



**hapi**

# HAPI Support Documentation

Document Name: RTU Installation and Configuration

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Note: This document assumes the user has a computer for working with Arduino hardware

## Preliminaries

If you will be running the RTU in network mode, fit the Arduino Mega 2560 with an Ethernet shield of the type available on the Arduino website.

Use a USB cable to connect the Arduino to a computer that has the Arduino IDE installed.

## Remote Terminal Unit v2.1 – Installation Procedure

Step	Description	Location/Command
1	Install the latest Arduino IDE on workstation	<a href="https://www.arduino.cc/en/Main/Software">https://www.arduino.cc/en/Main/Software</a>
2	Get the latest RTU code from HAPI github repository	<code>git clone https://github.com/mayaculpa/hapi.git</code>
3	Load the RTU code in the Arduino IDE	Ethernet: <code>arduino_mega2560_enet.ino</code> USB: <code>arduino_mega2560_usb.ino</code>
4	Modify the mac address by incrementing the last byte by 1 for each RTU on site.	(for multi-RTU network installations only)
5	Make custom code changes as necessary	Yeah, not too helpful, I know.
6	Upload the sketch to the RTU	
	In the IDE, launch the Serial Monitor. Set its Baud Rate to 9600. Type “sta” and click Send.	The RTU should respond with its current status. If on a network, the RTU will include its MAC and IP addresses.
7	Position RTU in growing environment and connect sensors as necessary	Even less helpful
8	Connect RTU to Ethernet (or USB)	
9	Power on the RTU	

To connect to an RTU on the network, use a telnet program by typing the following in a system shell: (use your RTUs IP address here)

```
telnet 192.168.0.2 80
```

The RTU will wait for a command, respond to the command and terminate the connection.