**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.*

**Table of Contents**

**1 GENERAL 3**

1.1 SUMMARY 3

1.1.1 Section Includes: 3

1.2 RELATED REQUIREMENTS 3

1.2.1 Section 27 15 00 - Communications Horizontal Cabling 3

1.2.2 Section 27 41 16 - Audio-Video Systems and Equipment 3

1.3 REFERENCES 3

1.3.1 Abbreviations and Acronyms 3

**2 PRODUCTS 3**

2.1 TABLETOP CONFERENCE SYSTEMS 3

2.1.1 Basis of Design Tabletop UCS for Large Rooms: 3

2.1.2 Basis of Design Tabletop UCS for Medium Rooms: 4

2.1.3 System components: 4

2.1.4 External Device and System Integration Capability 5

2.1.5 Video Presentation Features 5

2.1.6 Speakerphone 6

2.1.7 Room Occupancy Detection 6

2.1.8 Touch Screen User Interface 6

2.1.9 Network Management 6

**3 EXECUTION 7**

**4 APPENDICES 7**

4.1 SPECIFIED PRODUCTS 7

4.1.1 Crestron UC-MX70-U 7

4.1.2 Crestron UC-MX50-U 7

# **GENERAL**

## **SUMMARY**

### Section Includes:

#### Unified Communications and Collaboration Systems

## **RELATED REQUIREMENTS**

### Section 27 15 00 - Communications Horizontal Cabling

### Section 27 41 16 - Audio-Video Systems and Equipment

## **REFERENCES**

### Abbreviations and Acronyms

#### BYOD - Bring You Own Device

#### UC - Unified Communications

#### UCS - Unified Communication System

#### UCC - Unified Communications Computer

# **PRODUCTS**

## **TABLETOP CONFERENCE SYSTEMS**

### Basis of Design Tabletop UCS for Large Rooms:

#### Crestron UC-MX70-U

*Specifier Note:*

*The UC-MX70-U provides a complete video conference room solution for open-platform UC applications. It supports a single display, and features the Crestron Flex tabletop conference device, HDMI® over CATx Receiver, AVer® CAM520 PRO enterprise-grade camera, mic pod, cables, and power supply.*

*https://www.crestron.com/Products/Workspace-Solutions/Unified-Communications/Crestron-Flex-Tabletop-Conferencing-Systems/UC-MX70-U*

### Basis of Design Tabletop UCS for Medium Rooms:

#### Crestron UC-MX50-U

*Specifier Note:*

*The UC-MX50-U provides a complete conferencing and collaboration solution for open-platform UC applications. It supports a single video display, and features the Crestron Flex tabletop conference device, Huddly IQ™ Collaboration Camera, and HDMI® over CATx Receiver, cables, and power supply.*

*https://www.crestron.com/Products/Workspace-Solutions/Unified-Communications/Crestron-Flex-Tabletop-Conferencing-Systems/UC-MX50-U*

### System components:

#### The Tabletop UCS shall be composed of the following discrete component:

##### Main console unit:

###### Main console unit integrated components:

Microphone

Speaker

User interface

###### Main console unit integrated connections:

HDMI Input

HDBT Output

LAN port

Optional external microphone connection

USB port supporting camera and audio signals

##### HD Camera

##### HDBT Receiver with USB Extender

### External Device and System Integration Capability

#### Cloud based management service by same manufacturer

#### HDMI wired source device

#### Laptop running 3rd party soft codec

#### Microsoft Exchange Server

#### Mobile phone with Bluetooth

#### SIP compliant phone system

#### Wired or Wireless Ethernet video connection

### Video Presentation Features

*Specifier: Only the CCS-UC-1-AV KIT version includes video presentation features. Please see CCS-UC-1 Spec. Sheet Packages table for more information.*

#### The HDMI input and presentation gateway shall be internally routed to the Tabletop Conference System’s HDBT output for connection to the room display.

#### The Tabletop UCS shall include a built-in Ethernet wired or wireless presentation gateway. In wireless Ethernet mode a video source may connect to the system wirelessly via a third party gateway.

*Specifier Note:*

*Wireless operation requires a 3rd party wifi acces point.*

#### The Tabletop UCS shall include a USB HD camera for integration with web video conferencing software.

#### The Tabletop UCS System shall include an HDMI input connection for connection of a 1080p60 AV source to the room display.

### Speakerphone

#### The Tabletop UCS shall include full-duplex speakerphone support for the following:

##### Bluetooth paired mobile device

##### Laptop Softphone

##### VoIP systems

### Room Occupancy Detection

#### The Tabletop Conference System shall include built-in room occupancy sensing capabilities using motion detection and voice activity for determining occupied or unoccupied status state.

#### Controlled devices may be powered down in an unoccupied room state.

*Specifier Note:*

*Integrating "controlled" devices requires a Crestron control processor.*

### Touch Screen User Interface

#### The Tabletop UCS shall include an integrated touch screen user interface with the following capabilities:

##### Answering voice calls

##### Dialing voice calls

##### Muting microphone(s)

### Network Management

#### The UCS shall support Cloud-Based management software by same manufacturer:

##### Cloud-based software shall support UCS configuration in advance of hardware installation, with touchless updates following installation.

*Specifier Note:*

*See the following link for additional information:*

*https://www.crestron.com/xiocloud*

# **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 UC-MX70-U

### Crestron UC-MX50-U