DUET300

Compact PA System with USB/SD & Bluetooth™

Order ref: 178.190UK

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 the DUET300 compact PA system, which has been designed to provide a convenient sound solution for a wide range of applications. Please read this manual fully to understand the various features included and get the best results from this product.

Package Contents

Please check the contents to ensure the DUET300 set has been received in good condition with the following.
- Speaker unit 1 with detachable rear powered mixer
- Speaker unit 2 with detachable rear accessories compartment
- 2 x speaker jack leads (in accessories compartment)
- IEC mains lead(s) (in accessories compartment)

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

Warning

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. 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. Refer servicing to qualified service personnel.

Safety: Labelling Conventions

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	AVIS RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR	

	This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit

	This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

Prior to connecting mains, check the supply voltage is correct and the mains lead is OK.
Avoid ingress of water or particles into the enclosure.
If the mains or D.C. fuse blows, refer the unit to qualified service personnel

Warning: THIS UNIT MUST BE EARTHED

Placement

Keep the unit out of direct sunlight and away from heat sources.
Keep the unit away from moisture or dusty environments.
Mount the speakers on a stable surface or 35mm pole mount
Ensure that any supporting structures have adequate load capacity for the weight of the unit.

Cleaning

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

Setting up

After unpacking the DUET300 system, stand the speaker cabinets on a stable surface and slide the catch on top sideways to release each of the rear modules one at a time. Unclip the powered mixer module and accessory compartment from the rear of each speaker cabinet and place them with the rear side downwards.
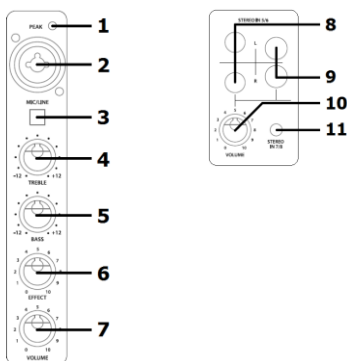
Unclip and open the hatch on the accessory compartment to reveal the mains lead(s) and speaker jack leads. Remove the contents of the compartment and unravel the speaker leads, connecting one end to the jack input on the speaker and the other end to left or right speaker output on the top panel of the powered mixer.

Connect the appropriate mains lead to the IEC inlet on the side of the powered mixer and the mains plug to a suitable outlet, ensuring the correct voltage and adequate power capacity to run the system.
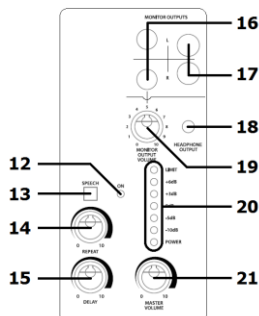
Connect microphones or line level inputs (keyboards, instruments, effect units etc.) to the 4 mic/line inputs (2) on top of the mixer. These inputs can accept either a 3-pin XLR male connector or 6.3mm jack plug. Ensure that the Mic/Line button (3) is pressed in for any line level inputs and left out for microphone inputs.

Connect any line level stereo inputs (e.g. CD or mp3 players) to input 5/6 via L+R 6.3mm jack plugs or RCA connectors (8, 9). An mp3 player or smart phone may be connected to input 7/8 on a 3.5mm stereo socket. L+R jacks are provided for monitors or line out (16), governed by the Monitor Output Volume control (19) There are also fixed level L+R RCA outputs for recording (17) and a 3.5mm jack out for headphones (18)

Input channel layout

1. Channel peak LED
2. Combo XLR/Jack input
3. Mic/Line input level switch
4. Treble EQ
5. Bass EQ
6. Effect level
7. Channel volume
8. L+R 6.3mm jack input - channel 5/6
9. L+R RCA input – channel 5/6
10. Channel 5/6 volume
11. Channel 7/8 3.5mm stereo input
12. Speech enhancement EQ indicator
13. Speech enhancement in/out switch
14. Repeat adjustment
15. Delay speed adjustment
16. Monitor output – L+R 6.3mm jack
17. Recording output – L+R RCA
18. Stereo 3.5mm headphones output
19. Monitor output volume
20. Power, Output level and Limiter indicators
21. Master volume

Operation

Once all connections have been made as described above, turn down the Master Volume control (21) and Monitor Output Volume control (19).

Switch the power on to the powered mixer module and the power LED (20) will light.

To check inputs 1-4, ensure that the Mic/Line switch (3) is set to the correct type of input source.

Set the Treble and Bass controls (4, 5) to the vertical (12 o'clock) position and ensure that the Effect and Volume controls (6, 7) are turned fully down.

Turn the Master Volume control (21) up part way and gradually increase the channel Volume (7) checking for output from the speakers whilst speaking into the microphone, playing the instrument or playback device. A similar test can be made using any of the stereo line inputs (8, 9, 11)

Alternatively, a USB pen drive or SD card with compressed audio tracks stored can be connected to the USB/SD player for checking playback and sound-checking the system.
More details are shown in the "Internal USB/SD player & Bluetooth receiver" section.

Once the sound has been checked through the speakers, increase the Master Volume to the required level, ensuring that the LED level meter (20) doesn't continually reach into the red (+6dB)

The red +6dB level meter LED should only ever light briefly on the loudest peaks of the sound (e.g. bass drum beat) and if it lights for anything longer than momentarily, the Channel or Master levels should be reduced until it lights only briefly (above this level, the amplifier will self-limit to avoid damage)

Adjust the channel Volume controls (7) to balance the mix and if required, adjust the tone of any channel by boosting or cutting the Treble and Bass controls (4, 5) – the vertical position is neutral.

For microphones, the Effect control (6) governs the level of signal sent to the internal delay (echo) effect. This effect has controls for Repeat (14) and Delay (15)

- Turning up the Repeat control increases the number of repeats returned by the delay effect.
- Turning up the Delay control increases the speed (reduces time) between the repeats.

If monitors or further active speakers are connected via the Monitor Outputs (16), these are governed by the Monitor Output Volume control (19), which will need to be turned up to the required level.

The L+R RCA output and headphones output are not affected by the Monitor Output Volume control.

When the unit is not in use, turn down the Master Volume and Monitor Output Volume controls before powering down in order to avoid damage to the DUET300 and other connected equipment.

Internal USB/SD player & Bluetooth receiver

The DUET300 onboard media player can play back files from USB/SD media or a paired Bluetooth device. Insert a USB memory stick or an SD card with compressed digital audio files stored on it into the relevant slot on the top panel. Playback will normally start automatically from the last media inserted (USB or SD).

If the LCD display shows a jack plug, press the USB/SD button and check that the LCD display shows that media is being read from the USB or SD device. If not, press the ▶❙❙ button or try removing and re-inserting the memory device.

Increasing the Master Volume control (21) should result in the audio being played through the speakers. Panel controls are detailed below…

MODE	switches input between USB/SD media or Bluetooth
◀◀	press for previous track
▶▶	press for next track
⟲	Repeat mode
▶❙❙	Play/Pause track

To connect a smart phone or other Bluetooth device to the DUET300 media player, open the Bluetooth menu on your device and search for "PA SYSTEM". Pair with this ID and connect (re-name if desired) in order to be able to play audio from the Bluetooth device to the DUET300.
Pressing the MODE button will select between Bluetooth and USB/SD playback sources.
(Note: there is also an AUX setting which is not used, since the mixer section has separate line inputs)

Mute, volume and track navigation can be achieved via the media player control panel. Bluetooth pairing is always available for a single device so long as the device is within reception range. It may be necessary to re-connect if the device has moved out of range and disconnected.

Specifications

Power supply	230Vac, 50Hz (IEC)
Mic/line inputs	4 (XLR/jack combo)
Stereo input	2 (RCA + 3.5mm)
Effects	Digital delay & speech EQ (Ch.1-4)
Output power	2 x 150Wmax (2 x 100Wrms)
Audio source	USB/SD player + Bluetooth receiver
Speaker units	250mm (10in) LF + 25mm (1in) Ti HF
Channel controls	Mic/Line, Treble, Bass, Effect, Volume (Ch.1-4)
Monitor outputs	L+R 6.3mm jack, L+R RCA
Headphone output	3.5mm stereo jack
Speaker outputs	L+R 6.3mm jack
Master controls	Master volume, stereo input volume, monitor volume
Dimensions : amplifier	430 x 245 x 185mm
Weight : amplifier	3.15kg
Dimensions : speaker	480 x 330 x 250mm
Weight : speaker	7.85kg

Troubleshooting

Power LED is not lit	Check power is switched on at the mains and at the rear panel
	Check IEC fuse – if blowing fuses, refer to qualified service personnel
Power LED is on but no other LEDs and no output	Check input signals and condition of connection leads
	Check channel gain and EQ controls are not turned fully down
	Check Master and channel level controls are not fully down
Power and level meter LEDs are lighting but no speaker output	Check output connections to speakers
	Check that speakers are in good working order
No playback from USB media	Check that files are standard compressed audio format
No output from Bluetooth	Check that the device is connected to the correct Bluetooth ID
	Check volume controls on the device
Output is very loud or distorted	Check level of input signal is not too high
	Ensure that the Mic/Line button is set correctly for the type of input
	Decrease Volume control and Treble/Bass/Effect settings if turned up
Output is working but at very low level	Check input audio source level is not too low
	Ensure that the Mic/Line button is set correctly for the type of input
	Increase Volume control and Treble/Bass settings if turned down
Feedback with microphones	Face microphone away from speakers and monitors
	Reduce channel Volume control and/or Treble/Bass level(s)