OPTIONAL ACCESSORIES
WIRELESS HANDHELD, WIRELESS BODY PACK, & STAND ALONE TRANSMITTER

Rack mount or stand alone Transmitter AS-TXRM
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
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**

- **Wind Screen**: Protects cartridge with Pop Filter.
- **Main Body**: Contains Wireless Transmitter PCB.
- **SET button**: For channel settings
- **LCD panel**: Channel and frequency display.
- **UP and DOWN buttons**: For Channel select and Frequency display.
- **LED**: Power status
- **Power Switch**
- **Charging Input**: Remove lower housing to access.
Description of Functions for Handheld Microphone
AS-TVHH/TVHHHC

Rear Panel

Volume Control: Three level settings, including mute, LOW and HI.

Pushing point: Slide the battery cover down by pressing here.

Battery Cover

Lower Housing: Remove to slide battery cover off or to connect charger
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.

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. 📡 CH.08 : Three bars means batteries are fully charged.

2. 📡 CH.08 : One bar indicates low batteries. Replace or recharge the batteries.

3. 📡 CH.08 : 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. 📡 CH.08 Battery indicator flashing: Non-Rechargeable batteries installed or no batteries installed. Check the batteries.

b. 📡 CH.08 Battery indicator is flashing and LCD backlight is on: Failing, corroded, or over-temperature batteries.

c. 📡 CH.08 One or two bars showing: Batteries are charging successfully.

d. 📡 CH.08 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". 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”

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
1. Power Switch w/ LED 10. Headphone Output
2. Mic Volume 11. Antenna Connector
3. Mic On/Off Switch 12. L/R Aux Outputs
6. Aux On/Off Switch 15. 5v DC Mic Switch
8. Transmitter Module 17. 12-15v DC Output

Setup and Operation of TXRM (See Page 11)

1. 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).

2. 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).

3. 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 ¼” 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.

4. Switch on the Transmitter Module (8) and set it according to the Audio Link System instructions provided on page 13.

5. Set the receiver(s) according to the Wireless Mic Receiver instructions provided on page 2.

6. 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.

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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

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Audio Link Transmitter Module

This module transmits the entire audio mix from one location to another device 
equiped 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

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

Continued on page 15
### Wireless Mic/Audio link Receiver Module

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antenna</td>
<td>Built-in or external</td>
</tr>
<tr>
<td>Dimensions (L x W x H)</td>
<td>5.25&quot; x 3.46&quot; x 1.45&quot; (133 x 88 x 37 mm)</td>
</tr>
<tr>
<td>Weight</td>
<td>3.88 oz. (110 g)</td>
</tr>
</tbody>
</table>

### Audio Link Transmitter Module (used in TXRM)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>RF output</td>
<td>10mW</td>
</tr>
<tr>
<td>Spurious emission</td>
<td>Less than 250 nW</td>
</tr>
<tr>
<td>Display status</td>
<td>LCD indicator displays channel or frequency</td>
</tr>
<tr>
<td>Channel select</td>
<td>SET, UP, DOWN keys</td>
</tr>
<tr>
<td>Antenna</td>
<td>Built-in or external</td>
</tr>
<tr>
<td>Dimensions (L x W x H)</td>
<td>4.25&quot; x 7.5&quot; x 1.75&quot; (108 x 190 x 44 mm)</td>
</tr>
<tr>
<td>Weight</td>
<td>5.99 oz. (170 g)</td>
</tr>
</tbody>
</table>

### Handheld Microphone

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

Continued on page 16
<table>
<thead>
<tr>
<th><strong>Antenna</strong></th>
<th>Built-in</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimensions ( Dia x L )</strong></td>
<td>1.8” x 10.4” (46 x 264 mm)</td>
</tr>
<tr>
<td><strong>Weight with battery</strong></td>
<td>9.87 oz. (280 g)</td>
</tr>
</tbody>
</table>

### Bodypack Transmitter

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

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.