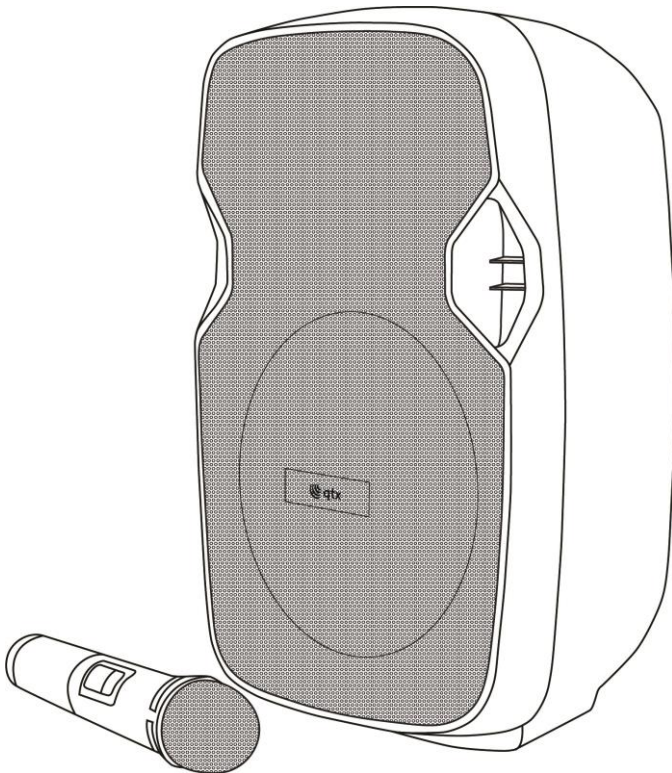# PAL8, PAL10
Portable PA Unit with LED Light Show

Order ref: 178.860UK, 178.861UK

User Manual

VERSION 1.2

⚠	Caution: Please read this manual carefully before operating Damage caused by misuse is not covered by the warranty

Introduction

Thank you for choosing a PAL SERIES portable home PA unit. This versatile portable PA unit is packed with features and includes a front speaker cone which doubles as an LED light show for a complete and compact entertainment system.

Package Contents

Please check the contents to ensure that the product has been received in good condition. If you find any accessory is missing or the product has arrived with any problems, please contact your retailer at once.

- PAL SERIES portable PA unit
- VHF handheld microphone
- UK/EU 13.5Vdc power adaptor

This product contains no user-serviceable parts so make no attempt to try to fix or modify this item yourself as this will invalidate the warranty. We recommend you keep the original package and proof of purchase for any possible replacement or returned demand.

Warning

To prevent the risk of fire or electric shock, do not expose this appliance to rain or moisture. To prevent electric shock do not remove the cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

Safety

Prior to connecting the power adaptor, check the supply voltage and plug type is correct.
Avoid ingress of water or particles into the enclosure.
If the VHF microphone is to be unused for a long period of time, remove the batteries and store for later use.

Placement

Keep the unit out of direct sunlight and away from heat sources.
Place the unit in an upright position during use and storage.
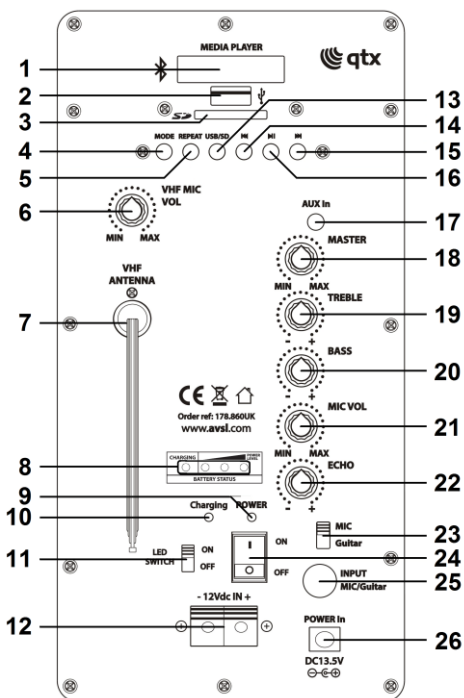Keep the unit away from moisture or dusty environments.

Cleaning

Use a soft cloth with a neutral detergent to clean the cabinet, panel and controls.
To avoid damage, do not use solvents to clean this equipment.

Rear Panel

1	Media player display
2	USB port
3	SD/MMC card slot
4	Media player mode
5	Media player repeat play setting
6	VHF microphone volume
7	VHF microphone antenna
8	Battery status LEDs
9	Power LED
10	Charging LED
11	Front LED lights power on/off
12	12Vdc power input terminals
13	Media player USB/SD source select
14	Previous track (hold for seek)
15	Next track (hold for seek)
16	Play/Pause
17	3.5mm AUX input
18	Master volume
19	Treble boost/cut
20	Bass boost/cut
21	Wired mic/guitar volume
22	Echo effect level
23	6.3mm jack mic/guitar select
24	Power on/off
25	Wired mic/guitar input 6.3mm jack
26	13.5Vdc power input

Powering up

Your new PAL SERIES portable home PA unit may arrive with the internal battery charged.

Before connecting to the mains, turn down all volume controls and switch the unit on (24) and the power LED should light (9). The battery charge status is shown on 4 LED indicators (8). If there is little or no charge, you will need to charge the battery before using away from mains power.

Connect the PAL SERIES unit to the mains using the UK/EU 13.5Vdc adaptor supplied (26), which is supplied with UK and EU pin connectors. Slide the correct type in place until it latches. When not in use but connected to the mains, if the POWER switch (24) is in the OFF position, the internal battery will be re-charged from the mains supply, indicated by a CHARGING LED (10) which lights when charging.

Note: it is recommended to store the PA unit at an ambient temperature and not with the battery fully discharged.

You may otherwise opt to connect the DC input at the rear (12) to an external 12Vdc supply (e.g car battery) or use the internal battery if charged.

Setting up

When powered up, BASS and TREBLE controls (19, 20) should remain pointing vertically (i.e. 12-o-clock position). Turn up the MASTER VOLUME control (18) part way.

You may decide to activate the LED light show on your PAL SERIES unit by moving the LED power switch (11) to the "on" position. These LEDs will sequentially switch colours, which increases in speed when there is sound coming from the speaker.

Your PAL SERIES unit should now be ready to operate.

VHF Wireless Microphones

Extend the VHF antenna (7) at the rear of the unit. Insert 2 x AA batteries into the handheld microphone by carefully unscrewing the base and connecting the "+" and "-" terminals of the batteries to the corresponding contacts inside the mic body, taking care to observe the correct polarity and screw the base back onto the handset. Turn the VHF MIC VOL. control (6) up part way for checking.

Switch on the wireless microphone and gradually increase the VHF MIC VOL control, testing the microphone for output through the speaker. Note that the microphone switch has 2 positions - the centre position is muted and the "fully up" position is "on". If the LED on the transmitter lights dimly, change the batteries.

Take care not to incur "feedback" (howling or screeching sound through the speaker) by keeping the microphone a sensible distance from the speaker and pointing away from the speaker so that it doesn't *hear* the speaker output.

Turning the ECHO control (22) clockwise adds an echo function for singing or special effects.

The BASS or TREBLE (18, 19) tone character can be cut by turning the relevant control anti-clockwise or boosted by turning clockwise.

When not in use, switch the wireless microphones off and remove batteries if not being used for long periods.

External Inputs

In addition to the included VHF microphone, a 6.3mm jack input (25) is provided to connect a wired microphone or guitar, which is governed by the MIC VOL control (21).

Depending on whether a microphone or guitar is connected, move the MIC/Guitar switch (23) to the appropriate setting to ensure this input is the correct sensitivity for the input source.

Also, a 3.5mm stereo jack input (17) is provided for a line input source such as a CD player or smart phone.

Internal media player

The PAL SERIES unit has an internal media player for digital audio playback from USB/SD/MMC media, FM tuner or via Bluetooth®.

Press 'Mode' (4) to select the function you require - USB, SD, FM radio or Bluetooth.
USb – Use this mode for both USB and SD/MMC cards
FM Radio – (the last chosen frequency will appear – i.e. 89-107MHz)
bLUE – Use this mode for Bluetooth™ selection

Playback from USB Device or SD/MMC Card

Inserting a USB memory device into the USB connector or SD/MMC card into the SD/MMC card slot will automatically load up and begin playback of mp3 or wma audio tracks stored on the media.

If playback does not start, press the Play/Pause button (16) or remove the memory device and check that the stored files are the correct compressed audio format before re-connecting.

PLAY/PAUSE (16) will alternately play or pause the selected track.

PREVIOUS TRACK (14) will step backwards through tracks.
Holding the PREVIOUS TRACK button will reverse seek through the current track.

NEXT TRACK (15) will step forwards through tracks.
Holding the NEXT TRACK button will forward seek through the current track.

USB/SD (13) will toggle between USB or SD/MMC card media playback.

REPEAT (5) will select between repeating **OnE** track or **ALL** tracks on the storage device.

FM Tuner

In FM tuner mode, the station frequency (in MHz) will be displayed.
For initial setup, press PLAY/PAUSE to begin the auto-tuning process.

The tuner will seek through all frequencies for strong signal reception (i.e. radio stations)
These will be stored into memory as **P01**, **P02**, **P03**, **P04**… etc.

Stored stations can then be selected using the PREVIOUS or NEXT buttons

Note: Pressing PLAY/PAUSE during auto-tune will allow manual tuning via PREVIOUS/NEXT

Bluetooth Connection

On the media player, select 'ᏏᏞᏌᎬ' using the mode button (4).

Scan for Bluetooth devices on your smart phone or other Bluetooth enabled audio player and check for a device called 'PAL SERIES'. Select this device and opt to connect your Bluetooth device, which should then state that it is connected to "PAL SERIES" for audio output.

Play audio from your Bluetooth device and check for output through the PAL SERIES unit. Ensure that the volume is turned up on the smart phone or other sending device. If there is no output, check if there is more than one device within range called "PAL SERIES"

In the eventuality that more than one device is called "PAL SERIES", try each device in turn until the PAL SERIES is found. Check also that the volume level is turned up on the sending device.

Once audio is playing through the PAL SERIES from Bluetooth, adjust the MASTER control (18) to the required volume.

In Bluetooth mode, the Play/Pause, Previous and Next buttons (15, 16, 14) can also remotely control playback from the sending device. Holding down the Previous or Next buttons will decrease or increase the Bluetooth output volume.

Bluetooth on the PAL SERIES can only pair to a single device at any one time and should be operable over a range of 5 to 8 metres.

Specifications

Model	PAL8	PAL10
Output power	30Wrms	35Wrms
Main driver	200mm (8")	250mm (10")
Power supply	13.5A, 2A adaptor (included) or internal battery	
Battery - main unit	Rechargeable 11.1V, 1800mAh Li-ion	
Batteries – VHF mic.	2 x AA	
HF driver	25mm (1")	
Inputs	Mic / Guitar 6.3mm jack, Aux 3.5mm jack	
Controls	Wireless Mic, Master, Treble, Bass, Mic/Gtr vol, Echo	
Audio source	Internal USB/SD/FM/BT media player	
Carrier frequency	174.1MHz	
Bluetooth version	2.1	
LED source (each)	Single RGB 3-in-one with auto patterns	
Dimensions	390 x 250 x 200mm	
Weight	3.65kg	

Troubleshooting

No output and no LEDs lit	Check POWER switch is on
	Check battery is not drained fully
	If battery is flat, connect mains power adaptor
Power LED lit but no VHF output	Check AA batteries in wireless microphone
	Check wireless microphone is switched on
	Check VHF MIC VOL is not turned down
Power LED lit but no USB/SD media output	Check USB/SD/MMC has mp3 or wma audio file format
	Check Master volume is not turned down
Power LED lit but no FM tuner output	Check that stations are tuned in (if not, press "Play/Pause")
	Check Master volume is not turned down
	Check media player is not turned down (hold down "Next")
No Bluetooth output	Check volume output level on sending device
	Check sending device is connected to the receiver correctly
	Check Master volume is not turned down
	Check media player is not turned down (hold down "Next")
No sound from external inputs	Check leads are OK and connected properly
	Check MASTER and MIC VOL controls are turned up