

Setting Up and Using The Wireless EarAmp®

8b. In the receiver, turn the Program switch off, then on (towards the "up" arrow) and then, within ten seconds, press and hold the transmitter's front-panel Program button for at least three seconds in order to program the receiver; when correctly programmed, the TX LED on top of the receiver will flash (see Appendix A on page 10 in this manual for more details). Note that the Program switch must always be on (toward the "up" arrow) for correct operation of the receiver.

9. When first setting up the Wireless EarAmp® system in a new environment, it's always a good idea to do a walkaround while experimenting with different frequency settings, observing the receiver's TX LED as you do so. If the light fails to light steadily as you move through the area that needs to be covered, the receiver may be receiving interference and the selected frequency or Group/Channel is probably unsuitable for use. Always pick the Group that has the greatest number of clear Channels and the Channel providing the strongest signal. The basic rule of thumb for successful wireless installations is to always try to minimize the distance between transmitter and receiver as much as possible (though not less than 10 feet) and also to try to maintain "line of sight" between the two (so that the person using the receiver can see the transmitter antenna). You may also be able to improve RF reception by relocating the transmitter or repositioning antennas.

10. Once you've settled on the radio frequency you want to use, it's time to set the audio levels. Turn on your mixer and set the level of the signal you're sending to the transmitter to unity gain (0 vu). Then slowly raise the transmitter's front-panel Input Level control while observing the level meters. For best signal-to-noise ratio, adjust the Input Level control so that the yellow "0" segment lights frequently, with the red "+6" segment lighting only infrequently during the very highest signal peaks. If you have signal connected to the Aux inputs, use a screwdriver to adjust the rear-panel Aux Input control. If you are sending very hot signal to the EarAmp® transmitter, you may need to set either the Main and/or Aux Attenuator switch to "-15 dB." To monitor the signal arriving at the transmitter, either connect a set of headphones to either headphone jack and slowly raise the Headphone Level control or connect the rear-panel Daisy-Chain outputs to an amp and speakers (or a pair of self-powered speakers). If you hear distortion, back the Input Level control off slightly.

11. Set the receiver's 2 CH/Stereo mode switch as desired. In Stereo mode, the two incoming signals are routed to the left and right earbuds, respectively. In 2 CH mode, the two incoming signals are internally mixed to mono and both signals are routed to both earbuds. If the signal to be monitored is mono, set the 2 CH / Stereo switch to the up, "2 CH" position. See Appendix C on page 12 in this manual for more information about the use of 2 CH mode.

12. Start by setting the receiver's Balance control (see #15 on page 7) to its center detented position, and by turning the Loudness switch (see #11 on page 7) off.

13. Connect the supplied earbuds (or third-party earpiece—see Appendix D on page 13) to the receiver's headphone jack (see #10 on page 7) and place them in your ears.

14. Finally, while playing or singing at a normal performance level, slowly turn up the receiver's volume control until you achieve the desired level. **The EarAmp® receiver should always be used at as low a volume as possible. If you hear ringing in your ears, turn down the volume control and operate it at a lower level!**

15. Adjust the Balance control as needed in order to get the best blend of the incoming signals. If necessary, use the supplied screwdriver to adjust the Limiter Level, Bass and Treble trimpots (see #3, 4 and 5 on page 6) in order to optimize the sound you're hearing. If you're operating at low signal levels, turning the loudness control on will help improve legibility.

16. Close the battery door and clip the receiver to your belt.

If you encounter difficulty with any aspect of setting up or using your Wireless EarAmp®, you can call Samson Technical Support (1-800-372-6766) between 9 AM and 5 PM EST.

Appendix A: Setting the Wireless EarAmp® Radio Frequency

The Samson Wireless EarAmp® is extraordinarily frequency-agile, offering more than 128 different radio frequencies and two different modes of operation. In Group/Channel mode, you can access a factory-programmed channel plan (see Appendix B on the following page) that allows you to use up to sixteen different systems together at the same location (assuming all frequencies are available). Alternatively, Frequency mode allows you to directly "dial in" any radio frequency between 614.35 and 662.0 MHz, in 25 kHz increments. Either mode can be used when only one Transmitter (with any number of receivers) is being utilized; however, in locations where more than one Transmitter is used, we strongly advise the use of Group/Channel mode. Note that Group numbers correspond to U.S. TV channel numbers, making it easy to select a known vacant channel.

To set the Wireless EarAmp® radio frequency in Group/Channel mode:

1. Press the transmitter's front-panel CH. (Channel) button (this sets Group/Channel mode).
2. Press the front-panel CH. (Channel) and FREQ (Frequency) buttons simultaneously. The word "Group" in the display will begin flashing.
3. Use the UP/DOWN buttons to select the desired Group, from 38 to 45 (these correspond to U.S. TV channel numbers). Note that, if you make no selection within five seconds, the word "Group" will stop flashing.
4. If the word "Group" is still flashing in the display, press the Channel button to stop it flashing. Use the UP/DOWN buttons to select the desired Channel (from 1 to 16) within the selected Group. The bottom line of the display shows the actual frequency of that Channel (see the Channel Plan in Appendix B on the following page).
5. In the receiver, turn the Program switch off, then on (towards the "up" arrow) and then, within ten seconds, press and hold the transmitter's front-panel Program button for at least three seconds, until the TX LED on the receiver flashes. This confirms that the receiver is set to the same radio frequency as the transmitter.
6. The TX LED in the receiver will always light steadily green when it is correctly set to the same frequency as the transmitter and is receiving pilot tone. If it does not do so, reprogram it (following step 5 above) until you see the TX LED flash.

To set the Wireless EarAmp® radio frequency in Frequency mode:

1. Press the transmitter's front-panel FREQ (Frequency) button (this sets Frequency mode).
2. Use the UP/DOWN buttons to select the desired Frequency, from 614.350 MHz to 662.000 MHz. Each press of the UP/DOWN button increments or decrements the frequency by 25 kHz. Press and hold down the UP or DOWN button to rapidly increase or decrease the frequency.
3. In the receiver, turn the Program switch off, then on (towards the "up" arrow) and then, within ten seconds, press and hold the transmitter's front-panel Program button for at least three seconds, until the TX LED on the receiver flashes. This confirms that the receiver is set to the same radio frequency as the transmitter.
4. The TX LED in the receiver will always light steadily green when it is correctly set to the same frequency as the transmitter and is receiving pilot tone. If it does not do so, reprogram it (following step 5 above) until you see the TX LED flash.

Note that both the transmitter and receiver in the Wireless EarAmp® system always retain their RF settings even after being powered off—in the case of the receiver, even after the battery is removed.

Appendix B: Wireless EarAmp® Channel Plan

Wireless EarAmp® Channel Plan:

(All frequency values are in MHz)

Channel	Group 38	Group 39	Group 40	Group 41	Group 42	Group 43	Group 44	Group 45
1	614.35	620.35	626.35	632.35	638.35	644.35	650.35	656.35
2	616.10	622.10	628.10	634.10	640.10	646.10	652.10	658.10
3	616.50	622.50	628.50	634.50	640.50	646.50	652.50	658.50
4	617.40	623.40	629.40	635.40	641.40	647.40	653.40	659.40
5	619.30	625.30	631.30	637.30	643.30	649.30	655.30	661.30
6	620.00	626.00	632.00	638.00	644.00	650.00	656.00	662.00
7	614.70	620.70	626.70	632.70	638.70	644.70	650.70	656.70
8	615.05	621.05	627.05	633.05	639.05	645.05	651.05	657.05
9	615.40	621.40	627.40	633.40	639.40	645.40	651.40	657.40
10	615.75	621.75	627.75	633.75	639.75	645.75	651.75	657.75
11	617.00	623.00	629.00	635.00	641.00	647.00	653.00	659.00
12	617.80	623.80	629.80	635.80	641.80	647.80	653.80	659.80
13	618.15	624.15	630.15	636.15	642.15	648.15	654.15	660.15
14	618.50	624.50	630.50	636.50	642.50	648.50	654.50	660.50
15	618.85	624.85	630.85	636.85	642.85	648.85	654.85	660.85
16	619.65	625.65	631.65	637.65	643.65	649.65	655.65	661.65