



# BOUTIQUE<sup>TM</sup>

Compact and Self-Amplified  
Public Address and Voice Alarm System

## Quick Start Guide



Revision History

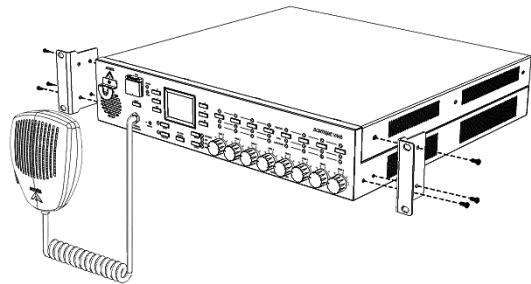
v1.09

# Hardware installation & connection

## BTQ-VM/SG/SL mounting

Mount the BTQ-VM4/8 controller in any standard 19-inch 2U audio equipment rack using the supplied mounting brackets and screws. Installing a BTQ-SL8/SG8 secondary unit is similar to installing a BTQ-VM4/VM8, except the secondary units are installed in 19-inch 1U rack-mounting.

Consider leaving enough ventilation space above and below the unit. Do not mount the controller directly above the heat generating devices like power supplies or power amplifiers.

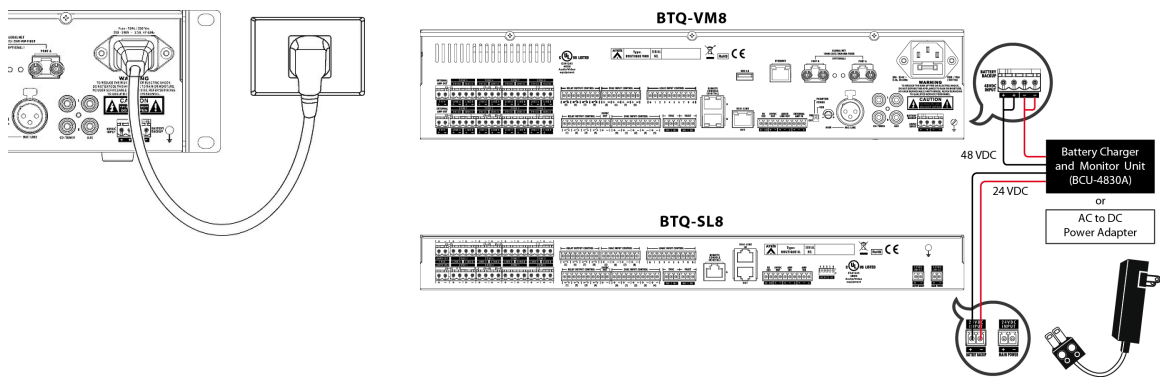



## BTQ-VM/SG/SL power supply

The BTQ-VM controller has two types of power supply input, AC mains and 48VDC for battery backup via phoenix euro-block connector, and secondary unit by 24VDC.

❖ Connection-mains power

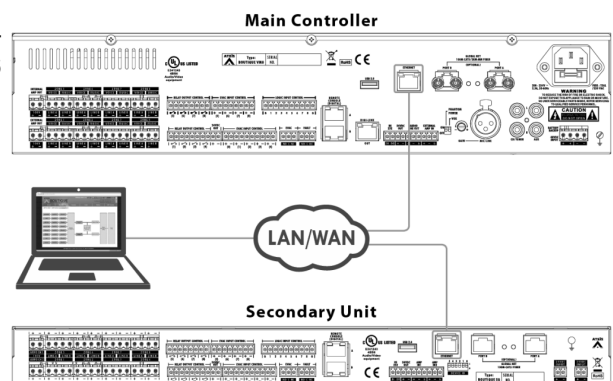
❖ Connection-battery backup



 To activate the power supply of BTQ-VMW wallmount controller, connect the AC mains power first, then 48VDC battery backup input. If the order is not correct, the BTQ-VMW can not be operated.

## Ethernet (RJ45)

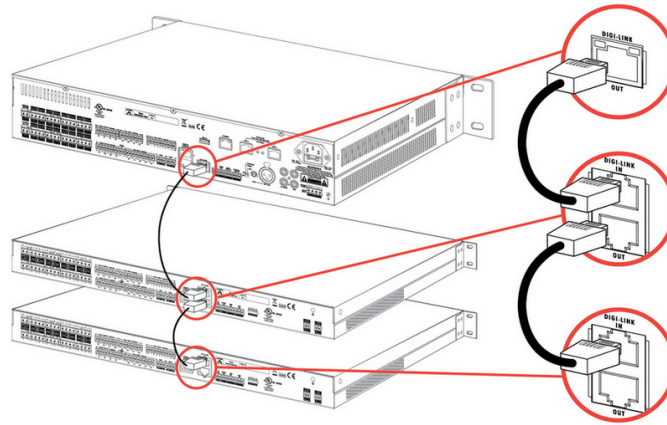
Connect the BTQ-VM4/8 controller and BTQ-SG8 unit to a computer by using CAT5/6 cable.



## ATEIS network (digilink and global-net)

### DIGI-LINK

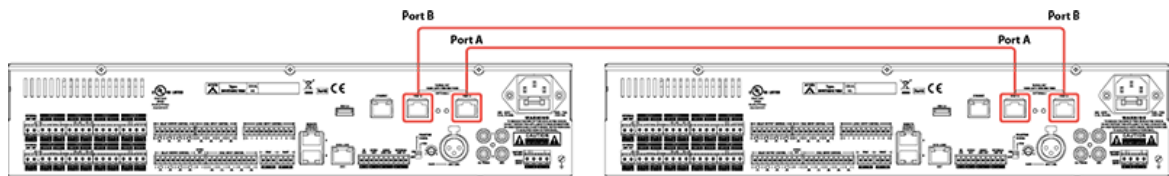
The BTQ-VM4/8 controller has 1 digi-link port for BTQ-SL8 secondary unit. Use STP CAT5/6 cable with shielded RJ45 connector to connect a BTQ-SL8 secondary unit to BTQ-VM4/8 controller. Up to 31 BTQ-SL8 units can be connected under the local digi-link network.



To identify the connection among the secondary units, each secondary unit has an unique ID. And the ID must be set orderly based on the Digi-link connection. For example, if the ID of BTQ-VM8 controller is 1:1, then the ID of the first connected BTQ-SL8 unit on BTQ-VM8 will be 1:2, and 1:3 for the second BTQ-SL8 unit. See [Device ID](#) to know the ID configuration.

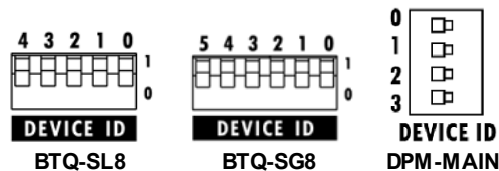
## GLOBAL-NET

Connect the BTQ-VM4/8 controller and SG8 secondary unit together through A, B port via global-net.



## Device ID

The BTQ-SL8, BTQ-SG8 secondary units and DPM-MAIN paging consoles are identified by device ID, which is configured by a DIP switch.



The DIP switch of device ID is followed by the binary code with 5 digit (BTQ-SL8), 6 digit (BTQ-SG8), 4 digit (DPM-MAIN).

The Device ID cannot be repeated. The range of ID can be set as the table on the right.

	DIP switch
BTQ-SL8	1~31
BTQ-SG8	0~63
DPM-MAIN	0~15

Please set the ID of BTQ-SL8, BTQ-SG8 and DPM-MAIN orderly, starting by the first number.

How-to:

1. Set the device ID for BTQ-SL8/SG8 and DPM-MAIN. See the example of BTQ-SL8 on Figure 1, the order (4~0) of the device ID is set as 00101 by the binary code. And the ID will be converted by the decimal code as 5, that is to say this device will be identified with the ID number of 5.



Figure 1

2. After the ID setting and the rest of the device hardware wiring are completed, go to Web Browser > Device Management > System Size to build a BOUTIQUE system by adding the number of controller/secondary units in the same group based on the hardware wiring.

**System Structure**

Group Size	Group	1	2	3	4	5	6	7	8
1	Number of Unit	2	0	0	0	0	0	0	0
8		16	15	14	13	12	11	10	9
16		0	0	0	0	0	0	0	0
32		17	18	19	20	21	22	23	24
48		0	0	0	0	0	0	0	0
64		32	31	30	29	28	27	26	25
		0	0	0	0	0	0	0	0

Cancel Save

3. Then go to Device Management to check if all the BOUTIQUE units are "online".

System > Device Management All

System Size

☐ Hide Auxiliary Units  
☐ Hide Remote Devices

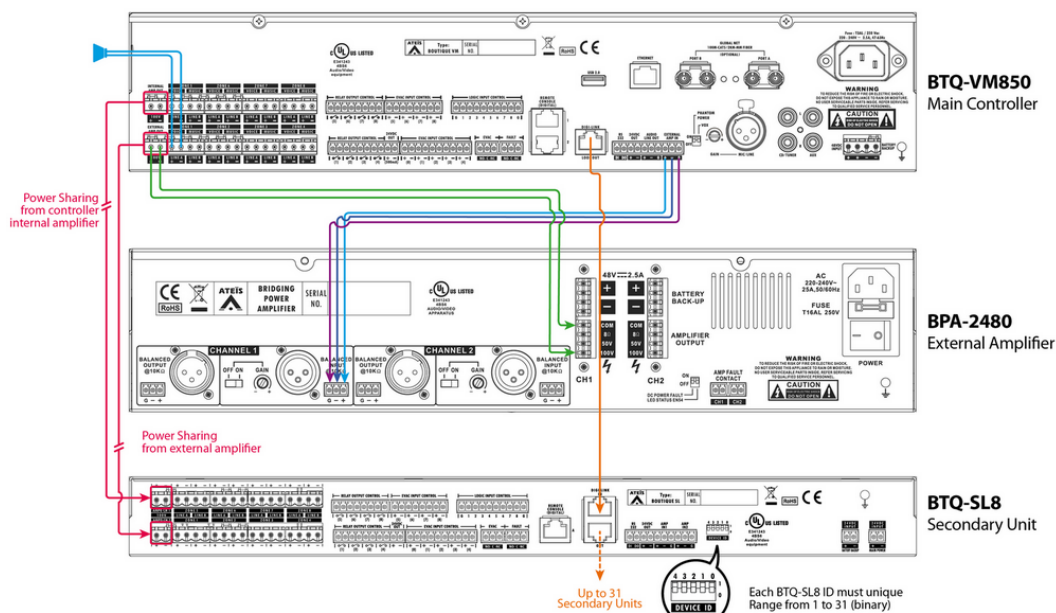
ID	Name	Model	Status	Add Remote	Setting	Delete	Modulation
1:1	BTQ-1:1	VM8	online	+	⚙	✕	
1:1:P1:1	VM-T5	DPM-MAIN	offline		⚙	✕	
1:2	SL-1	SL	offline	+	⚙	✕	
1:3	SL-2	SL	offline	+	⚙	✕	
2:1	VM-9462	VM8	offline	+	⚙	✕	

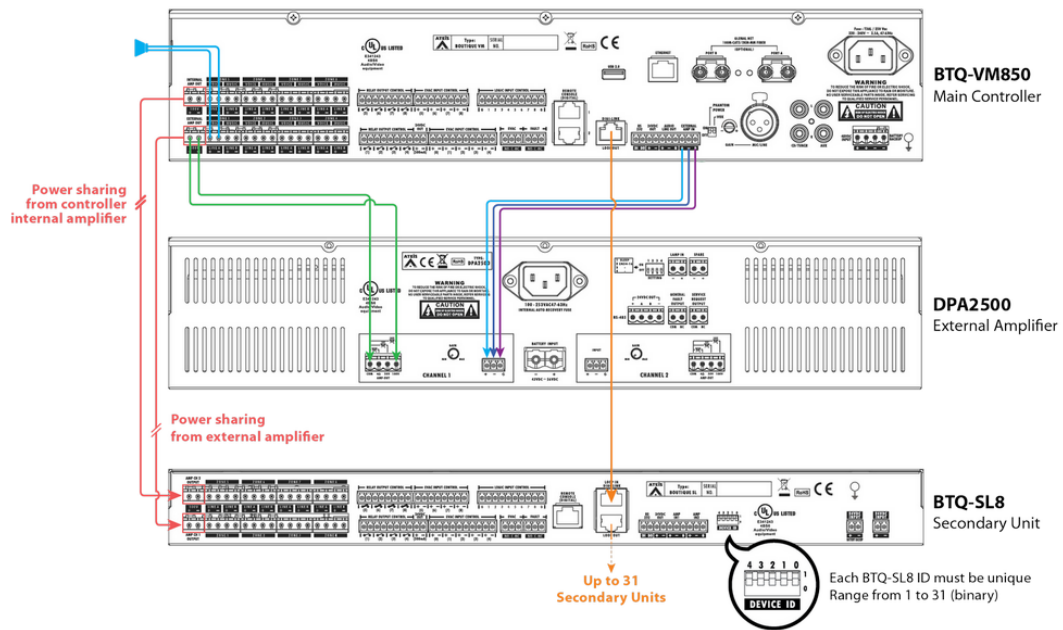
## External power amplifier

The BTQ-VM4/8 controllers have an internal 250W or 500W amplifier built-in. For system power sharing and/or backup, connect a second power amplifier (DPA or BPA) externally.

The BTQ-SL8 secondary unit can share power amplifier from BTQ-VM4/8 controller, secondary units or connect to an external power amplifier.

Both of the controller and secondary unit are capable to handle the power up to 1000W per speaker zone, 2000W per unit.

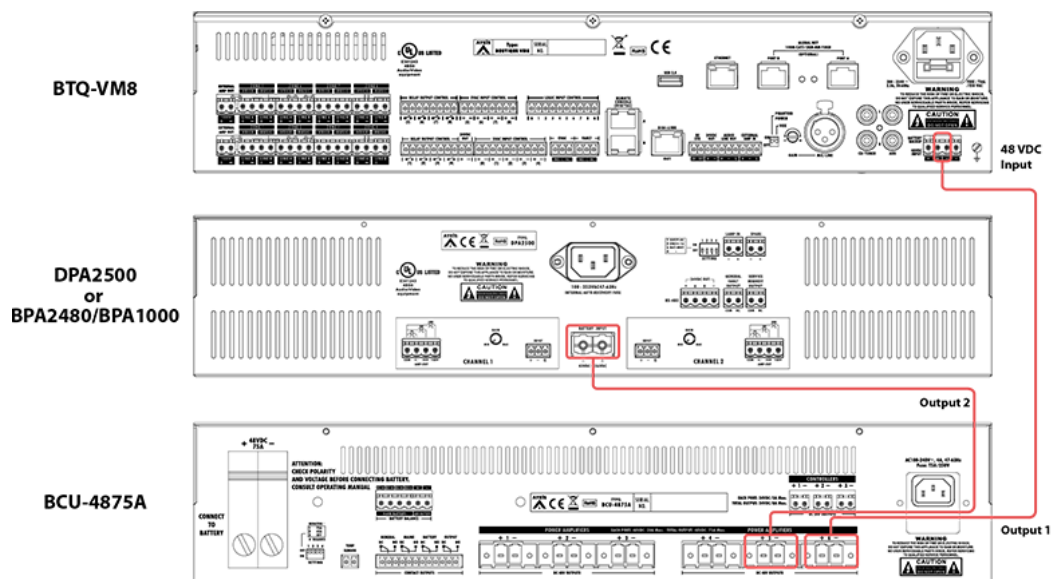




## Battery charger (power sharing)

For DC battery backup power sharing, connect the battery charger to BTQ-VM4/8 controller and external power amplifier as the picture below.

The example below is using the BCU-4830A/BCU-4875A battery charger and BPA or DPA power amplifier from ATEİS.



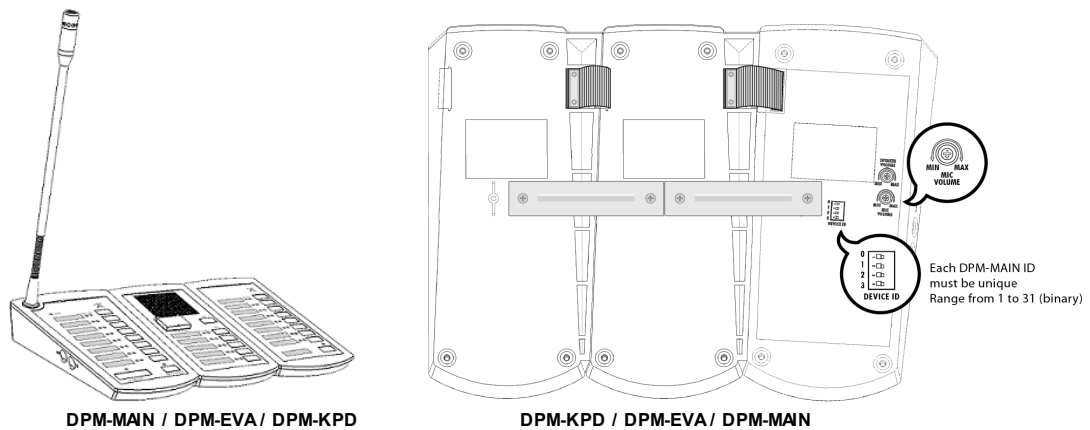
**⚠** Users "MUST" follow the orders below to connect the BTQ-VM4/8 and BPA/DPA with BCU-4830A/BCU-4875A battery charger.

1. Connect the four 12VDC batteries to BCU-4830A/BCU-4875A battery charger.
2. Connect the 48VDC backup power input terminals of BTQ-VM4/8 or BPA/DPA to the 2 output terminals on BCU-4830A or the 6 output terminals on BCU-4875A.
3. Plug in the AC mains power of BTQ-VM4/8 and BPA/DPA.
4. Plug in the AC mains power of BCU-4830A/BCU-4875A.

**⚠** Once the 48VDC battery backup input of BTQ-VM4/8 is connected to BTQ-VM4/8 directly without connecting to AC mains power, it may cause large inrush current. Therefore, install a soft starter device, which protects the AC electric motor of BTQ-VM4/8 from damage caused by

sudden influxes of power by limiting the large inrush current. Make sure to use the soft starter device which is suitable for sustaining the DC power consumption (full power) of BTQ-VM4/8.

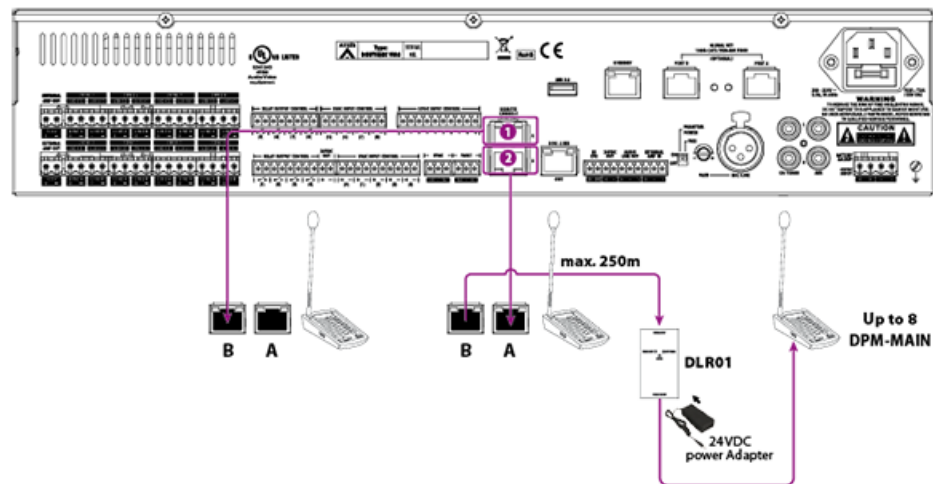
## Digital paging console



The BTQ-VM4/8 controller and BTQ-SG8 secondary unit has 2 remote connections with RJ45 connectors, and the BTQ-SL8 secondary unit has 1. Each port can address up to 8 DPM-MAIN consoles. The maximum communication cable length is 250M (820 ft.) between the controller/secondary unit and DPM console, DPM and DPM via STP CAT5/6 cable with shielded RJ45 connector, subjects to the power supply is sufficient. Multiple DPM consoles can be wired in a daisy-chain or redundant loop using 2 ports.

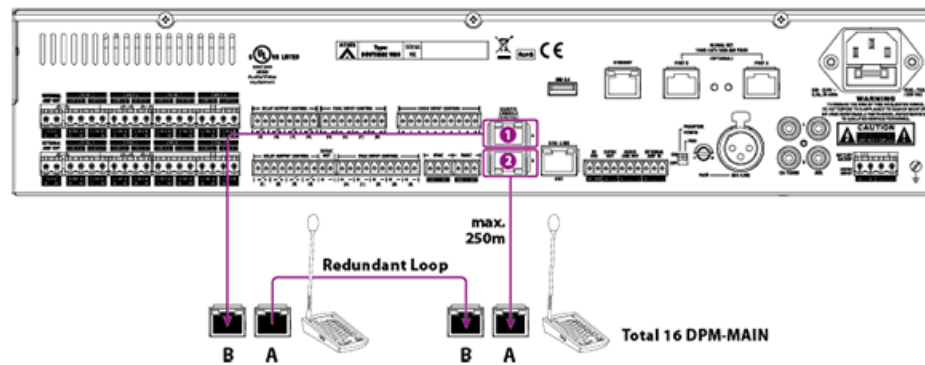
Each DPM-MAIN can attach one DPM-EVA, and up to 15 DPM-KPD can link to one DPM-MAIN by flat cable as shown above. If the control signal of DPM units is not strong enough, the DPM needs to connect to DLR01 digital loop repeater for expanding the distance to 250M longer. And if the power of DPM units is not enough, connect a 24VDC local power on DLR01 Digital Loop Repeater, see the picture below.

- Daisy-chain



- Redundant loop





1. Connect the [Remote Port 1] on BTQ-VM4/VM8/SG8 to the [Remote Port B] on the first set of DPM-MAIN.
2. Connect the [Remote Port A] on the last set of DPM-MAIN to the [Remote Port 2] on BTQ-VM4/VM8/SG8 via redundant loop.

Once completed the hardware connection, run the [New Setup] Setup Wizard with 6 steps from front LCD panel.

## Setup wizard

The LCD touch panel on main controller provides system configuration, control and system status display.



- After completed the hardware wiring, the LCD panel will activate automatically once it is powered.
- Press the touch panel to start the system setup.

1. [New Setup \(Setup Wizard\)](#)
2. [Replace \(replace the broken main controller with the new one\)](#)



## New setup

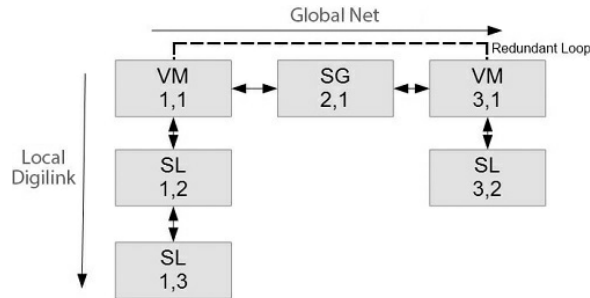
### Step 1: language

- Press [**A**] on touch panel to set the language.
- Press [OK].



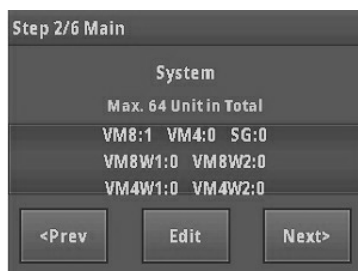
## Step 2: number of main and secondary units & ID

Set the number of main controller and secondary unit and its ID in the system. The ID is composed of the number of X, Y. X indicates the global net ID and Y is the local net ID.



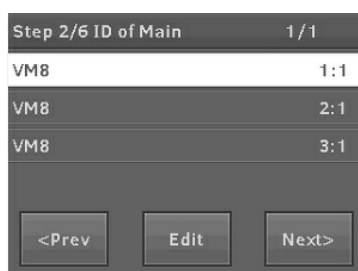
Network	
Local Network: *for BTQ-SL8 connection	<ul style="list-style-type: none"> <li>Max. digi-link units: 31</li> <li>Max. cable length: 10m between units (shielded RJ45 connector, STP CAT5/6)</li> </ul>
Global Network: *for BTQ-VMxx/BTQ-SG8 connection	<ul style="list-style-type: none"> <li>Max. global net units: 64</li> <li>Max. cable length: 100m between units (CAT5/6), multi-mode (2km), single-mode (20km) fibre optics</li> </ul>

- Set the number of controllers (VM4/VM8/VM8W1/VM8W2) and secondary global units (SG).



- Press [Edit] to change the number of VM4/VM8/VM8W1/VM8W2 and SG units.
- Press [Save] to apply settings.

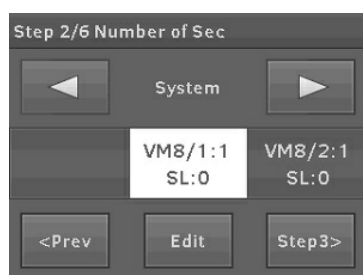
- Set the ID of BTQ-VM4/VM8/VM8W1/VM8W2 controller and SG unit.



- Select the unit, and press [Edit] to change its ID.
- Press [Save] to apply settings.

- Set the number of secondary local units (SL).





1. Select [VM8/SL] block via [◀ ▶] button, and press [Edit] to change the number of SL units.
2. Press [Save] to apply settings.
3. Press [Step3].

### Step 3: number of remotes

- Set the number of DPM8/DPM-T5/CD-8DF/CD-16DF/CD-T5DF on [VM8/1:1 Port 1].



1. Press [Edit] to change the number of DPM8/DPM-T5/CD-8DF/CD-16DF/CD-T5DF.
  2. Press [Save] to apply settings.
- Select [VM8/1:1 Port 2] block via [◀ ▶] button, and set the number of DPM8/DPM-T5/CD-8DF/CD-16DF/CD-T5DF on [VM8/1:1 Port 2].
  - Press [Save] to apply settings.
  - Press [Step 4].

### Step 4: power amplifier(s) sharing

The power amplifier from internal amplifier of main controller and external amplifier can be shared among the main controllers and secondary local units.

Single Amplifier	Dual Channel Amplifier
The internal amplifier in the main controller can share power amplifier with secondary local unit(s) to expand speaker zones.	Except the internal amplifier in the main controller, it is possible to have second amplifier externally for system power sharing and/or backup.

- Set the group based on the number of local-net the BOUTIQUE system has. The Group 1

indicates the amplifiers in the first local network (the internal amplifier is belonged to CH1), the Group 2 indicates the second local network, and so on.



1. Press [Edit] to change the number of amplifier for Int. amp channel and Ext. amp channel in the selected group.

2. Press [Save] to apply settings.

- Add device and set the unit ID for power amplifier sharing.



1. Press [Edit].

2. Press [⊕ ⊖] to set ID for the device unit, then press [Add]/[Delete] to add or remove the unit for power sharing in the amplifier.

3. Repeat #2 to add/delete more units.

4. Press [Save] to apply settings.

- Set CH1: Amp 1 power.



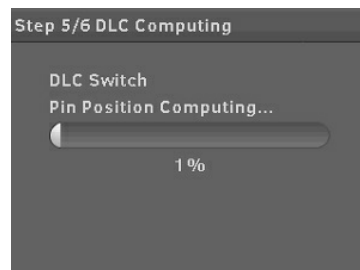
1. Press [⊕ ⊖] to change the power (wattage) of which Int./Ext. amplifier channel, and [Save] the settings.

2. Press [■] for the CH1, Amp2 settings, and repeat the same procedure for other amplifier (s) settings.

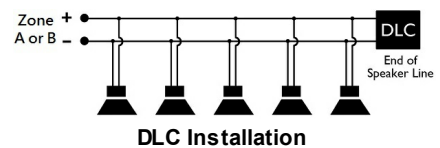
3. Press [Step 5].

## Step 5: dummy load capacitor

- Calculate dummy load capacitance and DIP switch setting.



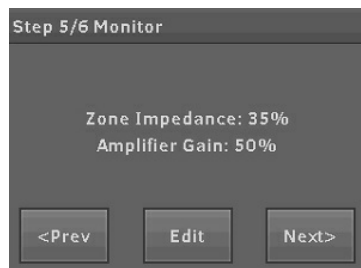
**Zone A/B**  
**Set DIP Switch**  
**Pin4 ON for Zone**  
**6/A and 6/B**



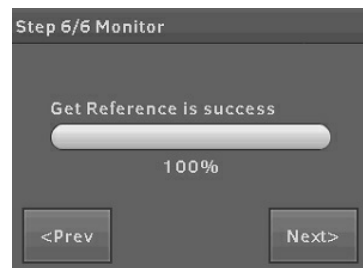
- Each speaker zone has A/B sub zones. Each sub zone requires a dummy load capacitor in the end of speaker line.
- Set the indicated number to ON position on the DIP switch.
- Press [Next].

## Step 6: monitoring

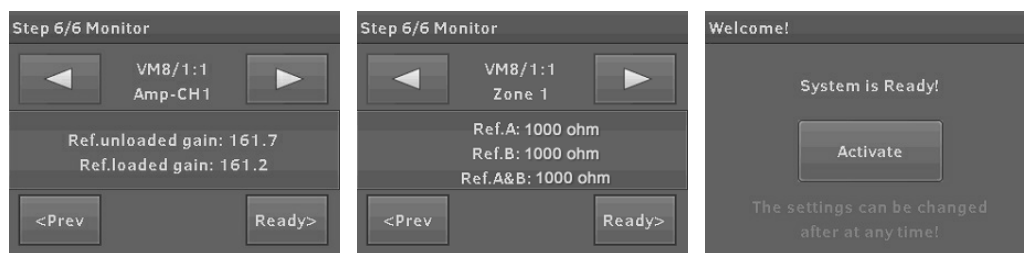
- Set the monitor tolerance of speaker line impedance and power amplifier.



- Press [Next] to apply the preset tolerance, impedance and amplifier gain. Or press [Edit] to change the tolerance of percentage.
  - Press [Save] to apply settings.
- Press [Next] to get monitor reference.




- Press [Ready] and [Activate] to enter the menu window.



## Replace

When replacing the broken main controller with the new one, proceed the Replace function to configure and synchronize the system with the broken device only.

1. If the USB flash drive is connected on BTQ-VM4/ VM8/SG8, click [Yes] to use the config. file from USB to replace (figure 1).

 If the USB flash drive is not connected, the system will display the alert window (figure 2).

2. If not using the file from USB flash drive, click [Skip] to skip the step.



figure 1

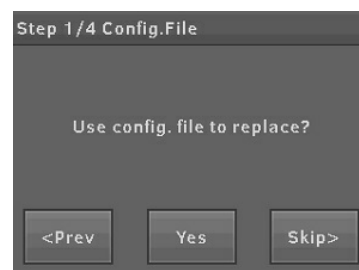
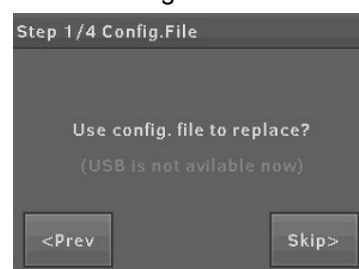
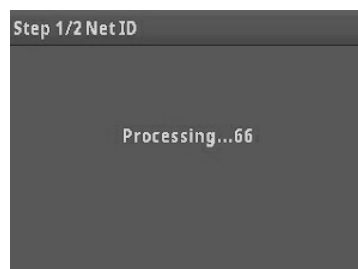
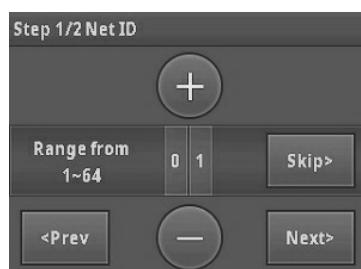


figure 2



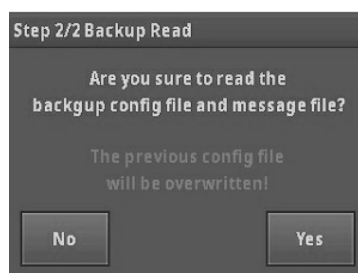
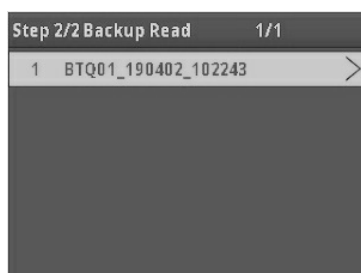
### Step 1: net ID

- Select the netcard ID of the "new" BTQ-VM4/VM8 controller used to replace the broken one.
- Click [Next] to apply the setting.

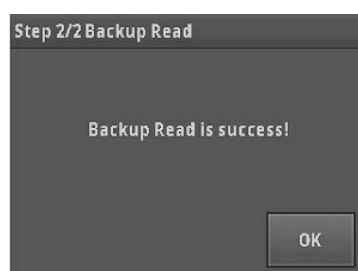
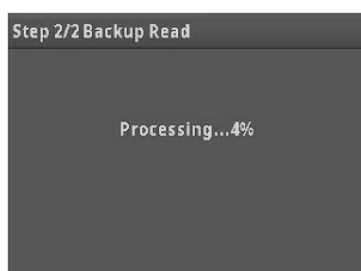


### Step 2: backup read

- The config. files will be automatically appeared on the LCD panel once the USB flash drive is connected to.



1. Select the config. file, and press [OK].
2. Press [Yes] to apply the config. file to the system.

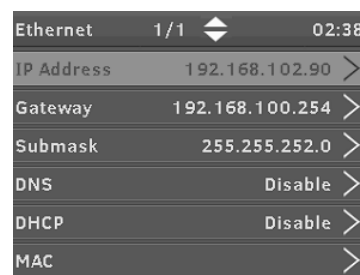


3. Press [OK] to enter the menu window.

## Ethernet settings

Ethernet settings: Go to Menu>Setting>Ethernet to setup IP address/Gateway/Submask/DNS/DHCP/MAC.

Default Setting	BTQ-VM4/VM8	BTQ-SG8
IP address	192.168.102.125	192.168.102.124
Subnet Mask	255.255.252.0	255.255.252.0
Gateway	192.168.100.254	192.168.100.254
DNS	0.0.0.0	0.0.0.0



Please read the BOUTIQUE user manual to know the advanced configuration such as audio routing, event and bell scheduler, paging with priority management, monitor, DSP parameter adjustment, level control, fault list etc. on [www.ateis.com](http://www.ateis.com).

**ATEİS Europe B.V.****EMEA**

Celsiusstraat 1 - 2652 XN Lansingerland  
(Rotterdam Region), Netherlands

Tel: +31 (0) 10 2088690

[info@ateis-europe.com](mailto:info@ateis-europe.com)



A member of PAX ProAV Group

[www.ateis.com](http://www.ateis.com)

**ATEİS Suisse SA****Switzerland & South-East Europe**

Avenue des Baumettes 9,  
1020 Renens VD, Switzerland

Tel: +41 (0) 21 881 25 10

Fax: +41 (0) 21 881 25 09

[info@ateis.ch](mailto:info@ateis.ch)

**ATEİS France**

8, rue de l'Europe -  
ZA de Font Ratel,  
38640 Claix, France  
Tel: 33 (0) 4 76 99 26 30

[contact@ateis.com](mailto:contact@ateis.com)

**Penton UK Ltd.****UK & Ireland**

Unit 2, Teville Industrials, Dominion Way,  
Worthing West Sussex,  
BN14 8NW, United Kingdom

Tel: +44 (0)1903 215315

Fax: +44 (0)1903 215415

[sales@pentonuk.co.uk](mailto:sales@pentonuk.co.uk)

**ATEİS Middle East**

Light Industrial Unit 11 Dubai  
Silicon Oasis, Dubai United Arab Emirates

Tel: +971 4 3262730

Fax: +971 4 3262731

[info@ateis.ae](mailto:info@ateis.ae)

**ATEİS SE PTE Ltd.****South-East Asia**

Blk 5002 Ang Mo Kio Avenue 5, #03-01B  
TECHplace II. Singapore 569871

Tel: +65 6481 1968

Fax: +65 6481 1960

[info@ateis-se.com.sg](mailto:info@ateis-se.com.sg)

**Penton Audio USA****USA, Canada & Latin America**

21 Sabin St. Pawtucket,  
RI 02860, USA

Tel: 401-727-1600

Fax: 401-727-0003

[info@penton-usa.com](mailto:info@penton-usa.com)

**ATEİS SE Europe****Serbia**

Sime Lukina Lazica 12-B,  
11040 Belgrade, Serbia

Tel: +381 (0)11 40 89 617

[info@ateisseurope.com](mailto:info@ateisseurope.com)

**Xavtel Communications RUS Ltd.****Russia**

Russian Federation, 115280, Moscow  
Leninskaya Sloboda str., 26 bld. 28, Business  
Center "Slobodskoy", office #122

Tel: +7 495 803 3655

Fax: +7 495 803 3655

[info@xavtel.ru.com](mailto:info@xavtel.ru.com)

**ATEİS China**

Room 610, No. 255 Wubao Road,  
Minxing district, Shanghai, China

Tel: 021-54495191/92

Fax: 021-54495193

[sales@ateis.com.cn](mailto:sales@ateis.com.cn)

**ATEİS Far East CORP.****Far-East Asia**

No.60, Xinghua 2nd Rd, Tanzi,  
Taichung 427, Taiwan

Tel: +886-4-25333820

Fax: +886-4-25333830

[sales@ateis-fareast.com](mailto:sales@ateis-fareast.com)