface:

1. Open a web browser and enter the IP address of the DM-DGE-200-C. The DM-DGE-200-C setup page loads in the web browser.
2. Select **PINPOINT UX** from the navigation menu, and then use the following menu options to configure various components of the software.

PinPoint UX Menu Options



NOTE: The other menu options on the DM-DGE-200-C setup page (**STATUS**, **HDMI INPUT**, **DM IN**, **HDMI OUTPUT**, **NETWORK**, and **DEVICE**) are used to check and configure the DM-DGE-200-C's connection and network settings. These settings may need to be configured before PinPoint UX can function correctly on the network.

Display Power

On the DM-DGE-200-C setup page, select **PINPOINT UX > Display Power** from the navigation menu to display the **Display Power Configuration** page.

Display Power Configuration - CEC Page

The screenshot shows the 'Display Power Configuration' page. On the left is a navigation menu with categories: STATUS, HDMI INPUT, DM IN, HDMI OUTPUT, NETWORK, and DEVICE. Under the DEVICE category, there is a sub-menu for PINPOINT UX with the following items: Display Power (highlighted), Display On/Off, PinPoint UX General, Room Schedule Screen, Presentation Screen, and Scheduling Integration. The main content area is titled 'Display Power Configuration'. It features a 'Method' section with three radio button options: CEC (selected), Serial, and Crestron Connected. Below this is a 'Test Mode' section with two buttons: 'Test Display On' and 'Test Display Off'. At the bottom right of the main content area are two buttons: 'Submit' and 'Reset'.

This page sets the power method of the connected display device (CEC, serial, or Crestron Connected display control). Depending on which power method is selected, the following configuration options are available:

CEC Power

Click the **CEC** button on the **Display Power Configuration** page to select the CEC (Consumer Electronic Control) display power method. Select this option when the connected display device uses CEC power.

The CEC power settings below can be configured:

- **Test Display On:** Enables the test power ON display on the CEC-powered device
- **Test Display Off:** Enables the test power OFF display on the CEC-powered device

Click **Submit** to save any changes. Click **Reset** to clear any pending changes.

Serial Power

Click the **Serial** button on the **Display Power Configuration** page to select the Serial display power method. Select this option when the connected display device uses serial power.

Display Power Configuration - Serial Page

The screenshot shows the 'Display Power Configuration' page for the Serial method. The sidebar on the left lists various configuration categories, with 'Display Power' selected under 'PINPOINT UX'. The main configuration area includes a 'Method' section where 'Serial' is selected. Below this, the 'Command Power Configuration' section contains four dropdown menus for Baud (300), Data Bits (7), Parity Bits (None), and Stop Bits (1). There are also two text input fields for 'On command' and 'Serial Off command', each with a 'Test Display On' or 'Test Display Off' button. At the bottom right, there are 'Submit' and 'Reset' buttons.

The Serial power settings below can be configured:

- **Baud:** Sets the baud rate for the serial connection
- **Data Bits:** Sets the number of data bits for the serial connection
- **Parity Bits:** Sets the parity bit setting for the serial connection
- **Stop Bits:** Sets the number of stop bits set over the serial connection
- **On command:** Sets a command to turn serial power on
- **Test Display On:** Enables the test power ON display on the serially powered device
- **Serial Off command:** Sets a command to turn serial power off
- **Test Display Off:** Enables the test power OFF display on the serially powered device

Click **Submit** to save any changes. Click **Reset** to clear any pending changes.

Crestron Connected Display Control Power

Click the **Crestron Connected** button on the **Display Power Configuration** page to select the Crestron Connected display control power method. Select this option when the connected display device uses Crestron Connected display control power.

NOTE: The Crestron Connected device must connect to the DM-DGE-200-C's IP table ID address before this power method can be used. To do so, configure the Crestron Connected device to the DM-DGE-200-C's IP address/hostname at IP ID "0x0C."

Display Power Configuration - Crestron Connected Page

The screenshot shows the 'Display Power Configuration' page for the Crestron Connected method. On the left is a navigation sidebar with categories: STATUS, HDMI INPUT, DM IN, HDMI OUTPUT, NETWORK, DEVICE, and PINPOINT UX. Under PINPOINT UX, the following options are listed: Display Power (selected), Display On/Off, PinPoint UX General, Room Schedule Screen, Presentation Screen, and Scheduling Integration. The main content area has the title 'Display Power Configuration'. Under the 'Method' section, there are three radio buttons: CEC, Serial, and Crestron Connected (which is selected). Below this is the 'Test Mode' section, containing two buttons: 'Test Display On' and 'Test Display Off'. At the bottom right of the configuration area are two buttons: 'Submit' and 'Reset'.

The Crestron Connected settings below can be configured:

- **Test Display On:** Enables the test power ON display on the Crestron Connected device
- **Test Display Off:** Enables the test power OFF display on the Crestron Connected device

Click **Submit** to save any changes. Click **Reset** to clear any pending changes.

NOTE: For a full list of devices that support the Crestron Connected display control, visit www.crestron.com/products/line/crestron-connected.

Display On/Off

On the DM-DGE-200-C setup page, select **PINPOINT UX > Display On/Off** from the navigation menu to display the **Display On/Off Configuration** page.

Display On/Off Configuration - Time Range Page

The screenshot shows the 'Display On/Off Configuration' page. On the left is a navigation menu with categories: STATUS, HDMI INPUT, DM IN, HDMI OUTPUT, NETWORK, and DEVICE. Under DEVICE, there is a sub-menu for PINPOINT UX with options: Display Power, Display On/Off (selected), PinPoint UX General, Room Schedule Screen, Presentation Screen, and Scheduling Integration. The main content area is titled 'Display On/Off Configuration'. It features a 'Display Auto On' section with a radio button for 'Time Range' selected. Below this is a 'Time Range' section with 'Turn On:' set to 06:00 and 'Turn Off:' set to 18:00. A 'Weekday Range' section has checkboxes for Monday, Tuesday, Wednesday, Thursday, and Friday (all checked), and Saturday and Sunday (unchecked). At the bottom, the 'Force Display On For' section has two input fields, both set to 0, labeled 'Minutes Before Meeting' and 'Minutes After Meeting'. 'Submit' and 'Reset' buttons are located at the bottom right.

This page configures the auto-on settings for the connected display, which are triggered and controlled by a time range. During the set date and time range, the display remains on regardless of whether meetings are scheduled or not.

NOTE: In PinPoint UX mode, all other standby configuration options are disabled. The options set through the **Display On/Off Configuration** page always dictate when the connected display turns on or off.

The settings below can be configured:

- **Time Range:** Controls the time range for the connected display's auto-on settings
 - **Turn On:** Sets the time, in 24-hour format, that the connected display is automatically turned on
 - **Turn Off:** Sets the time, in 24-hour format, that the connected display is automatically turned off
- **Weekday Range:** Sets the days that the connected display is automatically turned on and off (Check the box next to a day to enable auto-on for that day.)
- **Force Display On For:** Controls the connected display's auto-on settings in relation to when a meeting begins and ends

NOTE: The **Force Display On For** settings apply only for meetings scheduled outside of the set time range, which ensures that the connected display turns on and off for these meetings regardless of the set time range (such as for after-hours meetings).

- **Minutes Before Meeting:** Sets the time, in minutes, that the display is turned on before a meeting begins (Enter "0" to turn the display on as soon as the meeting begins.)
- **Minutes After Meeting:** Sets the time, in minutes, that the display remains on after a meeting ends (Enter "0" to turn the display off as soon as the meeting ends.)

Click **Submit** to save any changes. Click **Reset** to clear any pending changes.

PinPoint UX General

On the DM-DGE-200-C setup page, select **PINPOINT UX > PinPoint UX General** from the navigation menu to display the **PinPoint UX General Customization** page.

PinPoint UX General Customization Page

This page allows for various PinPoint UX settings to be customized. The settings below can be configured:

- **Friendly Room Name:** Sets the room name that is associated with the connected display
- **Date Format:** Sets the format of the date in the connected display (from the drop-down menu)
- **Time Format:** Sets whether the display's time appears in 24-hour or 12-hour format (Click the **12 Hrs** button or the **24 Hrs** button.)
- **Display Language:** Sets the connected display language
- **Hide Meeting Subject:** Hides the meeting subject on the connected display

- **Hide Meeting Organizer:** Hides the meeting organizer on the connected display
- **Hide Non-Emergency Broadcast:** Hides nonemergency broadcasts on the connected display
- **Emergency Broadcast Sound:** Enables the emergency broadcast sound
- **Emergency Broadcast Timeout:** Sets the time, in minutes, it takes for an emergency broadcast to time out (Enter "0" for no timeout.)
- **Non Emergency Broadcast Timeout:** Sets the time, in minutes, it takes for a nonemergency broadcast to time out (Enter "0" for no timeout.)
- **Suppress Offline Notification Period:** Sets the time, in minutes, it takes to delay the "Display Offline" message after the display is no longer connected to the scheduling integration software (Enter "0" for no delay.)

Click **Submit** to save any changes. Click **Reset** to clear any pending changes.

Room Schedule Screen

On the DM-DGE-200-C setup page, select **PINPOINT UX > Room Schedule Screen** from the navigation menu to display the **Room Schedule Screen Customization** page.

Room Schedule Screen Customization Page

This page allows for customization of the room schedule screen. The settings below can be configured:

- **Next Meeting Information Shown:** Sets the time, in minutes, before the next meeting information appears on the connected display (Enter "0" to disable this information.)
- **HDMI Input Type:** Displays the HDMI® input source (**AirMedia Presentation**)

NOTE: The AirMedia presentation gateway device must connect to the DM-DGE-200-C's IP table ID address before the **AirMedia Presentation** input can be used. To do so, configure the AirMedia presentation gateway device to the DM-DGE-200-C's IP address/hostname at IP ID "0x0B."

- **Hide Wired Cable Connection:** Hides information about the wired cable connection on the connected display
- **Cable Connection Details:** Adds details about the connected display's cable connection
- **Enable Custom Logo Graphic:** Enables a custom logo graphic to be set on the connected display
- **Custom Logo Graphic URL:** If **Enable Custom Logo Graphic** is selected, sets the URL of the desired custom graphic logo image

NOTE: PinPoint UX allocates an area of 480 x 94 pixels for the custom logo graphic; therefore, 480 x 94 pixels is the optimal size for custom logo graphics in PinPoint UX. Custom logo graphics larger than 480 x 94 pixels are scaled down while maintaining their aspect ratio. Custom logo graphics smaller than 480 x 94 pixels are not scaled up and should be resized for optimal image quality.

- **Enable Custom Backgrounds:** Enables a custom background image to be set on the connected display
- **Custom Background URL (1–15):** If **Enable Custom Background** is selected, sets the URL of the desired custom background image (Up to 15 URLs can be entered on this page.)
- **Interval between Backgrounds:** Sets the time, in seconds, that a background image appears on the connected display before the display cycles to the next image

NOTE: The **Interval between Backgrounds** option works only if multiple background URLs are specified in the **Custom Background URL** fields.

Room Schedule Screen Customization - Custom Background URLs Enabled Page

Room Schedule Screen Customization

Next Meeting Information Shown
 Minutes Before Meeting Start

HDMI Input Type
 AirMedia Presentation
 Hide Wired Cable Connection

Cable Connection Details:

Enable Custom Logo Graphic
Custom Logo Graphic URL

Enable Custom Backgrounds
Custom Background URL1

Custom Background URL2

Custom Background URL3

Custom Background URL4

Custom Background URL5

Custom Background URL6

Custom Background URL7

Custom Background URL8

Custom Background URL9

Custom Background URL10

Custom Background URL11

Custom Background URL12

Custom Background URL13

Custom Background URL14

Custom Background URL15

Interval between Backgrounds
 Seconds

Click **Submit** to save any changes. Click **Reset** to clear any pending changes.

Presentation Screen

On the DM-DGE-200-C setup page, select **PINPOINT UX > Presentation Screen** from the navigation menu to display the **Presentation Screen Customization** page.

Presentation Screen Customization Page

The screenshot shows the 'Presentation Screen Customization' page. On the left is a navigation sidebar with categories: STATUS, HDMI INPUT, DM IN, HDMI OUTPUT, NETWORK, DEVICE, PINPOINT UX (containing sub-items: Display Power, Display On/Off, PinPoint UX General, Room Schedule Screen, Presentation Screen, Scheduling Integration), and a bottom bar. The main content area is titled 'Presentation Screen Customization' and features two input fields: 'Time Remaining Message Starts' set to 10 Minutes, and 'Time Remaining Message Duration' set to 15 Seconds. At the bottom right of the main area are 'Submit' and 'Reset' buttons.

This page allows for customization of the presentation screen. The settings below can be configured.

- **Time Remaining Message Starts:** Sets the time, in minutes, before the "time remaining" message appears on the presentation screen
- **Time Remaining Message Duration:** Sets the duration, in seconds, of the "time remaining" message

Click **Submit** to save any changes. Click **Reset** to clear any pending changes.

Scheduling Integration

On the main setup page, select **PINPOINT UX > Scheduling Integration** from the navigation menu to display the **Scheduling Integration** page.

Scheduling Integration Page

The screenshot shows the 'Scheduling Integration' page. On the left is a navigation menu with categories: STATUS, HDMI INPUT, DM IN, HDMI OUTPUT, NETWORK, and DEVICE. Under the DEVICE category, the following options are listed: PINPOINT UX, Display Power, Display On/Off, PinPoint UX General, Room Schedule Screen, Presentation Screen, and Scheduling Integration (which is currently selected). The main content area is titled 'Scheduling Integration' and contains three sections: 'Source' with radio buttons for Fusion (selected), Exchange, and None; 'Current Status' with an orange 'Disconnected' button; and 'Timezone' with a dropdown menu set to '(UTC-05:00) Eastern time'. At the bottom right of the main area are 'Submit' and 'Reset' buttons.

This page selects the scheduling integration software that delivers scheduling information to the DM-DGE-200-C (Crestron Fusion, Microsoft Exchange, or none). Depending on which scheduling software is selected, the following configuration options are available:

NOTE: The chosen scheduling integration software must be fully installed and configured before an attempt is made to connect it to the DM-DGE-200-C. For more information, refer to page 4.

Crestron Fusion

Click the **Fusion** button on the **Scheduling Integration** page to synchronize PinPoint UX with Crestron Fusion.

The Crestron Fusion settings below can be configured:

- **Current Status:** Shows whether or not the Crestron Fusion is currently connected to the DM-DGE-200-C
- **Timezone:** Sets the current time zone

Click **Submit** to save any changes. Click **Reset** to clear any pending changes.

Microsoft Exchange

Click the **Exchange** button on the **Scheduling Integration** page to synchronize PinPoint UX with Microsoft Exchange.

Scheduling Integration - Exchange Page

The screenshot shows a web interface for configuring Microsoft Exchange integration. On the left is a navigation menu with categories: STATUS, HDMI INPUT, DM IN, HDMI OUTPUT, NETWORK, and DEVICE. Under the DEVICE category, there are links for PINPOINT UX, Display Power, Display On/Off, PinPoint UX General, Room Schedule Screen, Presentation Screen, and Scheduling Integration (which is highlighted). The main content area is titled 'Scheduling Integration' and contains the following fields:

- Source:** Radio buttons for Fusion, Exchange (selected), and None.
- Current Status:** A red 'Disconnected' button.
- Outlook Web Access URL:** A text input field.
- Outlook Domain Name [optional]:** A text input field.
- Outlook User Name:** A text input field containing 'username'.
- Outlook password:** A text input field.
- Calendar Email Address:** A text input field containing 'username@organization.com'.
- SMTP Server:** A text input field containing 'pool.ntp.org'.
- Timezone:** A dropdown menu showing '(UTC-05:00) Eastern time'.

At the bottom right of the form are 'Submit' and 'Reset' buttons.

The below Microsoft Exchange software settings can be configured:

- **Current Status:** Shows whether or not Microsoft Exchange is currently connected to the DM-DGE-200-C
- **Outlook Web Access URL:** Sets the Microsoft Outlook Web Access URL that is associated with the Microsoft Exchange account
- **Outlook Domain Name [optional]:** Sets the Microsoft Outlook domain name that is associated with the Microsoft Exchange account (if applicable)
- **Outlook User Name:** Sets the Microsoft Outlook username associated with the Microsoft Exchange account
- **Outlook password:** Sets the Microsoft Outlook password associated with the Microsoft Exchange account
- **Calendar Email Address:** Sets the SMTP (Simple Mail Transfer Protocol) server address of the room resource associated with the Microsoft Exchange account
- **SMTP Server:** Sets the SMTP (Simple Network Time Protocol) time server that is associated with the Microsoft Exchange account
- **Timezone:** Sets the current time zone

Click **Submit** to save any changes. Click **Reset** to revert to the previous settings.

No Scheduling Integration Software

To use PinPoint UX independently of a scheduling integration software, click the **None** button on the **Scheduling Integration** page. When no scheduling integration software is selected, PinPoint UX does not provide or receive any scheduling information about the room, but all other software functionality can be used.

Scheduling Integration - None Page

The screenshot shows the 'Scheduling Integration' configuration page. On the left is a navigation menu with categories: STATUS, HDMI INPUT, DM IN, HDMI OUTPUT, NETWORK, and DEVICE. Under the DEVICE category, there is a sub-section for PINPOINT UX with options: Display Power, Display On/Off, PinPoint UX General, Room Schedule Screen, Presentation Screen, and Scheduling Integration (which is currently selected). The main content area is titled 'Scheduling Integration' and contains the following settings:

- Source:** Radio buttons for Fusion, Exchange, and None. The 'None' option is selected.
- SNTP Server:** A text input field containing 'pool.ntp.org'.
- Timezone:** A dropdown menu showing '(UTC-05:00) Eastern time'.

At the bottom right of the configuration area are two buttons: 'Submit' (with a checkmark icon) and 'Reset' (with a circular arrow icon).

The following settings can be configured when no scheduling software is selected:

- **SNTP Server:** Sets the SNTP server to be used by PinPoint UX
- **Timezone:** Sets the current time zone

Click **Submit** to save any changes. Click **Reset** to clear any pending changes.

Configuration via Crestron Fusion

Once the PinPoint UX-enabled DM-DGE-200-C is connected to Crestron Fusion, PinPoint UX can be configured through Crestron Fusion by using custom properties.

Custom properties expand the functionality of the DM-DGE-200-C, such as passing properties to the device to display and announcing an emergency alert generated by Crestron Fusion. Custom properties provide information that is important to the user and that can be included in the description of the room. Custom properties that communicate settings to the device are defined for each room and are set through the Crestron Fusion Setup web client.

NOTE: Custom properties set in Crestron Fusion have precedence over settings configured using the web browser interface.

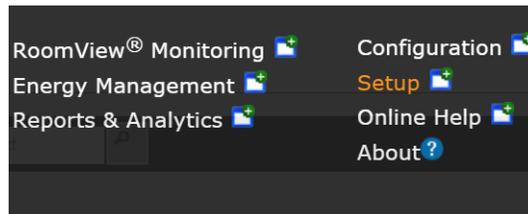
NOTE: For more information on setting up rooms and adding devices to rooms in Crestron Fusion, consult the Getting Started Guide for Adding Devices to Crestron Fusion Software (Doc. 7888) at www.crestron.com/manuals.

Adding Custom Properties to a Room

The following steps assume that the DM-DGE-200-C has been put into PinPoint UX mode and that a connection to Crestron Fusion has been established through the web browser interface (for more information, refer to page 4). These steps also assume that the DM-DGE-200-C has been already added to the appropriate room in Crestron Fusion.

1. Log in to the Crestron Fusion server.
2. From the Crestron Fusion header, select **Open > Setup**.

Crestron Fusion Page - Header



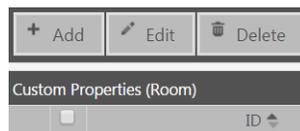
3. From the **Rooms** tree on the left side of the screen, select the **Objects** tab on the bottom of the tree.

Crestron Fusion Page - Objects Tab



4. Select **Custom Properties > Rooms** from the Objects tree, and then click **+ Add**.

Crestron Fusion Page - Add Button



5. Enter the following information for each custom property that is being added:
 - o **ID:** Enter the ID of the custom property *exactly* as it appears in this document.
 - o **Name:** Enter any descriptive name for the property.
 - o **Type:** Enter the custom property type (integer, string, Boolean, etc.).
 - o **Searchable:** Check this box to make the custom property searchable (optional).

Add - Custom Property (Room) Window

The screenshot shows a window titled "Add - Custom Property (Room)". Inside the window, there are four input fields: "ID:", "Name:", "Type", and "Searchable:". The "ID:", "Name:", and "Type" fields have a red asterisk to their right, indicating they are required. The "Searchable:" field has a checkbox. Below the input fields, there is a legend: "*denotes a required field". At the bottom right, there are two buttons: "Save & Close" and "Close".

6. Click **Save & Close** to save any changes. Click **Close** to cancel the addition.

Setting Custom Properties for PinPoint UX

After adding custom properties to the room as described in the above steps, use the **Custom Property** tab to configure the custom properties for PinPoint UX.

1. Navigate to the **Rooms** tree as described in the first three steps of the "Adding Custom Properties to a Room" section above.
2. Click the **Rooms** tab if it is not already selected, and then click the + sign next to the root directory to expand the directory tree.
3. Double-click on the desired room to open the **Edit - Room** window.
4. Click the **Custom Properties** tab to view the available custom properties for that room.
5. To enable a custom property, either add a valid value to the appropriate text box or check the appropriate check box.
6. Click **Save & Close** to apply the selected properties. Click **Close** to cancel any changes.

PinPoint UX Custom Properties

The following tables list the Crestron Fusion custom properties that can be configured for PinPoint UX. These custom properties correlate with the settings that are configurable via the web browser interface.

For a complete list of custom properties for PinPoint UX in the order that they appear in Crestron Fusion, refer to page 28.

Display Power Settings

Custom Properties (Display Power Settings)

CUSTOM PROPERTY	TYPE AND SUPPORTED VALUE(S)	DESCRIPTION	DEFAULT VALUE	NOTES
PowerMethod	String CEC, Serial, or Crestron Connected	Selects the display's power method	CEC	
SerialBaud	Integer [300, 600, 1200, ... 115200]	Sets the display's serial baud rate	115200	PowerMethod must be set to Serial.
SerialCommandOff	String [0–120 chars] or <empty>	Passes the display's "Serial Off" command	<empty>	PowerMethod must be set to "Serial," escape non-ASCII characters with "xHH" notation.
SerialCommandOn	String [0–120 chars] or <empty>	Passes the display's "Serial On" command	<empty>	PowerMethod must be set to "Serial," escape non-ASCII characters with "xHH" notation.
SerialDataBit	Integer [7, 8]	Sets the display's serial data bit number	8	PowerMethod must be set to Serial.
SerialParityBits	String None, Even, Odd, Mark	Sets the display's parity bit setting	None	PowerMethod must be set to Serial.
SerialStopBit	Integer [1, 2]	Sets the display's serial stop bit number	1	PowerMethod must be set to Serial.

Display On/Off Settings

Custom Properties (Display On/Off Settings)

CUSTOM PROPERTY	TYPE AND SUPPORTED VALUE(S)	DESCRIPTION	DEFAULT VALUE	NOTES
FrontOfRoomDisplayAfterMeetingMin	Integer [0–90] minutes	Sets when the display turns off after a meeting ends	0	
FrontOfRoomDisplayBeforeMeetingMin	Integer [0–90] minutes	Sets when the display turns on before a meeting ends	0	
FrontOfRoomDisplayTimeOff	String 00:00–23:59	Sets the time that the display automatically turns off	18:30	
FrontOfRoomDisplayTimeOn	String 00:00–23:59	Sets the time that the display automatically turns on	8:30	
FrontOfRoomDisplayTriggerType	String TimeOfDay	Selects the display's auto-on trigger method (time range)	TimeOfDay	
timeofweek[1–7]*	Boolean	Selects the days of the week that the display's auto-on settings are in effect	TRUE for 1–5, FALSE for 6–7	

* The table below correlates the number following each **timeofweek** property with a day of the week.

CUSTOM PROPERTY	DAY OF WEEK
timeofweek1	Monday
timeofweek2	Tuesday
timeofweek3	Wednesday
timeofweek4	Thursday
timeofweek5	Friday
timeofweek6	Saturday
timeofweek7	Sunday

PinPoint UX General Settings

Custom Properties (PinPoint UX General Settings)

CUSTOM PROPERTY	TYPE AND SUPPORTED VALUE	DESCRIPTION	DEFAULT VALUE	NOTES
BroadcastEmgTimeOut	Integer [10–90] minutes or 0	Sets the time it takes for emergency broadcasts to time out	90	0 = no timeout
BroadcastNonEmgTimeOut	Integer [10–720] minutes or 0	Sets the time it takes for nonemergency broadcasts to time out	720	FrontOfRoom HideNon Emergency Broadcast must be set to FALSE, 0 = no timeout.
BroadcastSounder	Integer 0 = Off, 1 = On	Sets whether the emergency broadcast sound is enabled or disabled	1	
DateFormat	Integer [0–9]*	Sets the date format of the display	0 (WMDY)	
DisplayLanguage	String†	Sets the language of the display	en_US	
FrontOfRoomHideNonEmergencyBroadcast	Boolean	Sets whether nonemergency broadcasts are hidden from the display (TRUE) or shown (FALSE)	TRUE	
FrontOfRoomHideOrganizer	Boolean	Sets whether the meeting organizer is hidden from the display (TRUE) or not (FALSE)	FALSE	
FrontOfRoomHideSubject	Boolean	Sets whether the meeting subject is hidden from the display (TRUE) or not (FALSE)	FALSE	
OfflineExpiry	Integer [0–24] hours	Sets the time to delay the "Display Offline" message after the display is no longer connected to the network	12	A value of 0 shows the offline screen immediately upon loss of connection.
RoomFriendlyName	String [0–40 chars] or <empty>	Sets the name of the room associated with the display	Room	
TimeFormat	Boolean TRUE = 12hr, FALSE = 24hr	Sets the time format of the display	TRUE	

* The first table on the following page correlates the date format with the required integer.

† The second table on the following page correlates the language setting with the required string values (case sensitive).

FORMAT	DEFINITION	EXAMPLE	PROPERTY
WMDY	Day of week, Month Day, Year	Tuesday, May 21, 2016	DateFormat=0
WDMY	Day of week, Day-Month-Year	Tuesday, 21-May-2016	DateFormat=1
WMD	Day of week, Month Day	Tuesday, May 21	DateFormat=2
WDM	Day of week, Day-Month	Tuesday, 21-May	DateFormat=3
MDY	Month Day, Year	May 21, 2016	DateFormat=4
DMY	Day-Month-Year	21-May-2016	DateFormat=5
M.DY	Month.Day Year	May.21 2016	DateFormat=6
D.MY	Day.Month Year	21.May 2016	DateFormat=7
WYMD	Day of week, Year-Month-Day (ISO format)	Tuesday, 2016-May-21	DateFormat=8
YMD	Year-Month-Day (ISO format)	2016-May-21	DateFormat=9

LANGUAGE	PROPERTY
Arabic	DisplayLanguage=ar
Chinese (Simplified)	DisplayLanguage=zh_CN
Chinese (Traditional)	DisplayLanguage=zh_TW
Czech	DisplayLanguage=cs
Danish	DisplayLanguage=da
Dutch (Netherlands)	DisplayLanguage=nl
English (US)	DisplayLanguage=en_US
English (UK)	DisplayLanguage=en_UK
Finnish	DisplayLanguage=fi
French	DisplayLanguage=fr
German	DisplayLanguage=de
Hebrew	DisplayLanguage=he
Hungarian	DisplayLanguage=hu
Italian	DisplayLanguage=it
Japanese	DisplayLanguage=ja
Korean	DisplayLanguage=ko
Norwegian	DisplayLanguage=no
Polish	DisplayLanguage=pl
Portuguese (Brazil)	DisplayLanguage=pt_BR
Portuguese (Portugal)	DisplayLanguage=pt_PT
Romanian	DisplayLanguage=ro
Russian	DisplayLanguage=ru
Slovak	DisplayLanguage=sk
Spanish	DisplayLanguage=es
Swedish	DisplayLanguage=sv
Thai	DisplayLanguage=th

Room Schedule Screen Settings

Custom Properties (Room Schedule Settings)

CUSTOM PROPERTY	TYPE AND SUPPORTED VALUE	DESCRIPTION	DEFAULT VALUE	NOTES
FrontOfRoomBackgroundIntervalSec	Integer [10–86400] seconds	Sets the time a background image appears on the display before cycling to the next one.	3600	FrontOfRoomEnableCustomBackgrounds URLs must be set to TRUE.
FrontOfRoomBackgroundsURL[1–15]	String [URL] or <empty>	Sets the custom background URL(s). Up to 15 URLs can be entered in their respective properties	<empty>	FrontOfRoomEnableCustomBackgrounds URLs must be set to TRUE.
FrontOfRoomCableConnectionDescription	String [0–30 chars] or <empty>	Sets the connection details for the wired cable connection	HDMI, DVI, or VGA	FrontOfRoomHideCableConnection must be set to FALSE.
FrontOfRoomEnableCustomBackgrounds URLs	Boolean	Sets whether custom background images are enabled (TRUE) or disabled (FALSE)	FALSE	
FrontOfRoomEnableCustomLogoURL	Boolean	Sets whether the custom graphic logo is enabled (TRUE) or disabled (FALSE)	FALSE	
FrontOfRoomHideCableConnection	Boolean	Sets whether the cable connection information is hidden (TRUE) or not (FALSE)	FALSE	If TRUE, the AirMedia connection information is used.
FrontOfRoomLogoURL	String [URL] or <empty>	Sets the custom graphic logo URL	<empty>	FrontOfRoomEnableCustomLogoURL must be set to TRUE.
FrontOfRoomReservedNextMeetingMin	Integer [0–420] minutes	Sets the time before the next meeting information appears on the display	10	0 = this information is not shown

Presentation Screen Settings

Custom Properties (Presentation Screen Settings)

CUSTOM PROPERTY	TYPE AND SUPPORTED VALUE	DESCRIPTION	DEFAULT VALUE	NOTES
FrontOfRoomContentNextMeetingIntervalSec	Integer [0–60] seconds	Sets the duration of the "time remaining" message	15	
FrontOfRoomContentNextMeetingMin	Integer [0–30] minutes	Sets the time before the "time remaining" message appears	5	

Master List of PinPoint UX Custom Properties

The below table lists all of the custom properties for PinPoint UX in the order that they appear in the Crestron Fusion custom properties list. For more information on a custom property, refer to that property's page number as shown in the below table.

Custom Properties (Master List)

CUSTOM PROPERTY	GROUPING	PAGE
BroadcastEmgTimeOut	General Settings	24
BroadcastNonEmgTimeOut	General Settings	24
BroadcastSounder	General Settings	24
DateFormat	General Settings	24
DisplayLanguage	General Settings	24
FrontOfRoomBackgroundIntervalSec	Room Schedule	26
FrontOfRoomBackgroundsURLs[1-15]	Room Schedule	26
FrontOfRoomCableConnectionDescription	Room Schedule	26
FrontOfRoomContentNextMeetingIntervalSec	Presentation	27
FrontOfRoomContentNextMeetingMin	Presentation	27
FrontOfRoomDisplayAfterMeetingMin	Display On/Off	23
FrontOfRoomDisplayBeforeMeetingMin	Display On/Off	23
FrontOfRoomDisplayTimeOff	Display On/Off	23
FrontOfRoomDisplayTimeOn	Display On/Off	23
FrontOfRoomDisplayTriggerType	Display On/Off	23
FrontOfRoomEnableCustomBackgroundsURLs	Room Schedule	26
FrontOfRoomEnableCustomLogoURL	Room Schedule	26
FrontOfRoomHideCableConnection	Room Schedule	26
FrontOfRoomHideNonEmergencyBroadcast	General Settings	24
FrontOfRoomHideOrganizer	General Settings	24
FrontOfRoomHideSubject	General Settings	24
FrontOfRoomLogoURL	Room Schedule	26
FrontOfRoomReservedNextMeetingMin	Room Schedule	26
OfflineExpiry	General Settings	24
PowerMethod	Display Power	22
RoomFriendlyName	General Settings	24
SerialBaud	Display Power	22
SerialCommandOff	Display Power	22
SerialCommandOn	Display Power	22
SerialDataBit	Display Power	22
SerialParityBits	Display Power	22
SerialStopBit	Display Power	22
TimeFormat	General Settings	24
timeofweek[1-7]	Display On/Off	23

Manual Control of Active Sources

By default, PinPoint UX employs automatic switching behavior when wired or wireless sources are connected to the PinPoint UX-enabled Crestron system. However, the DM-DGE-200-C also provides an option to control these sources manually. Manual control of active sources is often desired when both the DM-DGE-200-C is downstream of a signal routing presentation system device (such as a DMPS3-4K-300-C) that has multiple wired sources and when the user selection of sources takes place through a touch screen interface.

Enabling and configuring manual source selection are performed through the DM-DGE-200-C device extender named "PinPoint UX Reserved Joins." Refer to the following procedure to configure manual source selection through the DM-DGE-200-C device extender.

1. Add the PinPoint UX Reserved Joins device extender to the DM-DGE-200-C symbol using SIMPL Windows or Crestron Studio® software. For more information, refer to the embedded help files for SIMPL Windows or Crestron Studio.
2. Turn on manual source selection using the "PP_Manual_Source_Select_On" signal.
3. Depending on how the Crestron system is configured, indicate the source of the AirMedia connection information that is presented on the screen.
 - a. If the AirMedia device is connected to a control system, use the "Manual_AirMedia_Connection_Info_On" signal, and then connect the appropriate signals from the AirMedia symbol to the "AirMedia_NumConnected_Users" signal, the "AirMedia_IP_Address" signal, the "AirMedia_Hostname" signal, and the "AirMedia_Login_Code" signal.
 - b. If the AirMedia device's IP table is connected directly to the DM-DGE-200-C, use the "Manual_AirMedia_Connection_Info_Off" signal. The AirMedia connection information is automatically pushed to the DM-DGE-200-C without any programming required.
4. If using an H.264 streaming video source, program the "PP_Streaming_Video_URL" signal with the URL of the source.
5. Control which video sources are displayed at runtime with the "PP_Video_Source" signal. Refer to the below table for valid signal values.

PP_Video_Source Signal Values

VALUE	DESCRIPTION
1d	Schedule/home screen
2d	HDMI input (usually AirMedia)
3d	DM input
4d	Streaming input

