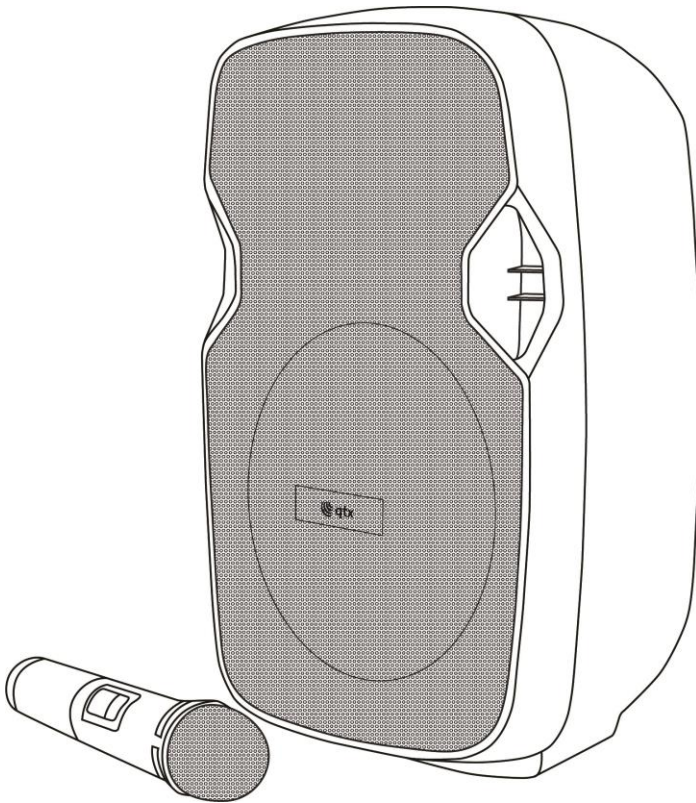


## PAL8

# Portable PA Unit with LED Effect and TWS pairing

Order ref: 178.960UK

User Manual



VERSION 1.0



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

## Introduction

Thank you for choosing a PAL8 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.

- PAL8 portable PA unit
- VHF handheld microphone
- IEC power lead(s)

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

Connect power to a suitable mains outlet using the supplied IEC lead or equivalent.

Prior to connecting to the mains, check that the supply voltage 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.

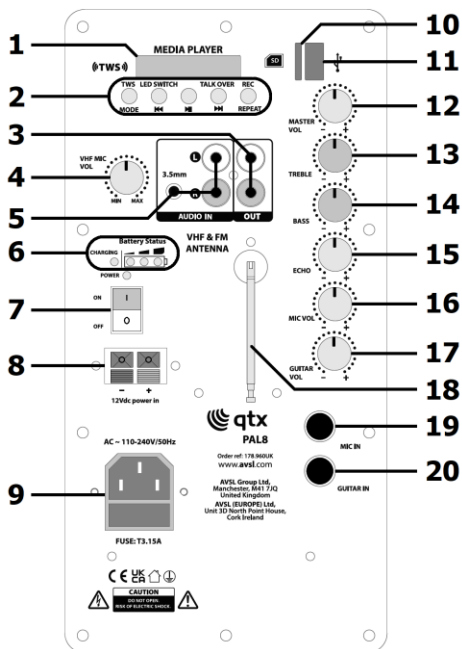
Keep the unit away from moisture or dusty environments.

## 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 Media player and LED controls
- 3 Line output (2 x RCA)
- 4 VHF microphone volume
- 5 Line input (3.5mm jack & 2 x RCA)
- 6 Battery status LEDs
- 7 Power on/off
- 8 12Vdc external power input terminals
- 9 IEC mains power inlet & fuse
- 10 MicroSD/TF card slot
- 11 USB pen drive input
- 12 Master volume
- 13 Treble boost/cut
- 14 Bass boost/cut
- 15 Echo effect level
- 16 Wired mic volume
- 17 Guitar input volume
- 18 VHF microphone antenna
- 19 Wired microphone input (6.3mm jack)
- 20 Guitar input (6.3mm jack)

## Powering up

Your new PAL8 portable home PA unit may arrive with you with the internal battery charged.

Before connecting to the mains, turn down all volume controls and switch the unit on (7) and the power LED should light. The battery charge status is shown on 4 LED indicators (6). If there is little or no charge, you will need to charge the battery before using away from mains power.

Connect the PAL8 unit to the mains using the IEC lead supplied (9) or a suitable equivalent. When not in use but connected to the mains, if the POWER switch is in the OFF position, the internal battery will be re-charged from the mains supply, indicated by a CHARGING LED, which lights when charging.

You may otherwise opt to connect the DC input at the rear (8) 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 (14, 13) should remain pointing vertically (i.e. 12-o-clock position). Turn up the MASTER VOLUME control (12) part way. Your PAL8 unit should now be ready to operate.

## VHF Wireless Microphone

Extend the VHF antenna (18) 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 (4) 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 (15) clockwise adds an echo function for singing or special effects.

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

## External Connections

In addition to the included VHF microphone, a 6.3mm jack input (16) is provided to connect a wired microphone which is governed by the MIC VOL control (19).

Another 6.3mm jack input (17) is provided to connect a guitar to the PAL8 which is governed by the MIC VOL control (20).

A line input is also provided on either 3.5mm jack or 2 x RCA sockets (5) for playback from wired input devices such as mp3 players, laptops or other line level stereo audio sources. This is selected through the media player section as described on the next page.

The overall BASS or TREBLE (14, 13) tone character of the PAL8 output can be cut by turning the relevant control anti-clockwise or boosted by turning clockwise. The best setting will depend on the usage and environment. It is recommended to experiment to get the best results.

To connect a line output from the PAL8 onto another portable PA unit or active speaker for extra sound coverage, use the 2 x RCA line output connectors (3) next to the line input.

## Internal media player

The PAL8 unit has an internal media player for digital audio playback from Bluetooth, USB, microSD, FM tuner or AUX input. This is controlled by 5 buttons (2) beneath the display (1).

Press **MODE** to select the required source - Bluetooth, USB, microSD, FM radio or Line input

**USB** – Use this mode for both USB and microSD cards

FM Radio – (the last chosen frequency will appear – i.e. 89-107MHz)

**BLUE** – Use this mode for Bluetooth selection

**AUX** – selects the 3.5mm / 2 x RCA line input in the rear panel (5)

## Playback from USB Device or microSD Card

Inserting a USB memory device into the USB input or microSD card into the microSD 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 or remove the memory device and check that the stored files are the correct compressed audio format before re-connecting.

**MODE** Selects the input source: - Bluetooth, USB, microSD, FM tuner, AUX input.  
holding this button for 3 seconds will activate the **TWS** pairing mode.

◀◀ Steps backwards through tracks on USB/microSD media, smart phone, FM channels.  
holding this button for 3 seconds will switch the front **LED** effect on or off.

▶ || Alternately plays or pauses the current track.  
In Bluetooth mode, holding this button for 3 seconds will disconnect the pairing.

▶▶ Steps forwards through tracks on USB/microSD media, smart phone or FM channels.  
holding this button for 3 seconds will activate or deactivate the **TALKOVER** function.

**REPEAT** Select repeat **ONE** track / repeat **ALL** / **RD** random order / **FD** repeat folder  
If a USB or microSD card is inserted and the player is in Aux or FM mode, then holding this button for 3 seconds will enter the recording mode.

## 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 **CH 1**, **CH2**, **CH3**, **CH4**... etc.

Stored stations can then be selected using the ◀◀ or ▶▶ buttons

## Bluetooth® Connection

On the media player, select 'BLUE' using the **MODE** button.

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 PAL8 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 PAL8 is found. Check also that the volume level is turned up on the sending device. Once audio is playing through the PAL8 from Bluetooth, adjust the MASTER control (12) to the required volume.

In Bluetooth mode, the ⏪, ▶ II, ⏩ buttons can also remotely control playback from the sending device.

## TWS (True Wireless Stereo) pairing

The Bluetooth receiver in the PAL8 is capable of pairing with another PAL8 unit, so that it plays just one side of the stereo audio and relays the other side of the audio to the other PAL8 over Bluetooth. This sets up a pair of PAL8 units as a wireless stereo set, known as True Wireless Stereo pairing.

To activate this function, pair a smart phone to one of the pair of PAL8 units and press and hold the button labelled **TWS** for 3 seconds on each PAL8 unit until an audio prompt confirms the TWS pairing. Bluetooth playback from the smart phone will now be reproduced by both PAL8 units with one playing the left channel and the other playing the right channel. Holding the **TWS** button on either unit for 3 seconds will cancel the TWS function.

## Front LED light effects

You may decide to activate the LED light show on your PAL8 unit by pressing and holding the button labelled "LED SWITCH" for 3 seconds. These LEDs will sequentially switch colours, which increases in speed when there is sound coming from the speaker. Pressing the "LED SWITCH" button for 3 seconds again will deactivate the LED light show.

## Talkover function

To override music playback when speaking into the microphone, press and hold the button marked **TALKOVER** for 3 seconds. When active, this will automatically reduce the music output volume whenever you speak into the microphone and resume the music volume when the microphone is silent. Holding TALKOVER again for 3 seconds will deactivate this function.

## Specifications

|                      |   |
|----------------------|---|
| Power supply         | 110-240Vac, 50Hz  |
| Output power         | 30Wrms  |
| Battery - main unit  | Rechargeable 11.1V, 1800mAh Li-ion                            |
| Batteries – VHF mic. | 2 x AA  |
| Main driver          | 200mm (8")  |
| HF driver            | 25mm (1")   |
| Inputs               | Mic / Guitar 6.3mm jack, Aux 3.5mm jack / 2 x RCA             |
| Controls             | Wireless Mic, Master, Treble, Bass, Echo, Mic vol, Guitar vol |
| Audio source         | Internal USB/SD/FM/BT media player (with TWS)                 |
| Carrier frequency    | 174.1MHz  |
| Bluetooth version    | v5.0  |
| LED source (each)    | Single RGB 3-in-one with auto patterns                        |
| Dimensions           | 390 x 250 x 200mm   |
| Weight               | 3.60kg  |

## 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                |
| 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/microSD media output | Check USB/microSD 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 ►    ) |
|   | Check Master volume is not turned down                 |
| No Bluetooth output                           | Check volume output level on sending device            |
|   | Check sending device is paired to the PAL8 correctly   |
|   | Check Master volume is not turned down                 |
| No sound from external inputs                 | Check leads are OK and connected properly              |
|   | Check MASTER / MIC / GUITAR VOL controls are turned up |



**Disposal:** The "Crossed Wheelie Bin" symbol on the product means that the product is classed as Electrical or Electronic equipment and should not be disposed with other household or commercial waste at the end of its useful life. The goods must be disposed of according to your local council guidelines.

Hereby, AVSL Group Ltd. declares that the radio equipment types 178.960UK is in compliance with [Directive 2014/53/EU](#)

The full text of the EU declaration of conformity is available at the following internet address:  
<http://www.avsl.com/assets/exportdoc/1/7/178960UK%20CE.pdf>

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