

SAMSON

UHF EARAMP

PERSONAL MONITORS

620

Wireless Personal Monitoring System

The UHF EarAmp brings professional in-ear-monitoring to a wide range of users. Offering superlative audio quality and extensive control, the EarAmp system includes individual volume and balance controls for the best possible mix, and separate bass and treble controls to fine-tune the signal and a limiter control to set the audio level and protect your ears.

Ideal for keyboard players, drummers and other more stationary performers who want the advantages implicit in personal monitoring, the EarAmp can be operated

in stereo mode with all controls operating as labeled, or in the Mix mode with two independent mono signals with the balance control adjusting the relative volume of source 1 to source 2. In Mix mode, the mixed signal is presented to the headphones in mono. Also includes a 15 dB pad control to attenuates "hot" inputs, a headphone jack and all required cabling.

By eliminating the need for loud onstage "wedge" monitors, the EarAmp allows you to hear yourself better, greatly reduces feedback problems, and makes the overall sound coming from the stage significantly cleaner.



EarAmp is one of the most unique audio products to ever come to the stage. The system brings unparalleled control and mobility to stage monitoring. Wedge monitors require a separate mixer and engineer. With EarAmp, artists can hear themselves better and fine-tune their mixes on the spot.

Overall stage volume and ambient noise are greatly reduced, eliminating feedback problems and promoting a cleaner front-of-house mix. EarAmp delivers a true stereo mix with discrete L/R replacement of channels. The resulting sound is more intelligible so performers can focus on the show—with a sense of intimacy never before possible. The ideal environment for performing.

EarAmp uses state-of-the-art PLL synthesized technology to optimize the desired signal while filtering out spurious emissions and noise. This highly developed circuitry ensures stable performance and reliability. Unparalleled frequency agility allows each user to instantly select from over 128 channels, for flexibility with unquestioned performance—even in the most RF-hostile environments.

Diversity Wireless Monitor System

EarAmp's freedom of movement and reliability come in part from its diversity design. If you already use a wireless mic or instrument system you know that diversity reception is essential for ensuring signal reliability.

With its microprocessor controlled diversity design, UHF EarAmp's range is maximized. The user experiences fewer drop-outs, increased rejection of unwanted signals and crystal-clear audio fidelity.

UHF EarAmp offers an extraordinary level of frequency and agility with 8 groups of 16 channels each—128 total. Frequencies can be selected by group and channel, or by direct selection in 25 kHz increments. And a single transmitter will broadcast to an unlimited number of receivers.

Wireless EarAmp Channel Selection Chart (U.S. Frequencies)

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



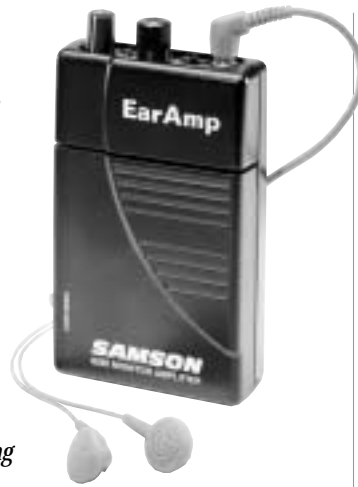
For Any Inquiries Regarding Your Order, Call Our Customer Service:
 (800) 221-5743 • (212) 239-7765 • FAX: (800) 947-2215 • (212) 239-7549

SAMSON

UHF EARAMP

Receiver

The system operates in both Dual Mono and Stereo modes. This gives performers the choice to listen the way they want. The unique Dual Mono mode allows for blending of two discrete input signals, which are routed to both ears using the balance control to mix them. The dedicated volume control adjusts the overall level to suit the listener's needs. A center detent lets performers feel the setting if changes are required during the show. An adjustable Limiter manages signal levels, prevents overload and protects the listener's ears from aggressive transients.



- ◆ Independent Treble and Bass controls allow performers to achieve their own personal in-ear mix. There's even a Loudness switch for enhanced articulation when the unit is operating at low levels.
- ◆ Frequency selection is fast and easy. An exclusive feature allows the receiver to automatically reset to the correct frequency for precise channel-matching at the flip of a switch and the push of a button.
- ◆ The UHF EarAmp receiver runs for approximately 8 hours on a single 9v battery. An LED on the receiver alerts you to low battery levels.

Transmitter

UHF EarAmp's transmitter features dual inputs for a choice of stereo or an additional mono signal in the performer's mix. The level is independently adjustable for each input. A 5-segment LED meter tracks the input level for optimum gain staging. In addition, an easy to read backlit LCD displays the selected Group, Channel and Frequency.

- ◆ The transmitter provides monitor engineers with the flexibility they need. Extensive input/output capabilities allow for inserting custom sub-mixes, adding effect returns or daisy-chaining transmitters.
- ◆ Neutrik Como (XLR or 1/4") inputs also provide for a range of signal levels and sources. A switchable 15dB pad is provided on both the main and auxiliary inputs.
- ◆ The transmitter is portable as well as rack mountable

Buds

Samson's high-quality flesh-colored ear buds provide the perfect match for UHF EarAmp's performance, allowing a slight amount of stage ambience into the mix. However, the system is universal and allows for the performer's choice of any standard third-party earpiece for total freedom of choice.

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'
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:	>80dB (>50uV at receiver, stereo or >15uV 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	200mW/CH, 1% THD into 32Ω 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 32Ω
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

SHURE

PSM SERIES

Personal Monitors for Installed Sound

Since their introduction, Shure PSM systems have become known as the best wired/wireless monitors available for sound quality, flexibility and affordability. What's more, they are simple to use, conserve space on stage, and are easy to transport. They deliver a full frequency range and great stereo separation. An impressive signal-to-noise ratio minimizes ear fatigue while increasing fidelity. This allows performers to concentrate better on their performance because they can now hear their mix more clearly at lower volumes. The audience will hear a better performance, too, because no wedges means no feedback can occur when users (intentionally or unintentionally) alter the position of the floor monitors relative to the microphones, and a cleaner mix for the room.

Unlike conventional floor monitors, Shure's PSM systems function as a closed system. The mix is sent directly to the performer's ear, so there is no chance of the monitors coloring or competing with the front-of-house speakers. The difference in perceptible sound quality is truly amazing. All PSM systems feature mono, stereo and MixMode operation. MixMode gives performers greater control over their monitor mix by turning the receiver into a 2-channel mixer.

MIXMODE

In MixMode, the performer receives two discrete channels of audio, just like in stereo. The difference is that each channel is sent to both the left and right earphone. The performer hears the two signals mixed together in each ear.

By adjusting the balance knob on the body-pack, performers can control the relative level of each signal, making one softer and the other louder in both ears. For example, a performer may choose to have their vocals (or instruments) sent through one channel and the rest of the band sent through the other. Using the balance knob on the receiver, the performer can determine exactly how much of themselves they want to hear in the mix. Musicians, in particular, enjoy the flexibility of MixMode because it gives them the ability to adjust their mix from one song to the next without having to signal the engineer at the soundboard. This means they can have exactly the right balance for every song with a minimum of fuss and distraction. Other possible MixMode configurations:

- ◆ One channel is lead instruments and the other is the rhythm section
- ◆ One channel is the bands monitor mix and the other is crowd noise
- ◆ One channel is the musician's mix and the other is a click track

To meet the budget requirements for a wide range of installations, Shure offers a full line of PSM systems in both wireless and hardwired configurations:

PSM 200

Affordable Monitoring - Get In Ear From Here

Affordable, full featured entry to personal monitoring. Whether you're playing live or rehearsing, you need to hear yourself to be your best. The PSM 200 is for performers who want to start out In Ear and stay there.

PSM 400

Versatile Systems for Working Musicians

Clear, consistent monitor mixes. Every Day. Every Night. This addition to the PSM family offers user-friendly features such as LCD controls and a battery fuel gauge. The wireless system is frequency agile with 16 UHF frequencies (8 compatible).

PSM 600

Professional Wired and Wireless Systems

Wired and wireless personal monitoring for professional installations and touring sound. The wireless PSM 600 system offers two-channel selectable UHF operation with the ability to use up to 10 systems simultaneously. A hardwired unit is also available for applications where wireless mobility is not a consideration.

PSM 700

Advanced Wireless Touring Gear

Unsurpassed wireless personal monitoring for professional installations and touring sound. With two groups of 16 compatible UHF frequencies, the PSM 700 gives system engineers the power to create up to 16 stereo mixes simultaneously - an important feature for larger installations with many performers who want their own mix.



EQUIPMENT LEASING AVAILABLE

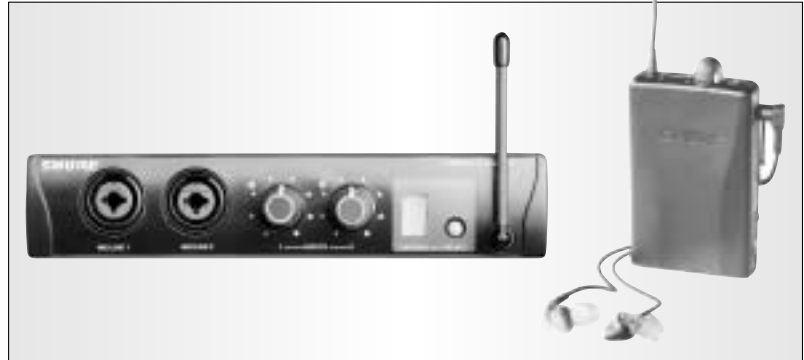
Personal Monitor Systems

The PSM200 is a frequency-agile, in-ear monitor system for use in a wide variety of applications. Its many features help overcome the difficulties associated with stage monitoring:

The P2R Receiver is the world's first bodypack receiver to function as a wired receiver, a wireless receiver, or both at the same time.

The P2T TransMixer is another breakthrough design for in-ear monitoring. It allows you to connect two mic or line-level inputs directly into the transmitter. The two signals can then be mixed independently. You can connect microphones or instruments directly to the inputs, use line outputs from a mixing console, or connect it to Shure's Aux-Pander. No matter what the output device, you can probably plug it into the P2T TransMixer.

The complete PSM200 System includes the E2 Earphones, which feature a dynamic driver that produces crisp, full-spectrum sound. They include a variety of sleeve options to provide the best fit and isolation for your ears. The E2, like all Shure earphones, work well with CD and MP3 players, and anything else with a 1/8" (3.5mm) stereo output.



System Features

The PSM 200 makes the benefits of in ear monitoring accessible to a wide array of cost-conscious musicians and houses of worship with exciting features including the built-in ability to upgrade the receiver from wired to wireless, a transmitter that is also a mixer, and a high fidelity earphone. Wired or wireless systems feature integrated mix control with two mic/line XLR-1/4" combo input channels plus XLR split outputs that connect signals to a mixing console or other device without affecting original settings. The frequency-agile wireless transmitter features eight channels per system (up to four simultaneous compatible systems).

P2R Hybrid Receiver

For those that can't initially afford wireless, the P2R Hybrid Receiver protects their investment by allowing them to upgrade at a later date. The hybrid receiver starts as a wired bodypack and with the addition of the Transmixer, operates fully as a wireless receiver.

- ◆ Dual-function receiver operating as a wired and wireless bodypack
- ◆ Volume control, and a built-in limiter that can't be defeated.
- ◆ LED indicators for power, RF signal strength, frequency, limiter, and battery level.
- ◆ Integrated cable management system keeps cables under control
- ◆ A 1/4" line input jack for convenient, integrated line input to connect monitor mixes, click tracks, or effects
- ◆ Up to 6 hours, volume dependent, on a standard 9V battery.

P2T TransMixer

By combining frequency-agile wireless transmitter functionality and a two-channel mixer, the P2T TransMixer offers you complete control of the in ear mix right on the stage

- ◆ A frequency-agile transmitter with eight channels per system.
- ◆ Up to four simultaneous compatible systems (country dependent).
- ◆ A range of 100 m (300 ft.) under optimal conditions.
- ◆ LED indicators for input level and frequency.
- ◆ Volume controls for mic/line inputs helps you create your own mix.
- ◆ Integrated mix control with two mic/line XLR-1/4" combo input channels for personal control.
- ◆ XLR split outputs that connect signals to a mixing console or other device without affecting original settings.

E2 Earphone

- ◆ In ear, high fidelity sound Isolation to help you keep what you hear on stage under your control Interchangeable flex and foam sleeves to give you the perfect fit.

SHURE

PSM400

Versatile Personal Monitor Systems

The PSM 400 makes professional quality, personal monitoring available to more performers than ever before. Designed for performers who are tired of the limits of floor wedges, the PSM400 offers hands-on control and freedom to musicians who have a limited budget for gear. With a wide range of available options - from complete wireless and wired systems to individual components

- there is a PSM 400 that is right, rehearsal through performance, for almost anyone who performs live music. The PSM400 offers a personal mix free of unwanted stage sounds; individual volume and balance controls; a freedom of movement that releases performers from standing in only one spot on stage; and an ease of portability far greater than bulky floor wedge monitors. Furthermore, the PSM series, when used properly, can aid performers in hearing conservation. These many benefits are further enhanced by the P4M mixer, which brings complete control of the in-ear mix right to the stage. Setting the standard for price and performance, PSM400 systems are available in both wired and wireless versions and offer user-friendly features such as LCD controls and a battery fuel gauge. The wireless system is frequency agile with 16 UHF frequencies (8 compatible).



P4HW

Wired Bodypack Receiver

- ◆ Attached input cable
- ◆ High-impact plastic chassis
- ◆ Operating controls include operating mode (Stereo, Mono, MixMode), volume and balance controls, defeatable limiter, high-frequency boost, -15 db Pad
- ◆ Backlit LCD display shows battery life, input levels and operating mode

P4R

Wireless Bodypack Receiver

- ◆ High-impact plastic chassis
- ◆ Frequency locator
- ◆ Operating controls include operating mode (Stereo, Mono, MixMode), volume and balance controls, defeatable limiter, high-frequency boost, and frequency select
- ◆ Backlit LCD display shows RF reception, battery life, operating mode and frequency

P4T

Wireless Transmitter



- ◆ Detachable front-mounted antenna
- ◆ 1/2 rack space
- ◆ Built-in audio limiter
- ◆ Controls include operating mode (Stereo, Mono, MixMode), earphone volume and frequency select
- ◆ 4-segment input level and transmission frequency LED indicators
- ◆ Two 1/4" TRS line level inputs; two 1/4" TRS loop outs and local earphone monitor
- ◆ External power supply

PSM 400 SYSTEM CONFIGURATIONS

<p>P4MHWE1 Wired Personal Monitor System with Onstage Mix Control</p> <p>P4M Personal Monitor Mixer</p> <p>P4HW Wired Bodypack</p> <p>E1 Single-Driver Earphones</p>	<p>P4TRE1 Wired Personal Monitor System</p> <p>P4T Wireless Transmitter</p> <p>P4R Wireless Bodypack Receiver</p> <p>E1 Single-Driver Earphones</p>	<p>P4MTRE1 Wired Personal Monitor System with Onstage Mix Control</p> <p>P4M Personal Monitor Mixer</p> <p>P4T Wired Bodypack</p> <p>P4R Wireless Bodypack Receiver</p> <p>E1 Single-Driver Earphones</p>
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PSM400

E1 and E5 Earphones—In Ear Comfort and Clarity

Unobtrusive, low mass/high energy earphones, the E1 and E5 are designed specifically for use with Shure PSM systems and deliver the incredible sound and performance ear buds and other headphones can't. Don't go In-Ear without them. The E1 and E5 earphones provide numerous advantages over earbuds. Along with their high fidelity, full-bandwidth transducers, the natural design of these stereo earphones allows them to rest comfortably in the ear canal, providing a tight seal for sonic isolation and a snug fit. Sound quality and isolation are the two most important things to consider when choosing an earphone. The E1 and E5 provide superior sound quality due to their high fidelity, full-bandwidth transducer design. Virtually the same, the E5 is a special dual-driver earphone that delivers an extended frequency response resulting in truly incredible sound. They have a universal 1/8" plug that connects to Shure's PSM body pack receivers, as well as many other personal audio applications, and they can be used with foam, flex or triple flange accessory sleeves (provided).



E1



E5

PERSONAL MONITORS

625

E1 Single-Driver Earphones

Transducer Type:	low mass/high energy
Sensitivity (at 1 kHz):	113.5dB SPL/mW
Impedance (at 1 kHz):	29 ohms
Output Connector:	Gold-plated stereo, 3.5 mm (1/8") phone plug
Cable Length:	60"

E5 Dual-Driver Earphones

Transducer Type:	Dual low mass/high energy
Sensitivity (at 1 kHz):	122dB SPL/mW
Impedance (at 1 kHz):	110 ohms
Output Connector:	Gold-plated stereo, 3.5 mm (1/8") phone plug
Cable Length:	61"

Earphone Sleeves

Each choice provides comfort and isolation in a variety of sizes and materials for the right fit.

Reusable Plastic Flex Sleeves (5 pairs):

PA756S - Small ..15.90 PA756M - Medium ..15.90 PA756L - Large ..15.90

PA750 Cylindrical Foam Ear Sleeves (5 pairs) ..31.83

PA755 Triple Flange Ear Sleeves (1 pair)15.90

dbx IEM

In-Ear Monitor Processor with Digital Multi-band Compressor/Limiter/Parametric EQ/PeakStop Limiter/Lexicon Reverb

A digital signal processor specifically designed for in-ear monitor applica-



tions, the IEM is the ideal tool for fine-tuning mix monitoring for in-ear monitoring devices. Not only does the IEM provide the legendary dbx effects in the digital domain, such as 4-band stereo compression, PeakStop limiting and 5-band parametric EQ, but the IEM also includes stereo adjust, dbx proprietary Type IV conversion system, and for good measure, custom reverb algorithms using industry-standard Lexicon technology.

- ◆ In addition to an intuitive user front panel which provides instant access to all effects at the push of a button, and a large custom display which shows all operational information in a logical manner—all parameters and features can be controlled by the bundled software. On-board IEM firmware is updateable via the web and the built-in RS-232 port.

SHURE

PSM600

The PSM 600 features crystal-controlled analog operation. Ten personal stereo mixes can be created using as many wireless transmitters. Or, by using only PSM wireless transmitter along with several PSM 600 wireless receivers, bands using a single monitor mix can have a full professional monitor system for a fraction of the usual cost. For musicians who maintain a single position throughout the performance (seated performers such as drummers and keyboard players), PSM 600 wired body packs are the perfect choice, allowing a direct patch from the sound board.



P6HW
Wired Bodypack Receiver

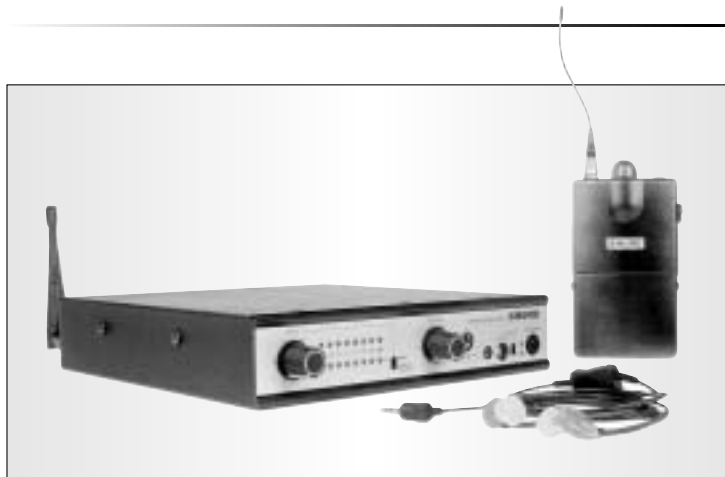
- ◆ Detachable input cable
- ◆ Rugged metal chassis
- ◆ Controls include mode (stereo, mono, MixMode), volume and balance, defeatable limiter, high-frequency boost, -15 db Pad
- ◆ LEDs show peak input, battery life

P4R
Wireless Bodypack Receiver

- ◆ Rugged metal chassis
- ◆ Frequency locator
- ◆ Controls include mode (stereo, mono, MixMode), volume, balance, defeatable limiter, high-frequency boost, frequency select
- ◆ LEDs show RF reception, battery life

P4T Wireless Transmitter

- ◆ 1/2 rack space, built-in audio limiter
- ◆ Removable/combinable antennas
- ◆ Controls include input knob, mode (Stereo, Mono, MixMode), frequency select
- ◆ 8-segment input level and transmission frequency LED indicators
- ◆ Two 1/4" TRS line level outputs, earphone monitor



PSM700

If you need more than 10 personal mixes but don't want to compromise wireless mobility, the PSM 700 is synthesized, giving you greater frequency agility. Plus its sound quality surpasses all other personal monitors on the market. With 32 compatible UHF frequencies, the PSM 700 gives system engineers the power to create up to 16 stereo mixes simultaneously—perfect for larger installations with many performers who want their own mix.

- ◆ Frequency Locator Mode reduces set-up time by allowing the installer to locate the optimal frequencies using the receiver as a tool.
- ◆ Dynamic Overload Control automatically protects the system from distortion that can occur when a performer gets too close to the transmitter.
- ◆ PSM 700 antenna combiners can be linked into one dedicated combiner to minimize the number of antennas used during the performance.

P7R
Wireless Bodypack Receiver

- ◆ Rugged metal chassis
- ◆ Frequency locator
- ◆ Dynamic overload protection
- ◆ Controls include mode (stereo, mono, MixMode), volume, balance, defeatable limiter, high-frequency boost, channel selector and group select switch
- ◆ LEDs show RF reception, battery life

P7T Wireless Transmitter

- ◆ 1/2 rack space
- ◆ Removable/combinable antennas
- ◆ Controls include input knob, mode (stereo, mono, MixMode), earphone volume, channel selector and group select switch
- ◆ 8-segment input level and frequency group LED indicators
- ◆ Two 1/4" TRS/XLR combo line level inputs; two 1/4" TRS loop outs, earphone monitor



PSM SERIES AT A GLANCE

	PSM 700	PSM600	PSM 400	PSM 200
WIRELESS SYSTEM				
Number of Selectable Channels	32	2	16	8
Number of Compatible Channels	16	10	8	4
Output Level	+6 dBV @ 0.9% THD+N	+6 dBV @ 0.9% THD+N	+3 dBV @ 0.9% THD+N	
Signal to Noise Ratio	78 dB	78 dB	80 dB	80 dB
Stereo Separation	35 dB	35 dB	35 dB	
WIRELESS TRANSMITTER				
RF Output Power	100 mW	100 mW	50 mW	30 mW
Frequency Selection Method	Front panel rotary switch with slide switch	Front panel rotary switch	Recessed, momentary button	
Stereo/Mono Selection Method	front panel switch	front panel switch	automatic	
Input Level Control	Front panel knob	Front panel knob	None	Front panel knobs
Audio Metering	8-LED string	8-LED string	4-LED string	Tri-color LEDs
Local Headphone Amplifier	1/4" and 1/8" jack	1/4" and 1/8" jack	1/8" jack	
Antenna	Front or rear mounting	Front or rear mounting	Front or rear mounting	Attached, front mounted
Input Connectors	XLR\1/4" combo (line)	XLR\1/4" combo (line)	1/4" TRS combo (line)	XLR\1/4" combo (mic/line)
Loop Thru Outputs	1/4" TRS	1/4" TRS	1/4" TRS	XLR split outs
Limiting	Built-in	Built-in	Built-in	Built-in
Power Supply	110/220V 3-prong IEC	110/220V 3-prong IEC	Locking, external (PS40)	External (PS20)
Rack Mounting	1/2 rack (hardware included)	1/2 rack (hardware included)	1/2 rack (hardware included)	1/2 rack (hardware included)
Input Pad	Yes	Yes	No	
WIRELESS RECEIVER				
Power Supply/Battery Life	9V/4-6 hours	9V/4-6 hours	9V/4-6 hours	9V/4 hours
Antenna	Detachable whip Lemo threaded	Detachable whip Lemo threaded	Attached whip bottom exit	Attached whip
Battery Status Indicator	Low battery LED	Low battery LED	Fuel Gauge & LEDs in LCD	Battery level LED
Volume Control				
Limiting	Built-in	Built-in	Built-in	Built-in (non-detachable)
Equalization	10 kHz shelf	10 kHz shelf	10 kHz shelf	None
Frequency Selection Method	DIP switch & rotary switch in battery compartment	DIP switch in battery compartment	Push button	
Personal Mix Control	MixMode and panning/balance knob	MixMode and panning/balance knob	MixMode and panning/balance knob	
RF Indicator	LED	LED	LED	
EARPHONES				
Model Number	E5	E1	E1	
Drivers (per ear & type)	2 balanced armatures	1 balanced armature	1 balanced armature	
Universal Sleeves	foams, triple flanges, flex tips			
Custom Sleeves	custom sleeves available			
ACCESSORIES	4x1 antenna combiner, unidirectional antenna for remote mounting	4x1 antenna combiner, unidirectional antenna for remote mounting		

SHURE

P4M

Four-Channel Personal Monitor Mixer

A highly versatile four-channel, two-bus stereo mic/line mixer designed to provide greater control and flexibility in monitoring situations, the P4M interfaces with both personal monitor and floor monitor systems. For the performer, the P4M offers the ability to make quick adjustments without having to go back to the main mixer. For the installer, the P4M's routing capabilities make it a great solution

not only for monitoring, but for any application that can benefit from a convenient two-bus mixer.

The P4M features four balanced mic/line inputs, each with level and panning controls. Corresponding XLR split outputs allow input signals to pass through the unit unaffected, while providing an independent mix.



Personal Stereo Monitors

When coupled with personal monitors, the P4M gives performers the ability to adjust personal mix levels onstage - even during a performance - without affecting the front-of-house system. This enables users to create and maintain consistent monitor mixes, regardless of the venue.

Installed Sound Systems

The P4M can also be used as a small "piggyback" mixer in applications such as houses of worship, or courtrooms. The unit acts as a console bypass when a permanent installation of a large, operator-controlled mixing console may require just a few microphones for smaller events.

Given its dual-bus output capabilities, the P4M can also serve as a "two zone" mixer, routing any combination of mic or line-level signals to two different zones.

Each mic/line input splits internally, so you can "tap into" existing signals, control them the way you want, and let the original signals pass through uninterrupted to their intended destinations.

The P4M has a pair of 1/4" auxiliary inputs that can be used to add channels from other sources. For example, multiple P4M mixers can be linked together to increase the number of inputs. In addition, sources not present in the original mix - such as a click track for live percussion - may be included via the auxiliary inputs.

Applications

Created to provide greater control and flexibility in monitoring situations, the P4M's routing capabilities also make it a great solution for any application that can benefit from a convenient 2-bus mixer:

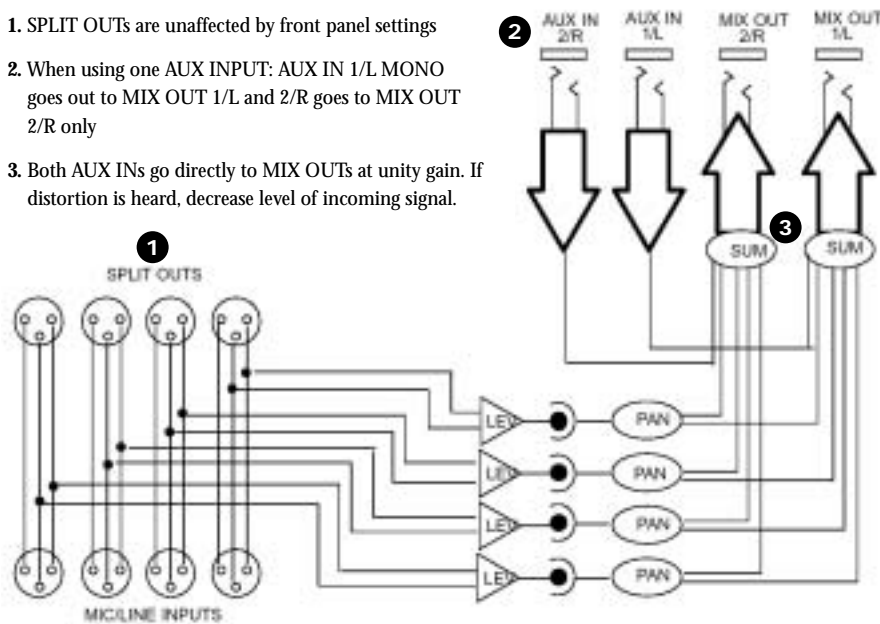
- Capturing a secondary mix for recording or broadcast feeds
- Sending and controlling mic/line level inputs to an existing mix
- Sending ambience or other signals to a remote location such as a "cry" room
- Creating a small "piggyback" sub mixer for activities where a live engineer is not viable
- Enabling director's cues and interruptible foldback

AUDIO SIGNAL PATH FOR THE P4M MIXER

1. SPLIT OUTs are unaffected by front panel settings

2. When using one AUX INPUT: AUX IN 1/L MONO goes out to MIX OUT 1/L and 2/R goes to MIX OUT 2/R only

3. Both AUX INs go directly to MIX OUTs at unity gain. If distortion is heard, decrease level of incoming signal.



ONE HOUR FREE PARKING

AT 349 W. 34th STREET (with purchase of \$100 or more)

Auxiliary Expander: 8x8 Insertable Matrix Mixer

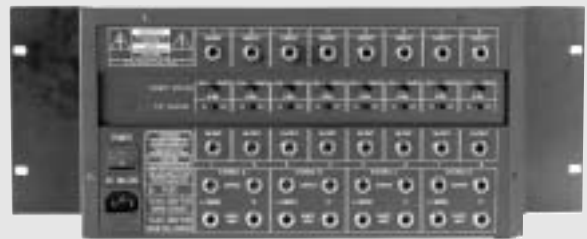
Traditionally, the number of auxiliary sends available on mixing consoles has been sufficient and proportional to the number of inputs needed for a given application. However, with Personal Monitors (PSM) rapidly becoming the monitoring solution of choice for live performers, the demand for auxiliary outputs to serve those systems can quickly outstrip the supply on most small to medium-size mixing boards. The AuxPander is an auxiliary expander designed as a flexible and cost-effective way to address this issue. With an AuxPander, you can boost the output abilities

of existing mixing consoles to eight busses without investing in a dedicated monitor console or bulky, complex large frame mixing board. An easy-to-use, 8 x 8 analog mixing matrix that will grow and adapt with your system, the compact and transportable AuxPander is capable of mixing eight input signals and distributing them to any of the eight available outputs, in any combination, and at any volume level.



- ◆ Offers endless options for mix and signal path creativity. Craft personal monitor mixes for an individual or an entire band. Quickly and easily add users and resources to your mix—night after night, gig to gig.
- ◆ Strengthens every link in the production chain. House sound or recording engineers can easily accommodate special recording and monitoring requests. Bands traveling with an AuxPander can ensure a uniform monitoring environment from a rehearsal to a gig. No matter what mixing equipment awaits, just plug and play.
- ◆ Use in conjunction with modular digital multitrack recorders (MDMs) for live and studio recordings.
- ◆ Combine input signals from multiple sources and route them to a single output.
- ◆ Inserted between a MDM and a mixing console, the AuxPander can mix to individual stereo cue mixes without interrupting the signal flow to the mixing console.
- ◆ Create stereo auxiliary sends to incorporate the stereo inputs of effects processors.
- ◆ Mix to eliminate feedback in certain distributed installations where each monitor receives a different mix by subtracting the source closest to each monitor.
- ◆ AuxPander is expandable both horizontally (16 x 8) and/or vertically (8 x 16) if more output mixes are required.

AuxPander taps up to eight input signals from a standard mixing console through its insert points, it then provides up to four stereo or eight mono auxiliary mixes and a new insert point without disrupting the levels established at the front of house soundboard.



- ◆ Balance controls let you pan the input signals between the left and right channels of a stereo output
- ◆ Level controls let you increase or decrease the volume of each of the eight input signals. Route signals to any of the eight outputs at any level and in any combination.
- ◆ With direct input jacks you can expand input channels (daisy-chaining) while keeping the same number of mixed outputs. For example, connect one AuxPander to another to create a 16x8 matrix.
- ◆ Four pairs of balanced, line-level 1/4" output jacks carry the mix created
- ◆ Insert jack lets you integrate processors (EQ, compressors, gates, etc.) in a particular signal path. Once a processor is connected, it can affect the AuxPander inputs, the console inputs, or both via the Insert Assign Switch.
- ◆ In Global Mode both the AuxPander and the mixing board receive the processed signal. In Local Mode only the AuxPander receives it and the console's inputs are unaffected. In Remote Mode only the mixing board receives it while the AuxPander inputs are affected.
- ◆ A single jack, rather than dedicated "in" and "out" jacks, receives and returns signals from the mixer, eliminating the need for Y-cables. One conductor on a 1/4" TRS cable jack receives signals. The other returns them. So connections of a console's insert points can easily be made with a TRS-TRS cable.
- ◆ When using 1/4" TRS cables, some consoles use the tip conductor as the send (tip-send) and others use the ring conductor (ring-send). AuxPander in/out jacks are compatible with both via the Tip Assign Switch.