DT50

Desktop PA
Item ref: 952.400UK
User Manual

Version 3.0

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

Introduction

Thank you for choosing the DT50 desktop PA unit. Please read this manual prior to use to avoid damage to the item.

This versatile portable PA unit is packed with features in a compact, manageable enclosure and is suitable for a wide array of applications ranging from public address for presentations to outdoor karaoke.

- Mains or DC operation
- Internal 12V rechargeable battery
- 2 x VHF handheld microphones included
- Guitar / Microphone inputs (6.3mm jack)
- Master 2 band EQ and Echo effect for microphones
- Internal USB/SD/FM media player with record function
- Wireless remote control for media player
- Carry handle & Shoulder strap
- AUX line input

Package Contents

Please check the contents to ensure that the product has been received in good condition.

- DT50 desktop PA unit
- 2 x VHF handheld microphone transmitters
- IR Remote control for media player
- Shoulder strap
- Fig.8 mains lead
- User manual

If you find any accessory is missing or the product has arrived with any problems, please contact your retailer at once.

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 mains, ensure that the supply voltage is correct and the mains lead is in good condition.
Avoid ingress of water or particles into the enclosure.
If the VHF microphones are to be unused for a long period of time, remove the battery and store for later use.

Placement

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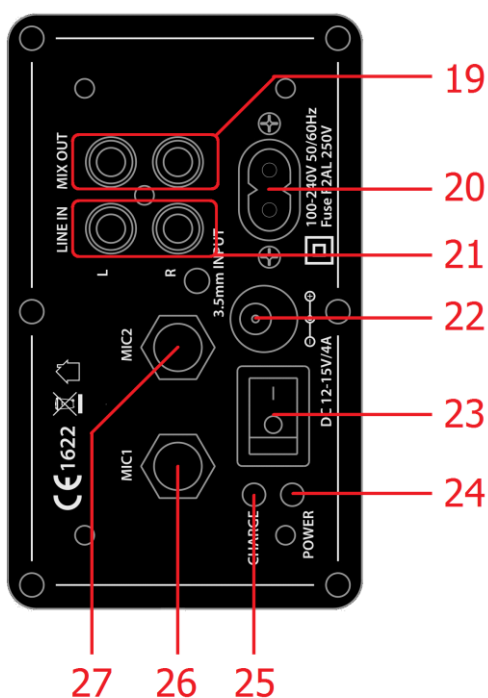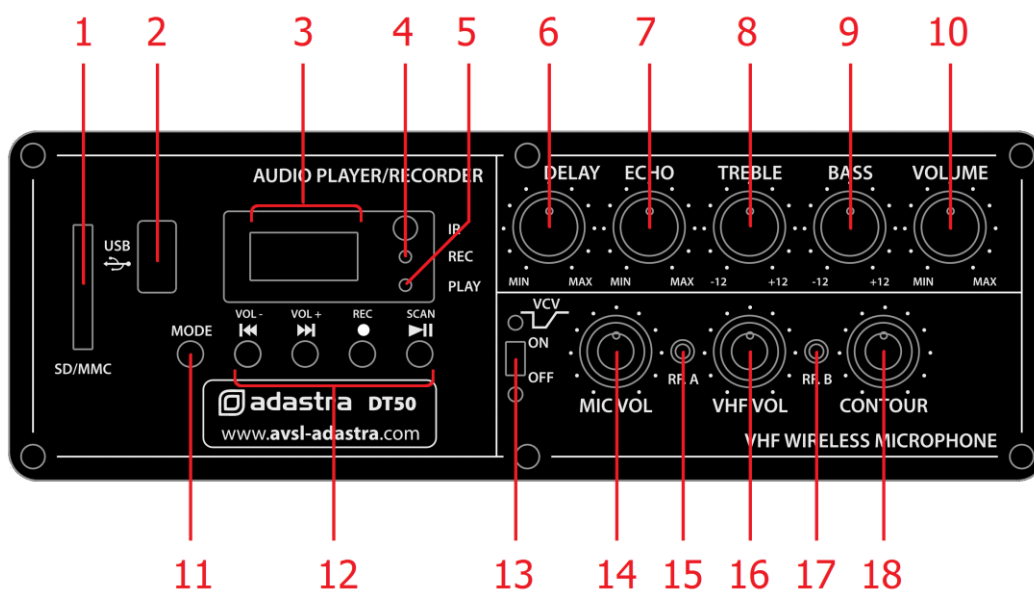Place the unit in an upright position during use and storage.
Keep the unit away from moisture or dusty environments.

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.

Controls

1) SD card slot
2) USB input
3) Media player LCD display
4) Record indicator
5) Play indicator
6) Delay time control of echo effect
7) Microphone Echo level control
8) Treble EQ control
9) Bass EQ control
10) Music volume control
11) Media player mode control
12) Media player transport/record controls
13) VCV activation switch
14) Wired microphones volume control
15) Radio Frequency indicator (channel A)
16) Wireless microphones volume control
17) Radio Frequency indicator (channel B)
18) Microphone EQ contour control
19) Mix line output (RCA)
20) Fig.8 mains inlet
21) Auxiliary line input (RCA)
22) 12Vdc power input
23) Power switch
24) Power indicator
25) Charging indicator
26) MIC 1/guitar input (6.3mm jack)
27) MIC 2 input (6.3mm jack)

Operation

Connection

Your new DT50 desktop PA unit may arrive with you with the internal battery charged. Before connecting the 12Vdc adaptor to the mains, switch the unit on and see if the power LED lights. If not, you will need to charge the battery before using away from a mains supply (see "**Charging the battery**" below)

Connect the QR-series portable PA unit to the mains using the fig.8 lead supplied or to a car 12Vdc outlet with the supplied cigar lighter lead. You may otherwise opt to use the internal battery if charged.

Power Up

Turn VOLUME, ECHO and MIC VOLUME controls down (anti-clockwise) and turn the POWER switch on (the power LED should light). BASS and TREBLE controls should remain pointing vertically (12-o-clock position) – these can be altered later to give the overall appropriate tone shape. Your DT50 desktop PA unit should now be ready to operate.

VHF Handheld Microphones

Insert the supplied 9V batteries into the handheld microphones by carefully unscrewing the base of each and connecting the "+" and "-" terminals of the battery to the corresponding clips inside the mic body.
Take care to observe the correct polarity when installing the batteries.

With the VHF VOL control turned down, press the VHF ON/OFF button on the DT50 so that the VHF POWER LED lights.
Switch on each wireless mic in turn – the RF LEDs on the DT50 unit should light as a result
If the LED on the handset does not light or stays on dimly lit, change the battery

Gradually increase VHF VOL control, testing each microphone in turn for output through the speaker.
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 clockwise introduces the echo effect for singing and special effects.
A DELAY rotary control changes the delay time of this echo effect.

The CONTOUR control varies the overall EQ shape of all the microphones
Rotating this control alters the microphones' tone from mid-focused to bass + treble enhanced.

When not in use, switch the wireless microphones off. Remove batteries if not being used for long periods of time.

External Inputs

In addition to the unit's own VHF microphones, 6.3mm jack inputs are provided to connect external microphones, which are both governed by the MIC VOLUME control.
Mic 1 input can also serve as an input for an electric or electro-acoustic guitar.

A VCV switch activates the Voice Controlled Volume feature.
This function gives priority to microphones over playback, so that announcements are more easily heard
When the VCV is on, any sound through the microphones will cause the music playback to "duck" (drop in volume)
The music volume is restored after there is no sound through the microphone (after a short, preset period of time)

Also, an AUX twin RCA input is provided for line input sources such as CD player or personal audio player.
To use these inputs, select the AUX input mode using the media player MODE button
The AUX input is governed by the VOLUME control at the top of the panel and volume settings in the media player

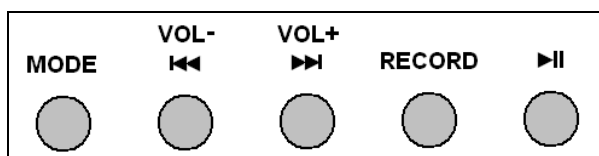Adjacent to this twin RCA input is a twin RCA line output carrying the overall main mix.
This can be used to connect onto other sound systems or for external recording.

Internal USB/SD/FM player

Insert a USB memory stick or an SD card with compressed audio media stored on it into the relevant slot on the top panel. (USB stick or SD card must be formatted to FAT32 standard – check the file system of the media if not working)

If the LCD display reads "LINE IN", press the MODE button and check that the LCD display shows that media is being read from the USB or SD device. If not, press the ">II" button or try removing and re-inserting the memory device. Increasing the VOLUME control should result in the media being played through the speaker.

Panel controls are detailed below…

	VOL-	VOL+		
MODE	I◄◄	►►I	RECORD	►II

"MODE"	Switches music input between internal USB/SD/FM player and AUX input
	Pressing "MODE" for 2 seconds opens Media Player Menus (see below)
"VOL – "	Press and hold to decrease volume
"I<<"	Momentary press for previous track (or station in FM mode)
"VOL +"	Press and hold to increase volume
">>I"	Momentary press for next track (or station in FM mode)
"RECORD"	In any mode, press to record to USB or SD, press again to stop and save
">II"	Play/Pause USB or SD track, Auto-scan FM tuner, MUTE AUX input

Media Player Menus

FM Tuner Menu
Pressing MODE for 2 seconds in FM Tuner mode opens the FM Tuner Menu
Use VOL- and VOL+ buttons to navigate through the menu and Play/Pause button to select
Auto search activates a search through FM frequencies and auto-stores detected stations
Manual replay
    Manual Station Search: Use VOL- and VOL+ buttons to scan manually in steps
    Semi-automatic Station Search: Use VOL- and VOL+ buttons to auto-scan to next station
    Switching Stations: Use VOL- and VOL+ buttons to switch between stored stations
Save stores the current station in internal memory
Record switches to USB/SD mode for recording/playback
Delete erases the current stored station from memory
Delete All erases all stored stations from memory
Volume Adjustment uses VOL- and VOL+ to adjust the output level of the FM Tuner
Exit leaves the FM Tuner Menu

USB/SD "Play" Menu
Pressing MODE for 2 seconds whilst USB/SD is playing opens the USB/SD "Play" Menu
Use VOL- and VOL+ buttons to navigate through the menu and Play/Pause button to select
Repeat
    Repeat All – plays all content and then repeats from the beginning
    Repeat Folder – plays all content from the selected folder and then repeats from beginning
    Repeat One – plays the current single track and then repeats
    Random – plays all content in random order
Equalizer offers 7 preset EQ settings using VOL-/VOL+ to navigate and Play/Pause to select
Music Volume Control uses VOL- and VOL+ to adjust the output level of the media player
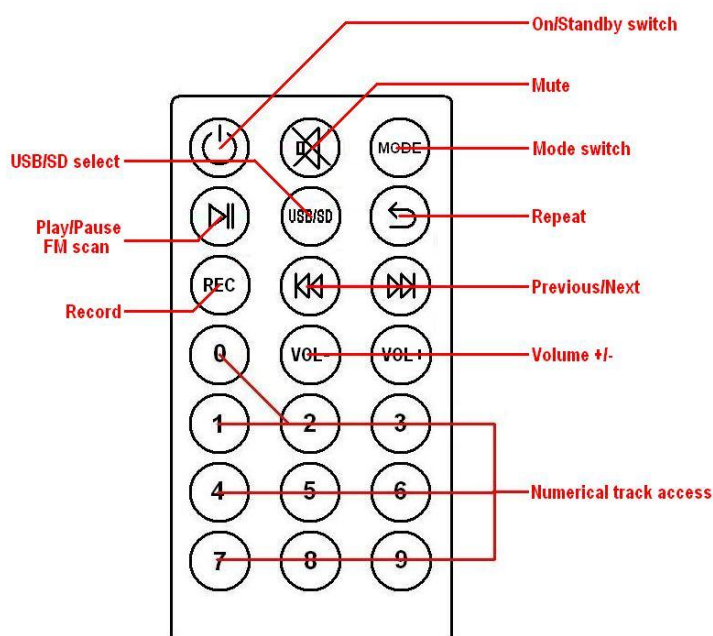**File Browser** uses VOL-/VOL+ to navigate and Play/Pause to select tracks on the media
Exit leaves the USB/SD "Play" Menu

USB/SD "Pause" Menu

Pressing MODE for 2 seconds whilst USB/SD is paused opens the USB/SD "Pause" Menu
Use VOL- and VOL+ buttons to navigate through the menu and Play/Pause button to select
File Browser uses VOL-/VOL+ to navigate and Play/Pause to select tracks on the media
Delete File uses VOL-/VOL+ to select "YES/NO" and then Play/Pause to delete the current file
Delete All uses VOL-/VOL+ to select "YES/NO" and then Play/Pause to delete all content
Exit leaves the USB/SD "Pause" Menu

AUX Menu

Pressing MODE for 2 seconds in AUX mode opens the AUX Menu
Use VOL- and VOL+ buttons to navigate through the menu and Play/Pause button to select
Recording opens the USB/SD player and begins recording
Music Volume Control uses VOL- and VOL+ to adjust the output level of the AUX input
Exit leaves the AUX Menu

In addition to the panel controls, an infra-red remote control is provided for the USB/SD player which adds some further functions to allow greater control over the media player.

To operate, remove the clear plastic tab from the remote to activate the battery.

Charging the battery

When not in use but connected via the 12Vdc adapter to the mains, if the POWER switch is in the *off* position, the internal battery will be re-charged from the mains supply. This can be observed by the CHARGE LED which lights when charging

Specifications

Power supply	110-240Vac, 50/60Hz, 12Vdc or internal battery
Battery life	Up to 8 hours
HF driver	2 x 25mmØ balanced dome
LF Driver	200mm (8") reinforced paper cone
Output power	50Wrms
SNR	85dB
Construction	Injection-moulded polypropylene
Power supply : Handheld transmitters	9Vdc (PP3 battery) each
Wireless microphone frequencies	174.1MHz + 175.0MHz
Dimensions	380 x 295 x 220mm
Weight	7.2kg

Troubleshooting

No output and no LEDs lit	Check POWER switch is on
	Check battery is not drained fully
	Check mains lead is connected if not on battery power
Power LED lit but no VHF output	Check 9V batteries in handheld transmitters
	Check VHF POWER is switched on
	Check VOL controls are not turned down on top panel
	Check RF LED is lit for each channel (check transmitter frequency)
Power LED lit but no media player output	Check USB or SD has compressed audio files stored
	Check USB or SD is connected properly
	Ensure media is formatted to the FAT32 file system
	Press MODE button and try Play/Pause button
	In FM tuner mode, ensure that a station is tuned in
	Check VOLUME is not turned down
	Press and hold "VOL +" button
	Check LCD display to see moving numbers
Power LED lit but no sound from external inputs	Check leads are OK and connected properly
	Check volume and on/off switch on external mic or line source
	Check VOLUME or MIC VOLUME control is not fully down
	In AUX mode, press Play/Pause to ensure input is not muted