DM 800H Twin Handheld UHF System (863.0Mhz-865.0Mhz)

User Manual



Order code: MIC78

WARNING

FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE YOUR INITIAL START-UP!

- Before your initial start-up, please make sure that there is no damage caused during transportation.
- Should there be any damage, consult your dealer and do not use the equipment.
- To maintain the equipment in good working condition and to ensure safe operation, it is necessary for the user to follow the safety instructions and warning notes written in this manual.
- Please note that damages caused by user modifications to this equipment are not subject to warranty.



CAUTION!
KEEP THIS EQUIPMENT AWAY FROM MOISTURE, RAIN AND LIQUIDS, AND OUT OF DAMP/HUMID ENVIRONMENTS



CAUTION!
TAKE CARE USING THIS EQUIPMENT!
HIGH VOLTAGE-RISK OF ELECTRIC SHOCK!!

IMPORTANT:

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorised modification to the equipment.

- Never let the power cable come into contact with other cables. Handle the power cable and all mains voltage connections with particular caution!
- Never remove warning or informative labels from the unit.
- Do not open the equipment and do not modify the unit.
- Do not connect this equipment to a dimmer pack.
- Do not switch the equipment on and off in short intervals, as this will reduce the system's life.
- Only use the equipment indoors.
- Do not expose to flammable sources, liquids or gases.
- Always disconnect the power from the mains when equipment is not in use or before cleaning! Only handle the power-cable by the plug. Never pull out the plug by pulling the power-cable.
- Make sure that the available voltage is 12V DC, 1000mA. (240V AC~50Hz power supply included)
- Make sure that the power cable is never crimped or damaged. Check the equipment and the power cable periodically.
- If the equipment is dropped or damaged, disconnect the mains power supply immediately and have a qualified engineer inspect the equipment before operating again.
- If the equipment has been exposed to drastic temperature fluctuation (e.g. after transportation), do not connect power or switch it on immediately. The arising condensation might damage the equipment. Leave the equipment switched off until it has reached room temperature.
- If your product fails to function correctly, stop use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Pro Light dealer for service.
- Only use fuses of same type and rating.
- Repairs, servicing and power connection must only be carried out by a qualified technician. THIS UNIT CONTAINS NO USER SERVICEABLE PARTS.
- This fixture is for professional use only - it is not designed for or suitable for household use. The product must be installed by a qualified technician in accordance with local territory regulations. The safety of the installation is the responsibility of the installer. The fixture presents risks of severe injury or death due to fire hazards, electric shock and falls.
- WARRANTY: One year from date of purchase.

OPERATING DETERMINATIONS

If this equipment is operated in any other way, than those described in this manual, the product may suffer damage and the warranty becomes void. Incorrect operation may lead to danger e.g: short-circuit, burns and electric shocks etc.

In case of malfunction this unit should be returned for service or inspection.

Do not endanger your own safety and the safety of others!

Incorrect installation or use can cause serious damage to people and/or property.

DM 800H Twin Handheld UHF System

DM series wireless UHF twin handheld radio microphones feature 15 digital switchable frequencies. Operating in Channel 70 (863-865Mhz) the systems are license free for operation in the UK. Equipped with intelligent mute software, the receiver will silently mute the audio output should the transmitter be switched off or out of range. Outstanding vocal reproduction and stable wireless connectivity allow freedom of movement on stage. These systems offer crystal clear sound reproduction and rock solid reliability. Metal bodied, rechargeable transmitters feature ergonomic design with a rugged housing to stand up to the rigours of the road. Supplied with a foam lined carry case for protection during transit.

- Phase Lock Loop (PLL)
- Digital audio transmission
- IR sync facility for simple setup
- Rechargeable transmitters, up to 8 hour battery life
- USB charge output on the rear panel of the receiver
- 16bit digital pilot frequency avoids interference
- 15 selectable frequencies
- Ultra low latency coupled with 48kHz processing
- Colour TFT receiver display
- LCD transmitter display
- Auto frequency scanning and spectrum display
- Balanced XLR output for each channel plus unbalanced mixed output
- Frequency response (handheld): 30Hz-20kHz
- Audio output level: 400mV
- Dynamic range: 96dB



In the box:
1 x receiver, 1 x audio lead,
2 x wireless microphones,
1 x USB charging mic cable,
1 x PSU, 1 x carry case
& 1 x user manual

Specifications	DM 800H Twin Handheld UHF System
Operating frequency	863.0Mhz-865.0Mhz
Power supply	12V DC, 1000mA (mains adaptor supplied)
Order code	MIC78

Receiver front panel identification:

1. Power Switch

On/Off control for the system receiver.

2. Setup Control – Channel A

Multifunction control for menu navigation and volume control. When the menu system is locked, the dial will adjust the receivers output volume. Turn the level control anti clockwise to the lowest setting, or turn clockwise to adjust to the highest setting and then press to confirm. Each channel features an independent volume control.

3. IR Activation – Channel A

The IR transceiver is used to communicate with the systems transmitter during setup. To commence IR sync with the transmitter, press the IR activation button. The display will confirm IR sync by showing the animated antenna symbol.

4. Menu Lock – Channel A

Press and hold to unlock the menu functions. Press to lock the menu functions.

5. TFT Display Window – Channel A

The receiver features a backlit display allowing the user to see information about the receiver including frequency, channels, mute status, audio and RF status.

6. IR Transceiver – Channel B

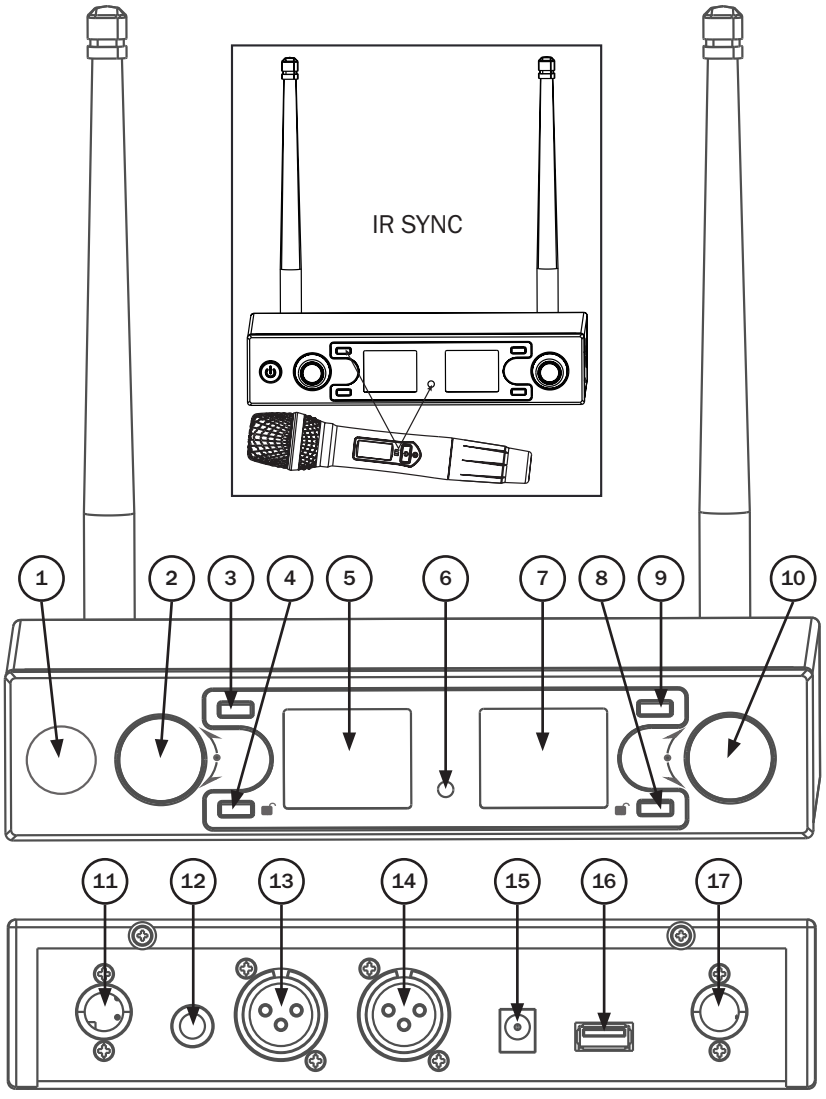
The IR transceiver is used to communicate with the systems transmitter during setup.

7. TFT Display Window – Channel B

The receiver features a backlit display allowing the user to see information about the receiver including frequency, channels, mute status, audio and RF status.

8. Menu Lock – Channel B

Press and hold to unlock the menu functions. Press to lock them.



9. IR Activation – Channel B

The IR transceiver is used to communicate with the systems transmitter during setup. To commence IR sync with the transmitter, press the IR activation button. The display will confirm IR sync by showing the animated antenna symbol.

10. Set Button – Channel B

Multifunction control for menu navigation and volume control. When the menu system is locked, the dial will adjust the receivers output volume. Turn the level control anti clockwise to the lowest setting, or turn clockwise to adjust to the highest setting and then press to confirm. Each channel features an independent volume control.

Receiver rear panel identification:

11. Antenna – Channel A

The antenna receives the RF radio signal from the transmitter unit. Reception maybe impaired by obstacles between the transmitter and receiver. High power electrical equipment can cause unwanted interference.

12. Audio (MIX) Output

6.35mm (1/4”) jack socket outputting an unbalanced, line level audio output featuring both audio channels.

13. Balanced Audio Output A

Individual, balanced audio outputs via 3 pin XLR for audio channel A.

14. Balanced Audio Output B

Individual, balanced audio outputs via 3 pin XLR for audio channel B.

15. DC Power Input

The receiver is powered by a standard DC power input 12V DC, 1000mA regulated voltage supply.

16. USB Charge Output

The receiver features a 5V DC 500mA output for charging the supplied handheld microphones. Use the USB Y cable supplied to charge the 18500 batteries inside the transmitters. Battery status can be seen on both the transmitter and the receiver.

17. Antenna – Channel B

The antenna receives the RF radio signal from the transmitter unit. Reception maybe impaired by obstacles between the transmitter and receiver. High power electrical equipment can cause unwanted interference.

Display Identification:

1. RF Level **RF**

The RF level indicator is a visual representation of the radio frequency signal strength utilising a bar graph. As the radio signal received is reduced, the bar graph will reduce.

2. AF Level **AF**

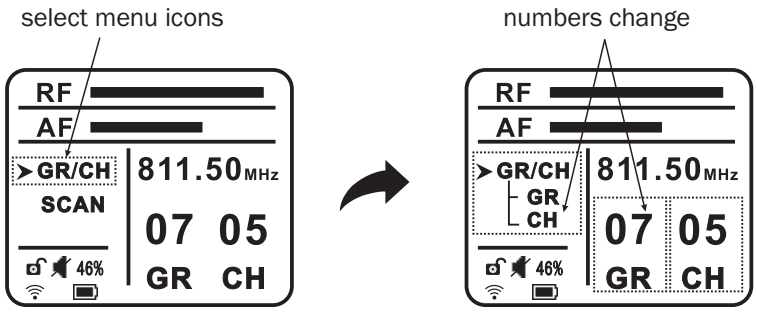
The AF level indicator is a visual representation of the audio signal strength utilising a 10 segment bar graph. As the audio signal fluctuates bar graph will indicate this.

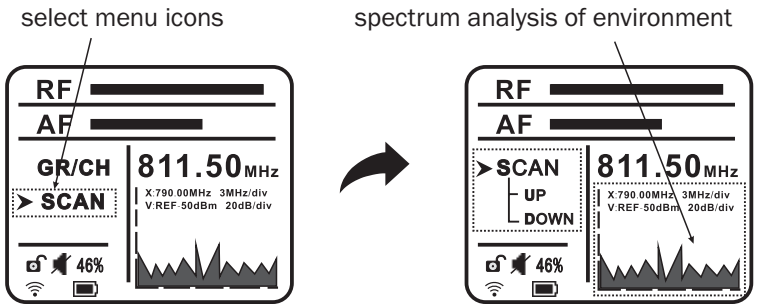
3. Channel/Group indicator **GR/CH**

Displays the current RF channel and group in use by the transmitter/receiver. Note: for 863-865Mhz CH70 there is only one group of 20 channels available for selection.

4. Scan

The receiver features a scan function to allow the user to avoid frequencies already in use. Before commencing the scan operation, please switch on any transmitters to be used in the local area. Unlock the menu system by pressing the padlock button until the white unlocked padlock symbol appears on the display. Press the Setup button and then scroll to highlight SCAN, press enter again to show the options for scanning UP or DOWN to search for a clear frequency. After the scan is completed, the receiver will automatically change the frequency. After completing the scan, the IR sync must be completed to set the transmitter to the same frequency.





5. Lock

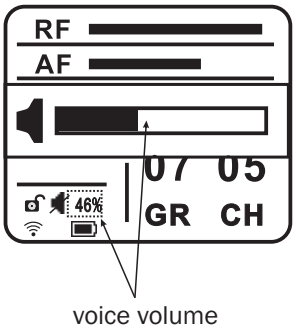
The receiver features a lock function to prevent accidental changes to the settings. Press and hold LOCK to unlock the menu system. After a short period of inactivity, the display will automatically lock or the user may quickly press the lock button to activate the menu lock.

6. Mute

The receiver will mute the audio output when a transmitter is switched off or out of range. The user may also mute the handheld transmitter by pressing the transmitters power switch with a short press. The beltpack features an on/off switch only.

7. Volume **46%**

The user may adjust the microphone transmitter gain from the receiver using the setup dial only while the display is locked.

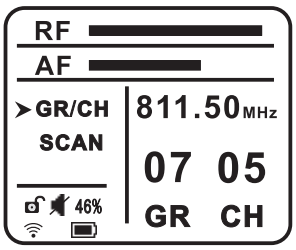


8. IR Sync

During synchronisation, the IR Sync will flash a radiating symbol, once the data has been transmitted, the radiating symbol will illuminate fully. Transmitters store the settings, as a result IR sync is only required after any changes and not before each operation.

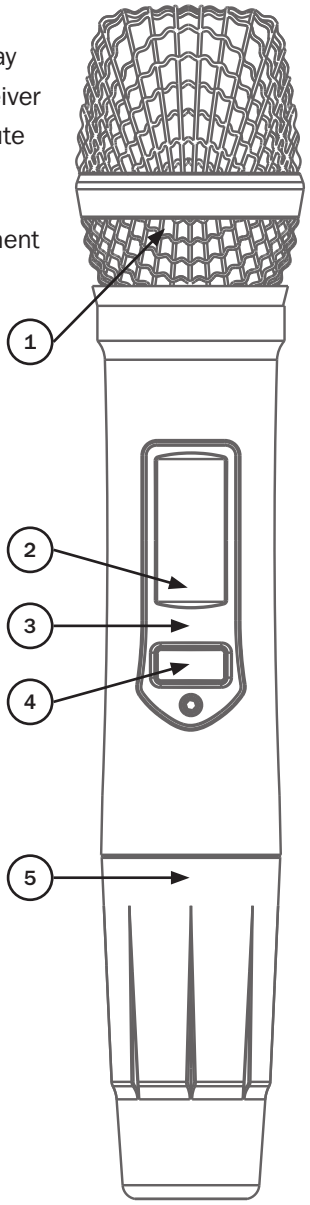
9. Battery Level

The receiver displays the current battery level in the transmitters allowing remote monitoring of the transmitter's battery level.



Handheld transmitter identification:

1. Grille
2. LCD display
3. IR transceiver
4. Power/mute switch
5. Battery compartment /cover

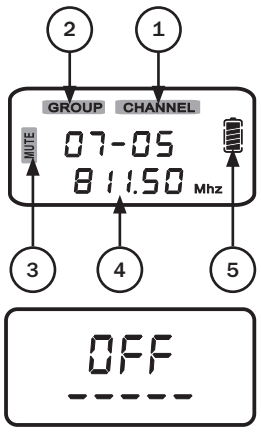


Operation:

- Carefully, lift the antennae into the vertical position.
- Connect the included power supply to a suitable 240V AC~50Hz mains voltage outlet and plug the DC connector into the DC Power Input on the rear panel of the receiver (12V DC, 1000mA minimum)
- Using the supplied audio cable, connect the MIX OUT on the rear panel of the receiver for both audio channels to the mixer's audio line input. The receiver also features balanced XLR outputs, one for each channel.
- Switch on the power to the receiver, checking the display backlight illuminates.
- Open the battery compartment on the transmitter (Beltpack – press the clip on the front side and pivot to open. Handheld - unscrew the lower portion). Install the appropriate batteries (Handheld - 1 x 18500 3.7V Li-Ion rechargeable type, Beltpack - 2 x 1.5V AA Alkaline
  non-rechargeable type) into the transmitter, taking care to observe the orientation and polarity. Only use high quality batteries. Refit the battery compartment cover carefully.
- For beltpack transmitters, when switched on the display on the transmitter will illuminate. If the display does not illuminate or glows dimly, the batteries will require replacement. For handheld transmitter's, a short press is required to power on or mute the unit, a long press is required to switch off the transmitter. The display should illuminate when working fully, if the display is flashing or is dim, the batteries may require charging.
- Adjust the volume on the front panel of the receiver for each of the channels.
- Follow the IR Sync Operation fully to ensure the transmitters are linked correctly to the receiver unit. Failure to follow this fully will prevent the microphone system from operating correctly.

Handheld transmitter display identification:

1. Channel
2. Group
3. Mute status
4. Operating frequency
5. Battery status



NOTE:
The DM 800H system is shipped with two handheld transmitters. The receiver in this system features a dual channel receiver allowing both handheld microphones to be used simultaneously, an additional belt pack kit maybe purchased if required to be used in place of the handheld transmitters. Each receiver channel in this system may only be used with one transmitter at any one time. If the user attempts to power on, and use two transmitters with one receiver the system will malfunction and not operate correctly as one transmitter will cut out the RF Radio signal to the second transmitter.

Troubleshooting:

Problem	Possible cause	Solution
Receiver – no sound	Power button is in the OFF position. DC power adapter is not plugged in	Turn on the power button plug in the power adapter
Receiver – no LED		
Microphone - no sound but LED indicators are lit	Mic transmitter is out of range. Mic is switched off. Mic volume it turned down. Batteries in mic are not installed properly. Receiver is not connected to an amp or mixer.	Ensure that the mic is within range. Turn on the mic switch. Turn up the mic volume on the receiver. Reinstall or use new batteries. Connect an output cable to an amp or mixer
Distorted sound or feedback	The 2 mics may be too close together. Batteries are running out of charge. Mic volume may be too high. Possible interference from another source.	Increase the distance between mics. Replace the batteries. Reduce the volume. Move the system away from other electric sources.

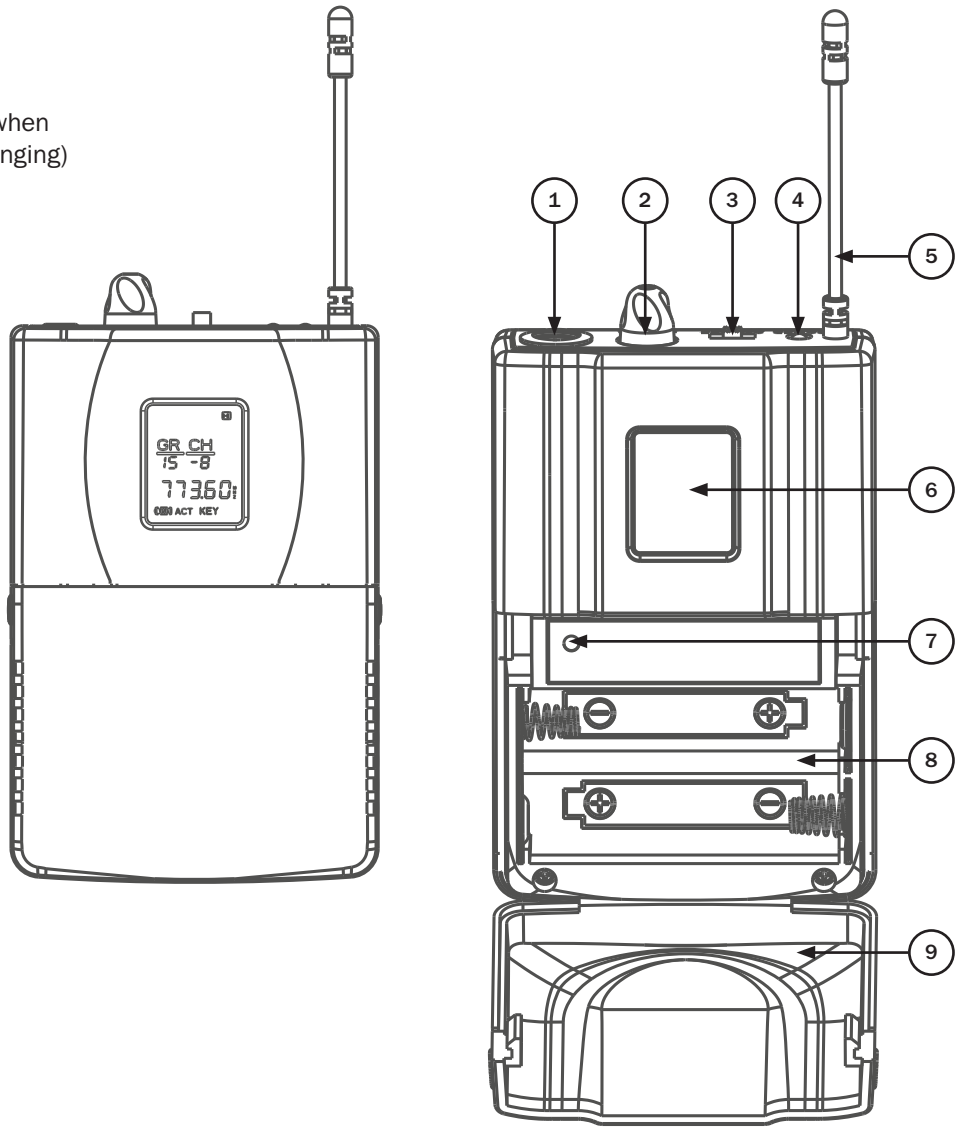
Optional DM 800BP Add On Beltpack Kits

Belt pack kit comprising of a belt pack transmitter plus headset and lavalier microphones to be used in place of the handheld transmitter.

Specifications	DM 800BP Add On Beltpack Kits
Operating frequency	863.0Mhz-865.0Mhz
Battery type	2 x 1.5V AA (not supplied)
Order code	MIC79

Beltpack transmitter identification:

1. Microphone Input
2. Volume Control
3. On / Off Switch
4. Power Indictor (illuminates when battery is low and requires changing)
5. Antenna
6. LCD Display
7. IR Transceiver
8. Battery compartment (care should be taken to observe battery polarity)
9. Battery cover



DM 800H Series Frequencies:

CH1 - 863.00MHZ	CH4 - 864.20MHZ	CH7 - 863.60MHZ	CH10 - 864.80MHZ	CH13 - 863.50MHZ
CH2 - 863.40MHZ	CH5 - 864.60MHZ	CH8 - 864.00MHZ	CH11 - 863.10MHZ	CH14 - 863.70MHZ
CH3 - 863.80MHZ	CH6 - 863.20MHZ	CH9 - 864.40MHZ	CH12 - 863.30MHZ	CH15 - 864.90MHZ



Correct Disposal of this Product (Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed of with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.