

# Quick Start Guide

to use RFXtrx with

# VERA



[www.rfxcom.com](http://www.rfxcom.com)

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## 1. Introduction

If you would like Vera to work with non Z-Wave wireless home automation equipment (such as the LightwaveRF devices) then look no further than the RFXCOM RFXtrx433. This little unit gives you the ability to communicate with a large number of products that operate within in the 433.92 MHz spectrum.

The picture below shows you what the USB Transceiver device looks like, oh and by the way, the picture might suggest it's huge, but actually, it's really very small.  
OK so let's get started, the first thing we need to do is...

## 2. Connect the RFXCOM

Plug the USB cable of the RFXCOM Transceiver into the back of Vera™, which can be done either directly or via a hub (preferably a powered version).



### 3. Upload device files

Once connected we need to upload all the required device files onto our Vera via **Apps / Develop Apps / Luup Files** .

These files can be found by looking here:

[http://code.mios.com/trac/mios\\_rfxtrx/browser/tags/alpha6#](http://code.mios.com/trac/mios_rfxtrx/browser/tags/alpha6#)

The screenshot shows the 'Develop Apps' interface. On the left, there is a sidebar with a menu: 'Vera developers', 'Test Luup code (Lua)', 'Edit Startup Lua', 'Luup files' (highlighted), 'Serial Port configuration', and 'Create device'. The main area is titled 'Luup files' and is divided into two columns: 'Current files' and 'Upload files'. The 'Current files' column lists 15 files, each with 'View' and 'download' links. The 'Upload files' column shows 15 empty slots, each with a 'Browse...' button. At the bottom right, there is a checkbox labeled 'Restart Luup after upload' and a 'GO' button.

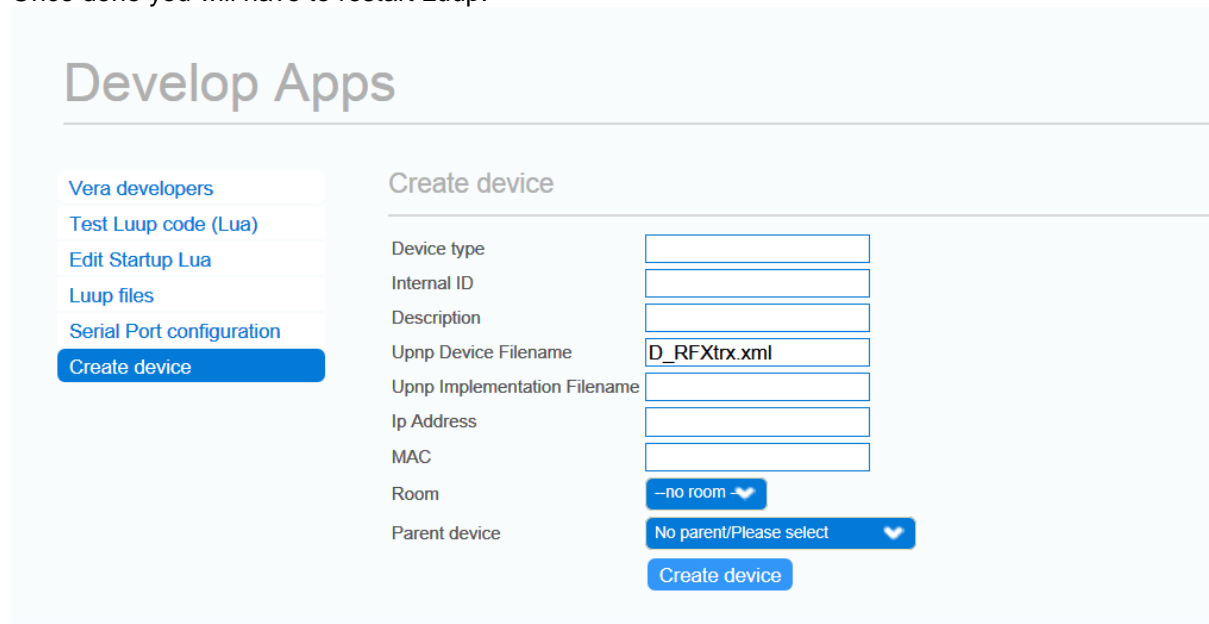
*Please note: Due to the number of files that need to be uploaded you will need to do them in a couple of batches, make sure you restart Luup after each batch you do by checking the box “Restart Luup after upload”.*

**Make sure you wait for Vera to finish the reboot process (Unit busy) by observing the Vera message window before you initiate the next batch upload.**

The screenshot shows the Micasaverde interface. At the top left is the 'micasaverde' logo. Below it is a navigation menu with 'select gateway' and a dropdown arrow. The main area has a blue header with 'Unit busy.' and a progress bar. Below the header is a navigation bar with 'DASHBOARD', 'DEVICES', 'AUTOMATION', 'APPS', 'ACCOUNT', 'ENERGY', and 'SETUP' (highlighted).

## 4. Create Master device

With the files uploaded, we now need to Create the master device using **Apps / Develop Apps / Create Device**, and enter the D\_RFXtrx.xml file name into the Upnp Device Filename. Once done you will have to restart Luup.

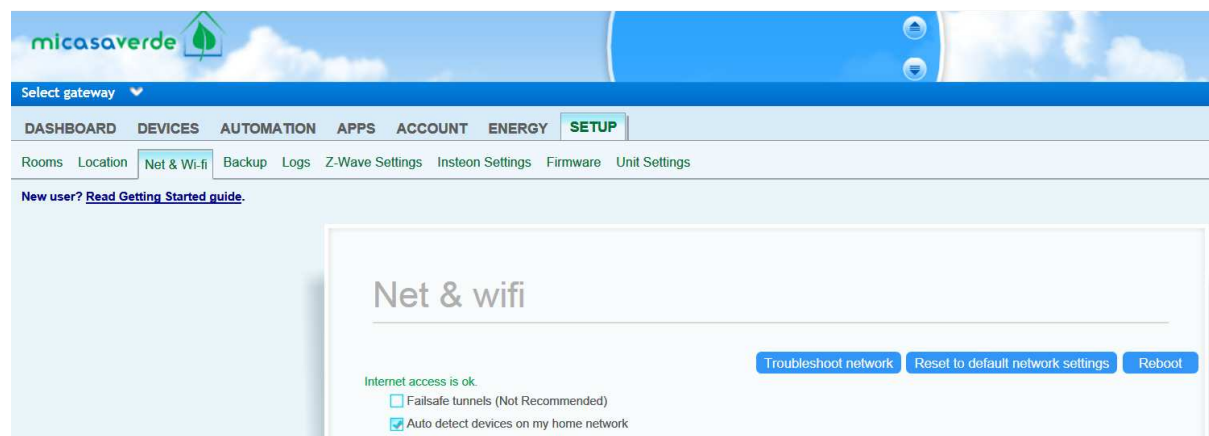


The screenshot shows the 'Develop Apps' section of a web interface. On the left is a sidebar menu with options: 'Vera developers', 'Test Luup code (Lua)', 'Edit Startup Lua', 'Luup files', 'Serial Port configuration', and 'Create device' (highlighted in blue). The main area is titled 'Create device' and contains a form with the following fields: 'Device type' (empty), 'Internal ID' (empty), 'Description' (empty), 'Upnp Device Filename' (filled with 'D\_RFXtrx.xml'), 'Upnp Implementation Filename' (empty), 'Ip Address' (empty), 'MAC' (empty), 'Room' (dropdown menu showing '-no room'), and 'Parent device' (dropdown menu showing 'No parent/Please select'). A 'Create device' button is at the bottom right of the form.

*Please note – A device named “RFXtrx controller device” has been created, however it will not be fully functional until we configure the USB serial port.*

## 5. Restart Luup

Restart Luup using **SETUP / Net & Wi-Fi / Reboot**, the Vera will now restart Luup, check the message window to wait for the process to finish



The screenshot shows the 'Net & wifi' settings page in the Vera web interface. The top navigation bar includes 'DASHBOARD', 'DEVICES', 'AUTOMATION', 'APPS', 'ACCOUNT', 'ENERGY', and 'SETUP' (highlighted). Below the navigation bar are links for 'Rooms', 'Location', 'Net & Wi-fi' (highlighted), 'Backup', 'Logs', 'Z-Wave Settings', 'Insteon Settings', 'Firmware', and 'Unit Settings'. A message says 'New user? Read Getting Started guide.' The main content area is titled 'Net & wifi' and shows 'Internet access is ok.' There are three buttons: 'Troubleshoot network', 'Reset to default network settings', and 'Reboot'. Below the buttons are two checkboxes: 'Failsafe tunnels (Not Recommended)' (unchecked) and 'Auto detect devices on my home network' (checked).

## 6. Setup the serial port

To setup the serial port, stay under **Apps / Develop Apps /** and this time choose **Serial Port configuration**, where you need to change the speed value to 38400 bauds and also select the device named "RFXtrx controller device" from the field "Used by device". Once done, go back and repeat chapter 5 to restart Luup.

# Develop Apps

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- Vera developers
- Test Luup code (Lua)
- Edit Startup Lua
- Luup files
- Serial Port configuration**
- Create device

## Serial Port configuration

*If you connected the USB/serial device and it's not displayed here, reload Luup.*

Name:  Path:

Device number:

IP address:  Port:

Baud:  Parity:

Data bits:  Stop bits:

Used by device:

*Result – That's it !! You should now have the RFXtrx433 up and running and working from within the MIOS Vera UI. And depending on your set up at home, some new compatible devices may even start to find their way automatically onto your device listings. Something that's a very different to the include/exclude process required by Z-Wave.*

## 7. Additional Setup

### 7.1. Setup of received protocols

Once you have the RFXtrx controller and plug-in installed you now need to start looking at the RF protocols you want the RFXtrx device to receive and you can do this by accessing the Settings tab of the RFXtrx Controller device. By default, you may notice a number already switched on, it matches what is currently saved in the RFXtrx memory. But it's now time to think about which protocols you actually want to use, because

- not all can coexist,
- too many can affect the performance.

So it's recommended that you only enable those ones you need to use.

For a better understanding of the protocols and those that are sensitive/conflict read the chapter titled "*Sensitivity influenced by enabled protocols*" of the RFXtrx433 user manual. Once you have finished to enable/disable several protocols, save your settings in the memory of the RFXtrx. This new configuration will now be restored every time after a power up. To do that, just push the button titled "Save RFXtrx Settings".

Please note that this memory is limited to a maximum of 10000 write cycles so don't save when it is not necessary.

**These settings are lost after a firmware update of the RFXtrx and need to be set again.**

### 7.2. Creation of Vera devices

By default, the devices are created automatically by the plugin accordingly to the messages received from the RFXtrx.

To disable the automatic creation of devices, you can access the Advanced tab of the RFXtrx Controller device and set the value of the variable named "AutoCreate" to 0. Then push the red button "Save" at top right in the dashboard to validate your change.

Few devices can be created manually by the user using the Device creation tab of the RFXtrx Controller device. ...

## 8. References

To keep up with the latest on this amazing plug-in, I recommend you check in every now and again with the forum <http://forum.micasaverde.com/index.php/topic,9563.0.html>

And the Wiki [http://code.mios.com/trac/mios\\_rfxtrx/wiki/WikiStart#InstallationSetup](http://code.mios.com/trac/mios_rfxtrx/wiki/WikiStart#InstallationSetup)

## 9. Thanks to

Huge thanks have to go out to **lolodomo** for bringing this particular USB transceiver to the Vera MIOS platform, and also to all the contributors who help it to continually grow.

**With thanks to Chris Parker the author of this document.**

## 10. Revision History

Version 0.1 November 12, 2012

Elaborated the restart procedure of Luup

Additional setup added