

Peavey® In Ear Monitor System





FCC ID:

I4S-EM100 I4S-EM100R

This device complies with Part 15 of the FCC rules and Industry Canada license-exempt RSS Standard(s). Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Warning: Changes or modifications to the equipment not approved by Peavey Electronics Corp. can void the user's authority to use the equipment.

Note – This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures.

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

(IC: 3642A-EM100)

Caution

The equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.





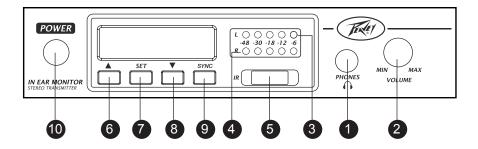
INTRODUCTION

Whether you're playing in a live performance or rehearsing, you need to hear yourself to be your best. Yet some performers still struggle with booming floor wedge monitors and loud stage volume. The Peavey In Ear Monitor is a personal monitoring breakthrough. You can only sound better if you hear yourself better. Wireless monitoring is taken to the next level of perfection with the Peavey In Ear Monitor system. New pass-through sockets for the audio signal enable the audio feed from a console to be routed to other devices in the chain, simplifying setup. The system features selectable output settings of 10mW and 100mW. The enhanced audio frequency response of 50 to 15,000 Hz means the sound the performers hear is the most realistic and life-like a wireless monitor system can offer.

The Peavey In Ear Monitor system is composed of a Stereo Mini Bodypack Receiver, a Stereo Transmitter, and ear buds. The system has 100 preset selectable frequencies.

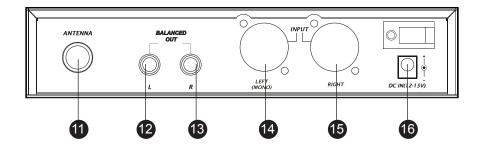
Features

- Transmitter has rugged metal housing
- Dynamic compander for crystal-clear sound as well as Enhanced AF frequency range and increased audio sensitivity
- · Selectable stereo or mono audio output
- Highly efficient power consumption circuitry ensures extended operating hours from two AA batteries.
- Wireless synchronization with the receiver using infrared interface
- Automatic frequency scan searches for available open frequencies
- User-friendly menu operation with control options shown on the LCD display
- The transmitter has balanced and unbalanced inputs
- Convenient headphone monitoring output jack on the transmitter
- 100 tunable UHF frequencies for interference-free reception



Transmitter Front Panel

- (1) **Headphone output jack:** Connects stereo headphones to monitor the output signal
- (2) **Volume:** Controls level to headphones independently of output to the bodypack and loop through jack
- (3) Left audio source input LED meter: Indicates input signal strength for left input
- (4) Right audio source input LED meter: Indicates input signal strength for right input
- (5) Infrared transmission LED: Sends infrared signal to sync receiver with transmitter frequency
- **(6) Up**▲: Steps selected function up
- (7) **Set:** Selects the functions of the transmitter
- (8) **Down V**: Steps selected function down
- (9) **SYNC:** Sets up the transmitter and receiver's infrared link and connection. Pressing this syncs transmitter with receiver
- (10) Power: Powers transmitter on or off



Transmitter Back Panel

- (11) Antenna output connector: Install transmitter antenna to BNC connector
- (12) Left channel balanced 1/4" output jack: Allows access to left channel input signal
- (13) Right channel balanced 1/4" output jack: Allows access to right channel input signal
- (14) Left channel input jack: Balanced XLR/1/4" combo jack; input for left channel
- (15) Right channel input jack: Balanced XLR/1/4" combo jack; input for right channel
- (16) DC input jack: Connects 12V-15V, 500mA DC power supply, the center pin of the jack is + polarity

Operation of the Transmitter

1. Antenna installation

Install the coaxial antenna to the transmitter. The antenna must be the same frequency as the receiver in order to achieve the ideal transmission efficiency.

2. Power Setup

Connect the output of DC 12V-15V/1A power adapter with DC input jack of transmitter. The DC supply voltage must be 12-15 v DC with output power of 500 mA or greater. If the voltage is not sufficient the unit will not work or will become unstable. If the voltage is exceeded then the unit will experience a significantly reduced life span due to increased heat dissipation.

3. Power the unit

Press the power switch. The LCD will light up and all the relevant information will be displayed on the screen. When the PLL circuit has locked the transmitter will start to transmit the signal.

4. Input audio source signal

The source signal can be supplied as either a stereo or mono signal to the XLR/1/4" combo jacks on the back of the transmitter. When mono mode is desired the left input channel should be used and the appropriate settings should be made using the menu on the front panel.

Note: The input signal is intended to be line level, such as that provided by a mixer. A microphone level signal will require pre-amplification to allow it to be used as a direct source. It is recommended to use auxiliary outputs, stereo outputs or monitor outputs from a mixing console.

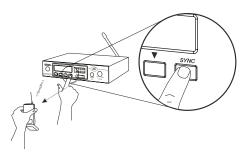
5. Set the proper audio input level

The strength of the audio input signal will be displayed on the two LED meters on the front panel. Adjust the mixer output level properly to make the LED meter light up three LEDs on average. When there are more than 4 LEDs lit up a red warning light will illuminate indicating that the signal is too strong(6dB before inputs clip). Adjust the input level to make sure the S/N ratio and dynamic range are adjusted to avoid distortion.

6. Transmitter function set up procedure:

SET Button:

SET CH------ MODE------ GROUP------ RF PWR ----- AF IN ----- EXIT



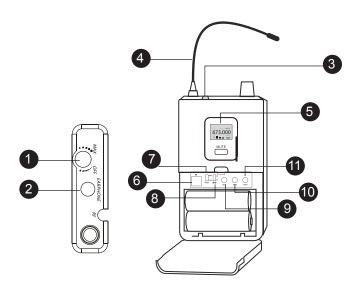
Setup:

- **1.** Press SET, entering into SET CH function, press UP or Down to increase or decrease the frequency. You can see that the frequencies are changed per 125KHz on the LCD displaying screen.
- **2.** Press down the SET to enter the stereo mono mode, press up to be in stereo mode and press down to be in mono mode.
- 3. Press SET continuously to enter GROUP function, press up or down buttons to increase or decrease the frequencies. At the same time you can see from the LCD displaying screen the frequencies are changed in 1.25MHz increments.

Once a frequency or group has been selected, transmitter and receiver will need to be synced. Open battery compartment of the receiver and hold the receiver in front of transmitter with IR LEDs facing each other. Press SYNC button on transmitter. Once synced, both displays should read the same frequency, the RF meter on the receiver display should be registering, and the RF LED on receiver top should be illuminated.

- **4.** Press SET button continuously to enter RF PWR function, press up or down to choose the RF power, press UP to set high power 100mW, press DOWN to set low power 10mW.
- **5.** Press SET button continuously to enter AF IN function, press up to increase AF input, down to choose AF IN level: The max input level is determined by the value selected.
- **6.** Press SET button continuously to EXIT function. (Please note when the operation is not continuously used within 8 seconds it will save the last operation and exit the setup mode.)
- 7. When monitoring the audio signal with headphones, plug the stereo headphones into the headphone output jack (1). The headphone jack must be stereo 1/4". Rotate the volume (2) to adjust the proper monitoring volume.

Note: In order to protect your ears, the volume must be adjusted properly, excessive volume settings may cause damage to ears as well as a distorted output signal.)



Bodypack Receiver

- (1) Power and volume control: Turns the receiver on and off and adjusts the volume of the earphones to the desired level
- (2) **Earphone jack:** 3.5mm jack for earphones or ear buds
- (3) RF signal indicator: Indicates receiving RF signal
- (4) **RF antenna:** Receiving antenna with length of 1/4 wave.
- (5) LCD display: Displays working frequencies, AF level, RF level, and battery life status
- **(6) Infrared communications:** Communicates with the transmitter to coordinate radio frequency configuration
- (7) **Stereo/Mono switch:** Selects Stereo or Mono mode on the receiver

(Note: This is different than Stereo/Mono mode on the transmitter.)

- (8) Limit switch: Limits the earphone output level
- **(9) Lock:** Locks the receiver controls to prevent accidental adjustments
- (10) **SYNC:** Press to sync information to the transmitter
- (11) **Scan:** SYNC activation scans for open frequency

Bodypack Receiver Operations

1. Using the battery and the battery automatic management system

The receiver uses two AA batteries or rechargeable AA batteries. The rechargeable battery must be the NiMH battery without memory, standard batteries have an estimated 8 hours of operational life. When the total battery voltage is less than 1.9V the power management system will power off the unit automatically.

2. Earphone connection

Plug stereo headphones or ear buds into the jack on the bodypack.

Note: The earphone output jack is stereo. The connecting plug must be a stereo plug. If the plug is mono, it is possible to short-circuit the output and damage one side of the earphone output.

3. Power on the unit and volume control

Rotate the power/volume knob on the top of the receiver to power on the unit. The LCD will display the working frequencies, RF and AF signal strength, and battery status. After the unit is on, continue to rotate the volume knob (1) clockwise to increase the volume and rotate the knob counter-clockwise to decrease the volume. The knob must be fully rotated counter-clockwise to power bodypack off.

4. Mode switch

Note: Switch (7) is used to select mono or stereo mode. The transmitter should be selected to be in the same mode.

5. RF signal LED Indicator

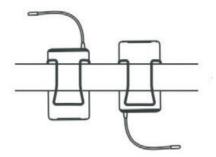
When the LED indicator (3) has been illuminated it means that the transmitter's signal has been received or the interference signal at the same frequency will also light up the LED indicator (3) To eliminate the interference switch to a non interfering frequency and sync with transmitter using SYNC button.

6. Receiver frequency setup

To activate the Infrared receiving function, open the battery compartment of the receiver (IR) (6), when it is pointing to the transmitter, then press the SYNC button on the transmitter until the receiver has the same frequency as the transmitter. The system has now been set up successfully. Close the receiver's battery compartment.

7. Wearing a Bodypack Receiver

Bodypack can clip on belt or clothing.



Cautions during operation:

- **1.** When using the in ear monitoring system together with a wireless microphone system, avoid using the same frequency range to prevent system interference.
- **2.** When using the coaxial cable to connect the transmission signal to the antenna, the coaxial cable must be 50Ω and should be less than 5 meters in length when using RG-58 cables.
- **3.** To obtain the best transmission and receiving performance, avoid line-of-sight obstacles.
- **4.** The operational battery life of the receiver is related to the earphone output power. When the earphone output volume increases the battery life will decrease. Using high sensitivity or isolation earphones will increase the life of the batteries. Use earphones with sensitivity greater than 110dB to maximize battery life.

Remove batteries from the receiver if the Peavey In Ear Monitor System will not be used for an extended period of time.



Warranty registration and information for U.S. customers available online at www.peavey.com/warranty or use the QR tag below



Features and specifications subject to change without notice.

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