DATA SHEET

AMX Conferencing Connectivity and Transport Kit

Soft-codec and distance transport solution featuring transmitter and receiver
CTC-1402 (FG1010-910)

Transmitter Front & Rear

Receiver Front & Rear

Overview

The AMX Connectivity and Transport (CT) Series is a family of 4K switching and distribution kits that combine switching, scaling and distance transport into a single kit that includes both a transmitter and receiver. The solutions deliver added value and flexibility to conferencing and presentation solutions by providing a single, simple to implement solution that offers switching and connectivity where you need it along with unified control of both the transmitter and receiver—all over a single category cable. Solutions available include a Presentation kit, targeting simple presentation environments, and a Conferencing kit, targeting web conferencing applications.

The CT Conferencing kit combines multi-format 4K60 video switching, scaling, and distance transport with USB 2.0 peripheral switching. This allows dynamic sharing of room USB peripherals between visiting laptops, etc., and permanently installed devices such as an Acendo Core or room PC. This ensures excellent sound and visuals for guests whether they are using installed equipment or bringing their own devices—at a cost effective price.

Common Applications

Ideal for web conferencing solutions with cameras, mics and other USB devices installed.

Features

- **4K60 4:4:4 Support –** Future proof for 4K source devices and displays
- **HDMI, DP, VGA, and USB-C* Inputs (TX) —** Supports common laptop video connectors at the table
- **HDMI Inputs (RX) –** Switch to devices such as Acendo Core or a room PC located near the display
- **USB 2.0 –** Allows room USB devices at the table or near the display to be dynamically shared between visiting and permanent computing devices without having to disconnect/reconnect
- **Simplified Room Control –** Control the display or projector and a screen from built-in control ports on the RX.

Specifications – Subject to Change

General	
Dimensions	CTC-1402TX 5.90 in (15.0cm) depth 8.66 in (22.0 cm) width 1.65 in (4.4 cm) height CTC-1402RX 5.90 in (15.0cm) depth 8.66 in (22.0 cm) width 1.65 in (4.4 cm) height
Weight	CTC-1402TX Approx. 2.14 lb. (0.97kg) CTC-1402RX Approx. 2.07 lb. (0.94 kg)
Shipping Weight	TBD
Mounting Options	Includes V-Style surface mount brackets
AMX Products Compatible with HDBaseT Inputs	CTC-1402TX / CTC-1402RX
MTBF	TBD
Airflow Approvals	Convection (openings on sides of case)
Regulatory Compliance	TBD
Twisted Pair Cable Type	Shielded Cat6, Cat6A and Cat7* / Shielded Cat6A and Cat7
Twisted Pair Cable Length	Up to 262 ft. (80 m) for full 4K signal support Up to 328 ft. (100 m) for 1080p and below
Included Accessories	2xUS AC Cable 2xEU AC Cable 2xUK AC Cable 1×IR Receiver(30-50KHZ) 8x 3P-3.5MM Phoenix Connectors 1x 2P-3.5MM Phoenix Connectors 2×Power Adapter 12V 3A 4x mounting ear 8x M2.5 screw (for mounting ears)

Active Power Requirements	
AC Power	12 VDC 3A Max Output; 100-240V 50/60Hz AC Input
Power Consumption (Max)	CTC-1402TX - 16.5 Watts CTC-1402RX - 17 Watts
Power Connector	Screw Down Locking Power Connector

Environmental	
Temperature (Operating)	32° F to 113° F (0° C to 45° C)
Temperature (Storage)	-4° to 158° F (-20° to 70° C)
Humidity (Operating)	10% to 90% RH (non-condensing)
Humidity (Storage)	10% to 90% RH (non-condensing)
Thermal Dissipation	CTC-1402TX - 56.3 BTU/hr. CTC-1402RX - 58 Watts BTU/hr.

Back Connectors – CTC-1402 TX	
DC Power	Screw Down Locking Power Connector
USB Device Connections	(3) USB 2.0 Type A connector
USB Host Connections	(2) USB 2.0 Type B connector
HDMI Input	(1) HDMI Type A Female Connector

VGA Inputs	(1) HD-15 Connectors
DisplayPort	(1) DisplayPort Connector
USB Input	(1) USB-C
LAN10/100 Ethernet Port	(2) RJ-45 Connector, TCP/IP Port (ICS LAN 10/100)
HDBaseT Output	RJ-45
IR RX	3.5mm Mini-Stereo Jack
RS-232 Device Control	(1) 3 Position 3.5 mm pluggable Phoenix Terminal Blocks
Analog Stereo Input	(1) 3.5 mm Mini-Stereo Jack
Analog Stereo Pass-Through Input	(1) 3.5 mm Mini-Stereo Jack
RS-232 Extended Control	(1) 3 Position 3.5 mm pluggable Phoenix Terminal Blocks

Back Connectors – CTC-1402 RX	
DC Power	Screw Down Locking Power Connector
USB Device Connections	(3) USB 2.0 Type A connector
USB Host Connections	(2) USB 2.0 Type B connector
HDMI Input	(2) HDMI Type A Female Connector
HDMI Output	(1) HDMI Type A Female Connector
Analog Stereo Program Output	(1) 3-pin 3.5 mm Screw Terminal Connector
Analog Stereo Pass-Through Output	(1) 3-pin 3.5 mm Screw Terminal Connector
LAN10/100 Ethernet Port	(2) RJ-45 Connector, TCP/IP Port (ICS LAN 10/100)
HDBaseT Input	RJ-45
IR RX	3.5mm Mini-Stereo Jack
RS-232 Device Control	(1) 3 Position 3.5 mm pluggable Phoenix Terminal Blocks
RS-232 Extended Control	(1) 3 Position 3.5 mm pluggable Phoenix Terminal Blocks
Relay Control	(2) 3 Position 3.5 mm pluggable Phoenix Terminal Blocks

Controls and Indicators – CTC-1402TX	
Input Status Indicator	(6) Tri-Color LED indicating selected input and signal presence on each input
Input Selection Buttons	(6) Selects active input
Auto LED	(1) Indicates Auto Switching Enabled/Disabled
Auto Button	Enables/Disables Auto Switching
Display Indicator	(1) Feedback on Display Control
Display Button	(1) Display On/Off Control
Relay Indicator	(2) Feedback on Relay Control
Relay Button	(2) Relay Control
Ethernet Link/Act Indicator	(2) Link/Activity LED (green) blinks when receiving Ethernet data packets, one on Ethernet RJ - 45
Ethernet Speed Indicator	(2) Speed LED (yellow) lights On when the connection speed is 100 Mbps Ethernet connection and turns OFF when the speed is 10 Mbp
HDBaseT Link	(1) On HDBaseT RJ-45 (green) On indicates link to HDBaseT Rx
HDBaseT HDCP Status	(1) On HDBaseT RJ-45 (yellow) On indicates HDCP, flashing indicates non-HDCP
Power Indicator	(1) Power LED (green) indicates the unit is powered on

Controls and Indicators – CTC—1402RX	
Input Status Indicator	(3) Tri-Color LED indicating selected input and signal presence on each input
Input Selection Buttons	(3) Selects active input
Auto LED	(1) Indicates Auto Switching Enabled/Disabled

Auto Button	Enables/Disables Auto Switching
Display Indicator	(1) Feedback on Display Control
Display Button	(1) Display On/Off Control
Relay Indicator	(2) Feedback on Relay Control
Display Button	(2) Relay Control
Ethernet Link/Act Indicator	(2) Link/Activity LED (green) blinks when receiving Ethernet data packets, one on Ethernet RJ - 45
Ethernet Speed Indicator	(2) Speed LED (yellow) lights On when the connection speed is 100 Mbps Ethernet connection and turns OFF when the speed is 10 Mbp
HDBaseT Link	(1) On HDBaseT RJ-45 (green) On indicates link to HDBaseT Rx
HDBaseT HDCP Status	(1) On HDBaseT RJ-45 (yellow) On indicates HDCP, flashing indicates non-HDCP
Power Indicator	(1) Power LED (green) indicates the unit is powered on

Integrated Switching CTC-1402 TX/RX	
Video Switching	4x1 TX switching combined with a 3x1 Receiver switching to select between TX HDBaseT Source or (2) HDMI RX sources - audio switches with video. Full 6x1 switching
Video Inputs	(1) HD-15; supports RGBHV (3) HDMI; supports HDMI/HDCP (1) DisplayPort; supports DisplayPort/HDCP (1) USB-C; Supports USB 3.0 DisplayPort Alternative Mode Video/HDCP (1) HDBaseT (to connected TX/RX)
Video Outputs	(1) HDMI; supports HDMI/HDCP (On RX) (1) HDBaseT (to connect TX/RX)
HDCP Support	Yes; HDCP 1.4 and 2.2 Key Management System
EDID Management	A preferred EDID can be selected for each input or any display EDID can be mirrored to any input independently

USB Peripheral Switching CTC-1402 TX/RX	
USB Switching	All USB Device Connections Switch to USB Host Device Connection associated with active video input selection
USB Device Hub Support	Supports 1 USB Hub connected to either TX or RX Device Port *AMX Acendo Vibe Consumes 1 USB Hub Position
USB Device Support	Up to 7 connected (USB devices) *AMX Acendo Vibe Consumes 3 USB Device Positions
USB Power Support	Not to exceed .5A per USB Device (USB-A) Port

HDMI CTC-1402 TX/RX	
Compatible Formats	HDMI 2.0, 1.X, HDCP 2.2
Signal Type Support	HDMI, DisplayPort++ (input only with HDMI cable adapter
HDMI Supported Input Resolutions	VESA 800x600 @ 60 Hz 1024x768 @ 60 Hz 1280x768, @ 60 Hz 1280x800 @ 60 Hz 1280x960 @ 60 Hz 1280x1024 @ 60 Hz 1360x768 @ 60 Hz

	1366x768 @ 60 Hz 1440x900 @ 60 Hz 1600x900 @ 60 Hz 1600x1200 @ 60 Hz 1680x1050 @ 60 Hz 1920x1200 @ 60 Hz 2048x1152 @ 60 Hz 3840x2160 @ 24 Hz, 25Hz, 30 Hz, 60 Hz 4096x2160 @ 24 Hz, 25Hz, 30 Hz, 60 Hz SMPT: 720x480 @ 59.94 Hz, 60 Hz 720x576 p @ 50 Hz 1280x720 p @ 50 Hz, 59.95 Hz, 60 Hz 1920x1080 p @ 50 Hz, 59.94 Hz, 60 Hz Established Timing 1280 x 1024 @ 75 Hz 1152 x 870 @ 75 Hz 1024 x 768 @ 60 Hz, 70 Hz, 75 Hz, 87 Hz 832 x 624 @ 75 Hz 800 x 600 @ 56 Hz, 60 Hz, 72 Hz, 75 Hz 720 x 400 @ 70 Hz, 88 Hz 640 x 480 @ 60 Hz, 67 Hz, 72 Hz, 75 Hz CEA Information Code (VIC) Formats: VIC = 1, 640 x 480 p 59.94/60 Hz 4:3 VIC = 2, 720 x 480 p 59.94/60 Hz 4:3 VIC = 3, 720 x 480 p 59.94/60 Hz 16:9 VIC = 4, 1280 x 720 p 59.94/60 Hz 16:9 VIC = 5, 1920 x 1080 i 59.94/60 Hz 16:9 VIC = 6, 720(1440) x 480 i 59.94/60 Hz 4:3 VIC = 7, 720(1440) x 480 i 59.94/60 Hz 16:9 VIC = 14, 1440 x 480 p 59.94/60 Hz 4:3 VIC = 15, 1440 x 480 p 59.94/60 Hz 16:9 VIC = 16, 1920 x 1080 p 59.94/60 Hz 16:9 VIC = 17, 720 x 576 p 50 Hz 4:3 VIC = 18, 720 x 576 p 50 Hz 16:9 VIC = 19, 1280 x 720 p 50 Hz 16:9 VIC = 20, 1920 x 1080 i 50 Hz 16:9 VIC = 21, 720(1440) x 576 i 50 Hz 4:3 VIC = 22, 720(1440) x 576 i 50 Hz 16:9 VIC = 29, 1440 x 576 p 50 Hz 4:3 VIC = 30, 1440 x 576 p 50 Hz 16:9 VIC = 30, 1440 x 576 p 50 Hz 16:9 VIC = 31, 1920 x 1080 p 50 Hz 16:9 VIC = 32, 1920 x 1080 p 23.97/24 Hz 16:9 VIC = 33, 1920 x 1080 p 25 Hz 16:9 VIC = 34, 1920 x 1080 p 29.97/30 Hz 16:9 VIC = 39, 1920 x 1080 i 50 Hz 16:9 VIC = 41, 1280 x 720 p 100 Hz 16:9 VIC = 42, 720 x 576 p 100 Hz 4:3 VIC = 43, 720 x 576 p 100 Hz 16:9 VIC = 44, 720(1440) x 576 i 100 Hz 4:3 VIC = 45, 720(1440) x 576 i 100 Hz 16:9
Output Signal Type	HDMI, HDCP
Output Connector	HDMI Type A Female
Output Scaling	Yes, Auto or Manual

Output Scaling Resolutions	800x600 @ 60 Hz 1280x720 p @ 50 Hz, 59.95 Hz, 60 Hz 1024x768 @ 60 Hz 1280x768, @ 60 Hz 1280x800 @ 60 Hz 1280x960 @ 60 Hz 1280x1024 @ 60 Hz 1360x768 @ 60 Hz 1366x768 @ 60 Hz 1440x900 @ 60 Hz 1600x900 @ 60 Hz 1600x1200 @ 60 Hz 1680x1050 @ 60 Hz 1920x1080 p @ 50 hz, 59.94 Hz, 60 Hz 1920x1200 @ 60 Hz 3840x2160 @ 24 Hz, 25Hz, 30 Hz, 60 Hz 4096x2160 @ 24 Hz, 25Hz, 30 Hz, 60 Hz
Input Video Level	.5 - 1.2 V p-p
Data Rate (Max)	18 Gbp
Pixel Clock (Max)	Up to 600 Mhz
Resolution Support	Various up to 4096 x 2160@ 60 Hz - Reference User Manual For Specific Resolution Support
Audio Format Support	2 CH L-PCM
Local Audio Support	TX Insertion / RX Extraction
HDCP Support	Yes HDCP 1.4, 2.2
CEC Support	Yes Automatic or NetLinx programmable

DisplayPort CTC-1402 TX	
DisplayPort Supported Video	800x600 @ 60 Hz 1024x768 @ 60 Hz 1280x768, @ 60 Hz 1280x800 @ 60 Hz 1280x960 @ 60 Hz 1280x1024 @ 60 Hz 1360x768 @ 60 Hz 1366x768 @ 60 Hz 1440x900 @ 60 Hz 1600x900 @ 60 Hz 1600x1200 @ 60 Hz 1680x1050 @ 60 Hz 1920x1200 @ 60 Hz 1280 x 720p @ 50 Hz 1920x1080p @ 50 Hz 1920x1080 @ 60 Hz 1920x1200 @ 60Hz 1280x720P @ 50Hz, 60Hz 1920x1080P @ 50Hz, 60 Hz 3840x2160 @ 50Hz, 60Hz 4096x2160 @ 50Hz, 60 Hz

USB-C CTC-1402 TX	
USB-C Supported Video	800x600 @ 60 Hz 1024x768 @ 60 Hz 1280x768, @ 60 Hz 1280x800 @ 60 Hz 1280x960 @ 60 Hz 1280x1024 @ 60 Hz 1360x768 @ 60 Hz 1366x768 @ 60 Hz

	1440x900 @ 60 Hz 1600x900 @ 60 Hz 1600x1200 @ 60 Hz 1680x1050 @ 60 Hz 1920x1200 @ 60 Hz 1280 x 720p @ 50 Hz 1920x1080p @ 50 Hz 1920x1080 @ 60 Hz 1920x1200 @ 60Hz 1280x720P @ 50Hz, 60Hz 1920x1080P @ 50Hz, 60 Hz 3840x2160 @ 50Hz, 60Hz 4096x2160 @ 50Hz, 60 Hz
USB-C Host Support	For connected USB 3.0 devices. USB-C connector supports simultaneous video passage and USB 2.0 peripheral connectivity for devices connected to CTC-1402 TX/RX
USB-C Cable Requirements	For USB-C Video Use of a USB 3.0 cable with a minimum transfer data rate of 5Gbps is required

Analog Video CTC-1402 TX	
Compatible Formats	RGBHV
Input Connector	HD-15
Resolution Support	Up to 1920x1200@60Hz Reduced Blanking
Auto-Adjust Input	Supported
Digital Processing	24-bit, 165 Mhz

Signal Transport – HDBaseT CTC-1402 TX/RX	
Connector	(1) RJ-45
Transport Layer Throughput (Max)	10.2 Gbps
Output Formats	Connects TX to RX
Twisted Pair Cable Type	Shielded Cat6, Cat6A and Cat7 HDBaseT cable runs for equipment shall only be run within a common building where common building is defined as: The walls of the structure(s) are physically connected and the structure(s) share a single ground reference

Stereo Audio Output CTC-1402 RX	
Output Signal Types	Unbalanced Stereo analog
Volume Control	-100 db to +0 db in 1 dB steps

About AMX by HARMAN
Founded in 1982 and acquired by HARMAN in 2014, AMX® is dedicated to providing AV solutions for an IT World. AMX solves the complexity of managing technology with reliable, consistent and scalable systems comprising control, video switching and distribution, digital signage and technology management. AMX systems are deployed worldwide in conference rooms, classrooms, network operation/command centers, homes, hotels, entertainment venues and broadcast facilities, among others. AMX is part of the HARMAN Professional Group, the only total audio, video, lighting, and control vendor in the professional AV market. HARMAN designs, manufactures and markets premier audio, video, infotainment and integrated control solutions for the automotive, consumer and professional markets. Revised 7.17.17. ©2017 Harman. All rights reserved. Specifications subject to change.

www.amx.com | +1.469.624.7400 |800.222.0193