

# PA6SR

# WIRELESS

# USER'S GUIDE



Wireless Handheld AS-TVHH



Wireless Handheld AS-TVHHC



Wireless Body Pack AS-TVMBP

## OPTIONAL ACCESSORIES

WIRELESS HANDHELD, WIRELESS BODY PACK, & STAND ALONE TRANSMITTER



Rack mount or stand alone Transmitter AS-TXRM

# Contents

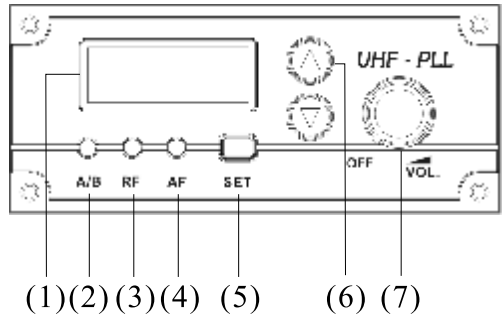
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# Introduction

This User's Guide covers the operation of the wireless Microphone/Audio Link Receiver module (AS-TVREC) as installed in the PA6SR. This manual also covers the optional transmitters including the AS-TVHH/TVHHC Handheld Mic, the AS-TVMBP Body Pack and the AS-TXRM Stationary Transmitter. Please read all instructions carefully before using. For more information and updates please visit [galaxyaudio.com](http://galaxyaudio.com)

# Wireless Microphone/Audio Link Receiver (AS-TVREC)

1. LCD display
2. A/B diversity indicator
3. RF indicator
4. AF level indicator
5. Channel Set
6. Channel selector
7. Power switch & mic. volume



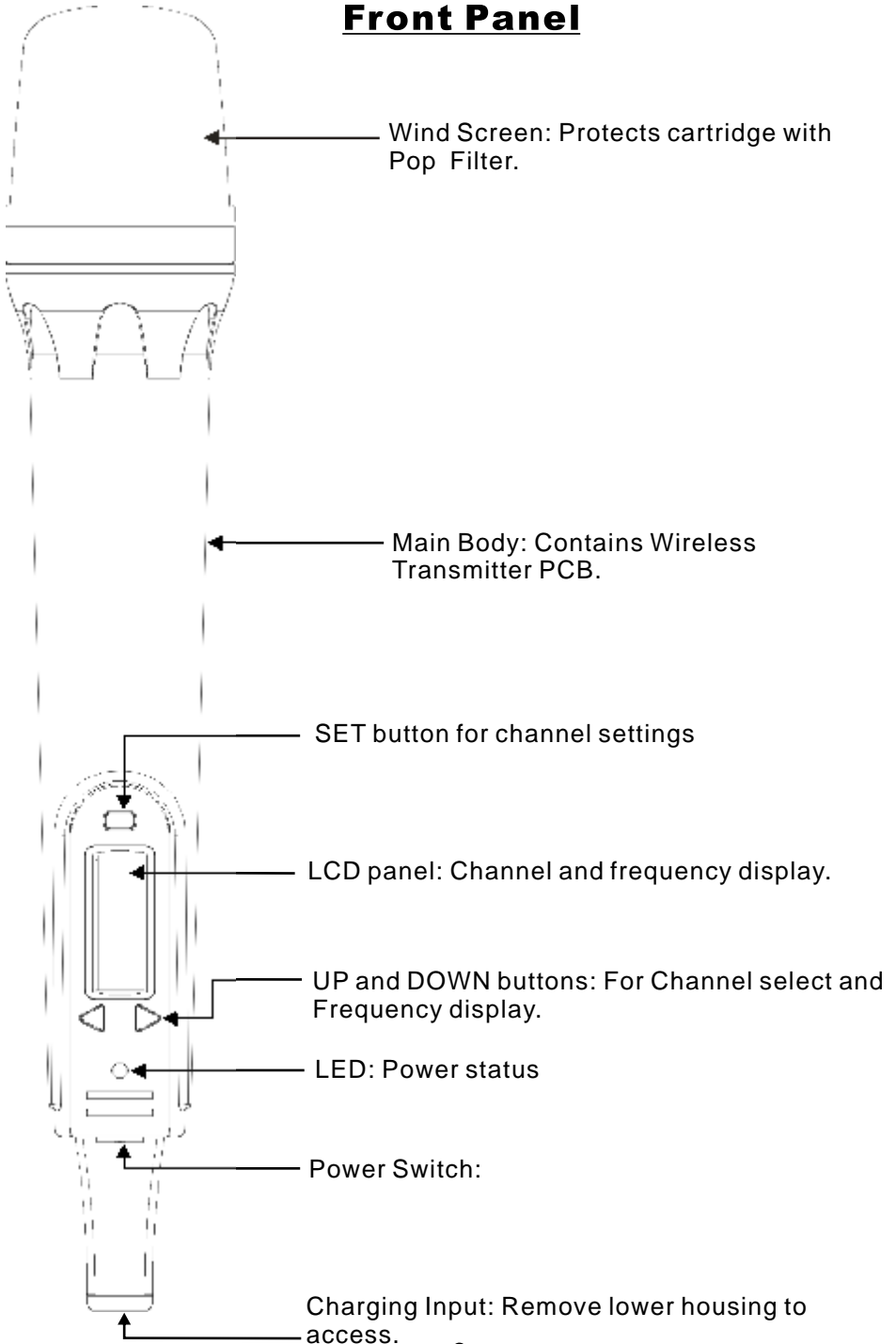
## Wireless Mic/Audio link Receiver (AS-TVREC)

This system includes one receiver module with selectable PLL 96 channel operation. This module receives signals from wireless Mics or from the stationary transmitter.

1. Switch on the PA6SR and turn the power switch **(7)** clockwise to turn on the receiver.
2. The LCD display **(1)** will show "On" and the channel that was last in use when the unit was turned off.
3. To select a different channel, press the set button **(5)**. The channel number will flash in the LCD display. Press the up or down button **(6)** to select a channel to use, and then press the set button. After a channel has been set, press either the up or down button to display the frequency of the selected channel.
4. Adjust the volume control to the desired level. (See transmitter setup on following pages.)
5. When receiving signal, the A/B diversity indicator **(2)** will light RED or Green to show the normal condition. The RF indicator **(3)** will light to show RF received and the AF indicator **(4)** will show audio received.

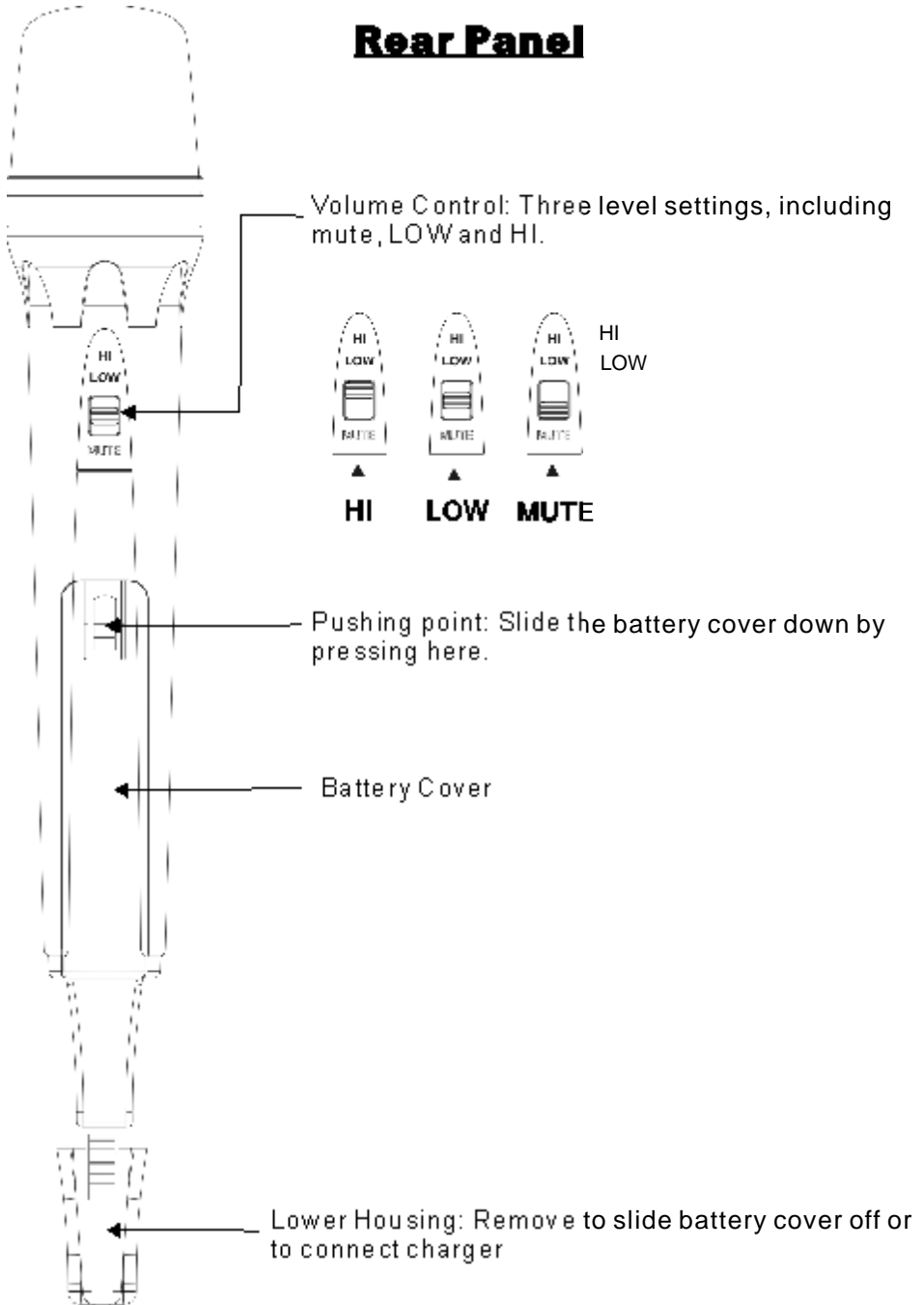
# Description of Functions for Handheld Microphone AS-TVHH/TVHHC

## Front Panel



# Description of Functions for Handheld Microphone AS-TVHH/TVHHC

## **Rear Panel**




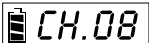
# Operation of Handheld Microphone AS-TVHH/TVHHC

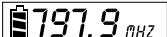
## A. Battery Installation Steps:

1. Turn off the microphone before inserting batteries.
2. Press in the latch to release the lower housing and slide it off.
3. Press in the latch to release the battery cover and slide it down.
4. Insert 2 disposable batteries of 1.5V type or 2 rechargeable batteries of 1.2V type.
5. Observe proper polarity while inserting batteries.
6. Slide the battery cover back to its original position.
7. Install the lower housing back to the lower part of the microphone.

## B. Switch-On Steps:

1. Press the power switch and hold for about two seconds until the LED turns to RED and "on" is displayed in the LCD. 
2. The LCD will then automatically display the selected channel.

 :Channel indicator.

 :Press and hold the Up or Down button to display the corresponding frequency.

## C. Switch Off steps:

1. Press and hold power switch for about two seconds until the LCD displays OFF.

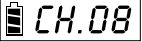
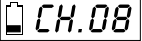
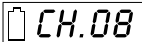


## D. Channel/Frequency Settings (with power on):

1. Press the SET button and hold for about 2 seconds.
2. The Channel number display will start flashing.
3. Press the Up button to display a higher numbered channel.

4. Press the Down button to display a lower numbered channel.
5. Press the SET button to activate the selected channel.

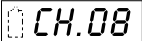
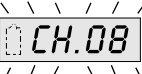
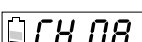
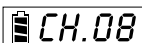
## E. LCD Indications:

1.  :Three bars means batteries are fully charged.
2.  :One bar indicates low batteries. Replace or recharge the batteries.
3.  :No bars showing indicates batteries are exhausted and after flashing three times the power will automatically shut off.

## F. Battery Charging Steps:

1. Rechargeable batteries need to be NiMH AA 1.2V with an amperage of 2100mAH or less as the charging function is limited to batteries of that rating.
- 2.Recharging is best accomplished by using the AS-DCTVHH charger

## 3. Charging status:

- a.  Battery indicator flashing: Non-Rechargeable batteries installed or no batteries installed. Check the batteries.
- b.  Battery indicator is flashing and LCD backlight is on: Failing, corroded, or over-temperature batteries.
- c.  One or two bars showing: Batteries are charging successfully.
- d.  Three bars showing: Batteries have been fully charged.

\* Please note the microphone will be turned off automatically while it is being charged.



## G. Troubleshooting:

### 1. LED doesn't light when power switch is pressed to turn on mic.

- a. Make sure that the batteries are not discharged.
- b. Make sure that the batteries are installed correctly.

### 2. LCD shows Err when power switch is pressed to turn mic off.

- a. Press the SET, UP and DOWN buttons at the same time in order to turn the microphone off automatically. The LCD display will flash about ten times and then the microphone will turn off automatically. The microphone should now turn on and off normally.
- b. If the problem persists, call for service.

### 3. LCD panel shows unusual indications.

- a. Remove the batteries from the microphone and re-install them.

### 4. No audio from microphone.

- a. Check that the frequency of the transmitter is the same as that of the receiver.
- b. Make sure that the Mic switch is not set to Mute.
- c. Check if the distance between the transmitter and the receiver is too great.
- d. Check if the transmitter or the receiver is too close to any large metal objects.

### 5. Interference and signal Disturbance.

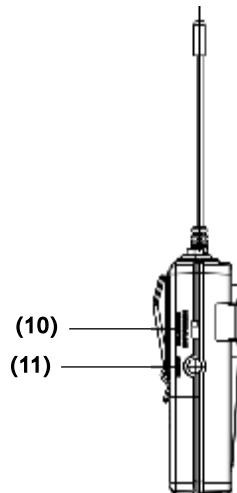
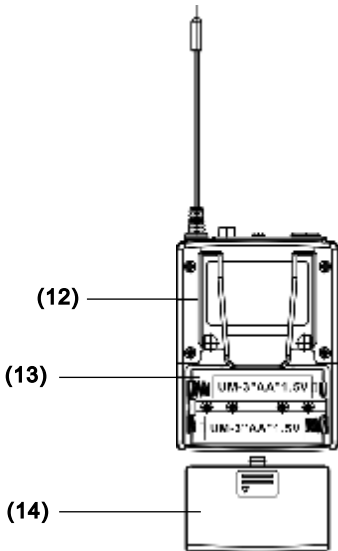
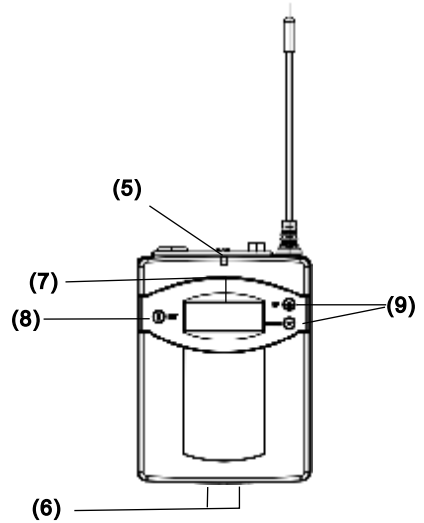
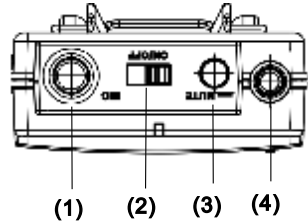
- a. Make sure there are no other wireless systems operating on the same frequency in the same area. This includes Microphones, televisions, radio stations, etc. Try setting the transmitter and receiver to a new channel.

## H. Q&A

1. **Q:** How long can the microphone be operated with fully charged batteries?  
**A:** Re-chargeable batteries will last approximately 8 to 10 hours. Disposable batteries will last approximately 13 hours.
- Q:** How much time is required to recharge batteries from a fully exhausted state?  
**A:** Approximately 4 to 5 hours.

# Description of Functions for Body Pack Transmitter AS-TVMBP

1. Mini XLR Mic input jack (TA3M)
2. Power switch
3. Mute button
4. Antenna
5. Power light
6. Charging Jack
7. LCD light
8. Set button
9. Channel select button
10. Sensitivity control
11. 3.5mm aux input jack
12. Belt clip
13. Battery compartment
14. Battery cover



# Operation of Bodypack Transmitter

## A. Battery Installation:

1. Switch the transmitter off before inserting batteries.
2. Slide the battery cover off.
3. Insert 2 disposable batteries (1.5V AA) or 2 rechargeable batteries (1.2V AA).
4. Observe correct polarity when inserting batteries.
5. Slide the battery cover back to its original position.

## B. Turning unit on:

1. Switch the power to ON position

2. The RED LED will light and the LCD will display "On".

The image shows a rectangular LCD display with the word "On" in a bold, black, sans-serif font.

Battery status and channel will then appear.






If no other operation is performed, LCD light will go off automatically in 5 seconds.

## C. Channel/Frequency Settings:

1. Press and hold the SET button for approximately 2 seconds until the channel number flashes.
2. Release the SET button and the current channel will keep flashing
3. Press the UP or DOWN buttons to select a different channel.
4. When the desired channel is displayed press the SET button again. The display will stop flashing and stay on the channel selected.
5. Press and hold the UP or DOWN buttons to display the frequency associated with the channel number selected.

## D. LCD Indications:

1.  Batteries fully charged and channel 08 selected.
2.  One bar displayed indicates low-battery. The batteries need to be changed or rechargeable batteries need to be recharged.
3.  No bars displayed indicates the batteries are exhausted and after flashing three times, the power will automatically shut off.

## E. Battery Charging Steps:

1. Insure that the batteries are the rechargeable type.
2. Switch Power to OFF position.
3. Insert AS-TVMBP into its own intelligent charger stand (AS-DCTVMBP).
4. Batteries will recharge automatically.
5. For more details of charger stand please refer to AS-DCTVMBP user guide.

## F. Turning the unit OFF:

1. Slide the power switch to the OFF position.

2. LCD display will show "OFF"



**OFF**

If there is no further operation, the Power LED and LCD will switch off automatically.

## G. Troubleshooting

1. No LCD display when the unit is switched on.
  - a. Make sure the batteries are not discharged.
  - b. Make sure the batteries are installed correctly.
2. LCD shows Err when switched on.
  - a. Switch power OFF, repeat steps for turning unit on.
  - b. If the problem persists, call for service
3. No Audio from Transmitter.
  - a. Check that the Transmitter and Receiver are on the same channel.
  - b. Check if "MUTE" is activated.
  - c. Check if the volume control of the receiver is set to a proper position.
  - d. Check if the Transmitter and Receiver are within the operating distance range.
4. Interference and signal disturbances.
  - a. When two Transmitters are being used, select different frequencies. If voice disturbance still occurs try selecting another channel until interference is gone.
  - b. Make sure there are no other wireless systems operating on the same frequency in the area. This includes other wireless microphones, television or radio stations, etc. Try setting the Transmitter and Receiver to a new channel.

# Maintenance

## Avoid Excessive Heat

Don't leave transmitter or receiver in hot sun, on a radiator, or near other sources of high temperature.

## Avoid Rough Handling

The transmitter and receiver may be damaged if dropped.

## Storage

Before storage, fully charge the batteries in both transmitters and receivers. If possible, recharge once a month during storage and again before first use.

## Storage (Long term)

Remove the internal batteries when storing the units for a long period of time.

## Replacing Batteries

Observe the correct polarity when installing batteries. Replace batteries only with the same or equivalent type.

## Battery Terminals

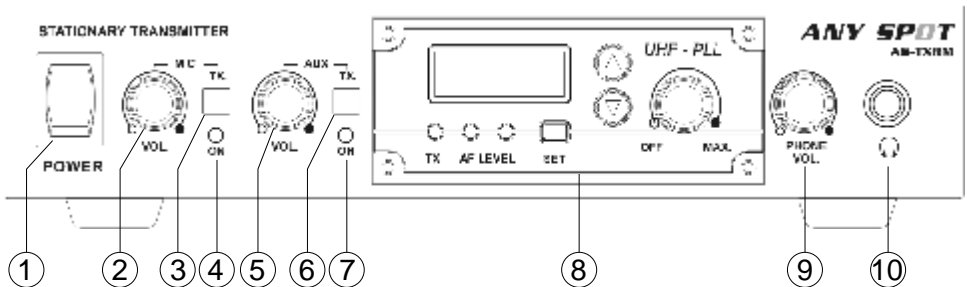
Keep the contacts clean and inspect them often to insure they are not corroded. If they become corroded, polish them with a pencil eraser.

# AS-TXRM Stationary Transmitter

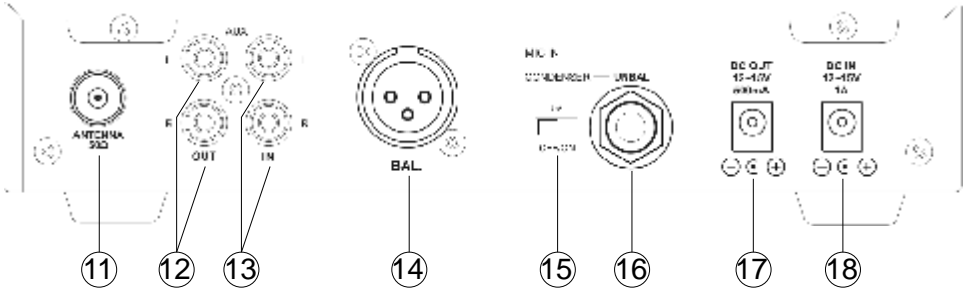
The AS-TXRM is a stand alone version of our AS-TVTX Audio Link Transmitter module. The module is housed in a standard half-rack sized enclosure, and includes a variety of inputs and outputs as well as mixing controls. The TXRM is great for transmitting the entire mix from a mixing console to one or more Powered speakers equipped with wireless receivers.

## TXRM Stationary Transmitter

### Front Panel



## Rear Panel



- |                        |                          |
|------------------------|--------------------------|
| 1. Power Switch w/ LED | 10. Headphone Output     |
| 2. Mic Volume          | 11. Antenna Connector    |
| 3. Mic On/Off Switch   | 12. L/R Aux Outputs      |
| 4. Mic On LED          | 13. L/R Aux Inputs       |
| 5. Aux Volume          | 14. Balanced Mic Input   |
| 6. Aux On/Off Switch   | 15. 5v DC Mic Switch     |
| 7. Aux On LED          | 16. Unbalanced Mic Input |
| 8. Transmitter Module  | 17. 12-15v DC Output     |
| 9. Headphone Volume    | 18. 12-15v DC Input      |

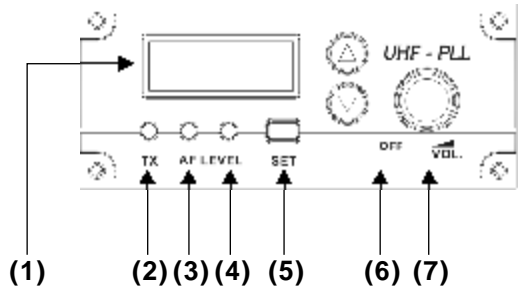
### Setup and Operation of TXRM (See Page 11)

- Starting with both the main power switch off (1) and the transmitter (8) power switch off, plug the included power supply into the DC In jack (18), and then plug the other end into an AC outlet. Connect the supplied antenna to the Antenna Jack (11).
- Set all volume controls (2), (5), & (9) to the minimum. Set the input TX switches (3) and (6) to off, and then switch on the power (1).
- Connect the desired source devices (such as a microphone or line output of a mixer) to the appropriate TXRM inputs. The XLR input (14) will accept balanced mic level signals. The 1/4" input (16) will accept unbalanced mic level signals, and provide 5v DC to condenser mics when desired, by activating the switch (15). These two inputs are controlled by the Mic Volume (2) and TX switch (3). The L/R Aux Inputs will accept a stereo line level signal, and are controlled by the Aux Volume (5) and TX switch (6). When the TX switches (3) and (6) are engaged, the respective LEDs (4) and (7) will light, indicating that the input signal is being sent to the Transmitter Module (8) and the L/R Aux Output jacks.
- Switch on the Transmitter Module (8) and set it according to the Audio Link System instructions provided on page 13.
- Set the receiver(s) according to the Wireless Mic Receiver instructions provided on page 2.
- Start sending a signal from the source device and set various volume controls (in the signal chain from the source to the receiving device) to the desired levels. It is important to set the gain structure properly to achieve the best signal to noise ratio. Normally you will want to set

- the output of the source as high as possible without causing distortion to the input of the following device, and so on down the line.
7. Signals sent to the L/R Aux Input will appear at the Headphone Jack (10) and be controlled by the Phone Volume (9). Note: Signals from the Mic Inputs (14) and (16) do not appear at the Headphone Jack.
  8. The DC Output Jack (17) supplies 12v DC for charging or powering other devices. Make sure any device connected to this jack complies with the voltage and current rating listed for this jack.

## Audio Link Transmitter Module

1. LCD display
2. TX indicator
3. Low audio level indicator
4. High audio level indicator
5. Enter Setting
6. Channel selector
7. Power switch and volume control



## Audio Link Transmitter Module

This module transmits the entire audio mix from one location to another device equipped with a wireless Mic/Audio Link Receiver.

1. Turn the power switch **(7)** clockwise to turn on the transmitter.
2. The LCD display **(1)** will show "On" and the channel in use when the unit was last turned off.
3. To select a different channel, press the set button **(5)** and the channel will flash in the LCD display. Press the up or down button **(6)** to select the transmit channel, and then press the set button again to enter the setting. The LCD will then automatically display the selected channel. To display the frequency of the selected channel press and hold either the up or down button.
4. Turn the volume control **(7)** to adjust the audio transmit level. Use this control in conjunction with the volume controls on the receiving device.
5. When transmitting signal, the TX indicator **(2)** will light Green to show the transmitting condition. The AF Level indicator lights Yellow **(3)** to show a low audio level and lights Red **(4)** to show high audio level.
6. Set up the receiving device according to the procedure outlined in: Wireless Mic/Audio Link Receiver on page 2. Select the same channel chosen on the transmitter.

# Wireless Mic/Audio link Receiver Module

◦ Oscillation type	PLL synthesized control OSC
◦ Adjustable frequency	Pre-programmed max. 96 switchable channels
◦ Switching bandwidth	Max. 12 MHz
◦ Ambient temperature	-10 °C ~ 50 °C
◦ Maximum deviation	50 kHz, with level limiting
◦ Dynamic range	110 dB
◦ T. H. D.	Less than 0.5%
◦ Pre/De- emphasis	50 $\mu$ s
◦ Squelch	Tone key and noise lock dual-squelch
◦ Frequency response	70 Hz ~ 16 kHz (wireless)
◦ Operating range	160 - 230 feet (50 ~ 70 M) (open field) with built-in antenna
◦ Antenna mode	Diversity
◦ Sensitivity	4 $\mu$ V @ 30 dB SINAD
◦ Double intermediate	110.6 Mhz / 10.7 MHz
◦ Display status	LCD indicator displays channel or frequency
◦ Channel select	SET, UP, DOWN keys
◦ RF spurious rejection	70 dB
◦ Adjacent channel performance	68 dB @ 250kHz
◦ IMD rejection	58 dB
◦ Carrier frequency range	640 ~ 664 MHz

Continued on page 15



## Wireless Mic/Audio link Receiver Module (continued)

◦ Antenna	Built-in or external
◦ Dimensions ( L x W x H )	5.25" x 3.46" x 1.45" (133 x 88 x 37 mm)
◦ Weight	3.88 oz. (110 g)

## Audio Link Transmitter Module (used in TXRM)

◦ RF output	10mW
◦ Spurious emission	Less than 250 nW
◦ Display status	LCD indicator displays channel or frequency
◦ Channel select	SET, UP, DOWN keys
◦ Antenna	Built-in or external
◦ Dimensions ( L x W x H )	4.25" x 7.5" x 1.75" (108 x 190 x 44 mm)
◦ Weight	5.99 oz. (170 g)

## Handheld Microphone

◦ Microphone type	Cardioid. Dynamic (HH), Condenser (HHC)
◦ RF output	10mW
◦ Spurious emission	Less than 250 nW
◦ Display status	LCD indicator displays channel or frequency, battery condition
◦ Channel select	SET, UP, DOWN keys
◦ AF controls	Hi/Low/Mute switch
◦ Battery	1.2 V (Ni-MH 1300 mAh) * 2 AA type rechargeable battery 1.5V * 2 AA Alkaline disposable
◦ Battery life Ni-MH rechargeable	11 hours typical
◦ Battery life Alkaline disposable	14 hours typical

Continued on page 16

• Antenna	Built-in
• Dimensions ( Dia x L )	1.8" x 10.4" (46 x 264 mm)
• Weight with battery	9.87 oz. (280 g)

## Bodypack Transmitter

• Microphone Type	Condenser mic.
• RF output	10mW
• Spurious emission	Less than 250 nW
• Display status	LCD indicator displays channel or frequency, battery life
• Channel select	SET, UP, DOWN keys
• AF controls	Mute switch, Hi/Mid/Low switch
• Audio input	Mic in, Aux in
• Battery	1.2 V (Ni-MH 1300 mAh) * 2 AA type rechargeable battery 1.5V * 2 AA Alkaline disposable
• Battery life Ni-MH rechargeable	11 hours typical
• Battery life Alkaline disposable	14 hours typical
• Housing	Aluminium
• Dimensions ( D x W x H )	1.04" x 2.52" x 3.48" (27 x 64 x 88 mm)
• Weight with battery	4.48 oz. (127 g)

# LIMITED WARRANTY

**A RETURN AUTHORIZATION (RA) NUMBER MUST BE OBTAINED** from Galaxy Audio prior to any items being returned to Galaxy Audio for return or repair.

**Galaxy Audio warrants the materials and workmanship of its products as follows:**

**A limited THREE YEAR Warranty applies to the following products:**

1. HOT SPOTS-including HSRG, HSVC, PA6S, & PA6SR
2. MICRO SPOTS-including MSVC, MSPM, MSPA(DC)
3. CRICKET Polarity Test Set
4. JACKS IN THE BOX – including the MULTI MIXER
5. Hot Spot Accessories
6. The TRAVELER SERIES is supported with a 3 year warranty on speaker components and casing, 1 year warranty on wireless and CD/MP3 player components.

**A limited ONE YEAR Warranty applies to the following products:**

1. CHECKMATE Series-including CM130, CM140, CM150, CM160, CM-C200 and accessories
2. ANY SPOT Series-including AS-1000(R)(T), AS-900, 1100, 1500 SERIES, DHT, TRC, PSE, TOUR GUIDE/TRANSLATOR SYSTEMS & WIRELESS CAMERA KITS
3. ANY SPOT Accessories & Components
4. Any units containing a battery will have a **90** day warranty on the battery.

**The following are not covered by the warranty:**

1. Damage to or deterioration of the exterior of the item which occurs after delivery
  2. Damage after initial delivery resulting from accident, misuse or neglect
  3. Damage resulting from failure to follow instructions contained in the owner's manual
  4. Damage resulting from the performance of repairs by someone other than the Galaxy Audio repair department
  5. Damage occurring during the shipment or delivery of any Galaxy Audio product to Galaxy Audio after initial delivery of the product to you.
  6. Damage to any Galaxy Audio product which has been altered or on which the serial number has been effaced or removed.
  7. Damage to or deterioration of the exterior of the item which occurs after delivery
- Galaxy Audio does not authorize any third party including any dealer or Service Center to assume any liability on behalf of Galaxy Audio or to make any warranty for Galaxy Audio

## **DEFECTIVE MERCHANDISE POLICY-WARRANTY**

**A RETURN AUTHORIZATION (RA) NUMBER MUST BE OBTAINED** from Galaxy Audio prior to any items being returned to Galaxy Audio for return or repair. Contact customer service @ **(800)369-7768**.

**The Galaxy Audio warranty policy is to repair and return defective merchandise.** Items under warranty may be replaced at no charge if deemed un-repairable by the Galaxy Audio technician. Proof of purchase may be required to verify warranty status. Customer will be responsible for shipping charges to repair facility, repaired product will be returned shipping prepaid by Galaxy Audio. Freight charges will not be reimbursed. Credit for defective warranty merchandise must have authorization from the Galaxy Audio main office before credit will be issued and will be subject to applicable restock and replacement charges. A twenty (20%) restock fee will apply to warranty items returned for credit. The cost of replacement parts to bring the item back to "like new" condition will also be deducted from credit for warranty items

## **DEFECTIVE MERCHANDISE POLICY-NON WARRANTY**

**A RETURN AUTHORIZATION (RA) NUMBER MUST BE OBTAINED** from Galaxy Audio prior to any items being returned to Galaxy Audio for return or repair. Repair charges are \$30.00 per hour (no minimum) plus parts. Customer will be responsible for all shipping charges. Prepayment is expected if customer is not set up with open account terms in advance. Discounts are not applicable on repairs. Open account terms for repairs will be Net Thirty (30) days. Some items past the warranty time period may qualify for a standard replacement cost. Please contact Galaxy Audio for more information.



**MAKERS OF THE ORIGINAL  
HOT SP●T PERSONAL MONITOR**

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WICHITA, KS 67216-0285**

**(316) 263-2852**

**[www.galaxyaudio.com](http://www.galaxyaudio.com)**

If outside the United States contact your local dealer for warranty details