5. Setup the Aprisa SR+ Migration Station

Login using the IP address of either the primary or secondary radio (do not use the PVIP address for login). All parameters will be automatically synchronized on both radios.

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

A single radio or a Migration Station in the Aprisa SR+ network must be setup as a base station. The other radios or Migration Stations 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 including the Base Station ID.

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 Migration Station and network parameters and settings. For more information, please refer to the 'Aprisa SR+ User Manual Appendix 1 - Migration Station' available from the 4RF website https://www.4rf.com/secure (login required).

Reboot both Primary and Secondary radios and restore the Hardware Manual Lock switch is set to AUTO.

The Aprisa SR+ Migration Station is ready to operate.

6. Monitor the Aprisa SR+ Migration Station 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 front panel until all the LEDs flash green (about 3 - 5 seconds).
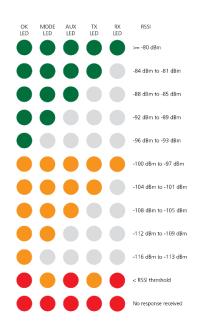
In Test Mode, the LED Display panel presents a real time visual display of the RSSI. This can be used to adjust the antenna for optimum signal strength.

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).

If the network is operating correctly, the LEDs will show:

- Active radio - the OK, MODE and AUX LEDs will be light green and the TX and RX LEDs will be solid or flash green.
- Standby radio - the OK will light green, the MODE LED will light orange, the AUX LED will light green and the TX and RX LEDs will light green (steady).

Quick Start Guide

Aprisa SR+ Migration Station

Contents

Follow these steps to setup your Aprisa SR+ Migration Station:

1. Check the box contents
2. Install the Aprisa SR+ Migration Station and connect the protection earths
3. Connect the antenna and apply power to the Aprisa SR+ Migration Station
4. Connect to the Aprisa SR+ Migration Station
5. Set up the Aprisa SR+ Migration Station
6. Monitor the Aprisa SR+ Migration Station signal strength
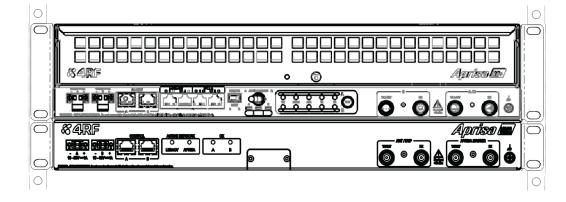
1. Check the box contents *

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

- One Aprisa SR+ Protected Station containing two Aprisa SR+ radios pre cabled to the protection switch with product options of single antenna operation and the power supply input of 48 VDC (part number suffix ends with AB)
- One Aprisa SR+ Migration Switch with a power supply input of 48 VDC
- Two cables TNC to TNC 160mm for RG142
- Two cables N-male to -N-male 360mm for RG142
- Two cables N-female- to TNC 800mm for RG142
- Four rack mounting brackets and screws
- One adaptor RJ45 to DB9 male and one adaptor RJ45 to DB9 female - MMS wired
- One adaptor RJ45 to DB25 male and one adaptor RJ45 to DB25 female - MMS wired
- Four 2 pin female power connectors
- One 4 pin female remote control connector

2. Install the Aprisa SR+ Migration Station and connect the protection earths

The Aprisa SR+ Migration Station is designed to mount in a standard 19" rack.

The Aprisa SR+ Protected Station and the Migration Switch both have earth connection points on the bottom right of the chassis. Earth both chassis earth connection points 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.

Note * When the spare Aprisa SR+ Migration Switch is supplied (APST-XMSW-450 or APST-XMSW-900), the item includes the Aprisa SR+ Migration Switch chassis, 2x mounting brackets, 2x power connectors, RF cables and RJ45 to DB9 / DB25 adaptors.

Note: The Aprisa SR+ radio operates within frequency bands that require a site license be issued by the radio regulatory authority with jurisdiction over the territory in which the equipment is being operated. It is the responsibility of the user, before operating the equipment, to ensure that where required the appropriate license has been granted and all conditions attendant to that license have been met.
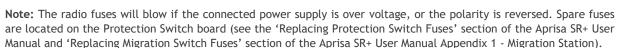
Hereby, 4RF Limited declares that the Aprisa SR+ digital radio is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the internet address http://www.4rf.com/library/en.

BE	BG	CZ	DK	DE
EE	IE	EL	ES	FR
HR	IT	CY	LV	LT
LU	HU	MT	NL	AT
PL	PT	RO	SI	SK
FI	SE	UK		

3. Connect the antenna and apply power to the Aprisa SR+ Migration Station

Connect the antenna to the Migration Station antenna port (TNC female connector). If the antenna is not available, terminate the TX/ANT A/B antenna port with a TNC male 50 ohm terminator (10 Watts min). If the Migration Station is the dual antenna option, then both TX/ANT A/B antenna ports / terminators must be connected.

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+ Migration Station has a power supply input of nominal 48 VDC (18 to 60 VDC floating) and consumes up to 42 Watts. Four power connectors (Molex 2 pin female) are supplied fitted. Wire your power source to the four power connectors (- / +), two for the Protected Station and two for the Migration Switch. The connector screws can be fastened to secure the connectors.

Note: The radio fuses will blow if the connected power supply is over voltage, or the polarity is reversed. Spare fuses are located on the Protection Switch board (see the 'Replacing Protection Switch Fuses' section of the Aprisa SR+ User Manual and 'Replacing Migration Switch Fuses' section of the Aprisa SR+ User Manual Appendix 1 - Migration Station).

Turn your power source on. All the LEDs on both radios will flash orange for one second and then change to:

- Active radio - the OK will light green, the TX / RX LEDs will light green (steady or flashing), the MODE and AUX LEDs will light green.
- Standby radio - the OK will light green, the TX / RX LEDs will light green (steady), the MODE LED will light orange and the AUX LED will light green.

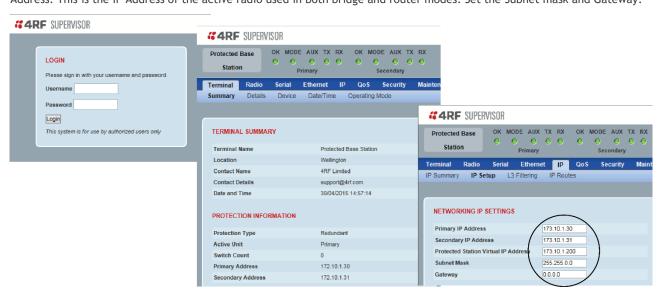## 4. Connect to the Aprisa SR+ Migration Station

Ensure that the Hardware Manual Lock switch is set to radio A (this is a factory default setting). This prevents random switching when changing the radio settings.

The Aprisa SR+ primary radio (radio A) in the Migration Station has a factory default IP address of 169.254.50.10 and the secondary Aprisa SR+ radio (radio B) in the Migration Station has a factory default IP address of 169.254.50.20, both with a subnet mask of 255.255.0.0.

- Set up 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+ Migration Station Ethernet ports (1 to 4 depending on product option).
- Open a browser and enter http://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 primary radio with the default login 'admin' and password 'admin'.
- Each radio in the network and both radios in the Migration Station must be setup with unique IP addresses on the same subnet.

  Set the Primary IP address and the Secondary IP address to network compatible IP addresses. Set the Migration Station Virtual IP Address. This is the IP Address of the active radio used in both bridge and router modes. Set the Subnet mask and Gateway.

If the IP addresses of radios in the Migration Station are unknown for some reason, they can be shown or changed via the Command Line Interface (CLI) on the radios MGMT USB ports. USB to UART Bridge VCP Drivers are required to connect the radio USB port to your PC. You can download and install the relevant driver from https://www.silabs.com/products/development-tools/software/usb-to-uart-bridge-vcp-drivers. Set the PC serial port to 38,400 baud, 8 data bits, no parity and 1 stop bit, with no hardware flow control.

- Open the Migration Station drawer by sliding it from the front
- Connect your PC USB port to the primary Aprisa SR+ (A) MGMT USB port (see the Aprisa SR+ User Manual CLI section)
- Login to the radio with the default login 'admin' and password 'admin'.
- At the command prompt >> type 'cd APRISASR-MIB-4RF' and enter
- At the command prompt >> type 'ls Terminal' and enter to show the existing IP address
- At the command prompt >> type 'set termEthController1IpAddress xxx.xxx.xxx.xxx' and enter to change the IP address.