

SHURE®

LEGENDARY
PERFORMANCE™

PSM® 1000 Personal Monitor System

PSM® 1000 PERSONAL MONITOR SYSTEM



The PSM 1000 Personal Monitor System from Shure brings personal monitoring to its most advanced level yet.

The full-rack, dual-channel, networkable transmitter is ideally suited for the demands of professional touring and installation applications, and the diversity bodypack receivers deliver pristine RF signal and audio quality. Networkability over Ethernet connection enables remote control of transmitter functions and comprehensive frequency coordination via Wireless Workbench® software.

APPLICATIONS

Touring Sound
House of Worship
Broadcast
Theater
IFB

PRODUCT HIGHLIGHTS

Touring-Grade Features and Design
Robust RF Performance and Networked Control
Advanced Lithium-Ion Rechargeability

PSM® 1000 System Specifications

| | |
|---|---|
| RF Carrier Range | 470–952 MHz (regionally dependent) |
| Compatible Frequencies | 39 per band |
| Tuning Bandwidth | 72 MHz – 80 MHz (regionally dependent) |
| Operating Range (environment dependent) | 90m (300ft) |
| Audio Frequency Response | 35Hz – 15kHz |
| Stereo Separation | 60 dB |
| Signal-To-Noise Ratio (A-Weighted) | 90 dB (typical) |
| Total Harmonic Distortion (ref. ±34 kHz deviation @1 kHz) | <0.5% (typical) |
| Comping | Patented Shure Audio Reference Comping |
| Spurious Rejection (ref. 12 dB SINAD) | >80 dB (typical) |
| Frequency Stability | ±2.5 ppm |
| MPX Pilot Tone | 19 kHz (±0.3 kHz) |
| Modulation | FM, MPX Stereo (±34 kHz deviation, nominal) |
| Operating Temperature | -18 to +57 °C |

Frequency Range

| Band | Range | RF Output Power*** |
|------|---------------|--------------------|
| G10 | 470-542 MHz | 10 / 50 / 100 mW |
| G10E | 470-542 MHz | 10 / 50 / 100 mW |
| G10J | 470-542 MHz | 6 / 10 mW |
| G11 | 479-542 MHz | 10 mW |
| G62 | 510-530 MHz | 10 mW |
| H8Z | 518-582 MHz | 10 / 50 mW |
| J8 | 554-626 MHz | 10 / 50 / 100 mW |
| J8A | 554-616 MHz | 10 / 50 / 100 mW |
| J8E | 554-626 MHz | 10 / 50 mW |
| J8J | 554-626 MHz | 6 / 10 mW |
| K10E | 596-668 MHz | 10 / 50 mW |
| L8 | 626-698 MHz | 10 / 50 / 100 mW |
| L8A | 653-663 MHz | 10 mW |
| L8E | 626-698 MHz | 10 / 50 mW |
| L8J | 626-698 MHz | 6 / 10 mW |
| L9E | 670-742 MHz | 10 / 50 mW |
| L11J | 670-714 MHz | 6 / 10 mW |
| P8 | 710-790 MHz | 10 / 50 mW |
| Q21 | 710-787 MHz | 10 / 50 mW |
| Q22E | 750-822 MHz | 10 / 50 mW |
| R27 | 794-806 MHz | 10 / 50 mW |
| X1 | 944-952 MHz | 10 / 50 / 100 mW |
| X7 | 925-937.5 MHz | 10 mW |

Antennas, Combiners and Accessories

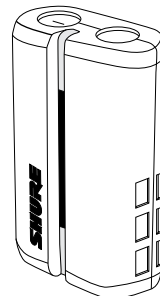
| | |
|----------|---|
| EAC-IFB | Coiled IFB Earphone Cable for Shure Earphones |
| PA821B | 8-to-1 antenna combiner for better RF performance |
| PA421B | 4-to-1 antenna combiner with power distribution to 4 transmitters (better RF performance and eliminates need for external power supply) |
| PA805SWB | Passive Directional Antenna |
| PA301 | Protective Cover for P9RA and P10R body pack receivers |
| HA-8089 | Helical Antenna (470-900 MHz) |
| HA-8091 | Domed Helical Antenna (470-900 MHz) |
| HA-8241 | Helical Antenna (944-952 MHz) |
| UA860SWB | Passive Omnidirectional Antenna |
| UA802 | Coaxial Cable, BNC-BNC, RG58C/U type, 50 Ohm, 2 ft length (0.6 m) |
| UA806 | Coaxial Cable, BNC-BNC, RG58C/U type, 50 Ohm, 6 ft length (2 m) |
| UA825 | Coaxial Cable, BNC-BNC, RG8X/U type, 50 Ohm, 25 ft length (7.5 m) |
| UA850 | Coaxial Cable, BNC-BNC, RG8X/U type, 50 Ohm, 50 ft length (15 m) |
| UA8100 | Coaxial Cable, BNC-BNC, RG8X/U type, 50 Ohm, 100 ft length (30 m) |

Furnished Accessories

| | |
|---------------------|------------------------------------|
| P10R Antenna | |
| UA700 | 470–542 MHz |
| UA710 | 540–626 MHz |
| UA720 | 596–692 MHz |
| UA730 | 692–830 MHz |
| UA740 | 830–952 MHz |
| P10T Antenna | |
| UA820G10 | 470–542 MHz |
| UA820H8 | 518–582 MHz |
| UA820J8 | 554–626 MHz |
| UA820K1 | 596–668 MHz |
| UA820L8 | 626–698 MHz |
| UA820LCH | 670–742 MHz |
| UA820P8 | 710–790 MHz |
| UA820Q2 | 750–822 MHz |
| UA820X | 944–952 MHz |
| 95A9023 | Front Mount Antenna Cable |
| 95A2313 | Zipper Bag |
| 53B8443 | Link Bar |
| 90AR8100 | Hardware Kit (Rackmounting Screws) |
| 90B8977 | Bumper Kit |

NOTE: This Radio equipment is intended for use in musical professional entertainment and similar applications. This Radio apparatus may be capable of operating on some frequencies not authorized in your region. Please contact your national authority to obtain information on authorized frequencies and RF power levels for wireless microphone products.

Rechargeable Power Management



SB900A Rechargeable Battery

The P10R+ bodypack is compatible with the SB900A, a lithium-ion rechargeable battery, providing up to 10 hours of continuous use and precise tracking of remaining life and charge cycle details.

SBC800 Recharging Station

Charges up to eight SB900A batteries to full capacity within three hours, with status LEDs to indicate power levels. SB900A batteries fit securely in the charger for easy, efficient storage and transport.

SBC200 Dual Docking Recharging Station

This compact and portable unit charges two SB900A batteries. Up to four SBC200's can be chained together to run off one power supply.

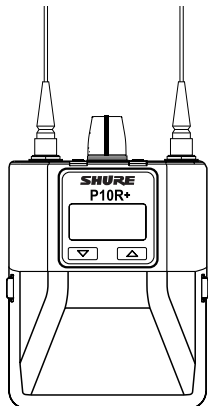
SBC10-100 Single Battery Recharging Station

The SBC10-100 charges one battery at a time and can be powered from either A/C power sources or USB ports.

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Component Specifications

P10R+ Wireless Bodypack Receiver



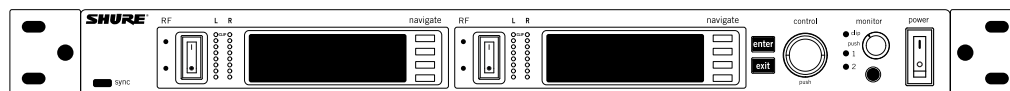
The P10R+ is a low profile, diversity bodypack receiver for use with the PSM® 1000 Wireless Personal Monitor System. It offers premium features like full bandwidth RF scan and Automatic RF Gain Control for unparalleled signal stability and channel availability, all packed in the slimmest form factor available. CueMode allows monitoring of different stage mixes and storing of up to 20 separate channels from one bodypack for quick and easy mix reference. Optional advanced rechargeability eliminates the need for disposable batteries and provides extended usage times with reliable battery life, cycle count, and health metering.

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|---|---|--|
| Tri-band RF Filtering | -3 dB at 30.5 MHz from the center frequency of each band | |
| Active RF Gain Control | 31 dB (adjusts RF sensitivity to provide more RF dynamic range) | |
| RF Sensitivity (20 dB SINAD) | 2.2 μ V | |
| Squelch Threshold | 22 dB SINAD (\pm 3 dB), default setting | |
| Adjacent Channel Rejection | >70 dB | |
| Intermodulation Attenuation | >70 dB | |
| Blocking | >80 dB | |
| Image Rejection | >90 dB | |
| Audio Output Power (1kHz @ <1% distortion, peak power, @16 Ω) | 100 mW per output | |
| Minimum Load Impedance | 4 Ω | |
| Output Impedance | <1 Ω | |
| 4-Band Parametric EQ | Low Shelf | Selectable Gain: \pm 2 dB, \pm 4 dB, \pm 6 dB @100 Hz |
| | Low Mid | Selectable Gain: \pm 2 dB, \pm 4 dB, \pm 6 dB @160 Hz, 250 Hz, 400 Hz, 500 Hz, 630 Hz Selectable Q: 0.7, 1.4, 2.9, 5.0, 11.5 |
| | High Mid | Selectable Gain: \pm 2 dB, \pm 4 dB, \pm 6 dB @1 kHz, 1.6 kHz, 2.5 kHz, 4 kHz, 6.3 kHz Selectable Q: 0.7, 1.4, 2.9, 5.0, 11.5 |
| | High Shelf | Selectable Gain: \pm 2 dB, \pm 4 dB, \pm 6 dB @10 kHz |
| Volume Limiter | Selectable: 0 dB to -48 dB in 3 dB steps | |
| Volume Lock <i>Limits volume adjustment knob. Selected value analogous to volume knob increment.</i> | Selectable: 0 dB to -70 dB | |
| Battery Life | 4-6 hours (continuous use) with AA batteries | |
| Net Weight | 158 g, without batteries | |
| Dimensions | 99 mm x 66 mm x 23 mm (3.9 in. x 2.6 in. x 0.9 in.) H x W x D | |

P10T Dual Wireless Transmitter

The P10T is a networkable, full-rack, dual channel wireless transmitter used in conjunction with the P10R+ Bodypack receiver as part of the PSM® 1000 Wireless Personal Monitor System. It offers a 72 MHz wide tuning bandwidth, networked remote control via Wireless Workbench software, advanced rechargeability options, and PSM 900 backwards compatibility. Connections include balanced $\frac{1}{4}$ " and XLR, loop out, dual Ethernet ports, and headphone monitor out. Comes with front or back mountable antennas, and power and Ethernet jumper cables.

| | |
|---|--|
| RF Output Power | Selectable: 10, 50, 100 mW (regionally dependent) |
| RF Output Impedance | 50 Ω (typical) |
| Net Weight | 4.7 Kg (10.4 lb) |
| Dimensions | 44 X 483 X 343 mm |
| Power Requirement (RF on, 100 mW power mode, no audio) | Input: 100-240V AC, 50/60 Hz, 0.5A max (5.5 max outlet loaded) Output: 100-240V AC, 5A max, unswitched |
| Audio Input | |
| Connector Type | Combination XLR and 6.35 mm (1/4") TRS |
| Polarity | XLR: Non-inverting (pin 2 positive with respect to pin 3) 6.35 mm (1/4") TRS: Tip positive with respect to ring |
| Configuration | Electronically balanced |
| Impedance | 70.2 k Ω (actual) |
| Nominal Input Level | Switchable: +4 dBu, -10 dBV |
| Maximum Input Level | +4 dBu: +29.2 dBu -10 dBV: +12.2 dBu |
| Pin Assignments | XLR: 1=ground, 2=hot, 3=cold 6.35 mm (1/4") TRS: Tip=hot, Ring=cold, Sleeve=ground |
| Phantom Power Protection | Up to 60 V DC |
| Audio Output | |
| Connector Type | 6.35 mm (1/4") TRS |
| Configuration | Electronically balanced |
| Impedance | Connected directly to inputs |



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