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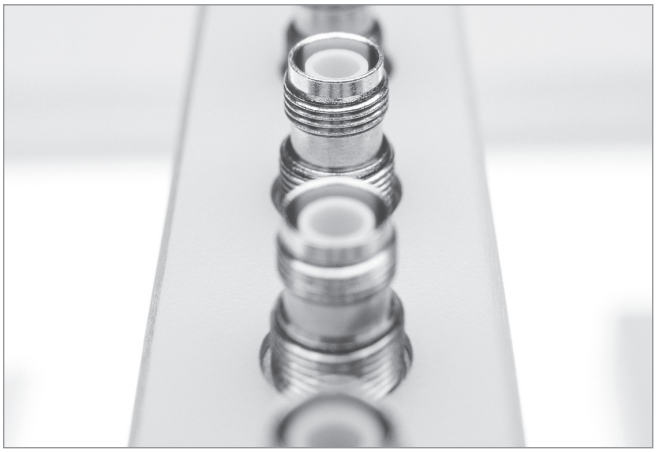
Mercury4
MERCURY5
RFID Reader



About this Guide

This guide explains how to set up the Mercury4 or Mercury5 Reader, how to configure it for networked operation, and how to use the browser-based interface. Separate appendices contain specifications and antenna information specific to each reader.

The clipboard icon indlcates a general background note or warning**.**

The mouse icon indicates an important tip on using the reader.

To learn more about the Mercury 4/5 reader, a Reader Query Language (RQL) Reference Guide is available on the ThingMagic web site. RQL queries for accessing tags are built in to the reader's web interface but you can get more out of your reader by modifying them. ThingMagic's low-level APIs (application programming interfaces) provide fine control over all aspects of the reader. A separate API Programming Guide and SDK (software developer kit) is available upon request from ThingMagic.

ThingMagic Reads Any Tag™

Setting Up the Reader for Single Reader Operation

Required Equipment

Enclosed with your Mercury4/5 reader are the following components:

- a certified limited power source with 1.2m (4 ft) secondary cable and 1.8m (6 ft) line cord. Total overall length when assembled is 3m (10 ft). (TM-M4-PS)
- a shielded Ethernet crossover 1.5m (5 ft) cable to connect the reader directly to a computer (CAT5: TM-CAB-CROSS5)
- a Mercury4 (TM-M4-NA-02) or Mercury5 reader (TM-M5-NA-02)
- this Mercury4/5 User Guide. (TM-M4/5-X-INSTALL)

There is no additional software to install.

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You'll also need the following additional hardware:

- Up to four antennas.
- Two antenna cables for each antenna.
- A computer with an Ethernet port and a Java-enabled web browser.

Set Up Procedure

Assembling and operating your Mercury4/5 reader is easy and straightforward:

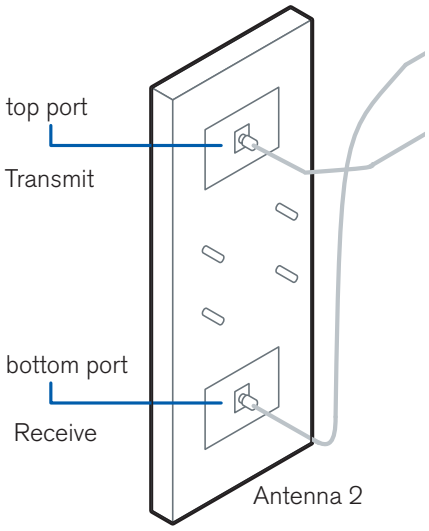
- Connect the antennas to the reader.
- Power up the reader.
- Connect your computer to the reader.
- Set your computer's network properties.
- Log on to the reader with a Java-enabled browser

The following pages detail these steps and show how to get you up and running quickly.

Connect the Antennas to the Reader

Use only authorized antennas and cables to maintain FCC approval . For Mercury4, see pages 44-45. For Mercury5, see pages 46-47.

Up to four antennas can be connected to the reader. Each antenna has two ports which are connected in pairs to the reader: one for transmitting, the other for receiving. While either port can be used to transmit or receive, for best performance we recommend using the top port for Transmit and the bottom for Receive.

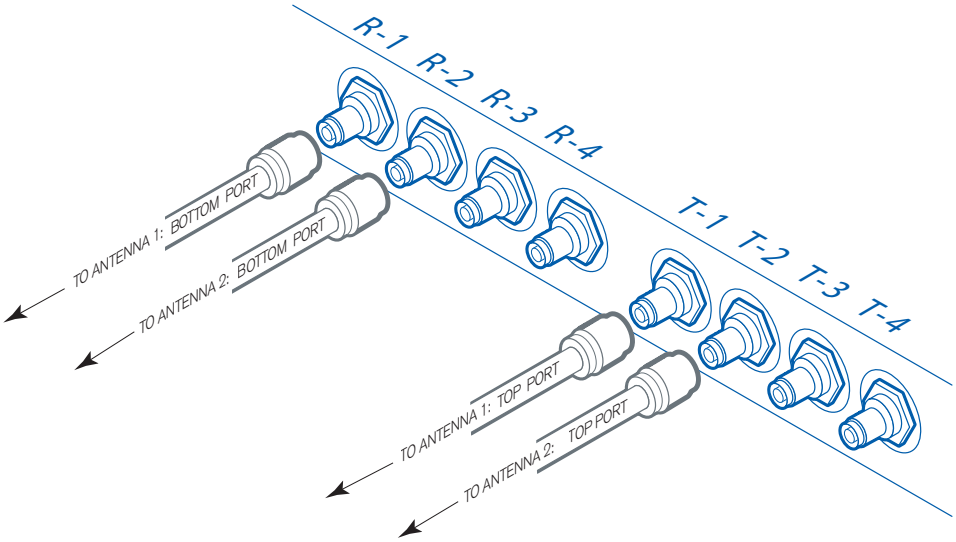


› Place the antennas upright.

When connecting each pair of antenna cables, follow the labels on the reader faceplate as shown below.

› Connect the top port of the antenna to the T-1 (transmit) port on the reader. Connect the bottom port of the antenna to the R-1 (receive) port on the reader.

› Repeat for the second through fourth antenna, if supplied, using T2 and R2, etc.



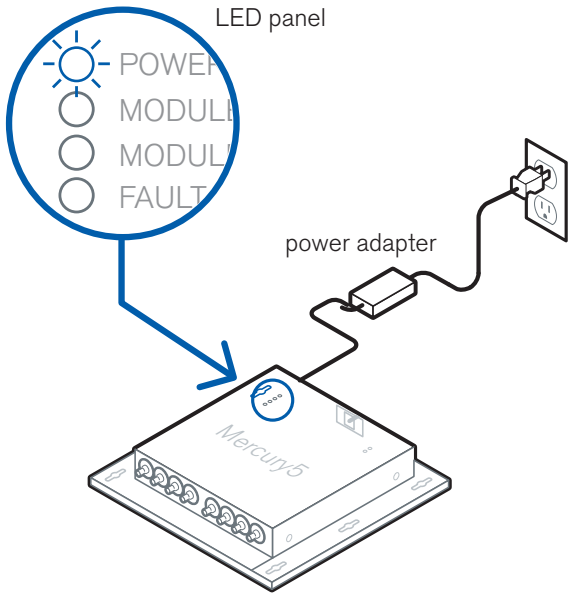
Power Up the Reader

› Plug the power supply into the reader's power port.

› Connect the extension cord to the power supply and plug it into a 100-240VAC power outlet. The reader will immediately begin powering up.

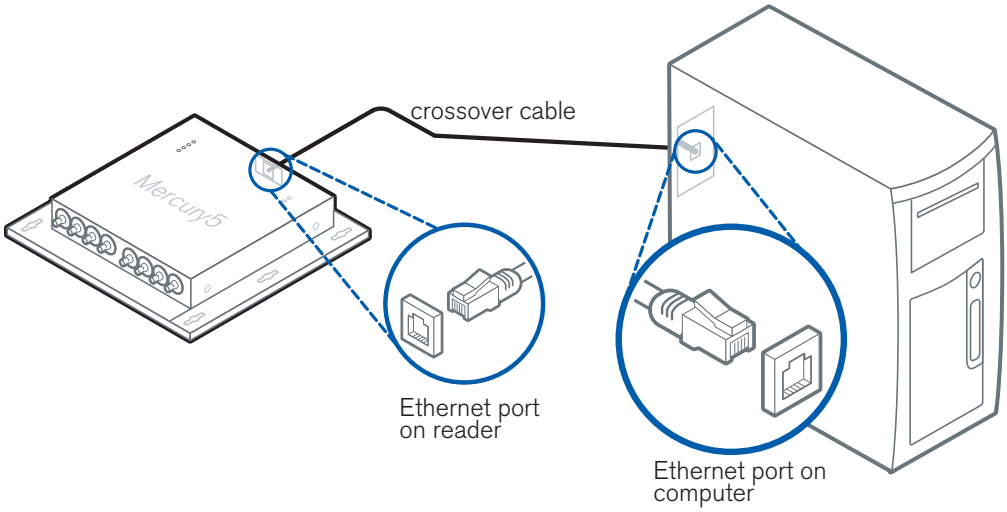
There is no on/off switch on the reader.

While the reader is powering up, the power LED will be solid green. After approximately 60 seconds, the power LED will begin to pulse. The reader is now ready for operation.



Connect Your Computer to the Reader

These instructions are for directly connecting your computer to the reader. Instructions for connecting the reader to a network begin on page 10.

› Connect the reader directly to your computer using the supplied shielded Ethernet crossover cable.

Straight-through shielded Ethernet cables are fine for connecting the reader to a network.