

BTECH FRS-A1 Orange

BTECH FRS-A1 Two-Way Radio User Manual

Model: FRS-A1 Orange | Brand: BTECH

INTRODUCTION

The BTECH FRS-A1 is a license-free FRS (Family Radio Service) walkie-talkie designed for reliable two-way communication. This radio is pre-programmed with all 22 FRS channels and supports 260 DCS and CTCSS privacy tones, offering up to 5720 channel combinations for compatibility with various FRS radios. Its robust design, combined with features like a full alpha-numeric display, USB-C charging, and built-in flashlight, makes it a versatile communication tool for various environments.

The FRS-A1 also includes dual watch capabilities, allowing you to monitor two different channels simultaneously, and a built-in NOAA receiver for weather forecasts and alerts. With maximum allowed power output for FRS radios, it provides effective communication over several miles in unobstructed terrain.

WHAT'S IN THE BOX



Figure 1: BTECH FRS-A1 Package Contents

Your BTECH FRS-A1 package includes the following items:

- 2 x FRS-A1 Radios
- 2 x Earpiece Kits
- 2 x Li-ion Batteries
- 1 x USB AC Adaptor
- 1 x USB to Dual USB-C Cable
- 2 x Belt Clips
- 2 x Wrist Straps
- 1 x User Manual (this document)

PRODUCT FEATURES AND COMPONENTS



Figure 2: FRS-A1 Radio Components

The FRS-A1 radio is designed with user-friendly controls and a clear display. Key components include:

- **Antenna:** For transmitting and receiving signals.
- **Volume/Power Knob:** Turns the radio on/off and adjusts volume.
- **Indicator Light:** Shows radio status (e.g., transmitting, receiving, charging).
- **Flashlight:** Built-in LED light for illumination.
- **PTT (Push-to-Talk) Button:** Press and hold to transmit, release to receive.
- **Screen:** Full alpha-numeric display showing channel, tone, battery status, and other information.
- **Monitor Button:** Allows quick monitoring of all traffic on a channel, regardless of privacy tone.
- **Menu Button:** Accesses radio settings and options.
- **Call/Lock Button:** Initiates a call tone or locks/unlocks the keypad.

- **Scan Button:** Activates channel scanning.
- **Speaker:** Outputs received audio.
- **Microphone:** Captures your voice for transmission.
- **Scroll Buttons (Up/Down):** Navigates menus and changes channels/settings.
- **FM Button:** Toggles FM radio mode.
- **WX Button:** Toggles NOAA weather radio mode.
- **Accessory Port:** For connecting earpieces or programming cables (K1 size/style).
- **Type-C Charging Port:** For direct USB-C charging.

SETUP

1. Battery Installation

The FRS-A1 uses a rechargeable Li-ion battery. To install, align the battery pack with the compartment on the back of the radio and slide it into place until it clicks securely. Ensure the battery is properly latched.

2. Charging the Battery



Figure 3: USB-C Charging



Figure 4: Charging from Laptop

The FRS-A1 can be charged using the included USB-C cable and AC adapter, or any standard USB-C power source (e.g., computer, power bank). Connect the USB-C cable to the radio's charging port. The indicator light will show charging status (typically red/amber for charging, green for fully charged). The docking station can also charge backup batteries independently.

3. Attaching Accessories

Attach the belt clip to the back of the radio by sliding it into the designated slot until it locks. The wrist strap can be threaded through the loop at the bottom of the radio. Earpieces can be plugged into the K1 size/style accessory port on the side of the radio.

OPERATING INSTRUCTIONS

1. Power On/Off and Volume

Rotate the **Volume/Power Knob** clockwise to turn the radio on. Continue rotating to increase the volume. Rotate counter-clockwise to decrease volume and turn the radio off.

2. Channel Selection and Privacy Tones



Figure 5: Channel and Privacy Tone Display

The FRS-A1 has 22 FRS channels. Use the **Scroll Up/Down Buttons** to change channels. To set a privacy tone (CTCSS/DCS), press the **Menu Button**, navigate to the CTCSS/DCS setting, and select your desired tone. The radio supports 260 privacy tones, allowing for clear communication with compatible radios. You can also rename channels for easier identification using the menu

options.

3. Transmitting and Receiving

To transmit, press and hold the **PTT Button** on the side of the radio. Speak clearly into the microphone. Release the PTT button to stop transmitting and return to receive mode. The indicator light will illuminate when transmitting.

4. Dual Watch Function

The dual watch feature allows you to monitor two different channels simultaneously. Consult the full user manual for detailed instructions on activating and configuring dual watch mode.

5. NOAA Weather Radio



Figure 6: NOAA Logo



Figure 7: Weather Icon

The FRS-A1 includes a built-in NOAA receiver. Press the **WX Button** to toggle to NOAA weather radio mode and receive local weather forecasts and alerts. This feature is pre-programmed with the 7 NOAA radio frequencies.

6. FM Radio and Flashlight



Figure 8: FM Radio and Flashlight Features

Press the **FM Button** to activate the built-in FM radio. You can use the scroll buttons to scan for stations. The FRS-A1 also features a built-in LED flashlight. Refer to the full manual for specific button presses to activate the flashlight.

7. Keypad Lock

To prevent accidental button presses, you can lock the keypad. Press and hold the **Call/Lock Button** to toggle the keypad lock on or off. A lock icon will appear on the screen when activated.

8. Advanced Features

The FRS-A1 includes advanced features such as VOX mode (Voice Operated Transmit), Busy Channel Lockout (BCLO), and Transmit Time-Out Timer (TOT). These settings can be adjusted via the radio's menu. Refer to the comprehensive manual for detailed explanations and configuration steps for these functions.

MAINTENANCE

- **Cleaning:** Use a soft, damp cloth to clean the radio's exterior. Do not use harsh chemicals or abrasive cleaners.

- **Battery Care:** To maximize battery life, avoid fully discharging the battery frequently. Charge the battery regularly, especially if the radio will not be used for an extended period. Store batteries in a cool, dry place.
- **Weather Resistance:** The FRS-A1 is IP54 weather resistant, meaning it is protected from dust and splashing water. While it can reasonably be used in various weather situations, it is not designed for submersion. Avoid exposing the radio to extreme temperatures or direct prolonged sunlight.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Radio does not power on.	Battery is dead or not installed correctly.	Ensure battery is fully charged and properly seated.
Cannot communicate with other radios.	Different channels or privacy tones. Out of range.	Verify both radios are on the same FRS channel and using the same CTCSS/DCS privacy tone. Move closer to the other radio.
Poor audio quality or static.	Weak signal, interference, or incorrect squelch setting.	Move to an open area. Adjust squelch level in the menu. Check for sources of interference.
Battery not charging.	Cable or adapter issue, or battery not making contact.	Ensure USB-C cable is fully inserted into the radio and power source. Check if the charging indicator light is on. Try a different USB-C cable or power adapter. Ensure battery is properly latched.
Keypad is unresponsive.	Keypad lock is active.	Press and hold the Call/Lock Button to unlock the keypad.

SPECIFICATIONS

Feature	Detail
Model Number	FRS-A1 Orange
Brand	BTECH
Channels	22 FRS Channels
Privacy Tones	260 DCS and CTCSS tones
Power Output	Maximum allowed for FRS radios (2W)
Estimated Range	3-8 miles (unobstructed terrain)
Battery Type	2 x Lithium Ion (1500mAh included)
Charging	USB-C
Water Resistance	IP54 (Weather Resistant)
Dimensions	2 x 0.75 x 5.5 inches
Weight	8 ounces

Feature	Detail
Special Features	Dual Watch, Full Alpha-numeric Display, Built-in Flashlight, FM Radio, NOAA Receiver

WARRANTY AND SUPPORT





The BTECH FRS-A1 radio comes with a **1-year warranty** from the date of purchase. BTECH is a USA-based company, committed to providing excellent local support for any issues that may arise with your product. For technical assistance, warranty claims, or general inquiries, please refer to the contact information provided in the original product packaging or visit the official BTECH website.


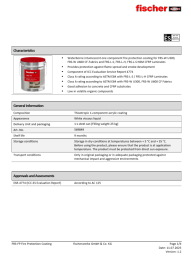



Figure 9: BTECH USA Support



Related Documents - FRS-A1 Orange

	Motorola Talkabout T48X Series Emergency Preparedness Two-Way Radio User Manual User guide for the Motorola Talkabout T48X Series emergency preparedness two-way radio, covering features, operation, safety, and troubleshooting for models like the T482. Learn about installation, settings, and advanced functions.
 	Walkie Talkies ZX-808 User Manual User manual for the ZX-808 Walkie Talkies, covering safety, operation, controls, troubleshooting, and FCC compliance. Features include 22 FRS channels, NOAA weather scan, VOX mode, and keypad lock.
	Inspireyes GL-508 Kids Walkie Talkies User Manual - Features, Operation, and Specs Comprehensive user manual for the Inspireyes GL-508 walkie talkies for kids. Learn about setup, operation, safety precautions, technical specifications, and warranty information for these fun and reliable communication devices.

	<p>Fischer FRS-L Universal Pipe Clamp: Technical Specifications and Applications</p> <p>Explore the Fischer FRS-L Universal pipe clamp, a lightweight, two-screw clamp with rapid locking. Find detailed technical data, applications, advantages, and installation information for various models.</p>
	<p>fischer FRS-FP Fire Protection Coating: Technical Datasheet and Application Guide</p> <p>Comprehensive technical datasheet for fischer FRS-FP, a waterborne intumescent fire protection coating. Includes characteristics, technical data, system components, processing instructions, and approvals.</p>
	<p>Motorola Talkabout T47X Series Two-Way Radio User Guide</p> <p>Comprehensive user guide for the Motorola Talkabout T47X Series two-way radios, covering safety information, operating instructions, menu options, special features like emergency alerts and built-in flashlights, and warranty details. Includes information on channels, frequencies, and accessories.</p>