PGX Wireless System Specifications

SHURE PGX WIRELESS

Created for active musicians and presenters who also manage their own sound, Shure PGX Wireless improves your performance and simplifies your setup.

Innovations such as automatic frequency selection and automatic transmitter setup make wireless quicker and completely worry-free. PGX systems now feature Shure's patented Audio Reference Companding, delivering the crystal clear sound quality that pro audio engineers trust.

PGX gives you 8 systems to choose from and tour-tested wireless for guitars, instruments, and vocal mics — including the legendary SM58® vocal microphones. It's the best-sounding, simplest choice in wireless, from the leader in live performance sound.

SYSTEM FEATURES

Auto Frequency Selection
- Locates a clear channel instantly

Auto Transmitter Setup
- Infrared link automatically synchronizes the transmitter and receiver

Shure's patented Audio Reference Companding
- Delivers crystal-clear audio transmission, far superior to conventional wireless technology

RECEIVER FEATURES

- Built-in 1/4" antennas
- Microprocessor controlled diversity
- Channel display LED
- 1/4" and XLR audio outputs

HANDHELD AND BODYPACK TRANSMITTER FEATURES

- Choice of Shure handheld microphones
- Bodypack works with headworn, lavalier and instrument microphones and cables
- Multi-function LED indicator (power, lockout, mute, low battery)
- 2 AA batteries (included) provide 8 hours of continuous use
- 100m (300 ft.) operating range

ARCHITECT'S SPEC

The wireless system shall operate in the UHF band between 524 MHz and 865 MHz, with the specific available frequency range being dependent on the user's locale. Effective range of the system, receiver to transmitter, shall be 100 meters (300 ft.), under optimal conditions. Each system shall allow selection of over 90 operating frequencies across 18 MHz of bandwidth in order to avoid RF interference. Optimal frequencies shall be selected automatically, ensuring that individual systems run at their highest level of performance, and that multiple systems in simultaneous use do not interfere with one another.

An infrared signal beamed from the receiver shall be used to synchronize the frequency between the transmitter and the receiver. The process of synchronizing the system shall be simple and instantaneous.

Each transmitter shall be powered by two AA batteries. Transmitters shall have a power on–off/mute switch, as well as multi-function LED indicator showing locked/unlocked status, mute status, and battery strength. Available transmitters shall include a bodypack for use with guitars, basses, and other instruments, as well as lavalier, headset or instrument microphones, and a handheld transmitter for vocals. The bodypack shall include a 3–position switch and the handheld transmitter shall include a 2–position switch to compensate for higher- or lower-gain devices. Both transmitters shall feature an easily accessible infrared port for system synchronization.

The receiver shall have a channel display LED. The system shall use diversity technology to improve reception, minimize signal drop-outs, and achieve the best possible signal-to-noise ratio. The receiver shall include an audio level meter and an infrared port for system synchronization.

The system shall be the Shure PGX Wireless.

TL1066 (REV 4)

SPECIFICATIONS

System	**Working Range**	100m (300 ft.) Note: actual range depends on RF signal absorption, reflection, and interference
	Audio Frequency Response +/– 2 dB	Minimum: 45 Hz Maximum: 15 kHz (Overall system frequency depends on microphone element.)
	Total Harmonic Distortion Ref. +/– 33 kHz deviation, 1 kHz tone	0.5%, typical
	Dynamic Range	>100 dB A-weighted
	Operating Temperature Range	–18°C (0°F) to +50°C (+122°F) Note: battery characteristics may limit this range
	Transmitter Audio Polarity	Positive pressure on microphone diaphragm (or positive voltage applied to tip of WA302 phone plug) produces positive voltage on pin 2 (with respect to pin 3 of low impedance output) and the tip of the high impedance 1/4-inch output.
PGX1 Bodypack Transmitter 	**Audio Input Level**	-10 dBV maximum at "mic" gain position +10 dBV maximum at 0dB gain position +20 dBV maximum at -10dB gain position
	Gain Adjustment Range	30 dB
	Input Impedance	1 MΩ
	RF Transmitter Output	30 mW maximum (dependent on applicable country regulations)
	Dimensions	108 mm H x 64 mm W x 19 mm D (4.25 x 2.50 x 0.75 in.)
	Weight	81 grams (3 oz.) without batteries
	Housing	Molded polycarbonate case
	Power Requirements	2 “AA” size alkaline or rechargeable batteries
	Battery Life	>8 hours (alkaline)
PGX2 Handheld Transmitter 	**Audio Input Level**	+2 dBV maximum at -10dB position -8 dBV maximum at 0dB position
	Gain Adjustment Range	10dB
	RF Transmitter Output	30 mW maximum (dependent on applicable country regulations)
	Dimensions including SM58 cartridge	254 mm x 51 mm dia. (10 x 2 in.)
	Weight	290 grams (10.2 oz.) without batteries
	Housing	Molded PC/ABS handle and battery cup
	Power Requirements	2 “AA” size alkaline or rechargeable batteries
	Battery Life	>8 hours (alkaline)
PGX4 Receiver 	**Dimensions**	40 mm H x 181 mm W x 104 mm D (1.6 x 7.125 x 4.1 in.)
	Weight	327 g (11.5 oz.)
	Housing	ABS
	Audio Output Level Ref. +/– 33 kHz deviation with 1 kHz tone	XLR connector (into 600 Ω load): –19 dBV 1/4 inch connector (into 3000 Ω load): –5 dBV
	Output Impedance	XLR connector: 200 Ω 1/4 inch connector: 1kΩ
	XLR output	Impedance balanced Pin 1: Ground (cable shield) Pin 2: Audio Pin 3: No Audio
	Sensitivity	–105 dBm for 12 dB SINAD, typical
	Image Rejection	>70 dB, typical
	Power Requirements	12–18 Vdc at 150 mA, supplied by external power supply

Frequency Range and Transmitter Output Level

Band	Range	Transmitter output
G4	470.125–493.825 MHz,	30 mW
G8	494.200–509.825 MHz	30 mW
H6	524–542 MHz	30 mW
J6	572–590 MHz	30 mW
K5E	606–630 MHz	10 mW
L5	644–662 MHz	30 mW
P6	702–719 MHz	30 mW
R1	800–820 MHz	20 mW
R14	794–806 MHz	20 mW
T1	846–865 MHz	10 mW
JB	806–810 MHz	10 mW
Q8	740–752 MHz	10 mW
Q24	736–754 MHz	30 mW
X5	925–932 MHz	10 mW

REPLACEMENT PARTS AND ACCESSORIES

All Systems	Microphone Stand Adapter (PGX2)	WA371
	Carrying Case	94A8429
System-Specific	AC Adapter (120 VAC, 60 Hz)	PS20
	AC Adapter (230 VAC, 50/60 Hz, Europlug)	PS20E
	AC Adapter (230 VAC, 50/60 Hz, UK)	PS20UK
	AC Adapter (100 VAC, 50/60 Hz)	PS20J
	AC Adapter (220 VAC, 50 Hz, China)	PS20CHN
	PG58 Head with Grille	RPW108
	SM58 Head with Grille (PGX2/SM58)	RPW112
	SM86 Head with Grille (PGX2/SM86)	RPW114
	BETA 58 Head with Grille (PGX2/BETA 58)	RPW118
	Matte Silver Grille (PGX2/SM58)	RK143G
	Matte Silver Grille (PGX2/SM86)	RPM266
	Matte Silver Grille (PGX2/BETA 58)	RK265G
	Belt Clip	44A8030
Optional Accessories	Black Grille (PGX2/BETA 58)	RK323G
	Zipper Bag (PGX1)	26A13
	Zipper Bag (PGX2)	26A14
	Universal Rack Tray	URT

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