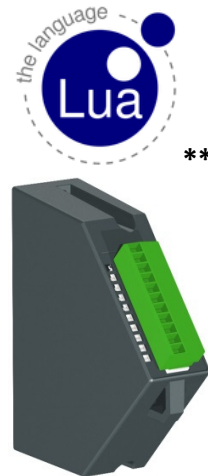


Lua Module Quick Start (M4223)

Specifications

- Ethernet and USB Port
- Embedded Linux Operating system
- Web Interface
- Lua 5.1.5
- LUA Multiplexer (for multiple connections to a single R400 device)
- 64 MB SDRAM, 64 MB Flash
- Requires Lua enabled firmware in the R400 indicator



Other Documents

- Rinstrum Lua Reference Manual (M400-626) is available from www.rinstrum.com
- Rinstrum Environment Setup is available on a USB memory stick (A10030) or download from www.rinstrum.com
- Online Lua tutorials <http://lua-users.org/wiki/TutorialDirectory>
- Online Lua reference manual <http://www.lua.org/pil/contents.html>
- It is recommended that developers use the Rinstrum 8 I/O tester accessory (A10058) to assist application development.

Connect M4223 to R420 or R423

- Disconnect power to the indicator
- Plug the M4223 into the back of the indicator and tighten the screws to secure the module.
- Plug an Ethernet cable into the M4223.
- Restart the indicator

Verify the Connection

- Bring up the Acc menu by holding the 0 key
- Use the arrow keys to navigate until TYPE displays M4223
- Press the +/- key until STATUS is shown (should be OK).

- If the STATUS displayed is ETH.ERR this indicates the M4223 is not talking to the R400 properly. Check that the M4223 is correctly plugged into the back of the device, turn the device off, wait 10 seconds, and then turn it back on.
- Press +/- once more so the IP is displayed (referred to as <IP> from here).
 - If the IP does not change from 0.0.0.0 within at least a minute after start-up, this indicates the module getting an IP address. This may be because the Ethernet cable is not plugged in properly, or the network is not configured properly

Logging In to the Remote Interface

1. Open a connection to the module
 - a. Windows
 - i. Download and open PuTTY
 - ii. Select 'Telnet'
 - iii. Enter <IP>, leave port as 23
 - iv. Press 'Open'
 - b. Linux
 - i. Open a terminal
 - ii. Type: telnet <IP>
2. Enter the username and password => Default username/password: root/root
3. Modify password

Environment Setup – Windows

- To develop on Windows for the M4223, any FTP client and text editor can be used. The files can then be pulled off the device, modified, and pushed back up.
- Recommended method is to use Notepad++ with the NppFTP plugin. This can be combined with PuTTY (for getting a terminal interface), and FileZilla if a more robust FTP client is needed for transferring files.
- To assist in setup, an installer containing Notepad++, PuTTY and FileZilla is available.
- Once this has been set up, the user can copy the Rinstrum libraries to the device (e.g. copy to /home) and begin developing.

Environment Setup - Linux

To develop on Linux for the M4223, Eclipse with the Lua Development Tools software (<http://www.eclipse.org/koneki/ldt/>) is recommended, and FileZilla is recommended for transferring files to the device. The device can be accessed using Telnet via the shell.