

# DATA SHEET

## CAMBRIDGE Qt X 300/300D SOUND MASKING CONTROL MODULE



The Cambridge Qt™ X 300/300D control module is a sound masking generator, controller, third octave band equalizer and amplifier, with two auxiliary audio inputs to allow for distribution of audio from paging controllers and/or (background) music players. The Qt X 300/300D controls up to 3 zones of Qt Standard or Active emitters. The Qt X 300/300D control module is a compact three-zone networkable controller suitable for installations of up to 36,000 square feet (3,345 m<sup>2</sup>). Each zone can be independently adjusted for masking and aux audio levels and spectra. Both models feature full compatibility with Biamp's SageVue™ system management software. When multiple controllers are included in a single system audio inputs can be shared across all controllers via AVB or Dante (300/D).

### FEATURES

- Compatible with Qt Standard emitters and Qt Active emitters.
- Supports up to 3 zones
- AVB or Dante (300/D) media network
- 2 audio inputs for paging and music
- Contact closure integrates with fire alarm systems
- Front panel with LCD
- Front Panel Lock (via software control)
- Auto ramping
- Event scheduling
- Adjustable equalizer for masking and audio inputs
- 4 non-correlated sound masking audio sources per zone
- Built-in clock with system NTP support
- Wall mount bracket included, optional rack mount bracket also available
- Dual network ports (media / control)
- Web interface control by any web-enabled device
- Third party control API/Ethernet
- CE marked, UL listed, and RoHS compliant
- Covered by Biamp Systems' five-year warranty
- Manufactured in the U.S.A.
- TAA compliant
- GSA eligible

### ARCHITECTS & ENGINEERS SPECIFICATION

The controller shall consist of all electronics required for operating a sound masking system from a single accessible location. Systems with distributed electronic packages above ceilings are not acceptable. The controller shall permit password protected access for control and monitoring via LAN/browser interface. The controller shall provide three zones and shall be sufficient to generate sound masking, audio control and audio power for up to 36,000 square feet (3,345 m<sup>2</sup>) of coverage. The unit shall be capable of time-of-day masking level control; per-zone settings shall be available for day/night levels and start times, ramping interval, and weekday/Sat/Sun behavior. Each audio output shall provide 4 non-correlated channels of masking noise to minimize comb filtering. The unit shall meet all requirements of Underwriters Laboratories, the US and Canadian National Electrical Codes, FCC Part 15, and all pertinent UK and EU codes. The controller shall be CE marked, UL listed, and shall be compliant with the RoHS directive. Warranty shall be 5 years. The controller shall be Qt X 300/300D.

## Qt X 300/300D SPECIFICATIONS

<b>ACTIVE EMITTERS</b>		<b>Audio Inputs</b>	
<b>Max Emitter/Device Capacity:</b>	50 Qt Active Emitters per cable run	<b>Input Connector Type:</b>	Captive Screw Terminal
<b>Max Emitter Cabling Distance:</b>	800 feet (243m) per cable run	<b>Number of Inputs:</b>	2 (Mono)
<b>Frequency Response<sup>1</sup></b>		<b>Input Level:</b>	+24dBu (12.3VRMS max)
<b>Sound Masking:</b>	125Hz to 6.3kHz	<b>Input Gain Range:</b>	6dB steps
<b>Music/Paging:</b>	115Hz to 12kHz	<b>Input Level Adjustment:</b>	1dB steps
<b>SPL<sup>1</sup></b>		<b>Input Impedance:</b>	8kΩ
<b>Minimum Masking SPL (@ 1m):</b>	30dBA	<b>Phantom Power:</b>	+48VDC (7mA/input)
<b>Maximum Masking SPL (@ 1m):</b>	55dBA	<b>Remote Control</b>	
<b>Maximum Music/Paging SPL (@ 1m):</b>	74dBA	<b>Connector Type:</b>	Captive Screw Terminal
<b>Equalization</b>		<b>Input Type:</b>	Contact Closure (Normally Open)
<b>Sound Masking (125Hz - 6.3kHz):</b>	ISO 1/3 Octave Bands	<b>Number of Inputs:</b>	2
<b>Music/Paging (200Hz - 8kHz):</b>	ISO 1/1 Octave Bands	<b>Output Type:</b>	Logic Status (5VDC)
<b>STANDARD EMITTERS</b>		<b>Number of Outputs:</b>	2
<b>Max Emitter/Device Capacity:</b>	60 Qt Emitters per cable run	<b>Output Connections:</b>	2 Channels GPIO
<b>Max Emitter Cabling Distance:</b>	1000 feet (300m) per cable run	<b>Minimum Output Impedance:</b>	2Ω (per channel)
<b>Frequency Response<sup>1</sup></b>		<b>Power Supply</b>	
<b>Sound Masking:</b>	200Hz to 6.3kHz	<b>Operating Voltage:</b>	100-240VAC 50/60Hz
<b>Music/Paging:</b>	200Hz to 10kHz	<b>Current Draw:</b>	0.9A
<b>SPL<sup>1</sup></b>		<b>Output:</b>	24VDC @ 2.7A
<b>Minimum Masking SPL (@ 1m):</b>	30dBA	<b>Max. Power Consumption (24VDC):</b>	22W
<b>Maximum Masking SPL (@ 1m):</b>	55dBA	<b>Included Accessories:</b>	ACT Hole Saw Wall Bracket
<b>Maximum Music/Paging SPL (@ 1m):</b>	56dBA	<b>Overall Dimensions</b>	
<b>Equalization</b>		<b>Height:</b>	3.5 inches (89mm)
<b>Sound Masking (200Hz - 6.3kHz):</b>	ISO 1/3 Octave Bands	<b>Width:</b>	14 5/8 inches (371.5mm)
<b>Music/Paging (200Hz - 8kHz):</b>	ISO 1/1 Octave Bands	<b>Depth:</b>	3.8 inches (97mm)
<b>Masking</b>		<b>Weight:</b>	1.5 lbs (0.68kg) (with surface mount bracket installed)
<b>Number of Masking Zones:</b>	3 (2 cable runs per zone)	<b>Environmental:</b>	
<b>Number of Non-Correlated Masking Sources:</b>	4 per zone	<b>Ambient Operating Temperature Range:</b>	40 - 104° F (4 - 40° C)
<b>Masking Level Adjustment:</b>	0.5dB steps	<b>Humidity:</b>	0-95% relative humidity (non-condensing)
		<b>Altitude:</b>	0-6,600 ft (0-2000m) MSL
		<b>Compliance:</b>	FCC Part 15B (USA) UL Listed (USA and Canada) CE Marked (Europe) RoHS Directive (Europe)

<sup>1</sup> Specifications based on use of Qt Emitters / Qt Active Emitter array and based on published layout practices

## Qt X 300/300D BACK PANEL



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