

UHF EarAmp

WIRELESS IN EAR MONITOR



The Samson Wireless EarAmp® is designed to bring professional in-ear monitoring to a wide range of users. By eliminating the need for loud onstage “wedge” monitors, it allows you to hear yourself better, greatly reduces feedback problems, and makes the overall sound coming from the stage significantly cleaner. You’ll find that this portable, lightweight system provides superlative audio quality and extensive control at an extremely affordable price. Capable of operating in both stereo and dual mono “2-channel” mode, the Wireless EarAmp® receiver provides individual volume and balance controls for the best possible mix, separate bass and treble controls to fine-tune the signal, and a built-in adjustable limiter to protect your ears.

The Wireless EarAmp® transmitter also offers a host of advanced features, including stereo/mono operation, dual stereo inputs with independent level controls and 15 dB attenuation pads, dual headphone outputs with dedicated level control, “daisy-chain” input/outputs for routing signal to or from external devices, a large backlit LCD display and a 5-segment audio VU meter—there’s even provision for optional computer remote control! Operating in the 774 - 864.5 MHz range, the Wireless EarAmp® system is extraordinarily frequency-agile, meaning that it can be used virtually anywhere, and a unique automatic programming feature allows the receiver to instantly be set to the same radio frequency as the transmitter, with just a flip of a switch and a push of a button.

UHF EarAmp® Features

- Excellent audio quality, with superior frequency response and low distortion.
- An extraordinary degree of frequency agility. The operating frequency can be selected either by Group and Channel, allowing the use of multiple systems at the same location, or by direct frequency selection (in 25 kHz increments between 774 and 864.5 MHz). This makes the Wireless EarAmp® eminently suitable for traveling performances and allows it to be used in even the most “RF-hostile” urban environments.
- Any number of receivers can be used with a single transmitter.
- Unique automatic receiver program function allows RF resetting at the flip of a switch and a push of a button.
- Country selection feature limits the selection of Groups and Channels to those frequencies actually available.
- PLL synthesized technology minimizes spurious emissions and provides solid, stable performance.
- Convenient belt clip and flesh-colored ear buds for unobtrusive, nearly “invisible” usage.
- Receiver offers dedicated volume and center detented balance controls, along with independent bass and treble controls allowing each user to set up the optimum in-ear mix. There’s even a Loudness switch for improved legibility when operating at low signal levels.

SAMSON
The Wireless Future

UHF EarAmp® Features

- Receiver provides stereo and dual mono ("2 CH") modes for maximum flexibility. In "2 CH" mode, the balance control enables you to adjust the blend of the two incoming signals, which are mixed internally to mono and routed to both ear buds.
- Receiver has a high-powered 200 mW 1/8" headphone output, while the transmitter offers dual 1/4" and 1/8" headphone jacks.
- Built-in adjustable limiter helps protect your ears from transients and signal overloads.
- Receiver utilizes microprocessor true diversity for maximum range, tone key squelch for rejection of spurious signals, and noise reduction for crystal-clear sound.
- Receiver operates on a standard 9-volt battery, with battery life of four hours or more.
- Battery LED indicator shows you when the receiver battery needs to be replaced.
- Unique "daisy-chain" parallel inputs/outputs allow a third signal source to be input or external monitoring of incoming audio signal to the transmitter.
- Transmitter operates in stereo or mono mode, and provides dual inputs (Main and Aux), with adjustable input level for each, as well as a five-segment input level VU meter to allow optimum gain settings. In addition, a large back-lit LCD display also shows the currently selected country, Group/Channel, and radio frequency.
- Switchable 15 dB pad for main and auxiliary inputs allows the Wireless EarAmp® system to be used with a wide variety of signal sources.
- Transmitter is rack-mountable in any standard 19" rack (taking only a single space) for portability and easy integration into existing systems.
- Computer interface allows optional remote control of all transmitter functions via software.
- Rugged construction of all components makes the Wireless EarAmp® eminently roadworthy.

SYSTEM

Frequency Coverage	774.1 to 864.5 MHz
Channels Available	182 in 13 groups, country dependent Direct frequency selection to nearest 25 kHz
RF Range:	Approximately 300 feet (91 m)
System Modulation:	FM, Multiplex Stereo. +/- 50 kHz deviation of main carrier
Noise Reduction:	Samson compandor system
Audio Frequency Response:	40 Hz to 15 kHz
Audio Distortion:	0.8% nominal
S/N Ratio:	> 80 dB (> 50 uV at receiver, stereo or > 15 uV at receiver, mono)
Stereo Channel Separation:	40 dB nominal

TRANSMITTER

RF Output	10 mW ERP
Main Audio Inputs (L & R)	
Connectors	Neutrik Combo (XLR or 1/4" phone) jacks
Impedance	40K Ohms, balanced or 20K Ohms, unbalanced
Attenuator	Switch selected, 0 or -15 dB
Level	-10 dBu nominal, +11 dBu maximum (attenuator out) +4 dBu nominal, +25 dBu maximum (attenuator in)
Daisy-Chain Out (L & R)	
Connectors	1/4" phone jacks
Electrical	Wired in parallel with main audio inputs
AUX Audio Inputs (L & R)	
Connectors	1/4" phone jacks
Impedance	40K Ohms, balanced or 20K Ohms, unbalanced
Attenuator	Switch selected, 0 or -15 dB - dedicated to the AUX inputs
Level	-10 dBu nominal, +11 dBu maximum (AUX attenuator out) +4 dBu nominal, +25 dBu maximum (AUX attenuator in)
Limiter	Limits maximum modulation to comply with regulatory limits Permits overdrive up to 20 dB with low distortion
Power	12 VDC, 500 mA from supplied AC adapter

RECEIVER

Audio Output Power	200 mW / CH, 1% THD into 32 Ohm load, 9 VDC 120 mW / CH, 1% THD into 32 Ohm load, 7 VDC 70 mW / CH, 1% THD into 32 Ohm load, 6 VDC
Audio Output Limiter	Adjustable from > 200 mW to < 50 mW into 32 Ohms
Low Frequency EQ	+/- 10 dB @ 150 Hz
High Frequency EQ	+/- 10 dB @ 5000 Hz
Loudness Switch	Flat or Loudness contour, selectable with slide switch
Battery Requirement	7 VDC to 9 VDC for full spec operation up to 120 mW audio output 6 VDC to 7 VDC for reduced spec operation 9 V Alkaline or Alkaline Plus (Duracell MN1604 - Ultra is suggested)
Low Battery LED	Illuminates when voltage drops below 7 VDC
Battery Life	4 hours typical - volume level dependent

SAMSON
The Wireless Future

Samson Technologies Corp. • P.O. Box 9031, 575 Underhill Blvd., Syosset, New York 11791-9031
Tel: 1-516-364-2244 • Fax: 1-516-364-3888 • www.samson-tech.com

Specifications subject to change without notice. © 2001 SAMSON