5. Setup the Aprisa SR radio

The Aprisa SR has a factory default Terminal Operating Mode of Remote Station.

One radio in the Aprisa SR network must be setup as a Base Station.
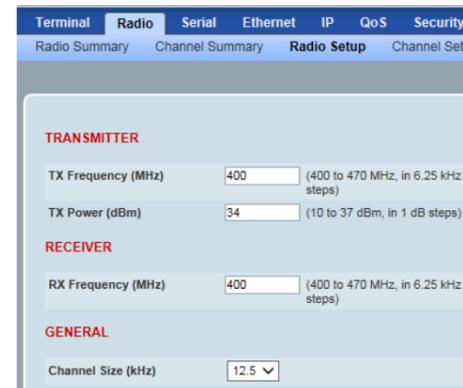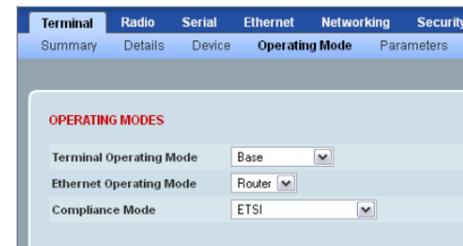
The other radios in the Aprisa SR network are setup as Remote Stations or Repeater Stations.

Set the Ethernet Operating Mode and the Compliance Mode required.

Set the unique radio Network ID to be the same in your entire network.

Set the Aprisa SR TX Frequency, RX Frequency, TX Power and Channel Size to comply with your site license.

Set the Antenna Port Configuration required.

You can now configure the remaining terminal and network parameters and settings. Please refer to the Aprisa SR User Manual for detailed instructions.

6. Monitor the Aprisa SR radio signal strength

When the network is installed, the radio signal strength can be monitored on remote stations by setting the radio to Test Mode.
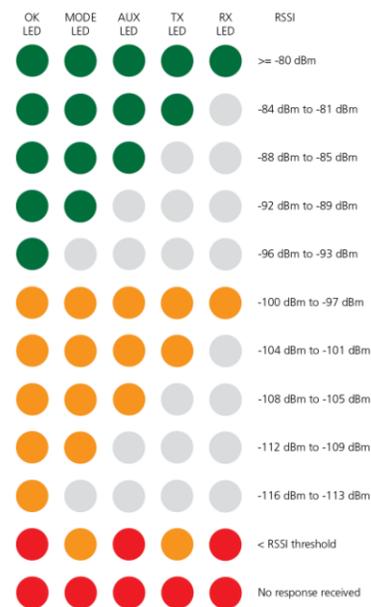
To enter Test Mode, press and hold the TEST button on the radio LED panel until all the LEDs flash green (about 3 - 5 seconds).

In Test Mode, the LED Display panel presents a real time visual display of the RSSI. This can be used to adjust the antenna for optimum signal strength.

Note: The response time is variable and can be up to 5 seconds.

To exit Test Mode, press and hold the TEST button until all the LEDs flash red (about 3 - 5seconds).

The OK, MODE and AUX LEDs will be solid green and the TX and RX LEDs will be solid or flash green if the network is operating correctly.

Please refer to the Aprisa SR User Manual on the Information and set up CD for more information.

Quick Start Guide

Aprisa SR Radio

Contents

Follow these steps to operate your Aprisa SR radio:

1. Check the box contents

2. Install the Aprisa SR radio and connect the protection earth

3. Connect the Antenna and apply power to the Aprisa SR radio

4. Connect to the Aprisa SR radio

5. Setup the Aprisa SR radio

6. Monitor the Aprisa SR radio signal strength

1. Check the box contents

The Aprisa SR is shipped to you in a box containing the following:

(i). Aprisa SR radio fitted with a power connector.

The Aprisa SR has two antenna port product options:

> Single Antenna Port
>
> Example; part number APSX-N400-SSC-<u>SO</u>-21-ENAA
>
> Dual Antenna Port
>
> Example; part number APSX-N400-SSC-<u>DO</u>-21-ENAA

(ii) Information and set up CD containing the following:

- Aprisa SR Radio Software
- Aprisa SR Product Description and Aprisa SR User Manual
- Aprisa SR Software Release Notes
- Adobe® Reader® (for viewing the PDF files on the CD)
- USB Serial Driver
- TFTP server software
- Microsoft® Internet Explorer and Mozilla Firefox web browsers

(iii) USB Cable USB A to USB micro B, 1m
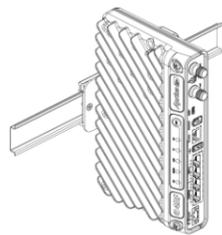
(used for Command Line Interface management see Aprisa SR User Manual)
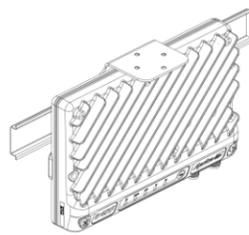
2. Install the Aprisa SR radio and connect the protection earth

The Aprisa SR has four threaded holes (M4) in the base and two holes (for M5 screws) through the enclosure for mounting. Mounting options include DIN rail mounting with the Aprisa SR Mounting Bracket (optional accessory part number 'APSB-MBRK-DIN' and Wall and rack shelf mounting.
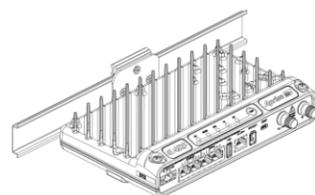
The Aprisa SR mounting options are shown below:
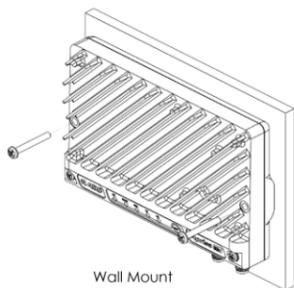
DIN Rail Vertical Mount   DIN Rail Flat Horizontal Mount   DIN Rail Horizontal Mount
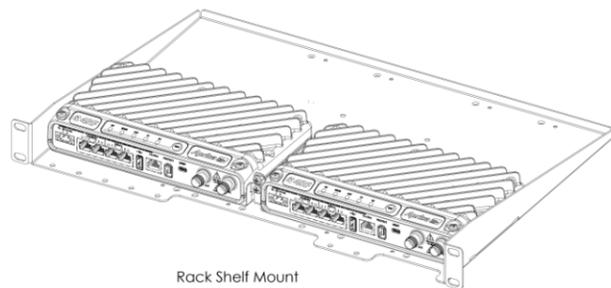
Wall Mount   Rack Shelf Mount

The Aprisa SR has an earth connection point on the top left and the top right of the enclosure. Use the supplied M4 screws to earth the enclosure to a protection earth.

The antenna feeder cable should use grounding kits for lightning protection as specified or supplied by the coaxial cable manufacturer to properly ground or bond the cable outer.

Warning: If the Aprisa SR is operated in an environment where the ambient temperature exceeds 50°C, the Aprisa SR must be installed within a restricted access location to prevent human contact with the enclosure heatsink.

3. Connect the antenna and apply power to the Aprisa SR radio

Connect the antenna to the antenna port TNC female connector. If the antenna is not available, terminate the 'TX / Ant' port with a TNC male 50 ohm terminator (10 Watts min).

Warning: Do not directly connect the two radio antenna ports without attenuation of at least 40 dB. The receiver can be damaged if signals greater than +10 dBm are applied to the antenna port.

The Aprisa SR is operated from a DC source of voltage between +10 VDC and +30 VDC (negative earth) and consumes up to 35 Watts. External power supplies are available from 4RF as accessories (see the Aprisa SR User Manual).

The power connector (Molex 2 pin female) is supplied fitted to the radio. Wire your power source to the power connector (- / +) and plug the connector into the radio. The connector screws should be fastened to secure the connector.

Turn your power source on.

The radio LEDs will flash orange for one second and then the OK, MODE, AUX LEDs will light solid green and the TX and RX LEDs will flash red. This is because the factory default Terminal Operating Mode for all Aprisa SR radios is set to Remote Station.

When the radio has been configured and has registered with the network, the TX and RX LEDs will be solid or flash green if the network is operating correctly.

The Aprisa SR radio is ready to operate.

Warning: On link operation, RF energy is radiated from the antenna. Do not stand in front of the antenna.

4. Connect to the Aprisa SR radio

The Aprisa SR has a factory default IP address of 169.254.50.10 with a subnet mask of 255.255.0.0. The Aprisa SR protected station has a factory default IP address of 169.254.50.10 for radio A and 169.254.50.20 for radio B with a subnet mask of 255.255.0.0.

Each radio in the Aprisa SR network must be setup with a unique IP address on the same subnet.

If the IP address of the radio is unknown, it can be changed via the Command Line Interface on the radio MGMT USB port:

- Connect your PC USB port to the Aprisa SR MGMT USB port (see the Aprisa SR User Manual Command Line Interface section).
- Login to the radio with the default login 'admin' and password 'admin'.
- At the command prompt >> type 'cd APRISASR-MIB-4RF' and enter.

    - type 'set termEthController1IpAddress xxx.xxx.xxx.xxx' and enter.

    - type 'set termEthController1SubnetMask 255.255.0.0' and enter.

    - type 'set termEthController1Gateway xxx.xxx.xxx.xxx' and enter.

If the IP address of the radio is known or is the default IP address, it can be changed via the Ethernet port:

- Setup your PC for a compatible IP address e.g. 169.254.50.1 with a subnet mask of 255.255.0.0.
- Connect your PC network port to one of the Aprisa SR Ethernet ports.
- Open a browser and enter https://169.254.50.10.

    Note: The Aprisa SR has a Self Signed security certificate which may cause the browser to prompt a certificate warning. It is safe to ignore the warning and continue. The valid certificate is 'Issued By: 4RF-APRISA' which can be viewed in the browser.

- Login to the radio with the default login 'admin' and password 'admin'.
- Change the IP address, Subnet mask and Gateway to network compatible IP addresses.