SECTION 27 41 16

INTEGRATED AUDIO-VIDEO SYSTEMS AND EQUIPMENT

GUIDE SPECIFICATION

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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

## 10.1 in. Wireless Touch Screen

Specifier Note:

*The Crestron® TST-1080 wireless touch screen is an advanced wireless controller, engineered to deliver ultimate performance, reliability, and customization for controlling a wide range of technologies.*

### Basis of Design

#### Crestron TST-1080

### Device Definition

#### Wireless touch screen with the following capabilities:

##### Support for proprietary custom user interface creation software by same manufacturer

###### Dynamic graphics support with connection to internet via Wi-Fi

##### Support for proprietary remote configuration, monitoring, and management software packages by same manufacturer

###### Support for setup via web browser

##### Compatibility with proprietary home / MDU automation operating system by same manufacturer

##### Voice recognition for spoken commands such as:

###### Turning devices on / off

###### Media source selection

###### Television channel selection

###### Setting of lighting scenes

###### Window shade operation

###### Security System operation

###### Password entry

###### Function requires connection to internet via Wi-Fi

##### Hands-free VoIP communication between touch screens and door stations that support proprietary SIP intercom technology by same manufacturer

###### Function requires connection to internet via Wi-Fi

##### Native support for H.264 and MJPEG streaming formats

###### Function requires connection to internet via Wi-Fi

##### Built-in web browser

##### Multitouch support

##### On-screen keyboard

##### Custom audio feedback for personalized sounds, button feedback, and voice prompts

##### Instant touch screen wake upon contact

###### Command send and execution with minimal delay

##### Wi-Fi 802.11ac/b/g/n/ax support at 2, 4, 5, and 6 GHz bands

###### Connectivity supports up to 50 ft (15 m) of omnidirectional coverage indoors, dependent on site-specific conditions

###### Hand-off support between four (4) predesignated Wi-Fi access points

##### Support for 802.1X network access control, Active Directory® service authentication, SSH, TLS, and HTTPS

##### Lithium-Ion battery pack that allows up to nine (9) hours of continuous operation and several days of typical use between charges

##### Compatibility with table and wall dock chargers by same manufacturer

### Device Architecture

#### Construction

##### Chassis: Plastic, integral docking part

##### Dimensions

###### Height: 6.42 in. (163 mm)

###### Width: 10.32 in. (262 mm)

###### Depth: 0.53 in. (14 mm)

##### Weight: 1.7 lb. (780 g)

##### Environmental Operating Conditions

###### Temperature: 32° to 104° F (0° to 40° C)

50° to 104° F (10° to 40° C) while charging

###### Humidity: 10% to 95% RH (noncondensing)

###### Heat Dissipation: 20.5 BTU / hr.

### Functions

#### Touch Screen Display

##### Display Type: TFT active matrix color LCD

##### Size: 10.1 in. (257 mm) diagonal

##### Aspect Ratio: 16:10 WUXGA

##### Resolution: 1920 x 1200 pixels

##### Brightness: 350 nits (cd / m2)

##### Contrast: 800:1

##### Color Depth: 24 bit, 16.7M colors

##### Illumination: LED backlit

##### Viewing Angle: +80° horizontal, +80° vertical

##### Touch Screen: Projected capacitive, 5-point multitouch capable

#### Operating System: Android 13

#### Memory

##### RAM: 4 GB LPDDR2 SDRAM

##### Storage: 30 GB (user space)

##### Maximum Project Size: 512 MB

#### Wireless Communications

##### Transceiver

###### IEEE 802.11ac/b/g/n/ax Wi-Fi communications (2,4,5, and 6 GHz 2-way RF)

6 GHz band supported only if using Wi-Fi 6 network communications

###### Static IP or dynamic IP via DHCP

##### Security: 64 and 128-bit WEP, WPA, WPA2, WPA Enterprise, and WPA2 Enterprise

##### Range: Up to 50 ft. (15 m), subject to site-specific conditions

##### Handoff: Supports handoff between a maximum of four (4) Wi-Fi access points

#### Graphics Engine

##### Support for proprietary custom user interface creation software by same manufacturer

##### Web browser

##### Multilanguage on-screen keyboard

##### Screensaver

##### Support for application that communicates with proprietary home / MDU automation operating system by same manufacturer

##### Setup and diagnostics via web browser, cloud, or on-screen UI

#### Video

##### Streaming Formats

###### H.265/H.264 up to 4K at 20 Mbps (MPEG-4 part 10 AVC)

###### MJPEG up to 1280 x 720 @ 30 fps

#### Audio

##### Built-in microphone and speakers

##### Proprietary SIP intercom technology

##### Multi language voice recognition

##### Audio Feedback Format: MP3

### Connectors

#### Power: (1) 2.1 x 5.5 mm DC power connector; 24 VDC power input

#### Docking Connector: (3) Contacts; mates with docking port on docking station by same manufacturer

#### USB: (1) Type-C USB port; for charging device battery

### Controls and Indicators

#### Reset: (1) Pinhole recessed button on rear panel for hardware reset and setup initiation

### Power

#### Rechargeable Battery: Li-Ion, 3.8 V, 10400 mAh

#### Usage per Charge

##### 120 hours typical under normal use (10% active duty cycle with standby / power down turned on)

##### 9 hours continuous use when using default settings

#### Charging Time: Up to 6 hours (typical)

#### Power Pack

##### Input: 0.8 A (maximum) @ 100-240 VAC, 50 / 60 Hz

##### Output: 1.25 A @ 24 VDC

##### DC power connection can be made via charging dock or onboard DC power connector

##### Includes 6 ft. (1.83 m) attached cable with 2.1 x 5.5 mm DC power barrel connector and universal blade kit to accommodate most AC outlet types

#### Power Consumption: 6 W

### Supported Languages

#### For proprietary custom user interface creation software by same manufacturer:

##### Arabic, Chinese (Simplified), Chinese (Traditional), Czech, Danish, Dutch, English (UK), English (US), Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Portuguese (Brazilian), Romanian, Russian, Slovak, Spanish, Swedish, Thai

#### For on-screen keyboard:

##### Arabic, Chinese (Simplified), Croatian, Czech, Danish, Dutch, English (UK), English (US), Finnish, French (Canada), French (Switzerland), German, Hebrew, Hungarian, Italian, Japanese, Norwegian Bokmal, Polish, Portuguese, Russian, Serbian, Spanish, Swedish, Turkish

#### For Voice Recognition:

##### Afrikaans (South Africa); Chinese, Mandarin (China, Simplified); Chinese, Mandarin (Hong Kong, Simplified); Chinese, Mandarin (Taiwan, Traditional); Chinese, Yue (Hong Kong, Traditional); Czech (Czech Republic); Dutch (Netherlands); English (Australia); English (Canada); English (Generic); English (India); English (New Zealand); English (South Africa); English (UK); English (US); French (France); German (Germany); isiZulu (South Africa); Italian (Italy); Japanese (Japan); Korean (South Korea); Polish (Poland); Portuguese (Brazil); Russian (Russia); Spanish (Spain); Turkish (Turkey)

#### For Web Browser:

##### Arabic, Bulgarian, Catalan, Chinese, Croatian, Czech, Danish, Dutch, English, Filipino, Finnish, French, German, Greek, Hebrew, Hindi, Hungarian, Indonesian, Italian, Japanese, Korean, Latvian, Lithuanian, Norwegian Bokmal, Pashto, Persian, Polish, Portuguese, Romanian, Romansh, Russian, Serbian, Slovak, Slovenian, Spanish, Swedish, Thai, Turkish, Ukrainian, Vietnamese

### Compliance

#### IC, CE, FCC Part 15 Class B digital device

# EXECUTION

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

# APPENDICES

## SPECIFIED PRODUCTS

Specifier Note: This Article includes Crestron products specified in this Guide Specification document. This Article is for reference only and should not be required in actual project manual unless included in an overall system equipment list.

### Crestron TST-1080

## Input / Output Connection Diagrams

### TST-1080

