DATA SHEET
DEVIO™ CR-1T

DEVIO CR-1 CONFERENCE ROOM DEVICE AND DEVIO DTM-1 TABLETOP BEAMFORMING MICROPHONE

The Devio CR-1 creates a desktop-like experience away from the desk, allowing you to make an easy transition to the meeting room simply by detaching your laptop from your desk and connecting to Devio via USB 3.0 in the meeting room. Devio's included beamforming DTM-1 microphone provides 360-degree coverage to capture in-room audio. Optional support is provided for a second DTM-1 microphone via daisy-chained connection. Connecting to Devio extends your desktop to one or two displays and offers multiple USB ports for attaching computer peripherals like a web camera for video conferencing. With the laptop handling the connection to conferencing systems, Devio works easily with a host of conferencing solutions including Microsoft Skype for Business (Microsoft Lync®) and Microsoft Skype®, Citrix GoToMeeting®, Cisco WebEx®, and Google Hangouts™.
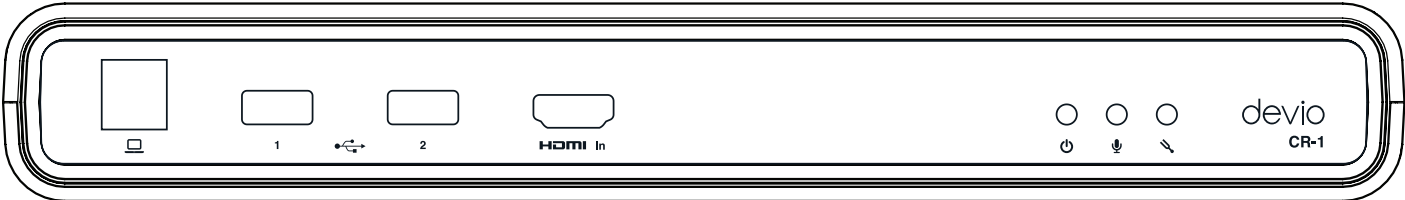
BENEFITS

- Devio brings Biamp's full conference room audio to smaller spaces.
- USB 3.0 allows a customer to plug into his or her laptop to use in-room technology for audio and video conferencing.
- 8-element microphone provides 360 degrees of coverage for clear, concise audio.
- Acoustic Echo Cancellation removes unwanted noise for natural, clear conversations on the far end.
- Compact design for flexible installation and placement.
- Offers simple pass-through HDMI® connectivity, and supports up to two displays via DisplayLink USB graphics technology.
- Devio supports both PC and MAC systems, and is forward compatible.
- Auto Setup simplifies installation by automatically optimizing audio levels.
- Devio System Administration Utility (SAU) helps technology managers see the current state of all Devio devices on the network, including status indicators for power, microphone connectivity, auto-setup, and USB connections.
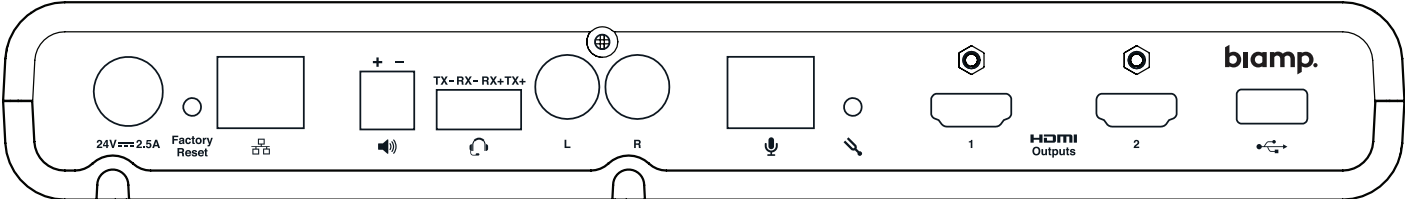- Two-year Biamp Systems warranty.

SPECIFICATIONS: CR-1

FRONT PANEL CONNECTORS

Upstream USB 3.0 Port (Type B Male Connector): USB connectivity from computer to Devio CR-1 for audio and video, DisplayLink USB graphics technology enables connection to two displays

2 Downstream USB 3.0 Ports (Type-A Female Connector): Two USB 2.0/3.0 ports for attaching additional peripherals to the computer

HDMI Input Port: Enables driverless, pass-through video connection from computer to one in-room display via Devio CR-1

REAR PANEL CONNECTORS

24V DC Input: Locking connection for Devio CR-1 60W inline power supply

Ethernet (RJ45): 10/100/1000Base-T Ethernet network connection

2-pin Phoenix Connector: 20W powered output speaker connection

4-pin Phoenix Connector: For bridging in-room telephone into audio conferences via headset jack (sidetone must be disabled)

Line Out (RCA): Alternative connection to self-powered speakers (mono signal on both channels)

MIC Out (RJ45): Cat-5/5e/6 cable connection to Devio DTM-1 tabletop microphone

2 HDMI Output Ports: Supports video output to up to two in-room HDMI-equipped displays

Downstream USB 2.0 Port: Additional USB 2.0 peripheral connection (ideal for USB Camera)

LINE OUTPUT

Full Scale Level: +8.5 dBu
Freq. Response (20 Hz-20 kHz @ FS): +0/-0.25 dB
Dynamic Range: 95 dB A-Weighted (THD+N < 0.01%)
THD+N (20 Hz-10 kHz, 20 kHz BW) @ FS: <0.011%
Signal to Crosstalk Ratio (20 Hz-20 kHz) @ FS: 85 dB (one channel driven)

POWER AMPLIFIER

Continuous Output Power: 20W into Rated Load Impedance < 0.025% THD+N
Rated Impedance: 8 Ω to 4 Ω (short circuit protection)
Freq. Response (20 Hz-20 kHz @ 20W): +0.2/-0.5 dB
THD+N @ 1 kHz, 1W (20 kHz BW): <0.02%
Dynamic Range: 97 dB A-Weighted (THD+N < 0.025%)

HEADSET I/O

Full Scale Level: +1 dBu
Freq. Response (200 Hz-20 kHz @ FS): +0.5/-0.5 dB
THD+N (1 kHz-10 kHz, 20 kHz BW) @ FS: < 0.05%
Dynamic Range: 80dB A-Weighted (THD+N < 0.05%)

USB Audio sampling rate and bit rate: 48 kHz, 16 bit

System Administration Utility Capabilities: Remote/networked-based CR-1 device access and management, install firmware updates, perform Auto Setup

Supported video resolutions:
640 x 480p / 60Hz 4:3
720 x 480p / 60Hz 4:3
1280 x 720p / 60Hz 16:9
1920 x 1080p / 60Hz 16:9
720 x 576p / 50Hz 4:3
1280 x 720p / 50Hz 16:9
1920 x 1080p / 50Hz 16:9

USB Device Charging: Up to 5W, requires USB connection to computer

SNMP CAPABILITIES

Read: Devio Firmware Version, USB Connection Status, Call In Progress, Microphone Audio Present, Far End Audio Present, Auto Setup Status Device Operational

Notification: Device Operational Notification, Microphone Connected Notification, Line Fault Notification, Auto Setup Status Notification, Call In Progress Notification

OVERALL DIMENSIONS

Height: 1-13/16 inches (46 mm)
Width: 11-3/16 inches (284 mm)
Depth: 6-7/8 inches (175 mm)
Weight: 2.05 lbs (0.93 kg)

ENVIRONMENTAL

Operating Temperature: 0° to 45° C / 32° to 113° F
Humidity Range: 0% to 95% RH non-condensing
Front Panel Indicators: Power, Mic Status, Auto Setup Status

Compliance: UL and C-UL listed (USA & Canada)
FCC Part 15, Class A (USA)
FCC Part 68 (USA)
Industry Canada CS-03 (Canada)
CE Marked (Europe)
RCM (Australia)
RoHS Directive (Europe)
NOM (Mexico)
KC
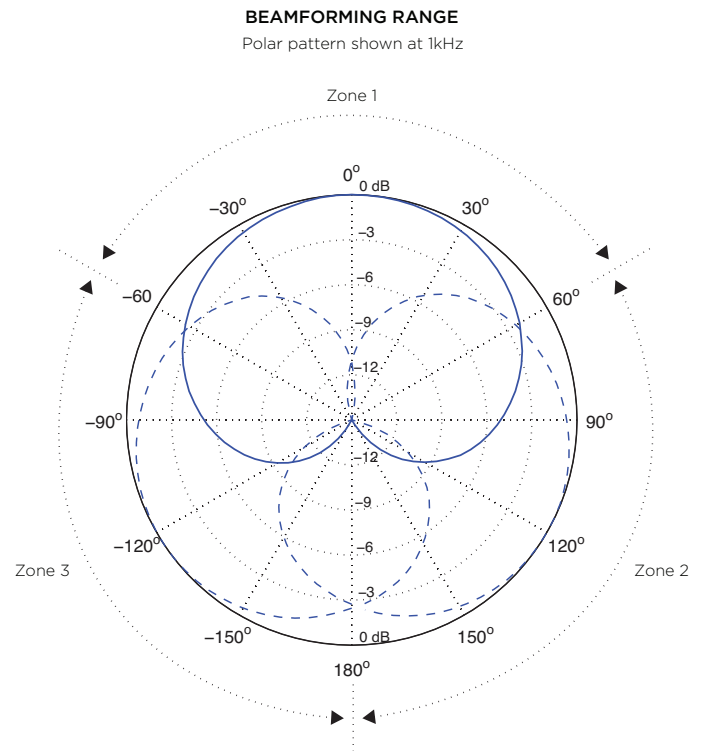China RoHS

DEVIO CR-1 FRONT PANEL
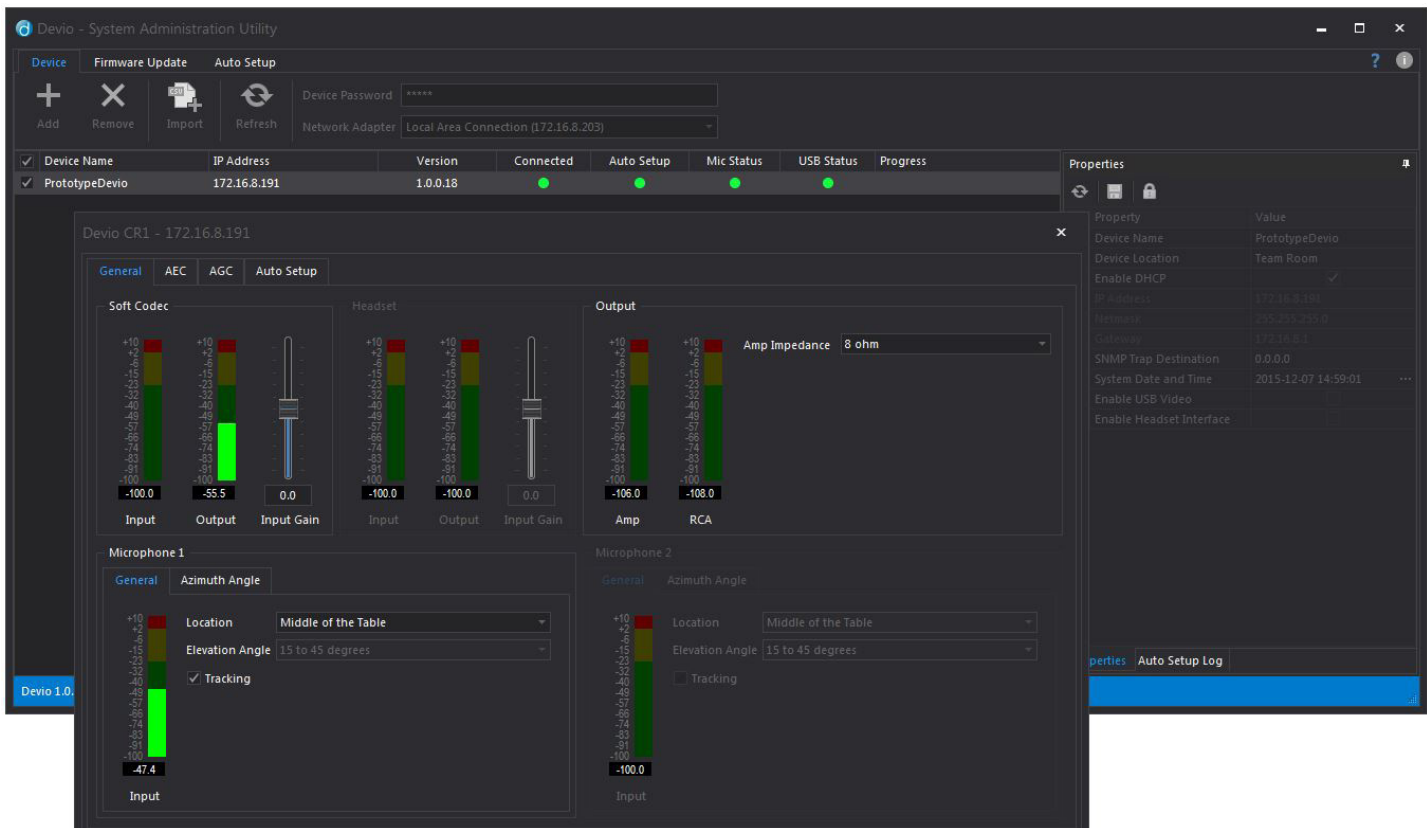

DEVIO CR-1 BACK PANEL

SPECIFICATIONS: DTM-1

Microphone Technology:	8-Element Digital Array
Frequency Response:	150 Hz - 16kHz (+3dB/-3dB)
Polar Pattern:	Active Beamformed
Sensitivity:	> 70 dB @ 1kHz (94 dBSPL, A-weighted)
Maximum SPL @ .5% THD:	106dBSPL
Dynamic Range:	92 dB A-Weighted (THD+N < 10%)
Power Requirements:	<1W, Phantom Powered
Connector:	1 x RJ45 (in) / 1 x RJ45 (out)
OVERALL DIMENSIONS	
Height:	2-3/16 inches (56 mm)
Width:	5-1/8 inches (130 mm)
Depth:	4-3/4 inches (121 mm)
Weight:	0.6 lbs (0.27 kg)
Automatic Noise Suppression:	4 modes: Off, Low (Default), Medium, High
Operating Temperature:	0° to 45° C / 32° to 113° F
Humidity Range:	0% to 95% RH non-condensing
Mute Switching:	3 Capacitive Touch Mute Buttons
Indicators:	Mute Indicator (Green/Red LED)
Digital Interface:	Custom/Proprietary
Required Cable:	Standard 4-pairs UTP (minimum Cat-5)
Node to Node Max Distance:	49.2 feet (15 meters) from CR-1 to DTM tabletop microphone, and for daisy-chained connection from first to second DTM-1

DEVIO DTM-1 BEAMFORMING 8-ELEMENT MICROPHONE ARRAY

360° Multidirectional Beamforming:	360° coverage is achieved with Multidirectional Beamforming, utilizing three 120° zones to capture input from multiple talkers in a collaborative environment
Automatic Voice Mixing:	Automatically tracks loudest voice within each 120° zone, intelligently mixes when voices occur in multiple zones
Selectable Directivity Modes:	Two Selectable Directivity Modes optimize microphone behavior for middle-of-table (360° range) or end-of-table (120° range) placement

BEAMFORMING RANGE
Polar pattern shown at 1kHz

ARCHITECTS & ENGINEERS SPECIFICATION

The unified communication (UC) system shall be designed to connect soft-codec conferencing systems with audio and video equipment. The UC system shall connect to a PC running Windows or Mac OS X (the "computer") via a single Universal Serial Bus (USB) USB type B connector for both audio and video, reception and transmission. The UC system shall provide a single audio channel of power amplification up to 20W. The UC system shall receive input from up to two tabletop microphones. Each tabletop microphone shall offer multidirectional beamforming capabilities. Audio transmission/reception from the computer shall be via a USB Class 1 Audio device. The UC system will provide two USB 3.0 type A ports and one USB 2.0 type A port. The UC system shall connect to up to two displays via High-Definition Multimedia Interface (HDMI) connections. The UC system shall connect to a camera via USB 2.0 or 3.0 connection. The UC system shall be able to bridge a call from a connected telephony headset interface via 4-pin Phoenix connector. The UC system shall be able to be monitored, configured and controlled via built-in Ethernet port using Simple Network Management Protocol (SNMP) version 2 procedures. The warranty shall offer two years of replacement or repair coverage. The UC system shall be the Devio CR-1T.

SYSTEM ADMINISTRATION UTILITY (SAU) EXAMPLE SCREEN:

The System Administration Utility for Devio provides network-based CR-1 device access and management, ability to install firmware updates and perform the Auto Setup.