# Crestron CAPTURE-TPMC-4SM Capture HD™ Interface

**Operations Guide** 





This document was prepared and written by the Technical Documentation department at:



# **Contents**

Cap	pture HD™ Interface	1
	Introduction	
	Getting Started	
	Hardware Connections	
	Ethernet Setup	
	Initial Screens	
	Device Offline	
	Start Page	
	Capture	
	Preparing - Mic	
	Preparing - Preview	
	Preparing – Layout - Main	
	Preparing – Layout - PIP	
	Recording	
	Preparing to Record	
	Recording – With Streaming Camera Preview	
	Recording – Without Streaming Camera Preview	
	LED Recording Indicators	
	Stop Recording Confirmation	
	Recording Complete	
	Configuration	14
	Password Entry	14
	Main Configuration Screen	15
	Audio Configuration - Speech	16
	Audio Configuration - Content	17
	Audio Configuration - Select	18
	Video Configuration - Camera	18
	Video Configuration - Content	20
	Video Configuration - Record	21
	Network Configuration - Status	22
	Network Configuration - Schedule	23
	Control Configuration - Storage	24
	Control Configuration - Upload	
	Control Configuration - Camera	
	A dunin	

# **Capture HD™ Interface**

#### Introduction

This compact touch screen controller enables simplified day to day operation of the Capture HD<sup>TM</sup> High-Definition Capture Recorder (CAPTURE-HD or CAPTURE-HD-PRO<sup>1</sup>) for recording lectures and meetings. The instructor or presenter need only follow the prompts on the touch screen to easily start and stop a recording, pause or mute the recording and add bookmarks during the session and make very basic adjustments when needed. The touch screen can also display a live view of the presenter's camera and a microphone level meter to lend an extra level of confidence during operation. The CAPTURE-TPMC-4SM Touch Screen Controller is available in white or black and can be installed at a lectern, mounted in a wall or placed on a tabletop<sup>2</sup>.

Capturing lectures and meetings is a breeze using the CAPTURE-TPMC-4SM Touch Screen Controller, with special features included to ensure reliable results. When starting a recording, the touch screen displays a level meter for testing and adjusting the presenter's microphone and a video window for previewing the camera image. If desired, the presenter can select whether to capture just the camera, the presentation content (a computer or other multimedia source) or both in either a side-by-side or picture-in-picture (PIP) layout. Advanced user settings are available for changing the PIP window size and position, adjusting audio levels and specifying the video capture format and file storage location. Critical settings can be password protected to prevent any unauthorized changes.

The recording does not begin until the presenter is ready and while recording, the presenter can add bookmarks, mute the audio or pause for a break, all via clearly labeled buttons on the touch screen. Clear status is provided on-screen and via indicators on either side of the screen which illuminate red when recording and flash when paused or muted.

The CAPTURE-TPMC-4SM features a very small footprint and a range of mounting options, allowing for installation on virtually any surface<sup>2</sup>. Complete connectivity is provided through a simple Ethernet connection, communicating directly over the LAN with the CAPTURE-HD device (no control system required). PoE (Power over Ethernet) technology eliminates the need for any additional wiring, powering the touch screen through the Ethernet connection using a PWE-4803RU<sup>1</sup> or other PoE power source. Video preview is enabled using a camera with built-in MJPEG streaming (Crestron® CAM-IFB-100, CAM-IPTZ-100, or similar<sup>1</sup>) or using a standard camera along with a Crestron Network Video Streamer (CEN-NVS200<sup>1</sup>).

- 1. Item(s) sold separately.
- Some installations may require additional mounting accessories. Refer to specifications for all mounting options.

## **Getting Started**

#### **Hardware Connections**

For hardware hookup details, refer to the latest version of the CAPTURE-HD and CAPTURE-HD-PRO Operations Guide (Doc 7233), which is available from the Crestron Web site (<a href="www.crestron.com/manuals">www.crestron.com/manuals</a>).

For more information on the TPMC-4SM refer to the latest version of the TPMC-4SM Operations & Installation Guide (Doc. 6845).

**NOTE:** Sections of the TPMC-4SM Operations & Installation Guide referring to *Room Scheduling* mode are not applicable to the CAPTURE-TPMC-4SM.

#### **Ethernet Setup**

Use the following procedure to establish Ethernet communication between the devices in your CaptureLiveHD<sup>TM</sup> system:

- Using the CAPTURE-TPMC-4SM "Ethernet Setup" screens, select Control System Settings and enter the IP Address (or hostname) of the CAPTURE-HD or CAPTURE-HD-PRO device. The capture recorder's IP Address can be found from its front panel display by entering the Network menu, then the Status menu.
- 2. Enter **03** as the CIP ID.

**NOTE:** Only one control connection should be specified on the touch screen's Ethernet setup, which is the IP Address and CIP ID of the capture recorder. If more than one control connection is defined, the Capture HD Interface program does not work correctly.

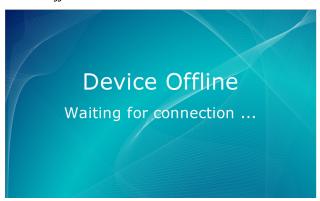
- 3. After saving the capture recorder's IP Address and CIP ID, exit the setup screens and start the Capture HD Interface program on the touch screen.
- 4. Select the "cog" icon in the upper right corner of the screen to display the "Enter Password" screen (refer to "Password Entry" on page 14). The default password is "12345".
- 5. When the password has been successfully entered, the main "Configuration" screen is displayed (refer to "Main Configuration Screen" on page 15). At the bottom of the screen, select Control to display the "Control Configuration" screen, then select Camera.
- 6. Select the **Edit** button next to *Hostname/IP Address* and enter the camera's hostname. The default hostname for the camera is <Crestron Model>-<Serial #>. For example, if the serial number on the body of a CAM-IPTZ-100 camera is 123456, the hostname is "CAM-IPTZ-100-123456".

#### **Initial Screens**

#### **Device Offline**

When the CAPTURE-TPMC-4SM is not connected to a CAPTURE-HD (or CAPTURE-HD-PRO) recorder, the following screen is displayed.

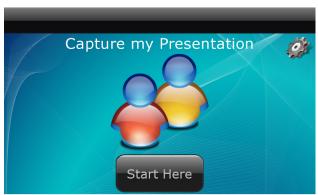
"Device Offline" Screen



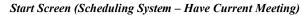
#### **Start Page**

When a CAPTURE-HD (or CAPTURE-HD-PRO) recorder is connected to the CAPTURE-TPMC-4SM, the screen that is displayed depends on the configuration of the scheduling system and whether there is a current or next meeting. (Refer to "Network Configuration - Schedule" on page 23.)

Start Screen (No Scheduling System)



CONTROL NAME	DESCRIPTION
Start Here	Displays the "Adjust speech volume" screen (refer to page 5)
"Cog" icon	Displays the "Enter Password" screen for configuration, prompts user for password (refer to page 14)





CONTROL NAME	DESCRIPTION
"Cog" icon	Displays the "Enter Password" screen for configuration, prompts user for password (refer to page 14)
Start capturing	Displays the "Adjust speech volume" screen (refer to page 5); sets the capture metadata to the current meeting
That's not my meeting	Displays the "Adjust speech volume" screen (refer to page 5); sets the capture metadata to "ad hoc" type

# **Capture**

#### **Preparing - Mic**

When any button to start recording is pressed, the following screen is displayed. The controls at the bottom of the screen change based on whether there is a streaming camera defined in the Tools page.

"Adjust speech volume" Screen (No Streaming Camera Defined)



CONTROL NAME	DESCRIPTION
Louder	Raises the speech audio input level
Quieter	Lowers the speech audio input level
Louder/Quieter Level Text	Indicates the current adjustment level of the mic input; value range is –3 to +3
Go Back	Returns to the previous screen
Adjust More	Displays the "What do you want to capture?" screen (refer to page 7)
Start Recording	Starts recording; displays the "Start recording" screen (refer to page 11)
Bar Graph	Speech audio volume meter

<sup>&</sup>quot;Adjust speech volume" Screen (Streaming Camera Defined - Only Bottom Bar Changes)



CONTROL NAME	DESCRIPTION
Go Back	Returns to the previous screen
Next Step	Displays the "Camera preview" screen (refer to page 6); if the streaming camera has not been set up (refer to "Control Configuration - Camera" on page 26, the "Camera preview" screen is not displayed

#### **Preparing - Preview**

This screen displays the streaming output of the camera. It requires the TPMC-4SM MJPEG viewer.

"Camera Preview" Screen



CONTROL NAME	DESCRIPTION
Go Back	Returns to the previous page
Adjust More	Displays the "What do you want to capture?" screen (refer to page 7)
Start Recording	Starts recording; displays the "Start recording" screen (refer to page 11)

**NOTE:** If the streaming camera has not been set up (refer to "Control Configuration - Camera" on page 26), this screen is not displayed.

#### Preparing - Layout - Main

This screen allows selection of the screen composition for the recording.

"What do you want to capture?" Screen



CONTROL NAME	DESCRIPTION
Side by Side	Selects the Side by Side preset
Fullscreen Presentation	Selects the Fullscreen Presentation preset
Fullscreen Camera	Selects the Fullscreen Camera preset
PIP (Picture-In-Picture)	Displays the "What do you want to capture?" screen (refer to page 9)
Go Back	Returns to the previous page
Start Recording	Starts recording; displays the "Start recording" screen (refer to page 11)

"What do you want to capture?" Screen ("Side by Side" Selected)



What do you want to capture?

Side by Side

My laptop

Fullscreen
Presentation

Fullscreen
Camera

PIP
Picture-In-Picture

Go
Back

Start Recording

"What do you want to capture?" Screen ("Fullscreen Presentation" Selected)

"What do you want to capture?" Screen ("Fullscreen Camera" Selected)



#### Preparing - Layout - PIP

This screen allows selection of the screen composition for the PIP recording.

"What do you want to capture?" Screen ("PIP Picture-In-Picture" Selected)



CONTROL NAME	DESCRIPTION
Camera Upper Left	Selects the Camera Upper Left preset; displays "What do you want to capture?" screen for Camera Upper Left (shown below)
Camera Upper Right	Selects the Camera Upper Right preset; displays the "What do you want to capture?" screen for Camera Upper Right (refer to page 10)
Camera Lower Left	Selects the Camera Lower Left preset; displays the "What do you want to capture?" screen for Camera Lower Left (refer to page 10)
Camera Lower Right	Selects the Camera Lower Right preset; displays the "What do you want to capture?" screen for Camera Lower Right (refer to page 10)
Go Back	Returns to the previous page
Start Recording	Starts recording; displays the "Start recording" screen (refer to page 11)

"What do you want to capture?" Screen (PIP "Camera Upper Left" Selected)





"What do you want to capture?" Screen (PIP "Camera Upper Right" Selected)

"What do you want to capture?" Screen (PIP "Camera Lower Left" Selected)



"What do you want to capture?" Screen (PIP "Camera Lower Right" Selected)



# Recording

#### **Preparing to Record**

When the CAPTURE-HD (or CAPTURE-HD-PRO) is preparing to start a recording, the following screen is displayed.

"Start recording" Screen



#### **Recording – With Streaming Camera Preview**

When the CAPTURE-HD (or CAPTURE-HD-PRO) is recording and the camera has been configured with support for an MJPEG stream, the following screen is displayed.

Streaming Camera Preview Screen



CONTROL NAME	DESCRIPTION
Add Bookmark	Adds a bookmark to the recording
Mute	Toggles the audio mute
Pause	Toggles the recording pause
Stop Recording	Displays the "Stop recording?" screen (refer to page 13)
99:59	Displays the current elapsed recording time
status	Displays the current recording status

#### **Recording – Without Streaming Camera Preview**

When the CAPTURE-HD (or CAPTURE-HD-PRO) is recording and the camera has been configured without support for an MJPEG stream, the following screen is displayed.

Streaming Camera Preview Screen



CONTROL NAME	DESCRIPTION
Add Bookmark	Adds a bookmark to the recording
Mute	Toggles the audio mute
Pause	Toggles the recording pause
Stop Recording	Displays the "Stop recording?" screen (refer to page 13).
99:59	Displays the current elapsed recording time
status	Displays the current recording status

#### **LED Recording Indicators**

The red LEDs on the CAPTURE-TPMC-4SM provide visual indication of the recording status.

The LEDs are solid on during recording and blink when **Mute** or **Pause** are activated.

#### **Stop Recording Confirmation**

When Stop Recording is selected, the "Stop recording?" screen is displayed.

"Stop recording?" Screen



CONTROL NAME	DESCRIPTION
Yes	Ends the recording; if the <i>Upload path</i> has been configured, the "Recording complete" screen (shown below) is displayed; if the path has not been configured, the start screen is displayed
No	Returns to the "Start recording" screen (refer to page 11)

# **Recording Complete**

When Stop Recording is selected and the *Upload path* has been configured, the "Recording complete" screen is displayed.

"Recording complete" Screen



# Configuration

#### **Password Entry**

When the "cog" icon on the Start page is selected, the following screen is displayed.

"Enter Password" Screen



CONTROL NAME	DESCRIPTION
<b>8</b>	Closes the password screen and returns to the previous screen
Clear	Clears the password field
0 - 9	Password keypad
Enter	Selected the current entry as the password

The default password is "12345". The password can be changed using the "Set Tools Password" screen (refer to "Admin" on page 27).

# **Main Configuration Screen**

When the password has been successfully entered, the following screen is displayed.

"Configuration" Screen



CONTROL NAME	DESCRIPTION
X	Closes the "Configuration" screen and returns to the start screen
Audio	Displays the "Audio Configuration" screen (refer to page 16); Speech is selected by default
Video	Displays the "Video Configuration" screen (refer to page 18); Camera is selected by default
Network	Displays the "Network Configuration" screen (refer to page on page 22); Status is selected by default
Control	Displays the "Control Configuration" screen (refer to page 24); Storage is selected by default
Admin	Displays the "Set Tools Password" screen (refer to page 27)

# **Audio Configuration - Speech**

When **Audio** is selected on the main "Configuration" screen, the following screen is displayed. (**Speech** is selected by default).

"Audio Configuration" Screen (Speech Selected)



CONTROL NAME	DESCRIPTION
<b>(</b>	Closes the "Audio Configuration" screen and returns to the start screen
<b>(4)</b>	Returns to the main "Configuration" screen (refer to page 15)
Speech	Displays the "Audio Configuration – Speech" screen (shown on this page)
Content	Displays the "Audio Configuration – Content" screen (refer to page 17)
Select	Displays the "Audio Configuration – Select" screen (refer to page 18)
Treble Up	Raises the treble level
Treble Down	Lowers the treble level
Bass Up	Raises the bass level
Bass Down	Lowers the bass level
Mix Up	Raises the level of the speech audio that is mixed with the content audio
Mix Down	Lowers the level of the speech audio that is mixed with the content audio
Speech Monitor	Current "live" audio level

#### **Audio Configuration - Content**

When **Content** is selected on the "Audio Configuration" screen, the following screen is displayed.

"Audio Configuration" Screen (Content Selected)



CONTROL NAME	DESCRIPTION
×	Closes the "Audio Configuration" screen and returns to the start screen
<b>(4)</b>	Returns to the main "Configuration" screen (refer to page 15)
Speech	Displays the "Audio Configuration – Speech" screen (refer to page 16)
Content	Displays the "Audio Configuration – Content" screen (shown on this page)
Select	Displays the "Audio Configuration – Select" screen (refer to page 18)
Treble Up	Raises the treble level
Treble Down	Lowers the treble level
Bass Up	Raises the bass level
Bass Down	Lowers the bass level
Mix Up	Raises the level of the speech audio that is mixed with the content audio
Mix Down	Lowers the level of the speech audio that is mixed with the content audio
Input Level Up	Raises the input trim level
Input Level Down	Lowers the input trim level
Content Monitor	Current "live" audio level

#### **Audio Configuration - Select**

When **Select** is selected on the "Audio Configuration" screen, the following screen is displayed.

"Audio Configuration" Screen (Select Selected)



CONTROL NAME	DESCRIPTION
<b>X</b>	Closes the "Audio Configuration" screen and returns to the start screen
<b>(4)</b>	Returns to the main "Configuration" screen (refer to page 15)
Speech	Displays the "Audio Configuration – Speech" screen (refer to page 16)
Content	Displays the "Audio Configuration – Content" screen (refer to page 17)
Select	Displays the "Audio Configuration – Select" screen (shown on this page)
HDMI	Sets the capture recorder to use the HDMI audio input for recording
Unbalanced	Sets the capture recorder to use the unbalanced analog audio input for recording
Balanced	Sets the capture recorder to use the balanced analog audio input for recording

### **Video Configuration - Camera**

When **Video** is selected on the main "Configuration" screen, the following screen is displayed. (**Camera** is selected by default).

"Video Configuration" Screen (Camera Selected)



CONTROL NAME	DESCRIPTION
×	Closes the "Video Configuration" screen and returns to the start screen
	Returns to the main "Configuration" screen (refer to page 15)
Camera	Displays the "Video Configuration – Camera" screen (refer to page 18)
Content	Displays the "Video Configuration – Content" screen (refer to page on page 20)
Record	Displays the "Video Configuration– Record" screen (refer to page on page 21)
Input - Auto	Sets the capture recorder to auto select the video camera input for recording
Input - SDI	Sets the capture recorder to use the SDI video camera input for recording
Input - Composite	Sets the capture recorder to use the composite video camera input for recording
SDI – Video Detected LED	Indicator lights when video is detected on the SDI video camera input
Composite – Video Detected LED	Indicator lights when video is detected on the composite video camera input
PIP – Small	Selects the small PIP size
PIP – Medium	Selects the medium PIP size
PIP – Large	Selects the large PIP size
	Sets the default recording layout to Fullscreen Camera
	Sets the default recording layout to Fullscreen Presentation
<b>\$2</b>	Sets the default recording layout to Side by Side
	Sets the default recording layout to Picture-In-Picture, Camera Upper Left
<b>2</b>	Sets the default recording layout to <i>Picture-In-Picture</i> , <i>Camera Upper Right</i>
* <b>*</b>	Sets the default recording layout to Picture-In-Picture, Camera Lower Left
	Sets the default recording layout to <i>Picture-In-Picture</i> , <i>Camera Lower Right</i>

#### **Video Configuration - Content**

When **Content** is selected on the "Video Configuration" screen, the following screen is displayed.

"Video Configuration" Screen (Camera Selected)



CONTROL NAME	DESCRIPTION
<b>8</b>	Closes the "Video Configuration" screen and returns to the start screen
<b>(4)</b>	Returns to the main "Configuration" screen (refer to page 15)
Camera	Displays the "Video Configuration – Camera" screen (refer to page on page 18)
Content	Displays the "Video Configuration – Content" screen (shown on this page)
Record	Displays the "Video Configuration– Record" screen (refer to page 21)
HDMI	Sets the capture recorder to use the HDMI video input for recording
VGA	Sets the capture recorder to use the VGA video input for recording
HDMI – Active Source LED	Indicator lights when HDMI video input has been set as the active source while in <i>Auto</i> mode; control is not visible if <i>Auto</i> mode is not set
VGA – Active Source LED	Indicator lights when VGA video input has been set as the active source while in <i>Auto</i> mode; control is not visible if <i>Auto</i> mode is not set

**NOTE:** *Auto* mode selection is available only from the front panel controls of the capture recorder (CAPTURE-HD or CAPTURE-HD-PRO, both sold separately).

#### **Video Configuration - Record**

When **Record** is selected on the "Video Configuration" screen, the following screen is displayed.

"Video Configuration" Screen (Record Selected)



CONTROL NAME	DESCRIPTION
×	Closes the "Video Configuration" screen and returns to the start screen
<b>(4)</b>	Returns to the main "Configuration" screen (refer to page 15)
Camera	Displays the "Video Configuration – Camera" screen (refer to page 18)
Content	Displays the "Video Configuration – Content" screen (refer to page on page 20)
Record	Displays the "Video Configuration– Record" screen (shown on this page)
Format – 720p-60	Sets the capture recorder to record at 720p/60 fps
Format – 1080p-24	Sets the capture recorder to record at 1080p/24 fps
Format – 720p-30	Sets the capture recorder to record at 720p/30 fps
Format – 720p-24	Sets the capture recorder to record at 720p/24 fps
Bitrate Up	Raises the capture recorder record bitrate
Bitrate Down	Lowers the capture recorder record bitrate

#### **Network Configuration - Status**

When **Network** is selected on the main "Configuration" screen, the following screen is displayed. (**Status** is selected by default).

"Network Configuration" Screen (Status Selected)



CONTROL NAME	DESCRIPTION
X	Closes the "Network Configuration" screen and returns to the start screen
<b>(4)</b>	Returns to the main "Configuration" screen (refer to page 15)
Status	Displays the "Network Configuration – Status" screen (shown on this page)
Schedule	Displays the "Network Configuration – Schedule" screen (refer to page 23)
Panel Setup	Displays the CAPTURE-TPMC-4SM's main "Panel Setup Options" screen

#### **Network Configuration - Schedule**

When **Schedule** is selected on the "Network Configuration" screen, the following screen is displayed.

"Network Configuration" Screen (Schedule Selected)



CONTROL NAME	DESCRIPTION
<b>2</b>	Closes the "Network Configuration" screen and returns to the start screen
<b>(4)</b>	Returns to the main "Configuration" screen (refer to page 15)
Status	Displays the "Network Configuration – Status" screen (refer to page on page 22)
Schedule	Displays the "Network Configuration – Schedule" screen (shown on this page)
Use Scheduling System	When enabled, the CAPTURE-TPMC-4SM assumes a scheduling system is used with the capture recorder; the start screen switches to support a scheduling system

# **Control Configuration - Storage**

When **Control** is selected on the main "Configuration" screen, the following screen is displayed. (**Storage** is selected by default).

"Control Configuration" Screen (Storage Selected)



CONTROL NAME	DESCRIPTION
X	Closes the "Control Configuration" screen and returns to the start screen
<b>(4)</b>	Returns to the main "Configuration" screen (refer to page 15)
Storage	Displays the "Control Configuration – Storage" screen (shown on this page)
Upload	Displays the "Control Configuration – Upload" screen (refer to page 25)
Camera	Displays the "Control Configuration – Camera" screen (refer to page 26)
MMC	Sets the capture recorder default storage location to the MMC card
USB Front	Sets the capture recorder default storage location to the front USB connection
USB Back	Sets the capture recorder default storage location to the back USB connection

#### **Control Configuration - Upload**

When **Upload** is selected on the "Control Configuration" screen, the following screen is displayed.

"Control Configuration" Screen (Upload Selected)



CONTROL NAME	DESCRIPTION
X	Closes the "Control Configuration" screen and returns to the start screen
<b>(4)</b>	Returns to the main "Configuration" screen (refer to page 15)
Storage	Displays the "Control Configuration – Storage" screen (refer to page 24)
Upload	Displays the "Control Configuration – Upload" screen (shown on this page)
Camera	Displays the "Control Configuration – Camera" screen (refer to page 26)
Edit Upload Path	Displays the keyboard to allow editing of the capture recorder upload path
Edit Username	Displays the keyboard to allow editing of the capture recorder upload path username
Edit Password	Displays the keyboard to allow editing of the capture recorder upload path password

#### **Control Configuration - Camera**

When **Camera** is selected on the "Control Configuration" screen, the following screen is displayed.

"Control Configuration" Screen (Camera Selected)



CONTROL NAME	DESCRIPTION
X	Closes the "Control Configuration" screen and returns to the start screen
<b>(4)</b>	Returns to the main "Configuration" screen (refer to page 15)
Storage	Displays the "Control Configuration – Storage" screen (refer to page 24)
Upload	Displays the "Control Configuration – Upload" screen (refer to page 25)
Camera	Displays the "Control Configuration – Camera" screen (shown on this page)
No Camera	Configures the interface to not use a streaming camera
Generic MJPEG	Configures the interface to use a streaming camera that supports MJPEG
Crestron IPTZ-100	Configures the interface to use the Crestron IPTZ-100 camera
Crestron IFB-100	Configures the interface to use the Crestron IFB-100 camera
Edit Hostname/IP Address	Displays the keyboard to allow editing of the camera's Hostname/IP Address
Edit MJPEG Path	Displays the keyboard to allow editing of the camera's path to the MJPEG stream
Edit MJPEG Port	Displays the keyboard to allow editing of the camera's MJPEG port

# **Admin**

When **Admin** is selected on the main "Configuration" screen, the following screen is displayed.

"Set Tools Password" Screen



CONTROL NAME	DESCRIPTION
<b>8</b>	Closes the "Set Tools Password" screen and returns to the start screen
<b>(a)</b>	Returns to the main "Configuration" screen (refer to page 15)
Clear	Clears the password field
Enter	Stores the value as the new password
0 - 9	Password keypad

