# DATA SHEET

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





The Cambridge Qt<sup>™</sup> 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 m²). 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 eliqible

# **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 m²) 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

**ACTIVE EMITTERS** 

Max Emitter/Device Capacity: 50 Qt Active Emitters

> per cable run 800 feet (243m)

**Max Emitter Cabling Distance:** per cable run

Frequency Response<sup>1</sup>

Sound Masking: 125Hz to 6.3kHz Music/Paging: 115Hz to 12kHz

SPL1

30dBA Minimum Masking SPL (@ 1m): Maximum Masking SPL (@ 1m): 55dBA Maximum Music/Paging SPL (@ 1m): 74dBA

**Equalization** 

ISO 1/3 Octave Bands Sound Masking (125Hz - 6.3kHz): Music/Paging (200Hz - 8kHz): ISO 1/1 Octave Bands

STANDARD EMITTERS

60 Qt Emitters Max Emitter/Device Capacity: per cable run

Max Emitter Cabling Distance: 1000 feet (300m)

per cable run

Frequency Response<sup>1</sup>

200Hz to 6.3kHz Sound Masking: Music/Paging: 200Hz to 10kHz

SPL1

Minimum Masking SPL (@ 1m): 30dBA Maximum Masking SPL (@ 1m): 55dBA Maximum Music/Paging SPL (@ 1m): 56dBA

**Equalization** 

ISO 1/3 Octave Bands Sound Masking (200Hz - 6.3kHz): Music/Paging (200Hz - 8kHz): ISO 1/1 Octave Bands

Masking

**Number of Masking Zones:** 3 (2 cable runs per zone)

**Number of Non-Correlated** 

**Masking Sources:** 4 per zone 0.5dB steps **Masking Level Adjustment:** 

**Audio Inputs** 

**Input Connector Type:** Captive Screw Terminal **Number of Inputs:** 2 (Mono)

Input Level: +24dBu (12.3VRMS max) **Input Gain Range:** 6dB steps

**Input Level Adjustment:** 1dB steps Input Impedance:  $8k\Omega$ 

**Phantom Power:** +48VDC (7mA/input)

**Remote Control** 

**Connector Type:** Captive Screw Terminal Input Type: Contact Closure (Normally Open) **Number of Inputs:** 

**Output Type:** Logic Status (5VDC)

**Number of Outputs:** 2 2 Channels GPIO

**Output Connections:** 6 RJ-45

**Minimum Output Impedance:**  $2\Omega$  (per channel)

**Power Supply** 

100-240VAC 50/60Hz **Operating Voltage: Current Draw:** 0.9A Output: 24VDC @ 2.7A Max. Power Consumption (24VDC): 22W

ACT Hole Saw **Included Accessories:** Wall Bracket

**Overall Dimensions** 

Heiaht: 3.5 inches (89mm) Width: 14 5/8 inches (371.5mm) Depth: 3.8 inches (97mm) Weight: 4.1 lbs (1.88 kg) (with surface mount bracket installed)

**Environmental:** 

**Ambient Operating** 40 - 104° F (4 - 40° C) **Temperature Range:** 

**Humidity:** 0-95% relative humidity (non-condensing) 0-10,000 ft (0-3000m) MSL Altitude:

Compliance:

FCC Part 15B (USA) UL Listed (USA and Canada) CE Marked (Europe) RoHS Directive (Europe)

### Qt X 300/300D BACK PANEL



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