



REPEATIT

Trinity-800 Quick Start Guide

Warning *This product transmits information using microwave radio signals. Installation of fixed outdoor radio links should only be performed by a qualified and trained technician who has sufficient electricity/safety competence and who is familiar with local radio regulations.*

Before proceeding with the installation, follow this quick-start guide to verify that the equipment works on the ground:

1. Place the two radio units next to each other on a table. If the units have integrated antennas (which holds for all models except Trinity-800), make sure that the antennas are not pointing towards each other as that could result in too high power being received (over-steering). If you have two Trinity-800 units, place the antenna connectors of the two units close to each other without any connected antenna).
2. Power up the first radio with the PoE injector and connect to it with a laptop:
 - Connect the PoE port marked "P+DATA OUT" to the Trinity unit with a Cat5E Ethernet cable.
 - Connect the PoE port marked "DATA IN" to a laptop or a network (via a switch or a router).

You reach the unit's web GUI with these login details:

IP address: 10.0.0.1

Username: admin

Password: public



3. Configure this unit as “Master”. Apart from this setting, you only have to configure “Link ID” and “Passphrase” fields. In the example below we have used the phrase “ritlink” for both fields. When this is done, click “Set” (located at the bottom of the Configuration page), then “Apply” and finally “Save” (Apply and Save are located at the left hand pane of the web site).

The screenshot shows the configuration page for a Trinity-800 Series unit. At the top, there are three tabs: "Status", "Configure", and "Tools". Below the tabs, there are two radio buttons: "Ethernet" and "Radio", both of which are selected. The main content area is titled "Radio settings" and contains the following fields:

- Mode ? : Master (dropdown menu)
- Remote MAC ? : 00:00:00:00:00:00 (text input)
- Channel : 100 (5.500 GHz) + Ext ch 104/108/112 (dropdown menu)
- Channel bandwidth ? : 80 MHz (dropdown menu)
- Modulation rate ? : Auto rate (dropdown menu)
- Link ID ? : ritlink (text input)
- Passphrase : ritlink (text input)
- Regulatory domain ? : Sweden (dropdown menu)
- Max Transmit power ? : 23 dBm + Antenna (dropdown menu)
- Distance ? : 1 (text input)
- CAC Policy ? : Off (dropdown menu)

At the bottom left of the configuration area, there is a "Set" button.

Figure 1 - Configure the Master unit.

4. Now power up the second radio unit and log in to that one. It should be configured identically as the Master unit, with the exception that the Mode is set to “Client” rather than “Master” (see figure below). Make sure that the Link ID and the Passphrase get the same values as on the Master side. Set, Apply and Save the configurations.



Radio settings	
Mode ?	Client ▼
Remote MAC ?	00:00:00:00:00:00
Modulation rate ?	Auto rate ▼
Link ID ?	ritlink
Passphrase	ritlink
Regulatory domain ?	Sweden ▼

Figure 2 – Client unit configuration.

- The two radios will establish a radio link. Connect one of the two radios to a laptop and the other side to a network (the Internet or some local network that you can perform tests from). Once the link is up (could take a couple of minutes), test to see that you have connectivity between your laptop and the network.

Note: When testing links in office environment, several factors can affect the achieved throughput. The purpose of the above described connectivity test is to verify that the links are fully operational before anything is mounted in field.

Installing the link in field

- Mount the first unit and point it towards the site of the second unit. Power it up and make sure the Power LED is lit and the status LED blinks slowly.
- Mount the second unit. Power it up and adjust it for best signal using the status LED (5 pulses or more in sequence recommended).
- Adjust the first unit for best signal using the Status LED.
- Make sure all cables are secured and connect the link to the network.
- Configure the distance parameters at the master unit to reflect the correct distance between the units.

Note: Make sure that the polarization on both units is the same. Unaligned polarization will significantly reduce the signal strength. For more information about antenna polarization and how to successfully tune the links for best possible performance, refer to Repeatit's Deployment Guideline document (available at www.repeatit.se).

