RED'S ENGINEERING

SRPT-02
Simplex Repeater
Data Sheet

Overview:

The SRPT-02 is an affordable repeater system designed for HMRS and Ham Radio enthusiasts. It offers fast plug-and-play repeater operation and is compatible with most two-way radios. This repeater comes equipped with a built-in rechargeable battery that can be charged via a USB C connection, making it an excellent choice for trips where repeater coverage is unavailable. The internal battery can provide a weekend's worth of use on a single charge. This small and compact device can be easily attached to any base station or handheld radio for mobile use. It's simple to use and works right out of the box.

Configuration can be performed using a web application. The repeater can be powered either by the internal battery or the USB port located on the top of the unit. Real-time LED indicators provide operational status updates. DTMF tone detection allows you to enable or disable the repeater directly from the field. Additionally, an open frame design allows for compactness, and plastic shields can be attached for added ruggedness when needed. The SRPT-02 also supports CCTSS on your radio for added privacy and interference prevention. Currently, it supports UV-5R and compatible radios.

Features

- Plug and play, works right out of the box
- Web based configuration via cell phone
- Low power operation
- DTMF detection, enable disable repeater
- 10 second message record time
- Station Identification (Morse Code generation)
- LED Indicators show current status
- Shield type enclosure design
- USB C power / Charging
- Open source software
- OTA Firmware Updates (WiFi)
- Long battery life, ~20 hours talk time, ~30 day active standby

What's in the kit:

(1) SRPT-02 Repeater

(1) 1 UV-5R Compatible Cable

(1) USB C Cable

(1) 5V A/C Adapter

(1) 1000mA Battery (installed)

A simplex repeater can be a valuable tool for both ham (amateur radio) and GMRS (General Mobile Radio Service) radio users. Here are some of the benefits of using a simplex repeater for these purposes:

- **Cost-Effective Solution:** Running a simplex repeater can be more cost-effective than setting up a full-fledged duplex repeater system, making it an attractive option for budget-conscious users.

- **Extended Range:** Simplex repeaters can significantly extend the communication range of radios operating in simplex mode. They record signals on one frequency and re-transmit them on the same or a different frequency, effectively increasing the range of communication. No duplexer needed.

- **Emergency Communications:** During emergency situations or disaster scenarios, simplex repeaters can play a crucial role in maintaining communication when other infrastructure may be compromised. They can relay important information across a wider area.

TECHNICAL SPECIFICATIONS

- Dimensions: 2.7"W x 1.9"D x 0.7"H (70 x 48 x 18 mm)
- Weight: 2.2 oz. (0.63 g)
- Power Supply: 5 VDC, max 500mA current
- Wireless Technology: IEEE 802.11b/g
- Antenna: 1 x 2dBi Built-in
- Frequency Band/Bandwidth: 2.4 GHz IEEE 802.11b/g
- Channels: 1 to 11 IEEE 802.11b/g (North America)
- Wireless Transmission Speed: 20Mbps
- Battery Capacity: 1000mA
- Full charge time: 3 Hours
- Interfaces/Ports: USB C, 3.5mm audio connection
- Serial Interface: 115200 Baud