**SECTION 27 41 16**

**INTEGRATED AUDIO-VIDEO SYSTEMS AND EQUIPMENT**

**GUIDE SPECIFICATION**

*Specifier: The Specifier/Design Professional is responsible for the accuracy of all project specifications, including system application and coordination with related sections. This guide specification is provided as a convenience and requires editing to match actual project requirements. CRESTRON ELECTRONICS, INC. SHALL NOT BE LIABLE FOR ANY DAMAGES ARISING OUT OF THE USE OF ANY OF ITS GUIDE SPECIFICATIONS. For Crestron design assistance and design review please contact Sales Support Services Department at 800.237.2041 or techsales@crestron.com.*

*Specifier: Please see PART 4 for a listing of products specified in this Guide Specification.*

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# **GENERAL**

*NOT USED in this Guide Specification. Specifier shall Specify PART 1 administrative and procedural requirements as needed.*

# **PRODUCTS**

## **Touch Screen User Interface**

### Basis of Design Touch Screen UI

*Specifier Note: Please see system drawings or equipment lists for specified model and quantity.*

#### Crestron TSW-570

#### Crestron TSW-570-P

#### Crestron TSW-770

#### Crestron TSW-770-GV

#### Crestron TSW-1070

#### Crestron TSW-1070-GV

#### Crestron TS-770

#### Crestron TS-770-GV

#### Crestron TS-1070

#### Crestron TS-1070-GV

#### Crestron TSS-770

#### Crestron TSS-1070

#### Crestron TSS-770-T-LB KIT

#### Crestron TSS-1070-T-LB KIT

### Device Architecture

#### The Touch Screen UI shall be composed of the following functional elements:

##### Audio intercom

*Specifier Note:*

*Not supported by GV version of 70-Series touch screens.*

###### 2-way intercom and paging with touch screens from same manufacturer

###### 2-way intercom via 3rd party SIP system

##### Capacitive graphical touch video display

##### USB port for integrated accesories

##### Built-In proximity sensor

##### Built-in microphone

*Specifier Note:*

*Not included in GV version of 70-Sereies touch screens.*

##### Built-in speakers

##### Built-in WiFi

*Specifier Note:*

*Not included in GV version of 70-Series touch screens.*

##### Built-in bluetooth communications beacon

*Specifier Note:*

*Not included in GV version of 70-Series touch screens.*

##### Built-in web browsing

### Graphical Display

#### Graphical UI - Touch screen UI display shall support the following viewable elements:

##### Custom control buttons and objects

##### Feedback indication via text, button object change in color, animated object or graphical element.

##### Video streaming support for H.265, H.264, and MJPEG

##### Automatic brightness control

### Scheduling Touch Screens

*Specifier Note:*

*The TSS-770 and TSS-1070 are the wallmount scheduling versions of the 70-Series touch screens.*

*Native Microsoft Teams*

*The TSS-770-T-LB and TSS-1070-T-LB are the wallmount scheduling versions of the 70-Series touch screens with Native Microsoft Teams.*

#### Touch Screen UI shall be available in the following sizes:

##### 7 inch TFT active-matrix color LCD touch screen 1280 by 800 WSVGA resolution display.

*Specifier Note: 7 inch version: Crestron TSS-770*

##### 10.1 inch TFT active-matrix color LCD touch screen 1920 by 1200 WXGA resolution display.

*Specifier Note: 10.1 inch version: Crestron TSS-1070*

#### The touch screen shall support native Microsoft Teams operation.

*Specifier Note:*

*Native Teams version of TSS panels*

*Crestron® TSS-x70 series touch screens are designed to enhance and simplify room scheduling across an enterprise. The TSS-x70 installs near a meeting room or huddle space to provide a clear indication of its availability and scheduling and integrates seamlessly with the Microsoft Teams® Panels scheduling application.*

*The TSS-770-T-LB KIT includes one TSW-770-LB series room availability light bar with the touch screen, providing for a complete room scheduling solution out of the box.*

*The TSS-1070-T-LB KIT includes one TSW-1070-LB series room availability light bar with the touch screen, providing for a complete room scheduling solution out of the box.*

*https://www.crestron.com/Products/Control-Surfaces/Touch-Screens/Medium-Touch-Screens/TSS-770-T-B-S-LB-KIT*

*https://www.crestron.com/Products/Control-Surfaces/Touch-Screens/Large-Touch-Screens/TSS-1070-T-B-S-LB-KIT*

#### The touch screen shall integrate directly with the following scheduling applications:

##### Crestron Fusion software, Microsoft Exchange Server software (for users of Outlook® software and Office 365® software), the Google Calendar calendaring app

#### Indicator Signs

##### Built-in USB 2.0 Host connection shall be included for optional room availability sign by same manufacturer.

### Touch Functions

#### Touch Screen UI shall support Multi-Touch control interfacing.

#### Touch Screen UI shall support gesture driven controls through custom programming and configuration.

### Device Functions

#### Custom Control UI - control of integrated system components through custom programming or preset configuration of the system control processor by same manufacturer.

#### System Integration - device shall support controls for compatible integrated AV systems, HVAC and Lighting hardware, and scheduling and management systems.

#### Audio Intercom via Ethernet network.

*Specifier Note:*

*Intercom feature supports Crestron Rava enabled devices and 3rd party SIP server based systems.*

#### Custom audio feedback via custom programming.

#### Multi-Language support

#### Internet Browsing shall be supported via Ethernet network.

*Specifier Note:*

*Internet access required and to be provided by integrator.*

#### Voice Recognition - device shall support voice commands control functionality through custom programming and configuratIon of the system control processor.

*Specifier Note:*

*Internet access required and to be provided by integrator.*

### Communication

#### Ethernet 100 Mbps, auto switching, auto negotiating, auto discovery, full/half duplex, TCP/IP, UDP/IP, CIP, DHCP, SSL, TLS, SSH, SFTP (SSH File Transfer Protocol), IEEE 802.1X, SNMP, IPv4 or IPv6, Active Directory® service authentication

#### Wi-Fi: IEEE 802.11a/b/g/n/ac

*Specifier Note:*

*Not included in GV version of 70-Series touch screens.*

#### Bluetooth

*Specifier Note:*

*Not included in GV version of 70-Series touch screens.*

#### USB 2.0: for accessory communication

### Power

#### Power: IEEE 802.3at Type 2 compliant PoE+ Powered Device

### Physical

#### Wired Connection - Device shall utilize a single wired connection for power and data communication.

#### Tabletop Version

*Specifier Note:*

*The TS-770 and TS-1070 are the tabletop versions of the 70-Series touch screens.*

##### Touch Screen UI shall be available in the following sizes:

###### 7 inch TFT active-matrix color LCD touch screen 1280 by 800 WSVGA resolution display.

###### 10.1 inch TFT active-matrix color LCD touch screen 1920 by 1200 WXGA resolution display.

##### Wall Mount Version

*Specifier Note:*

*The TSW-570, TSW-570P, TSW-770 and TSW-1070 are the wallmount versions of the 70-Series touch screens.*

*The TSS-770, TSS-1070, TSS-770-T-LB, and TSS-1070-T-LB are the wallmount Scheduling Panel versions of the 70 series touch screens.*

###### Touch Screen UI shall be available in the following sizes:

5 inch TFT active-matrix color LCD touch screen 1200 by 720 qHD resolution display.

5 inch TFT active-matrix color LCD Portrait touch screen 1280 by 720 qHD (portrait) resolution display.

7 inch TFT active-matrix color LCD touch screen 1280 by 800 WSVGA resolution display.

10.1 inch TFT active-matrix color LCD touch screen 1920 by 1200 WXGA resolution display.

###### Mounting Options

The 7 inch and 10 inch wall mounted versions shall mount directly to standard electrical boxes using included hardware.

The 5 inch wall mounted version shall mount over a 2 in. H x 3-3/4 in. W cutout using included hardware.

Optional mounting hardware shall be available from same manufacturer:

Mullion mounting kits

Multisurface mounting kits

Rackmount mounting kits

Retrofit mounting brackets

Back Box and preconstruction mounting kits

Universal Mounting Bracket

# **EXECUTION**

*NOT USED in this Guide Specification. Specifier shall Specify PART 3 On-Site work as needed.*

# **APPENDICES**

## **SPECIFIED PRODUCTS**

### Crestron TSW-570

### Crestron TSW-570-P

### Crestron TSW-770

### Crestron TSW-770-GV

### Crestron TSW-1070

### Crestron TSW-1070-GV

### Crestron TS-770

### Crestron TS-770-GV

### Crestron TS-1070

### Crestron TS-1070-GV

### Crestron TSS-770

### Crestron TSS-1070

### Crestron TSS-770-T-LB KIT

### Crestron TSS-1070-T-LB KIT