All ECM systems include the following components:
- ECMR Receiver
- One 1/4" Audio Cable
- Power Adapter
- Quick Start Guide

1/4" to 1/4" Audio Cable

PS-13.5-.35.5 Power Adaptor

Quick Start Guide

Handheld Microphone Systems:
HH52 Handheld Transmitter

Lavalier/Headset/Guitar Systems:
MBP52 Body Pack Transmitter
Microphone (choice of Lavalier, Headset, or Guitar Cable)

HH52

MBP52

Replacement parts can be purchased at www.galaxyaudio.com

AS-CLP911R Belt Clip for MBP52

BATTCOVER11005264 Battery Cover for MBP52

WS-GR52 Mesh Grill Cover for HH52
Front Panel

1 Channel Display.
Displays selected Channel.

2 Channel select button

3 IR Window.
Unit sends Infrared Signal to the Transmitter through this Window for Frequency Synchronization.

4 ASC Synchronizing Signal Transmit Button.
Press this Button to establish Infrared connection between the Receiver and Transmitter.

5 RF Signal LED

6 Audio LED. Indicates a peak Audio Signal.

7 Audio Output Level Control.
Left turn for Output Level Decrease, right turn for Output Level Increase.

Rear Panel

1 AF Audio Output.

2 Power Adapter Jack.

3 AF Output fine adjustment of Mute Threshold Level.
This is factory set and usually does not need to be adjusted.
If interference signals are present, this Threshold Value can be Increased by turning the knob Clockwise until RF Signal LED goes out.

4 ¼" Audio Output.
HH52/HH52SC Handheld Transmitter

Functions:

1. Microphone Head.

2. Gain (Sensitivity) Control.
   Turn Left to Decrease Sensitivity.
   Turn Right to Increase Sensitivity.

3. RF Power Level Switch.
   H for High Level RF Power.
   L for Low Level RF Power.

4. IR Window.
   Receives Infrared signal to synchronize frequencies between Receiver and Transmitter.

5. Battery Tray.

6. Power/ASC/Low Battery Indicator.
   Green: Power On.
   Flashing Green: IR Transmission in progress.
   Red: Batteries Low.

7. Power On/Off Switch.

Changing Batteries:
Unscrew cover to access the Battery Tray. Observe correct polarity markings when installing Batteries.
Expected life for two alkaline batteries is about 8 hours.
Functions:

1. Antenna.

2. Input Gain Switch.
   There are three Gain settings. Select the setting most suitable to your application.
   Mic.: Microphone Level.
   0: Guitar Level.
   -10dB: Line Level.

3. Power/Low Battery/IR Transmission LED.
   Green: Power On, Batteries OK.
   Flashing Red: Low Batteries.
   Flashing Green: IR transmission in Progress.

4. 3-pin Input Jack.

5. Power Button.
   Press and Hold to switch Power On/Off.

6. ASC Automatic Frequency Synchronization.
   Press this button to establish Infrared connection between the Transmitter and Receiver.

7. IR Window.
   This window receives the Infrared signal during ASC.

How to Wear the MBP52 Transmitter:
Slide the transmitter clip onto the belt ①, or run a guitar strap through the transmitter clip ②, as shown in the diagram at left.

Battery Replacement:
Slide open the Battery Door as shown. Install Batteries while observing correct polarity markings.

The life expectancy of two alkaline batteries is about 8 hours.
ECM Receiver Setup:
Group and Channel Selection
Press Channel UP or Channel DOWN buttons to select desired Channel. For best results when operating multiple systems, set every channel to achieve the maximum distance between channels.

Receiver Volume Control:
Turn Left for Output Level decrease, turn Right for Output Level increase.

Mute Level Threshold Adjustment:
The Mute Level is factory set and normally needs no adjustment. However, you may turn clockwise if interference is present.

Automatic Transmitter Setup (ASC):
Remove the access cover on the Handheld Transmitter. Point the IR Window of the Handheld towards the IR Window on the Receiver and press the ASC button.

Point the MBP52 Body Pack IR Window towards the Receiver IR Window, then press the ASC buttons on both the Transmitter and Receiver.

The Receiver transmits sync frequencies for 25 seconds each time you press the “ASC” button.

Whenever the ASC button on the MBP52 is pressed, the synchronizing signal will be transmitted continually for 25 seconds.

Note: When establishing infrared connection between the receiver and the transmitter, the distance between them should not exceed 1.64ft (0.5m). When more than one system are used, only IR window of one transmitter should be pointed to the receiver for each infrared connection.
**Specifications**

**ECM System**
- Available Channels: 16
- Frequency Range: CODE D 584–607 MHz
  - CODE N 518–542MHz
- Transmitter Output Level: 10 dBm
- Band: UHF
- Operating Range Under Typical Conditions: 200’ (61m)
  - Note: actual range depends on RF signal absorption, reflection, and interference.
- 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)
  - Note: battery characteristics may limit this range

**ECMR Receiver:**
- Audio Output Level: (+/-30KHz deviation, 1KHz tone)
- XLR connector (into 600Ω load) -12dBV
- 1/4” connector (into 3Ω load) -18dBV
- Output Impedance: XLR connector 200Ω
  - 1/4” connector 1KΩ
- XLR output: Impedance balanced
- Pin1: Ground (cable shield)
- Pin2: Audio
- Pin3: No Audio
- Sensitivity: -93dBm for 30dB
- Image Rejection: >90dB
- Dimensions: 1.75” x 9.25” x 4.75” (44.45 x 235 x 121 mm)(HxWxD)
- Weight: 0.65 lb (0.39 kg)
- Power Requirements: 13.5 V dc at 300mA, supplied by external power supply.

**MBPS2 Bodypack Transmitter:**
- Audio Input Level: 0 dBV to +10dBV
- Gain Adjustment Range: 20dB
- Input Impedance: 5KΩ
- Dimensions: 3.3” x 2.6” x 1” (85 x 65 x 24 mm) (HxWxD)
- Weight: 3 oz (85 g) (without batteries)
- Power Requirements: 2 AA Batteries alkaline or rechargeable batteries
- Battery Life: About 8 hours

**HH52 Handheld Transmitter:**
- Max Audio input level: 0dBV
- Dimensions: 9.8” x 2.1” (250 x 53 mm)(LxDia.)
- Weight: 9.5 oz (270 g) (without batteries)
- Power Requirements: 2 “AA” size alkaline or rechargeable batteries
- Battery Life: About 8 hours

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**DTV Frequency Ranges & FCC Consumer Alert**

**Wireless Tips**
- Maintain line of sight between the transmitter and receiver antennas.
- Do not have walls, metal objects, large crowds, etc. blocking the line of sight between the transmitter and receiver.
- Antennas on the stationary equipment should be kept several feet above the ground.
- Antennas can be mounted on stands or walls using brackets such as the ANT-LB.
- On body pack receivers/transmitters, avoid putting them in your pocket, and/or folding the antenna under the pack. The antenna should hang freely and openly.
- Keep the distance between transmitters and receivers as short as possible.
- If distances above 20-30’ are unavoidable, directional antennas such as the ANT-PDL can improve reception by rejecting signals outside their pickup angle.
- Find out what TV stations are broadcasting in your area and avoid the channels they are on.
- This information is available from many sources on line, such as www.tvfool.com.
- If your receiver is showing that it is receiving RF when your transmitter is turned off, you need to move to another frequency.
- If you are using several systems, you can contact service@galaxyaudio.com for assistance in frequency coordination.
- Make certain you are using fresh batteries, rechargeable batteries may be used, but they discharge at a much faster rate than alkaline.
- The frequencies of the Galaxy UHF Wireless Systems are on frequencies that are used by Digital Television stations.
- To be assured of the best performance, you should determine on what RF channels the DTV stations in your area are broadcasting, then set your wireless systems on frequencies that are not being used.
- You can find that information on this FCC web site: [https://www.fcc.gov/media/engineering/dtvmaps](https://www.fcc.gov/media/engineering/dtvmaps)
- Enter the zip code of the location where the wireless system will be used into the location search bar. A list of stations in that area will be listed. Click on the call sign of the stations and the details will appear, showing you the RF channel the TV station is using. Compare these with the chart to the left, and using the Galaxy frequency charts on page 5, find a frequency that is not on an active DTV RF channel.
- For example, if you have a L-Band ECMR and your location has DTV stations on RF channels 45 and 48, you will want to set your ECMR on a frequency that is on RF channel 46 or 47.

**FCC Consumer Alert for Wireless Microphones (U.S.)**
- Most users do not need a license to operate this wireless microphone system. Nevertheless, operating this microwave 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
THREE YEAR LIMITED WARRANTY

WARRANTY Information can be viewed online at
https://www.galaxyaudio.com/support/warranty

ECM
USER'S MANUAL

Specifications in this manual are subject to change without notice.
For the most up to date manual and information
visit www.galaxyaudio.com.

1-800-369-7768    www.galaxyaudio.com

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