SVX

Wireless System

Online user guide for SVX wireless system.
Version: 1.1 (2022-E)

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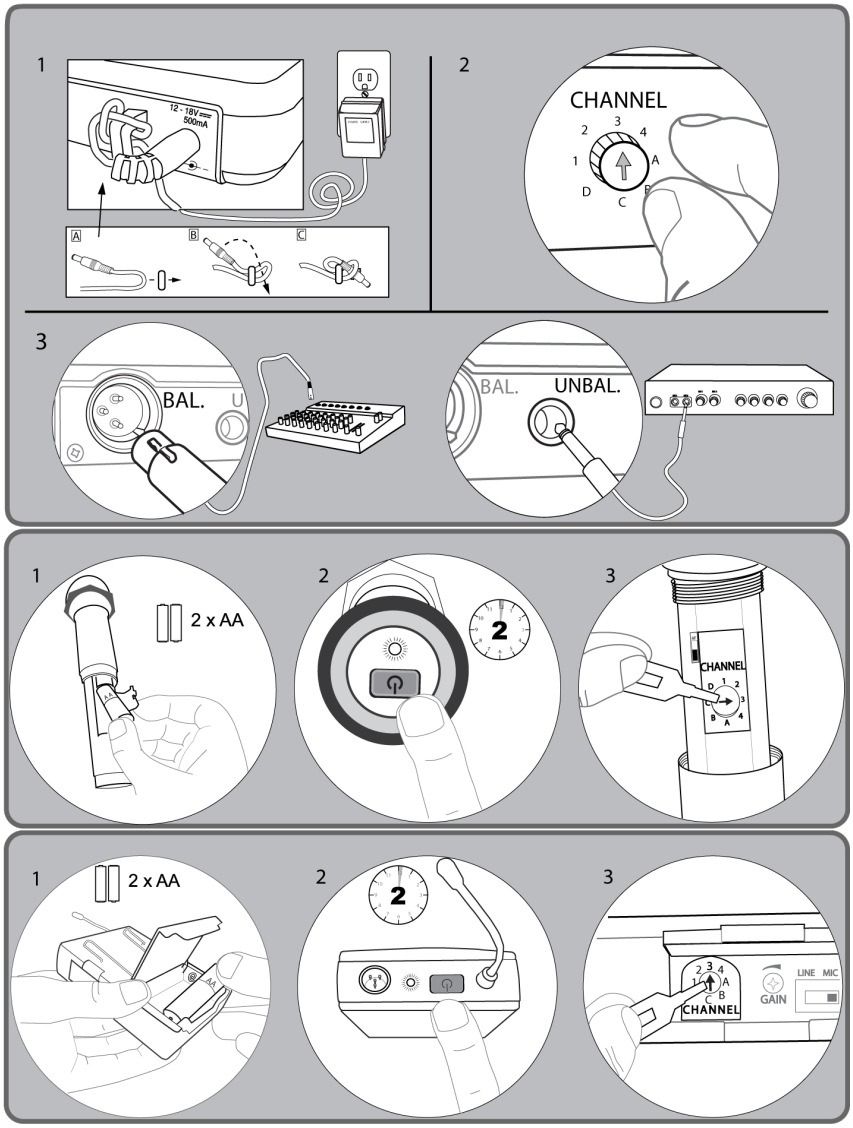
SAFETY PRECAUTIONS

The possible results of incorrect use are marked by one of the two symbols—"WARNING" and "CAUTION"—depending on the imminence of the danger and the severity of the damage.

	WARNING: Ignoring these warnings may cause severe injury or death as a result of incorrect operation.
	CAUTION: Ignoring these cautions may cause moderate injury or property damage as a result of incorrect operation.
	**WARNING** If water or other foreign objects enter the inside of the device, fire or electric shock may result. Do not attempt to modify this product. Doing so could result in personal injury and/or product failure.
	**CAUTION** Never disassemble or modify the device, as failures may result. Do not subject to extreme force and do not pull on the cable or failures may result. Keep the microphone dry and avoid exposure to extreme temperatures and humidity.

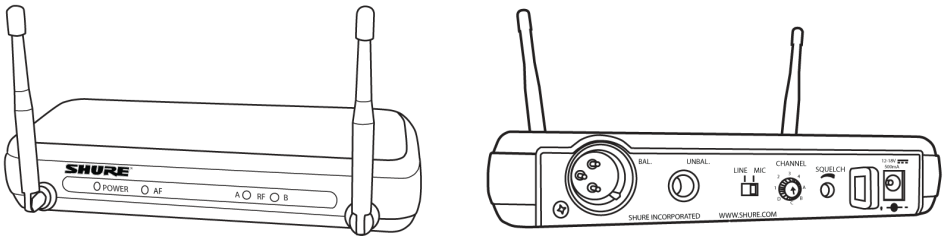
Quick Setup



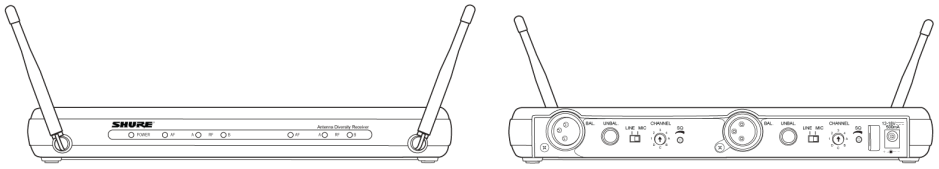
Shure SVX Wireless

Congratulations on purchasing your SVX Wireless system from Shure. Shure professional audio products deliver legendary sound quality, stage-proven durability and hassle-free setup. The SVX Wireless System comes with your choice of lavalier, handheld, or headset microphone making it an ideal choice for presentation, karaoke performance, aerobics/fitness instruction or other applications where the freedom of wireless is desired.

Receiver



KCX4



KCX88

① Power LED light

② Audio Frequency LED light

③ Radio Frequency Diversity lights

④ Balanced output (XLR connector)

⑤ Unbalanced output (6.35mm connector)

⑥ Audio output level (line/mic) switch

⑦ Channel selection dial

⑧ Squelch dial

⑨ Power adapter input

⑩ Antennas

Transmitter

① Power button

② Channel selection dial

③ Audio input level (line/mic) switch

④ Battery compartment

⑤ Transmitter gain dial

⑥ Belt clip

⑦ Mic input (CVL Lavalier or PGA31 Headworn)

⑧ Radio Frequency (RF) level switch

⑨ Antenna

⑩ Color ID rings

⑪ Anti-roll ring

⑫ Power LED light

System Components

All Systems

- SVX Receiver
- PS24 Power Supply
- Channel Selector Tool
- 2 AA batteries

Handheld Transmitter

- SVX2 Handheld Microphone Transmitter
- Microphone Stand Adaptor

Bodypack Transmitter

- SVX1 Bodypack Transmitter
- Microphone

- CVL Lavalier microphone **OR**
- PG31 Headworn microphone

Power

Plug in the power adapter to turn on the receiver. There is no power switch.

Insert 2 AA batteries into the transmitter. Hold the power button for two seconds to turn on.

Connecting to a Sound System

Connect the balanced XLR output on the receiver to a MIC or LINE input. Set the LINE MIC switch accordingly.

If there is no XLR input, connect the unbalanced 6.35 mm (1/4 inch) receiver output to a LINE input. Set the LINE MIC switch to LINE.

Channel

Set the transmitter and the receiver to the same frequency using the channel dial.

Note: If using a dual system (or more than one single system), assign each input to a different channel within the same group (channels 1-4 or channels A-D). For the JB1 band, there are three groups: channels 1-3, 4-6, and 7-8. This ensures the best signal quality.

Bodypack Gain

The gain dial controls the audio volume sent to the receiver.

- Turn down the gain if the audio signal sounds distorted.
- Turn up the gain if the AF LED light is faint or the audio is too low.

RF Level

This switch sets the RF level of the handheld transmitter. It does not affect the audio volume.

- Set to LO to avoid interfering with other receivers when in a building with multiple systems.
- Set to HI for transmitting over a greater distance when using a single system.

Squelch

Squelch controls the amount of RF signal that the receiver picks up.

- Turn up the squelch dial (clockwise) to remove ambient noise from unwanted RF sources.
- Turn down the squelch dial (counterclockwise) if the microphone is not transmitting clearly to the receiver.

Low Battery Indicator

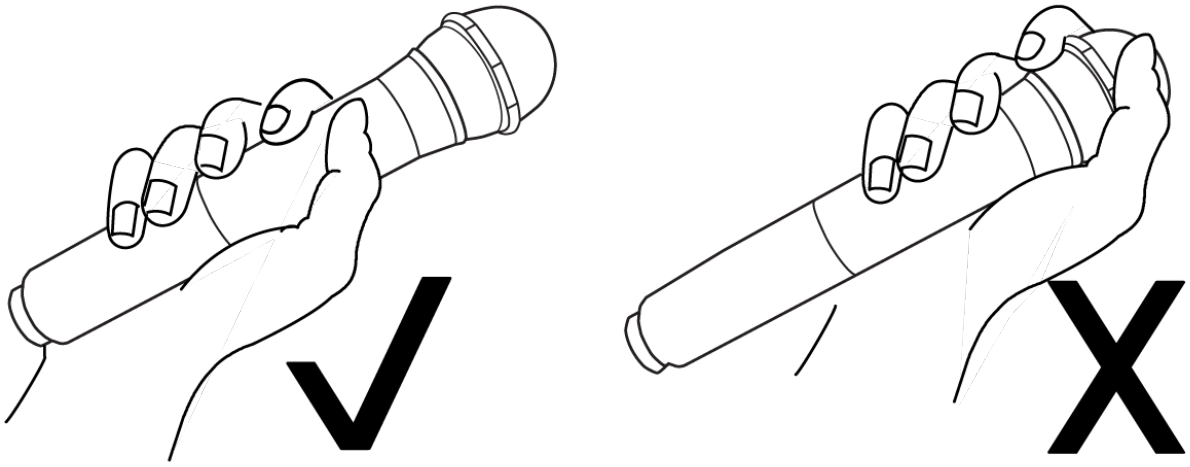
The transmitter power LED flashes to indicate low batteries.

Color ID Rings

Slide these color rings over the handle of the microphone to identify them. (Sold in a package of six as an optional accessory.)

Getting Good Sound

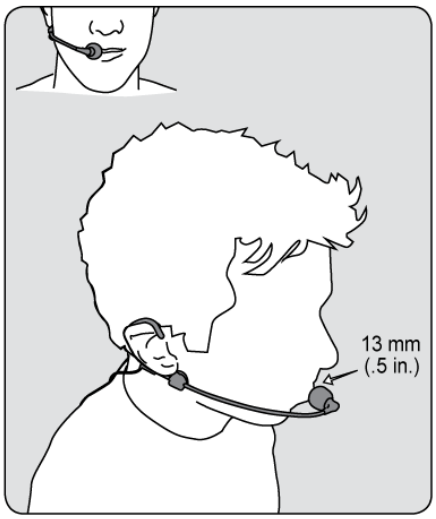
Correct Microphone Placement



- Hold the microphone within 12 inches from the sound source. For a warmer sound with increased bass presence, move the microphone closer.
- Do not cover grille with hand.

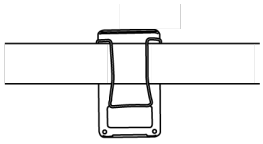
Wearing the Headworn Microphone

- Position the headworn microphone 13 mm (1/2 in.) from the corner of your mouth.
- Position lavalier and headworn microphones so that clothing, jewelry, or other items do not bump or rub against the microphone.



Wearing the Bodypack Transmitter

- Clip the transmitter to a belt or pocket.
- For best results, the belt should be pressed against the base of the clip.



Wireless Tips to Improve System Performance

If you encounter wireless interference or dropouts, try the following suggestions:

- Replace the transmitter batteries
- Choose a different frequency channel
- Reposition the antennas so there is nothing obstructing a line of sight to the transmitter (including the audience)
- Avoid placing transmitter and receiver where metal or other dense materials may be present
- Move the receiver to the top of the equipment rack
- Remove nearby sources of wireless interference, such as cell phones, two-way radios, computers, media players, and digital signal processors
- Keep transmitters more than two meters (6 feet) apart
- Keep the transmitter and receiver more than 5 meters (16 feet) apart
- Keep them away from large metal objects
- During sound check, mark trouble spots and ask presenters or performers to avoid those areas

Troubleshooting

Problem	Solution
No sound	Check the power supply of the microphone and receiver. Ensure that the batteries are inserted correctly. Set the transmitter and receiver to the same channel. Check that the receiver is connected to the input on the audio mixer or amplifier. Check that the transmitter is not too far away from the receiver. Decrease (counterclockwise) the squelch. Set the bodypack audio input switch to MIC. Make sure that the receiver has a clear, line-of-sight path to the transmitter. Keep the receiver away from metal objects.
Noise from RF interference	Replace the transmitter batteries. Check the receiver antenna location. Make sure there is a clear path between the receiver and the transmitter.

	When using two or more systems simultaneously, chose different channels within the same group (channels 1-4 or channels A-D). For the JB1 band, there are three groups: channels 1-3, 4-6, and 7-8. Turn off or relocate possible sources of interference such as cell phones, radios, or other electronic devices. Increase squelch (clockwise) to restrict the receiver from picking up ambient noise. Unplug any unused receivers
Audio distortion	Adjust levels on the mixer board or sound system. Make sure all cables are securely connected from the receiver to the sound system. If using a bodypack transmitter, lower the gain settings.

Optional Accessories

Color Rings (6)	WACR
Single Channel Rack Mount Kit	WASRM
Dual Channel Rack Mount Kit	WADRM

Replacement Parts

Channel Key	53A14226
Microphone Stand Adapter	95A14227
Power Supply	PS24
See your local Shure distributor for assistance	

Frequency Range

Band	Frequency Range (MHz)
G15	505 to 517
G17	519 to 529
H14	541 to 553
JB1	806 to 810
J9	558 to 570
M19	694 to 703

Band	Frequency Range (MHz)
P12	698 to 710
P14	710 to 726
P16	726 to 742
Q12	748 to 758
Q16	742 to 758
Q24	748 to 758
Q18	758 to 774
R23	774 to 787
R25	794 to 806
X7	925 to 937.5
X9	925 to 932

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.

低功率射頻器材技術規範

取得審驗證明之低功率射頻器材，非經核准，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。低功率射頻器材之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前述合法通信，指依電信管理法規定作業之無線電通信。低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

（一）本产品符合“微功率短距离无线电发射设备目录和技术要求”的具体条款和使用场景；

（二）不得擅自改变使用场景或使用条件、扩大发射频率范围、加大发射功率（包括额外加装射频功率放大器），不得擅自更改发射天线；

（三）不得对其他合法的无线电台（站）产生有害干扰，也不得提出免受有害干扰保护；

（四）应当承受辐射射频能量的工业、科学及医疗（ISM）应用设备的干扰或其他合法的无线电台（站）干扰；

（五）如对其他合法的无线电台（站）产生有害干扰时，应立即停止使用，并采取措施消除干扰后方可继续使用；

（六）在航空器内和依据法律法规、国家有关规定、标准划设的射电天文台、气象雷达站、卫星地球站（含测控、测距、接收、导航站）等军民用无线电台（站）、机场等的电磁环境保护区域内使用微功率设备，应当遵守电磁环境保护及相关行业主管部门的规定。

Australia Warning for Wireless

This device operates under an ACMA class licence and must comply with all the conditions of that licence including operating frequencies. Before 31 December 2014, this device will comply if it is operated in the 520-820 MHz frequency band.
WARNING: After 31 December 2014, in order to comply, this device must not be operated in the 694-820 MHz band.

เครื่องโทรคมนาคมและอุปกรณ์นี้มีความสอดคล้องตามมาตรฐานหรือข้อกำหนดทางเทคนิคของ กสทช.

Specifications

SVX

Working Range

Note: Actual range depends on RF signal absorption, reflection and interference.Note: Actual range depends on RF signal absorption, reflection and interference.

HI power mode	75 m (250 ft) (Line of Sight)
LO power mode	18 m (60 ft) (Line of Sight)

Audio Frequency Response

50–15000 Hz (Note: Dependent on microphone type)

Modulation

FM, Ref. ±48 kHz deviation with 1 kHz tone

Total Harmonic Distortion

<0.5%

Dynamic Range

90 dB, A-weighted, typical

Operating Temperature Range

-10°C (0°F) to 50°C (122°F) (Note: Battery characteristics may limit this range.)

Transmitter Audio Polarity

Positive pressure on microphone diaphragm produces positive voltage on pin 2 (with respect to pin 3 of XLR output) and the tip of the 6.35 mm (1/4-inch) output.

SVX1 Bodypack Transmitter

Audio Input Level (maximum)

MIC setting	−15 to − 7 dBV
LINE setting	1 to 9 dBV

Gain Adjustment Range

8 dB

Input Impedance

MIC setting	16 kΩ
LINE setting	120 kΩ

RF Output Power

10 mW (dependent on applicable country regulations)

Dimensions
108 mm x 64 mm x 19 mm (H x W x D)

Weight
90 g (without batteries)

Housing
Molded ABS

Power Requirements
2 "AA" size alkaline or rechargeable batteries

Battery Life
up to 10 hours

SVX2 Handheld Transmitter

Audio Input Level (maximum)
−20 dBV

Input Impedance
22 kΩ

RF Output Power
dependent on applicable country regulations

HI power mode	10 mWmaximum
LO power mode	1 mWmaximum

Dimensions
254 mm X 51 mm dia. (10 X 2 in.)

Weight
270 g (10.2 oz.) (without batteries)

Housing
Molded ABS

Power Requirements
2 "AA" size alkaline or rechargeable batteries

Battery Life
up to 10 hours (alkaline)

SVX4/ SVX88

Dimensions

SVX4	32 mm X 168 mm X 104.5 mm

SVX88	32 mm X 256 mm X 104.5 mm

Weight

SVX4	245 g (8.5 oz.)
SVX88	381 g (13.5 oz.)

Housing

Molded ABS

Audio Output Level

Ref. ±48 kHz deviation with 1 kHz tone

XLR connector into 100 kΩ load	−16 dBV
6.35 mm (1/4") connector into 100 kΩ load	−22 dBV

J9 Audio Output Level

Ref. ±26 kHz deviation with 1 kHz tone

XLR connector into 100 kΩ load	−21 dBV
6.35 mm (1/4") connector into 100 kΩ load	−27 dBV

Output Impedance

XLR connector	600 Ω
6.35 mm (1/4") connector	600 Ω

Sensitivity

-105 dBm for 12 dB SINAD, typical

Power Requirements

(supplied by external power supply)

SVX4:	12–18 V DC @ 130 mA
SVX88:	12–18 V DC @ 220 mA