XTUGA SF-1

XTUGA SF-1 Wireless XLR Transmitter and Receiver User Manual

Model: SF-1 | Brand: XTUGA

1. INTRODUCTION

The XTUGA SF-1 is a versatile wireless XLR transmitter and receiver system designed to convert any wired XLR microphone into a wireless setup. It operates on the UHF band, offering enhanced interference resistance and stable signal transmission. This system supports both dynamic and condenser microphones with built-in 0V/5V/48V phantom power modes, making it suitable for a wide range of audio applications including live performances, recording, and PA systems.

Image: XTUGA SF-1 Wireless XLR Transmitter and Receiver units.

2. PRODUCT FEATURES

- **Wireless XLR Compatibility:** Supports all XLR microphones, including dynamic and condenser types, with selectable 0V/5V/48V phantom power modes.

- **Low Latency Audio:** Features 24-bit audio resolution and 48K sampling frequency for impeccable audio performance with less than 2ms latency.

- **UHF Band Superiority:** Utilizes the UHF band for enhanced interference resistance from electronic devices like phones, TVs, and Wi-Fi.

- **Multiple Channels:** Offers 16 selectable channels to ensure interference-free operation, even in crowded environments.

- **Extended Range:** Provides a wireless range of up to 164 feet (50 meters) for flexible stage use.

- **Long Battery Life:** Built-in rechargeable lithium batteries offer 5-8 hours of continuous usage.

- **Adjustable Volume/Gain:** Features a VOL button to switch between 5 adjustable gain levels for optimal sound quality.

Image: Diagram illustrating the low latency (less than 2ms) of the wireless XLR system.

50 METERS TRANSMISSION DISTANCE

Stable signal and strong anti-interference ability

50M

UHF

Wireless transmission

Image: Visual representation of the 50-meter transmission distance and UHF wireless technology.

ANTI-INTERFERENCE

Completely avoid the interference of WIFI, Bluetooth and other signals

PK Contrast	Signal	Distance	Resistance
UHF ✔	Strong	50M	Excellent
5.8G ✗	Medium	30M	Moderate
2.4G ✗	Weak	10M	Slight

Image: Illustration highlighting the 6-hour working time and Type-C charging port.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- 1 x XTUGA SF-1 Transmitter
- 1 x XTUGA SF-1 Receiver
- 2 x USB Charging Cables
- 1 x Instruction Manual
- 1 x XLR (male) to mono 6.35mm (male) audio adapter
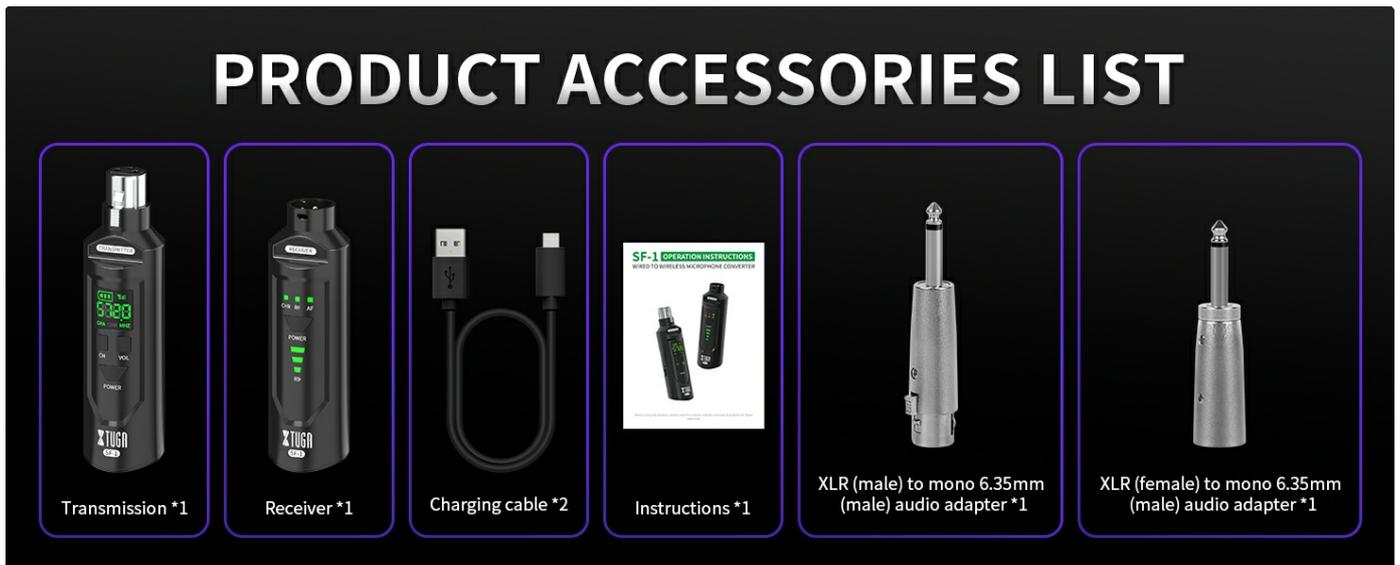- 1 x XLR (female) to mono 6.35mm (male) audio adapter

Image: A visual list of all included product accessories.

4. SETUP INSTRUCTIONS

Follow these steps to set up your XTUGA SF-1 wireless system:

1. **Charge the Units:** Before first use, fully charge both the transmitter and receiver using the provided USB charging cables. The charging indicator light will show charging status.

2. **Identify Units:** The unit labeled "TRANSMITTER" connects to your microphone. The unit labeled "RECEIVER" connects to your audio interface, mixer, or PA system.

3. **Connect Transmitter to Microphone:** Plug the XLR male end of the transmitter directly into the XLR female output of your microphone. Ensure a secure connection.

4. **Connect Receiver to Audio Input:** Plug the XLR female end of the receiver into an available XLR input on your audio interface, mixer, or PA system. If your input is 6.35mm, use the appropriate XLR to 6.35mm adapter provided.

5. **Power On:** Press and hold the POWER button on both the transmitter and receiver until their displays or indicator lights illuminate.

6. **Pairing (Automatic):** The units are designed to pair automatically upon power-on. The display on the transmitter and the RF indicator on the receiver will confirm a successful connection.

7. **Select Phantom Power (for Condenser Mics):** If using a condenser microphone, ensure the transmitter's phantom power setting is appropriate (48V or 5V). This can typically be adjusted via a dedicated switch or button on the transmitter. Refer to the 'Operating Instructions' section for details on phantom power selection.
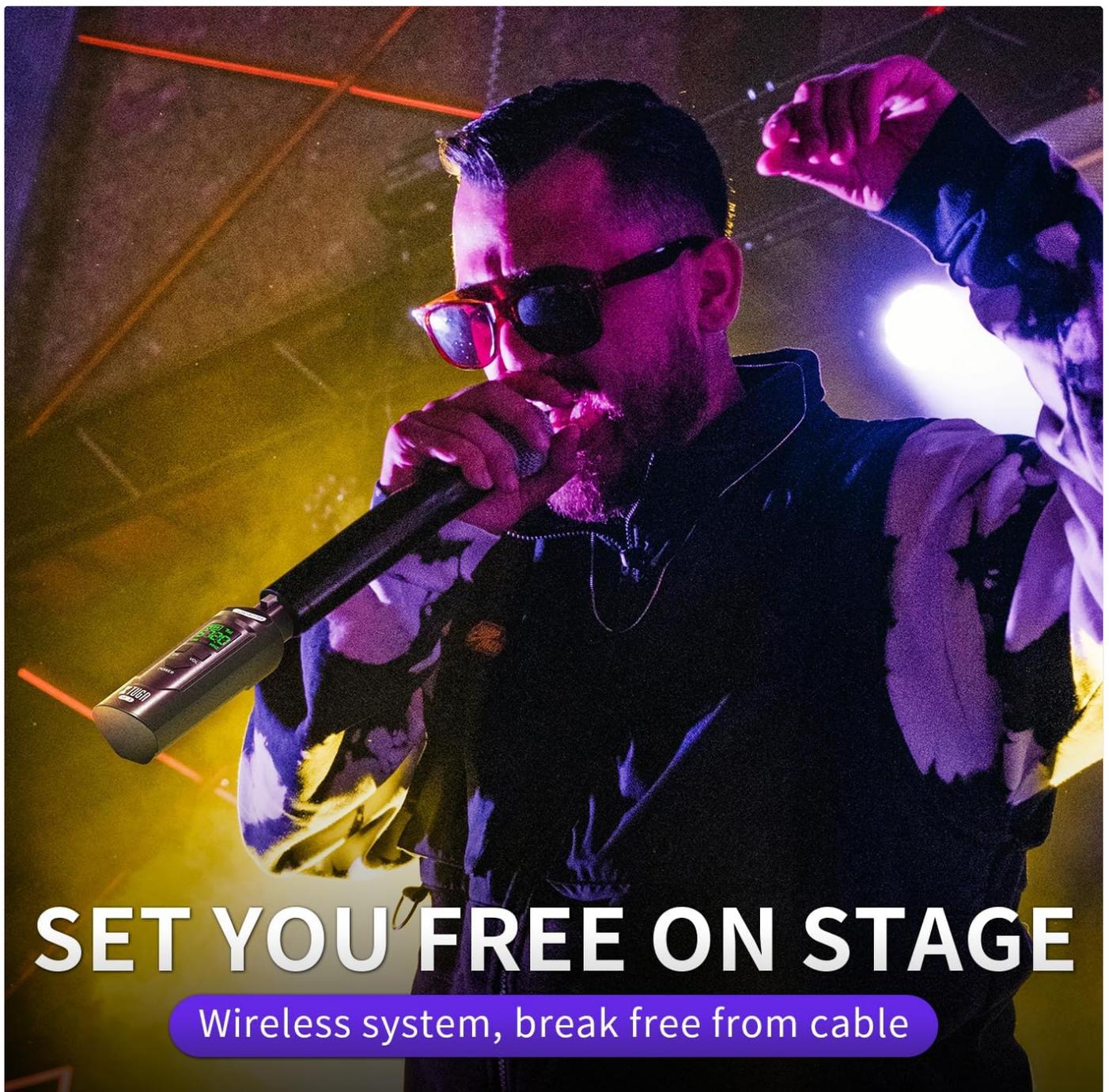
Image: Diagram showing the compatibility of the SF-1 system with dynamic mics, condenser mics, recorders, mixers, and PA systems.

Image: Illustration demonstrating the system's versatility and support for 48V phantom power for condenser microphones.

5. OPERATING INSTRUCTIONS

Understanding the controls and functions of your SF-1 system:

Image: Detailed diagram of the transmitter and receiver with numbered components and their functions.

Transmitter Controls:

- **XLR Female Plug:** Connects to the microphone.

- **Charging Indicator Light:** Indicates charging status.

- **Monitor Display:** Shows remaining power, signal strength, frequency, and channel.

- **CH Button (Frequency Switch):** Short press to switch between available UHF frequencies (16 channels).

- **VOL Button (Volume Control):** Short press to cycle through 5 gain/volume levels. For best sound quality, it is recommended to set the gear to 5.

- **POWER Button:** Press and hold to power on/off.

- **Charging Port:** USB-C port for charging.

Receiver Indicators:

- **XLR Male Plug:** Connects to the audio input device.

- **CHR (Charge) Indicator:** Indicates charging status.

- **RF (Radio Frequency) Indicator:** Illuminates when a stable wireless connection is established.

- **AF (Audio Frequency) Indicator:** Illuminates when audio signal is being received.

- **POWER Button:** Press and hold to power on/off.

- **Battery Level Indicators:** Shows remaining battery life.

- **Charging Port:** USB-C port for charging.

Channel and Frequency Management:

The SF-1 system offers 16 selectable UHF frequencies to minimize interference. If you experience signal drops or interference, short press the **CH** button on the transmitter to switch to a different frequency. The receiver will automatically sync to the new frequency.

Image: Depiction of multiple microphones connected to a mixer, illustrating the support for up to 16 simultaneous sets.

6. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the units. Do not use abrasive cleaners or solvents.

- **Battery Care:** Recharge the units regularly, even if not in frequent use, to maintain battery health. Avoid fully depleting the battery before recharging.

- **Storage:** Store the units in a cool, dry place away from direct sunlight and extreme temperatures.

- **Avoid Moisture:** Keep the devices away from water and high humidity to prevent damage to internal components.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
No sound output.	Units not powered on; Low battery; Not paired; Incorrect phantom power setting; Volume too low.	Ensure both units are powered on and charged. Check if RF indicator is lit on receiver. Adjust phantom power setting on transmitter if using condenser mic. Increase volume on transmitter and connected audio device.
Interference or static noise.	Nearby electronic devices; Channel conflict.	Move away from sources of interference (Wi-Fi routers, phones, TVs). Short press the CH button on the transmitter to switch to a different frequency.
Limited range.	Obstructions; Environmental factors.	Ensure clear line-of-sight between transmitter and receiver. Avoid using in areas with dense walls or metal structures.
Transmitter/Receiver not charging.	Faulty cable or power adapter; Charging port issue.	Try a different USB charging cable and power adapter. Ensure the cable is fully inserted into the charging port.

8. SPECIFICATIONS

Feature	Detail
Model Name	SF-1
Connectivity Technology	UHF, XLR
Connector Type	XLR
Microphone Form Factor	Handheld (adapter for XLR microphones)
Phantom Power Support	0V/5V/48V selectable
Audio Resolution	24-bit
Sampling Frequency	48KHz
Latency	Less than 2ms
Number of Channels	16
Operating Range	Up to 50 meters (164 feet)
Power Source	Battery Powered (Rechargeable Lithium)
Battery Life	5-8 hours
Charging Port	USB-C
Item Dimensions (L x W x H)	6.69 x 7.09 x 2.36 inches
Item Weight	13.4 ounces

Feature	Detail
Color	Black
Recommended Uses	Indoor/Outdoor
Compatible Devices	Audio Interface, Audio Mixer, Karaoke Machine, PA System

9. WARRANTY AND SUPPORT

For detailed warranty information and customer support, please refer to the official XTUGA website or contact their customer service directly. Keep your purchase receipt as proof of purchase for any warranty claims.

XTUGA Official Store: Visit the XTUGA Store on Amazon