

C20 Smart Processor

Signal processing, AVoIP audio channels, and control including connection to common computing and communications devices in a small sized unit.

OVERVIEW

The C20 processor provides signal processing, audio channels, and control all in a single unit, and also bridges the gap between IP networks and USB-equipped devices. The C20 functions as a simple yet reliable way to connect external USB audio sources to networks with a plug and play experience that is easy to use and understand. C20 features a modern locking USB-C connector with 8 x 8 audio bridging.

Equipped with 64 Dante transmit channels, 64 Dante receive channels, and 8 best-in-class Acoustic Echo Cancellation (AEC) channels, C20 provides crystal-clear sound which is crucial for use with collaboration applications such as Zoom or Teams.

Media playback and record is included with a USB-A port which works with playlists for usage such as announcements and background music.

Using Symetrix COGNIO DesignOps software, integrators and installers can easily route and configure audio directly, thereby eliminating the need for additional software which simplifies setup and enhances usability. DesignOps software provides complete processing, programming and configuration for C20.

With integrated web server functionality, C20 can be controlled through an interface on a personal device. C20 can also be paired with TC-Series touchscreens. Control extends to various third-party devices.

Dual network connection from RJ-45 network ports on the units makes them discoverable and configurable.

Installation is highly flexible with the possibilities of mounting under a table, in a podium, or in a rack. The C20 can be placed out of sight with a locking USB-C cable conveniently placed in arms reach of users.

USE CASES

Conferencing

Networked conference rooms are suitable for users to communicate with people outside of their environment using applications such as Zoom or Teams. In this scenario participants often rely on laptops or other devices to join sessions. With the C20, the audio output from these devices can be routed into the conference room's Dante-enabled audio system. With support for Acoustic Echo Cancellation, optimal audio quality during the meeting is ensured with hearing audio clearly through the room's speakers by eliminating echo and feedback. A local computer can transmit external conferencing audio into the room and receive the installed beam forming microphones audio in the room to send out to participants at other locations.

Synchronization with user devices for easy processing and control of audio as well as the ability to get call status, answer and hang-up calls when using collaboration applications such as Teams or Zoom. The bridging of the C20 to networks eliminates many of the common USB connectivity limitations.

Higher Education

School campuses need a workflow that enables anyone using a classroom to easily connect to the local audio system. In classroom settings, many different teachers will share classrooms. C20 can be permanently installed at a podium and instructors can connect their laptops to the classroom audio system for audio playback in the room or for distance learning applications. Each classroom or lecture hall can use a single unit to provide Dante audio channels, signal processing, and control.

In an auditorium setting, the C20 offers a versatile solution for processing and managing audio from various sources into the venue's Dante network. For instance, during school assemblies, concerts, or theatrical productions, USB-equipped devices may be used to play back pre-recorded music, cues, or announcements. The C20 can also provide this functionality itself. Devices can connect to the auditorium's Dante network through the C20, enabling efficient distribution of audio signals to the venue's amplifiers and speakers as well as out to external locations.

Government Agencies

C20 processors in facilities such as courtrooms and council chambers transmit or receive audio that can be used as part of an audio recording and playback workflow. C20 processors can also be used to interconnect computers used for storing and logging audio content. C20 facilitates continuous recording itself or with simple connectivity and no down time.

KEY BENEFITS

- Incorporates user supplied computers and other devices into audio systems.
- Intuitive setup and integration with Symetrix COGNIO Design Ops software ensures hassle-free operation, eliminating the need for third-party applications.
- A powerful unit with 64 transmit and 64 receive channels plus 8 AEC channels, provides a premium audio experience.
- Media playback and record for background music and announcements with playlists.
- A versatile device that can be mounted under a table, in a podium or in a rack for deployment in any environment.
- Plug-and-play functionality provides easy training and operation for users.
- Provides high quality audio processing for crystal-clear meetings.

PRIMARY CAPABILITIES

- 64x64 transmit and receive Dante channels
- 8 AEC channels
- 32 playback channels
- 8 record channels
- 8x8 USB-C Audio Bridging
- 96 kHz / 24-bit Signal Processing
- USB-C port (3.2)
- USB-A port (3.2)
- 2x 1Gb Ethernet ports
- Web server functionality for third party control / personal device integration
- Device sample rate conversion.
- HID sync
- Rack or surface mounting- 1RU height