

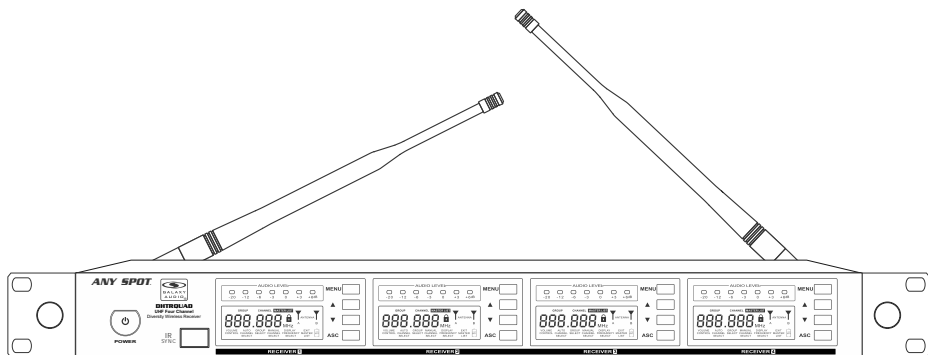
DHTRQUAD UHF



USER'S MANUAL

ANY SPOT®

WIRELESS MICROPHONE SYSTEM



MAKERS OF THE ORIGINAL
HOT SPOT PERSONAL MONITOR

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DHTRQUAD System

DHTRQUAD System

Thank you for purchasing the DHTRQUAD wireless system. For users who need an advanced UHF wireless system, the DHTRQUAD provides an excellent solution. With 120 selectable channels, the DHTRQUAD is perfect for applications such as live shows, broadcast, meetings, & musical instruments. Touch buttons and liquid crystal displays allow for a quick and simple system setup. The "User Guide" and "Quick Setting Guide" included in your system will provide all the details you need to operate the system efficiently.

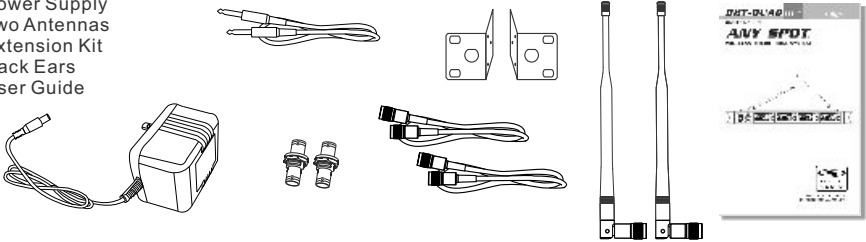
Frequency Band

Most countries closely regulate the radio frequencies used in the transmission of wireless information. These regulations state which devices can use which frequencies, and help to limit the amount of RF (radio frequency) interference in all wireless communications. The DHTRQUAD offers 120 selectable channels within either the 584-607MHz (Code D) or 655-679MHz (Code L) frequency ranges.

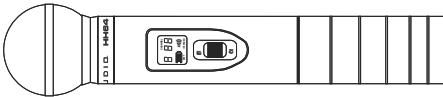
To facilitate system setup and protect against RF interference, each system comes with multiple predefined frequency groups and channels. When using a single receiver/transmitter, the operating frequency will generally not have to be changed. In an installation with multiple receivers/transmitters, each set must operate on a separate channel from the others. The group and channel system provides an optimum frequency spread when using multiple receiver/transmitter systems.

All systems include:

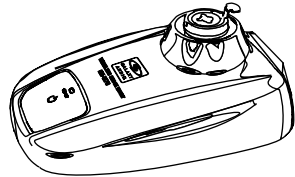
- DHRQUAD Receiver
- ¼" to ¼" Audio Cable
- Power Supply
- Two Antennas
- Extension Kit
- Rack Ears
- User Guide



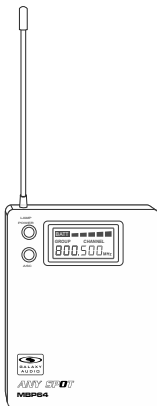
Transmitter Options:



HH64 / HH64SC Handheld Mic/Transmitter

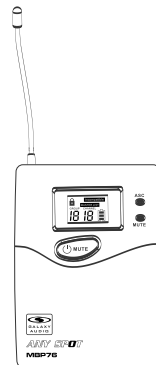


SM-W76 Wireless Shockmount Base



MBP64
Body Pack
Transmitter

Visit our website
www.galaxyaudio.com
to see all of our great
headset & lavalier
options

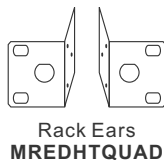
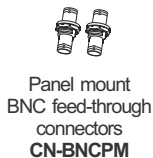
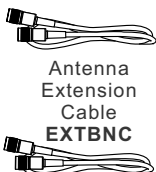


MBP76
Body Pack
Transmitter

Rack-Mounting the Receiver

Rack-Mounting the Receiver

Maintain a line of sight between transmitter and antenna.

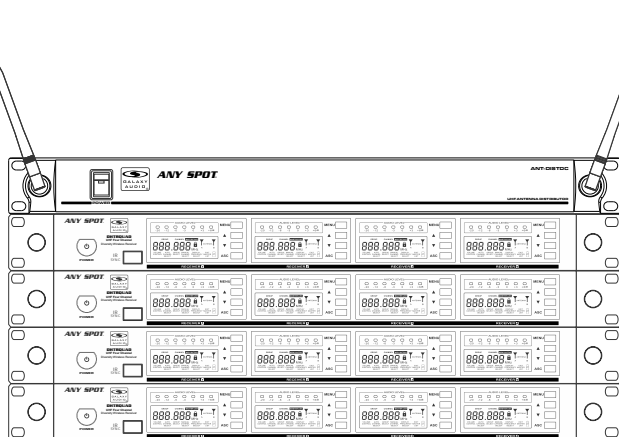


Shown with optional **ANT-DISTDC** antenna distributor.

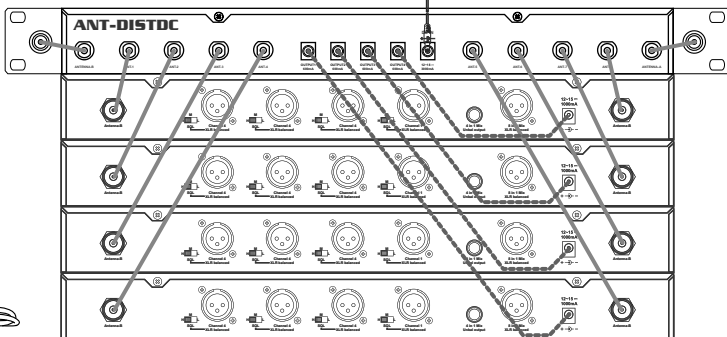
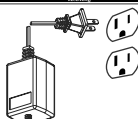


ANT-DISTDC info

Four **DHTRQUAD** receivers



The **ANT-DISTDC** will provide DC power to operate up to 4 **DHTRQUAD** Receivers.



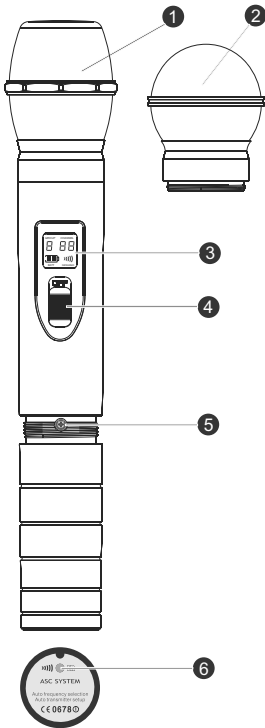
Ten **BNC** connecting cables (included)
Two **BNC** connectors (included)

1. BNC Cables —————
2. Power Supply Cable - - - - -

HH64/HH64SC Handheld Transmitter

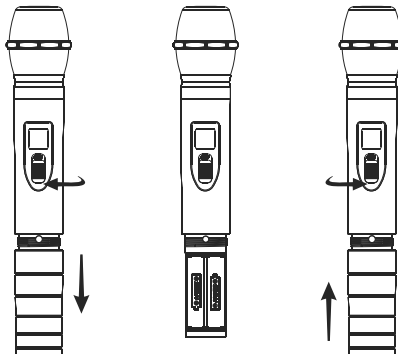
Functions:

- 1 Condensor mic
- 2 Dynamic mic
- 3 LCD screen
Please See "system setup " on page 8.
- 4 Power Switch
- 5 Microphone Input Sensitivity Control.
Left turn for output level decrease, right turn for output level increase.
- 6 IR Port receives infrared beam to synchronize frequencies.



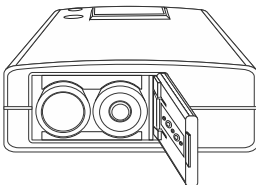
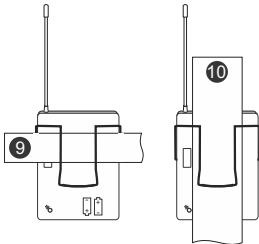
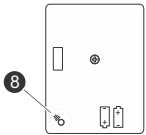
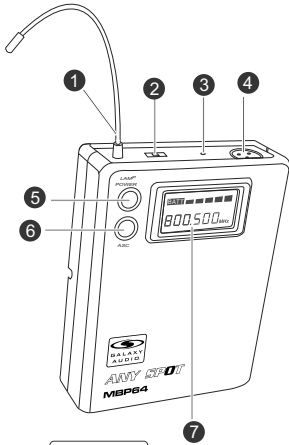
Changing Batteries:

Batteries should be replaced when LCD indicator flashes. Unscrew the battery cover as shown below. Install two AA alkaline batteries, while observing correct polarity indicators in the battery tray. Expected life for two AA alkaline batteries is 8 hours.



MBP64 Bodypack Transmitter

BodyPack Transmitter



Functions:

- 1 Antenna.
- 2 Gain Switch.
There are three Gain settings on the MBP64. Select the setting most suitable to your application.
Mic: Microphone Level
0: Guitar Level
-10dB: Line Level
- 3 Low Voltage/IR Transmission LED.
LED On: Battery Voltage OK.
LED Off: the Battery Voltage is Low.
Flashing LED: IR transmission is in progress
- 4 3-pin Input Jack.
- 5 Power/Backlight Control button
Press and Hold for Power On/Off.
Press and Release for Back-light On/Off.
- 6 ASC Frequency Synchronization Button.
Press this button to automatically set the Transmitter frequency to match that of the Receiver. Use in conjunction with Receiver's ASC control.
- 7 LCD screen
See "system setup" on page 8.
- 8 IR Window Point this window towards IR window on Receiver during ASC frequency synchronization.

How to Wear the Bodypack Transmitter:

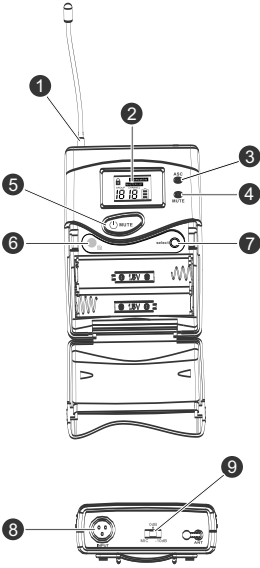
Slide the transmitter clip onto the belt 9 or run a guitar strap through the transmitter clip 10, as shown in the diagram at left.

Battery Replacement :

The life expectancy of two alkaline batteries is about six hours. When the BATT indication symbol on the display screen is flashing as shown in the diagram below, the batteries should be replaced immediately, as shown in the diagram on the left.



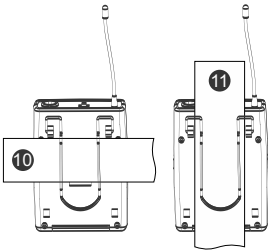
MBP76 Bodypack Transmitter



Features

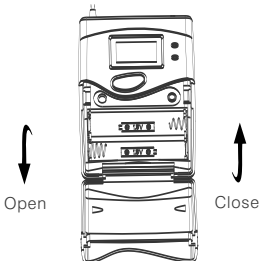
- 1 Antenna.
- 2 LCD panel.
Please see (System Setup) on Page 7.
- 3 Power/ASC/ Low Battery Indicator.
Constant Green: Power ON.
Flashing Green: IR ASC in progress, or Low Batteries.
- 4 Mute Indicator.
Constant Red: Audio Muted.
- 5 Power/Mute Button.
Push and Hold for Power On/Off. Push once for Mute On/Off.
- 6 IR Window.
Receives IR signals (ASC) to synchronize with Receiver.
- 7 Select Button.
Please see (System Setup) on Page 8.
- 8 3-pin Microphone Input Jack.
- 9 Gain Adjustment Switch.
Three gain settings are available. Choose the appropriate setting for your application:
Mic: Microphone
0dB: Guitar with passive pickups
-10dB: Guitar with active pickups, or Line Level Signals.

Note: To prevent accidental power or mute changes during a performance, you may set the Lock function by a simultaneous press and release of buttons 5 and 7. This will disable all buttons and a "lock" icon will appear in the LCD. Repeat procedure to return to normal operation.



Wearing the Backpack Transmitter:

Clip the transmitter to a belt **10**. For best results, slide the transmitter down until the belt is pressed against the base of the clip. Or, slide a guitar strap through the transmitter clip **11**, as shown.

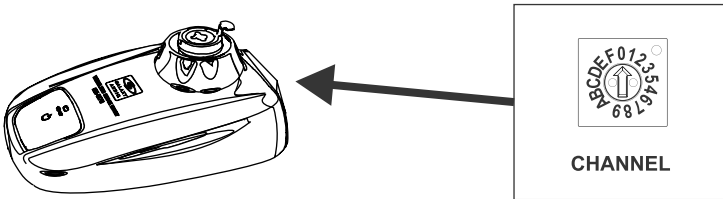


Changing batteries:

Expected life for Two Alkaline batteries is approximately 6 hours. Replace batteries when the Green Power LED and the LCD Battery Indicator (shown below) begin to blink.

SM-W76 Wireless Shockmount Base

1. Adjust the 16 position rotary knob on the rear of the SM-W76 base to change the frequency. A small flat headed screwdriver can be used.
2. Use the chart to set up the DHTR/TRCR Group & Channel to the frequency that corresponds to the SM-76 base.
3. Once the Group & Channel of the receiver is set, press the gray button on the top of the SM-76 base to turn the microphone on.



CODE D Frequency Chart

SW-W76D	DHT/TRC	DHT/TRC
16 Positions	Group	Channel
0 ~ 584.400 Mhz	1	1
1 ~ 587.500 Mhz	1	2
2 ~ 589.575 Mhz	1	3
3 ~ 591.050 Mhz	1	4
4 ~ 593.425 Mhz	1	5
5 ~ 595.200 Mhz	1	6
6 ~ 598.450 Mhz	1	7
7 ~ 599.650 Mhz	1	8
8 ~ 601.275 Mhz	1	9
9 ~ 603.775 Mhz	1	10
A ~ 605.500 Mhz	1	11
B ~ 606.750 Mhz	1	12
C ~ 601.575 Mhz	7	9
D ~ 602.250 Mhz	6	8
E ~ 607.600 Mhz	2	12
F ~ 607.875 Mhz	9	12

CODE L Frequency Chart

SW-W76L	DHT/TRC	DHT/TRC
16 Positions	Group	Channel
0 ~ 655.400 Mhz	1	1
1 ~ 656.550 Mhz	8	1
2 ~ 657.225 Mhz	5	2
3 ~ 658.500 Mhz	1	2
4 ~ 660.575 Mhz	1	3
5 ~ 662.050 Mhz	1	4
6 ~ 664.425 Mhz	1	5
7 ~ 666.200 Mhz	1	6
8 ~ 669.450 Mhz	1	7
9 ~ 670.650 Mhz	1	8
A ~ 672.275 Mhz	1	9
B ~ 674.775 Mhz	1	10
C ~ 676.500 Mhz	1	11
D ~ 677.750 Mhz	1	12
E ~ 678.050 Mhz	7	12
F ~ 678.800 Mhz	6	12

Receiver Programming



1

Group and Channel Selection:

① Press "SET" button twice, "GROUP SELECT" will display, press ▲ or ▼ to choose the appropriate frequency group.

② Press "SET" again, "MANUAL CHANNEL SELECT" will display, press ▲ or ▼ to choose the appropriate channel.



2

For best results when operating multiple systems, set all systems to a single group, then set each system to a unique channel within that group.

Auto Frequency Finder function on the Receiver:

③ Choose "AUTO CHANNEL SELECT" by pressing "SET" once, then press ▲ or ▼. Receiver will automatically find a clear frequency with no interference.



3

Receiver Volume Setting:

④ The receiver has an electronic volume control. Press ▲ or ▼ from the normal display (00 to 63)



4

Normal Display:

⑤ Frequency and Antenna A/B (RF Received).



5

Transmitting frequency automatic setup:

Place the Transmitter "IR" window to face the Receiver "IR" window. Then press the "ASC" button on the desired Receiver. The Transmitter will automatically match the Receiver frequency.

Attention: The distance between the Receiver and Transmitter IR windows should be less than 0.5m during the ASC IR setup. When setting up multiple Transmitters/Receivers, activate the ASC function of only one Transmitter and Receiver at a time.

Handheld Transmitter

Bodypack Transmitter



1



2



3

MBP76 Transmitter Status Display

Battery Status:

① Battery Status Indicators for both the Handheld and Bodypack Transmitters feature Four Level Displays.

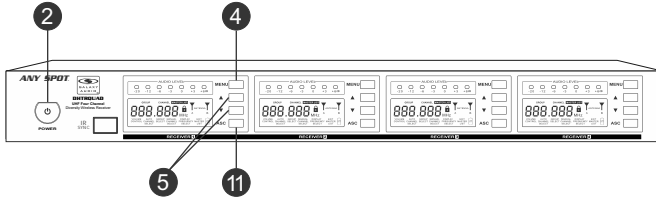
Group and Channel Display:

② After completing the ASC, both the Handheld and Bodypack Transmitters will display the Group and Channel numbers selected.

Normal Display:

③ Both Handheld and Bodypack Transmitters will display Group and Channel numbers as well as Battery Status.

Setting up multiple receivers



- 1) Power on any pre-existing wireless systems and transmitters except the first DHT system.
- 2) Power on the first DHT Receiver.
- 3) The Control and set buttons are on the front of the receiver.
- 4) Press the set button until the group number flashes on the LCD screen
- 5) Press the up/down buttons to select group 1.
- 6) Press the set button twice to get to the scan mode.
- 7) Press the up or down button. The unit will now go into scan mode. You will probably see the RF meters light up if the scan sees other transmitters.
- 8) When it stops scanning, it will stop on the clearest frequency, and will be flashing the frequency on the LCD screen.
- 9) Press the set button and it will set itself to that frequency. Do not wait to press the set button as the DHT Receiver will revert back to the original frequency, and the process will need to be restarted
- 10) If the unit cannot find a good frequency within group 1, start the process again scanning group 2, if that is also not clear try group 3, and so on till you get a good frequency.

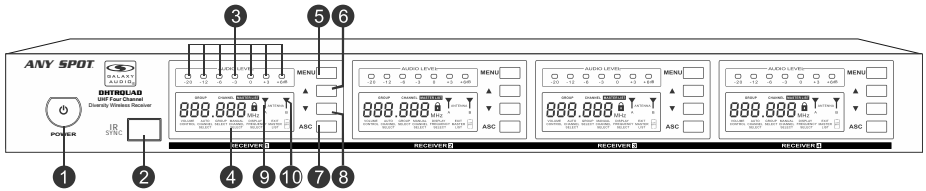
When the DHT Receiver has been set to a clear frequency, use the ASC feature to sync the receiver frequency to the transmitter.

- 11) Turn the transmitter on, aim the red infrared window on the transmitter towards the one on the receiver and press the ASC button on the front of the receiver. The transmitter will sync to the receivers frequency.

If you have more DHT systems to tune follow the same procedure on each one, always leaving the previous system transmitter on.

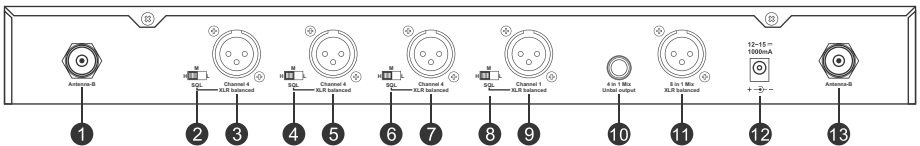
DHTRQUAD Receiver Features

Front Panel



- ① On/Off Switch
- ② Infrared (IR) Window
- ③ Audio Level Meter
- ④ LCD Panel
- ⑤ System Setup Button
Please see “System Setup” on Page 8
- ⑥ System Menu Up button
Please see “System Setup” on Page 8
- ⑦ ASC Sync Button
Press to initiate IR connection between Receiver and Transmitter.
- ⑧ System Menu Down button
Please see “System Setup” on Page 8
- ⑨ Antenna A Indicator
Lights when Antenna A is active .
- ⑩ Antenna B Indicator
Lights when Antenna B is active .

Rear Panel



- ① Antenna Jack B
- ② Channel 4 Fine Adjustment of Squelch Threshold Level
- ③ Channel 4 XLR Output Jack
- ④ Channel 3 Fine Adjustment of Squelch Threshold Level
- ⑤ Channel 3 XLR Output Jack
- ⑥ Channel 2 Fine Adjustment of Squelch Threshold Level
- ⑦ Channel 2 XLR Output Jack
- ⑧ Channel 4 Fine Adjustment of Squelch Threshold Level
- ⑨ Channel 1 XLR Output Jack
- ⑩ 1/4inch Mix Output Jack
- ⑪ Balanced Mix Output Jack
- ⑫ DC Power Input Jack
- ⑬ Antenna jack A

The 3 position Squelch Adjustment helps to prevent extraneous RF from being picked up and turned into audio when the transmitter is off. The higher level will reduce the useable distance of the transmitter from the receiver. Use the lowest setting to keep the receiver quiet when the transmitter is off.

Troubleshooting

Tips for Improving System Performance

- Maintain a line of sight between transmitters and antennas.
- Avoid placing the receiver near metal surfaces or any digital equipment (CD players, computers, etc).
- Keep the receiver away from the wall and at least 1m from the ground.
- Cellular telephones and two-way radios can interfere with the operation of wireless systems.
Do not use these devices in close proximity to the wireless systems.

Troubleshooting

Issue	Indicator Status	Solution
No sound or faint sound.	Transmitter LCD off.	Turn on transmitter. Make sure the batteries are installed correctly.
	Receiver LCD off.	Make sure AC adapter is securely plugged into electrical outlet and into DC input connector on rear panel of receiver.
	Receiver indicates RF.	Increase receiver volume. Make sure Gain adjustment switch on the transmitter is set correctly (applies only to MBP76 Bodypack.)
	Receiver indicates No RF, Transmitter LCD is on.	Make sure Transmitter and Receiver are set to the same frequency. Make sure Transmitter is in range of Receiver. Make sure no large metal objects are near Transmitter or Receiver.
	The battery power indicator light on LCD flashes.	Change the batteries in transmitter.
Distortion or unwanted noise.	Receiver Indicates RF.	Remove nearby sources of RF interference (CD players, computers, in-ear monitor systems, etc.)
Distortion level increases gradually.	Transmitter power indicator light flashing on the LCD.	Replace Transmitter batteries.
Sound level different from cabled guitar or microphone, or when using different guitars.		Adjust Transmitter Gain and Receiver Volume as necessary.

System

Frequency Range: CODE D 584~607 MHz
CODE L 655~679 MHz

Transmitter Output level: 10 dBm

Band: UHF

Operating Range Under Typical Conditions: 300'

Note: actual range depends on RF signal absorption, reflection, interference, and battery characteristics.

Audio Frequency Response (+/-3dB):
60Hz~16kHz

Total Harmonic Distortion (+/-30kHz deviation, 1KHz tone): <1%

Dynamic Range: >90dB A-weighted

Operating Temperature Range:
14°F to 122°F (-10° C to +50° C)

Bodypack Transmitter:

Max Audio Input Level:

0 dBV maximum at mic gain position.
+10 dBV maximum at 0 dB gain position.
+20 dBV maximum at 10 dB gain position.

Gain Adjustment Range: 30dB

Input Impedance: 470kΩ

Dimensions: 3.5" x 2.6" x 1"
(89mm H x 65mm W x 24mm D)

Weight: 3.0oz (85 g) (without batteries)

Power Requirements:
2 "AA" Batteries alkaline or rechargeable batteries

Battery Life:
About 6 hours

Handheld Transmitter:

Max Audio input level: 0dBV

Dimensions: 9.5" x 2.1" dia.
(242mm x 54mm dia.)

Weight: 10.6oz (300 g) (without batteries)

Power Requirements: 2 "AA" size alkaline or rechargeable batteries

Battery Life: About 6 hours

Shockmount Transmitter:

Number of Channels: 16

Number of Simultaneous Systems:

4-8 across multiple bands

Carrier Frequency Bandwidth: Code D 584-607 MHz
Code L 655-679 MHz

Operating Range : 150'

Number of Inputs: 1

Type of Connections: XLR/F

Indicators: Low battery LED

Frequency Response: 60Hz~16kHz

SNR: 102dB (a)

THD+N: <1%

RF Power: 10 mW

Phantom Power: 4VDC

Power Requirements: 2 "AA" size alkaline or rechargeable batteries

Power Consumption: 110mA

Weight: 1.55 lbs (without batteries)

Receiver:

Audio Output Level (+/-30kHz deviation, 1kHz tone): XLR connector (into 600Ω load) -12dBV
¼" connector (into 3kΩ load) -18dBV

Output Impedance: XLR connector 200Ω
¼" connector 1kΩ

XLR output: Impedance balanced

Pin1: Ground (cable shield)

Pin2: Audio

Pin3: No Audio

Sensitivity: -93dBm for 30dB

Image Rejection: >90dB

Dimensions: 1.7" x 8.3" x 6.3"
(44mm H x 212mm W x 160mm D)

Weight: 31.75oz (900 g)

Power Requirements:

12-18 V dc at 1000mA, supplied by external power supply.

Accessories and Replacement Parts

Many of these parts and accessories may be found and purchased from the Galaxy Audio website in either the Galaxy Store (www.galaxyaudio.com/store.php) or in the accessories tab of each products web page.



AS-EXTBNC - BNC Connector and Cable for front mounting the antennas on the DHTQUAD.



AS-ANTBNC - Replacement BNC Antenna for use with Galaxy Audio Wireless Personal Monitors and Wireless Microphones.



WMC-CGR - DC Charger for AS-1500R, HH64, HH64SC, & MBP76. Charges 2 body packs or handhelds at once.



MC-L - Wireless Microphone Clip



MC-SC - Spring Loaded Microphone Clip



AS-CLIP911R - Replacement Belt Clip for AS-900, AS-1100, MBP52, & MBP64



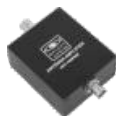
AS-CLIP1576 - Replacement Belt Clip for AS-1500 & MBP76



AS-UA12-14.5 - Universal Power Supply for Replacement Power Supply for AS-900, AS-1100, AS-1500, VES, VSC, ECD, ECM, PSE, TRC, DHT, DHTQUAD, & CTS. Includes adapters for most other countries.



PS-13.5-.35.5 - Replacement Power Supply for AS-900, AS-1100, AS-1500, VES, VSC, ECD, ECM, PSE, TRC & DHT.



ANT-AMPMIC - Antenna Amplifier utilizes phantom power and a low noise design which covers all UHF frequency points from 500mHz to 900mHz. Metal construction, requires phantom power (9VDC), 50 ohm input/output impedance.



ANT-PDL - Directional antenna used to decrease interference to other equipment. Frequency range 500-900MHz The UHF wide-band (500-900 MHz) directional LPDA (log periodic dipole array) antenna reduces outside interference while providing increased send/receive signal range. Each antenna paddle is matched to 50 ohms impedance with a low-loss BNC connector; 7dBi gain. For permanent or temporary installation; mounts to 5/8"-27 threads.

DHTRQUAD FREQUENCY CHART

D-BAND										
Channel	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8	Group 9	Group 10
1	584.400	585.250	584.200	585.775	585.100	584.425	584.700	585.550	584.500	586.075
2	587.500	586.500	585.675	586.500	587.225	586.400	587.800	586.800	585.975	586.800
3	589.575	588.225	586.800	590.200	588.550	589.425	589.875	588.525	587.100	590.500
4	591.050	590.725	588.450	591.600	590.575	591.475	591.350	591.025	588.750	591.900
5	593.425	592.350	589.750	592.700	592.900	593.775	593.725	592.650	590.050	593.000
6	595.200	593.550	592.200	594.250	596.500	597.675	595.500	593.850	592.500	594.550
7	598.450	597.800	594.325	595.500	597.750	599.800	598.750	598.100	594.525	595.800
8	599.650	598.575	598.225	599.100	599.300	602.250	599.950	598.875	598.525	599.400
9	601.275	600.950	600.525	601.425	600.400	603.550	601.575	601.250	600.825	601.725
10	603.775	602.425	602.575	603.450	601.800	605.200	604.075	602.725	602.875	603.750
11	605.500	604.500	605.600	604.775	603.500	606.325	605.800	604.800	605.900	605.075
12	606.750	607.600	607.575	606.900	606.225	607.800	607.050	607.900	607.875	607.200

L-BAND										
Channel	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8	Group 9	Group 10
1	655.400	656.250	655.200	656.775	656.100	655.425	655.700	656.550	655.500	657.075
2	658.500	657.500	656.675	659.500	657.225	657.400	658.800	657.800	656.975	659.800
3	660.575	659.225	657.800	661.200	659.550	660.425	660.875	659.825	658.100	661.500
4	662.050	661.725	659.450	662.600	661.575	662.475	662.350	662.025	659.750	662.900
5	664.425	663.350	660.750	663.700	663.900	664.775	664.725	663.650	660.050	664.000
6	666.200	664.550	663.200	665.250	667.500	668.675	666.500	664.850	663.500	665.550
7	669.450	667.800	665.325	666.500	668.750	670.800	669.750	668.100	665.525	666.800
8	670.650	669.575	669.225	670.100	670.300	673.250	670.950	669.875	669.525	670.400
9	672.275	671.950	671.525	672.425	671.400	674.550	672.575	672.250	671.825	672.725
10	674.775	673.425	673.575	674.450	672.800	676.200	675.075	673.725	673.875	674.750
11	676.500	675.500	676.600	675.775	674.500	677.325	676.800	675.800	676.900	676.075
12	677.750	678.600	678.575	677.900	677.225	678.800	678.050	678.900	678.875	678.200

FCC Consumer Alert for Wireless Microphones (U.S.)

Most users do not need a license to operate this wireless microphone system. Nevertheless, operating this microphone system without a license is subject to certain restrictions: the system may not cause harmful interference; it must operate at a low power level (not in excess of 50 milliwatts); and it has no protection from interference received from any other device. Purchasers should also be aware that the FCC is currently evaluating use of wireless microphone systems, and these rules are subject to change.

For more information, call the FCC at 1-888-CALL-FCC (TTY: 1-888-TELL-FCC) or visit the FCC's wireless microphone website at www.fcc.gov/cgb/wirelessmicrophones

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USER'S MANUAL

Specifications in this manual are subject to change without notice.
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