

PA/VA Controllers



BTQ-VM4 / BTQ-VM8

PAVA Controller

BTQ-VM425 / BTQ-VM450



BTQ-VM825 / BTQ-VM850



The BTQ-VM4/BTQ-VM8 controllers offer 4 and 8 monitored speaker zones respectively. Each controller can cascade with up to 31 BTQ-SL8 secondary units via local digilink, and up to 64 x BTQ-VM4/VM8/SG8 via global-net. This will then extend as little as 4 monitor A/B speaker zones to a large networked system of up to 16,384 zones. The BTQ-SL8 is linked to the controller via STP CAT5/6 cable with shielded RJ45 connector (max. length 100M between units); and the BTQ-SG8 is linked to BTQ-VM4/8 via STP CAT5/6 cable (max. length 100m between units), multi-mode (2 km) and single-mode (20 km) fibre optics or even longer distance.

The BOUTIQUE system can be installed and configured with ease of operation, including easy setup and replacement from LCD front panel. Operational versatility such as volume, PEQ, audio routing, monitor and control, event and bell scheduler, paging with priority management (1~99 priority level) etc. can be configured by a dedicated ATEIS web browser. In addition, the BOUTIQUE system has full digital audio mixing and internal message and music storage for up to 90 minutes, and a USB interface to play G.711, G.722, G.726, G.727, MP3 and WAV files.

In accordance with EN54-16 and UL2572, all BOUTIQUE system including paging microphones and loudspeaker lines provides full monitoring and fault reports. Multiple volume attenuators can be installed on monitored speaker lines without loopback cable. The controller is also an eco-friendly product with extremely low power consumption during standby mode (6.5W).

FEATURES

- Support as little as 4 zones to a large 16,384 zones using global network of BTQ-VM8/SG8
- 250W or 500W high efficiency Class-D amplifier built-in
- Full DSP system with superior audio quality
- Control, management and monitoring via web browser
- Both background music playing and paging can be simultaneously proceeded
- IP based music streaming and paging over LAN/WAN
- Easy integration with Terracom, TerraManager and IP phone via SIP protocol
- Internet radio receiver built-in
- Low cost 2 channel switching amplifier architecture
- VAT volume attenuators can be installed on monitored speaker lines without loopback cable
- Integrated ambient noise sensing for auto audio level
- 2.2" LCD colour display for system status and configuration setting
- Third party control via RS232 or Ethernet

PA/VA Controllers

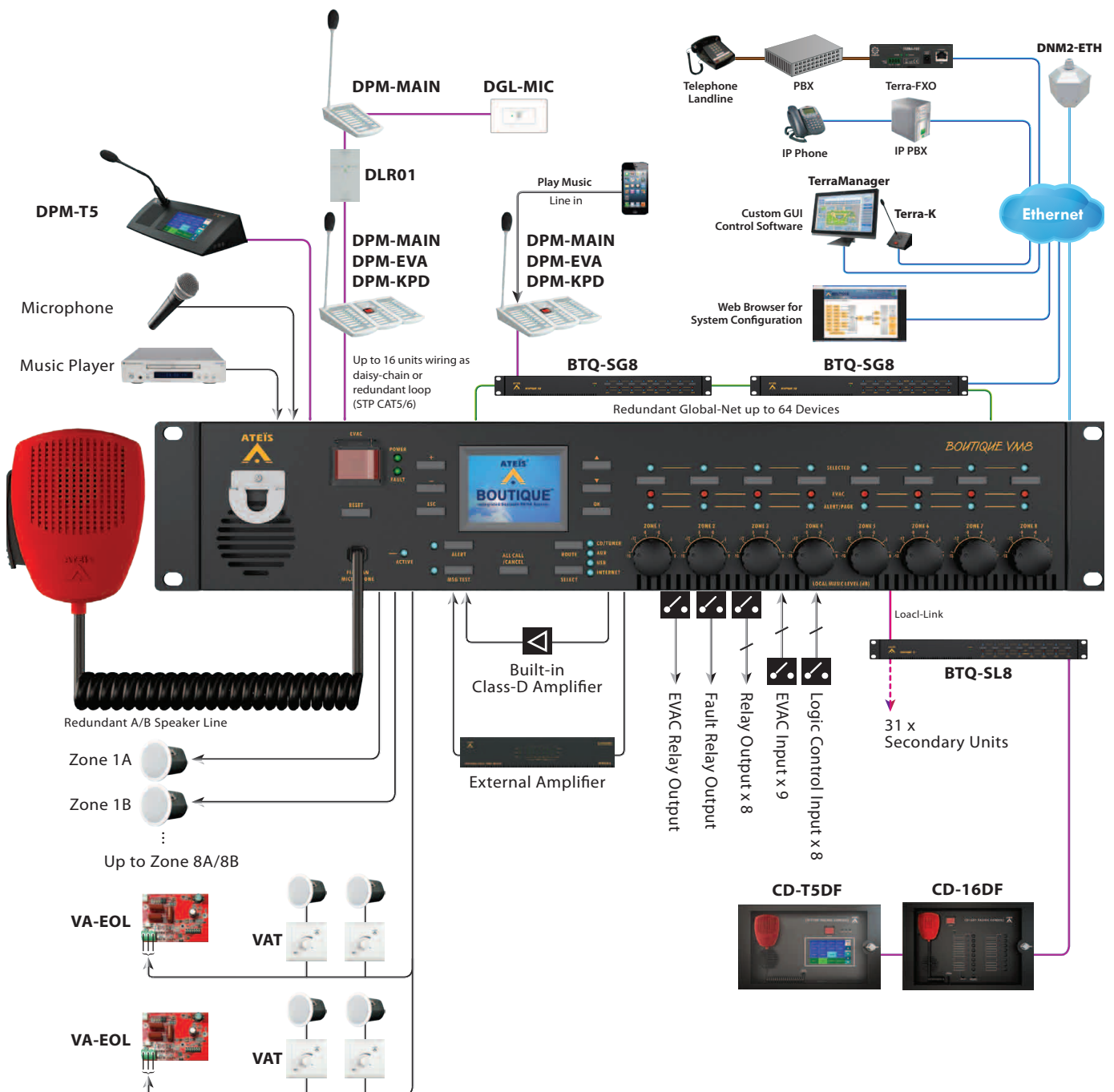


Installation Notes

The BOUTIQUE controller is fully integrated with 250W or 500W high efficiency Class-D amplifier built-in and is capable of handling 1000W speaker load per zone and 2000W max. per unit. Targeted at scalable small to large sized facilities, the controller has 6 audio inputs: 2 music inputs, mic/line, fireman mic, and 2 remote ports. The remote ports can be wired in a daisy chain or a redundant loop. The mic/line input features VOX function (Voice Activation) and each input is fitted with volume controls and equalizers.

INTERFACE

- BTQ-VM4: Five monitored EVAC inputs, four relay control outputs, one fault relay and one EVAC relay output
- BTQ-VM8: Nine monitored EVAC inputs, eight logic control inputs and eight relay control outputs, one fault relay and one EVAC relay output



BTQ-VM4 / BTQ-VM8

Technical Specifications

PA/VA CONTROLLER

■ Front (4/8 zones type)

- 2.2" full colour touch screen LCD display
- 1 evacuation button
- Reset/route/select button
- Monitoring speaker
- 4/8 zone selected buttons and LEDs
- 4/8 zone EVAC LEDs
- 4/8 zone alert page LEDs
- 4/8 BGM source status LEDs (CD/TUNER, AUX, USB, INTERNET)
- 4/8 zone volume control knobs
- 1 all-call and all-call cancel button
- Status LED (power/fault/fireman MIC active/Alert/MSG testing)

■ Back

- 2 DIP switches for VOX and phantom power
- 2 global-net port LEDs

INTERCONNECTIONS

■ Front

- Fireman microphone

■ Back (4/8 zones type)

- AC power cord socket
- 48 VDC backup power input
- 5/9 monitored EVAC inputs
- 4/8 speaker zone(A/B) outputs
- 4/8 relay control outputs
- 8 monitored logic control inputs (BTQ-VM8)
- 1 fault relays & 1 EVAC relay output
- 2 digital ports for paging console
- 1 MIC/LINE XLR 3-pin phoenix input and 2 RCA stereo input
- 1 audio line output
- 1 external amp input
- 1 set of digilink loop port (BTQ-VM4/8 to BTQ-SL8 link)
- 1 set of global-net port (optional)
- 1 Ethernet port
- 1 USB 2.0 for messages and music files
- 1 internal amp output (100V)
- 1 external amp output
- 24 VDC output
- RS232 for third party control

CERTIFICATIONS AND APPROVALS

Europe	Voice Alarm	EN54-16 (In process)
Europe	CE/EMI	EN55032: 2015 AC: 2016 Class A
Europe	CE/EMC	EN61000-3-2:2014 EN61000-3-3:2013 EN55020:2007/A11:2011
Europe	CE/LVD	EN60065: 2014 (In process)
USA	Mass Notification Systems	UL2572 (Pending)
USA	Safety	UL60065 (Pending)

ELECTRICAL

- AC power input
 - EU type: 220VAC ~ 240VAC, 50/60 Hz
 - US type: 100VAC ~ 120VAC, 50/60 Hz
- Power consumption (AC)

model	idle	1/2 full power	full power
BTQ-VM425 BTQ-VM825	24W	195W	360W
BTQ-VM450 BTQ-VM850	24W	345W	645W

Idle: pilot tone -36 dB, 1/2 full power: alarm tone

- DC power input: 43 VDC ~ 56 VDC
- Power consumption (DC)

model	standby mode	idle	1/8 full power	1/2 full power	full power
BTQ-VM425 BTQ-VM825	6.4W	22W	65W	175W	325W
BTQ-VM450 BTQ-VM850	6.4W	22W	95W	310W	580W

Idle: pilot tone -36 dB, 1/8 full power: speech, 1/2 full power: alarm tone

AUDIO CHARACTERISTICS (GENERAL)

- A/D-D/A bit resolution: 24 bit
- Sampling rate: 48 kHz
- Frequency response: 20 Hz ~ 20 kHz (±1 dB) @ 0 dBu
- Input gain range: 0 ~ -15 dB (3 dB steps)
- SNR: > 80 dB
- THD+N: < 0.01 % @ 30 dB gain, -24 dBu (1 kHz) in
- EIN: < -80 dBu @ 0 dB gain
- Maximum input level (CD/AUX/mic): 17 dBu
- Maximum output level (line out): 17 dBu
- Crosstalk: > 90 dB @ 42 dB gain, 0 dBu (10 kHz) in

WATTAGE CAPACITY

- 1000W per zone/2000W (max.) per unit

INTERNAL POWER AMPLIFIER

- Rated output power: 250W/500W (Class-D)
- Frequency response: 50 Hz ~ 20 kHz (±3 dB) @ 0 dBu
- THD+N: < 0.1 % @ 42 dB gain, 0 dBu (1 kHz) in
- SNR: > 90 dB

MECHANICAL

- Dimensions (W x H x D)
 - BTQ-VM425/VM825: 437 x 88 x 396 mm (17.2 x 3.5 x 15.6 inch)
 - BTQ-VM450/VM850: 437 x 88 x 412 mm (17.2 x 3.5 x 16.2 inch)
- Weight
 - BTQ-VM425: 10.8 kg (23.8 lbs)
 - BTQ-VM450: 14.1 kg (31.1 lbs)
 - BTQ-VM825: 11.4 kg (25.1 lbs)
 - BTQ-VM850: 14.6 kg (32.1 lbs)
- Mounting: 19" 2U rack
- Colour: RAL 7016

ENVIRONMENTAL

- Operating temperature: -5 °C ~ +55 °C (+23 °F ~ +131 °F)
- Storage temperature: -40 °C ~ +70 °C (-40 °F ~ +158 °F)
- Relative humidity: 20 % to 95 %
- Air pressure: 600 to 1100 hPa
- Heat dissipation
 - BTQ-VM425/BTQ-VM825: 375 BTU/hr
 - BTQ-VM450/BTQ-VM850: 495 BTU/hr