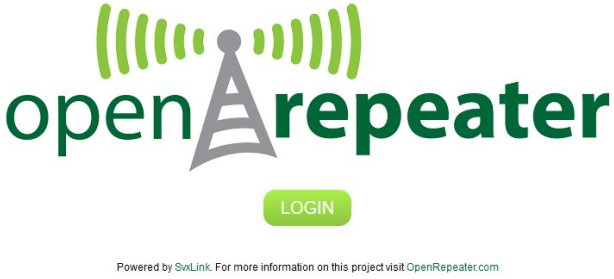
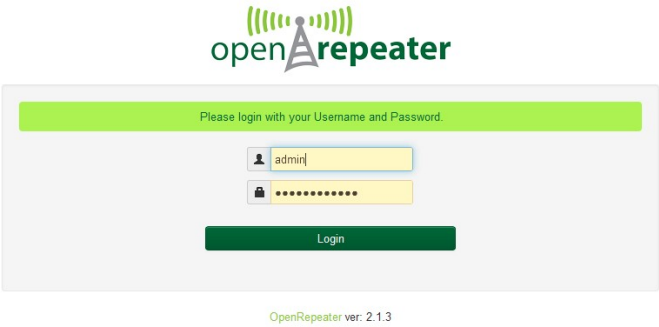
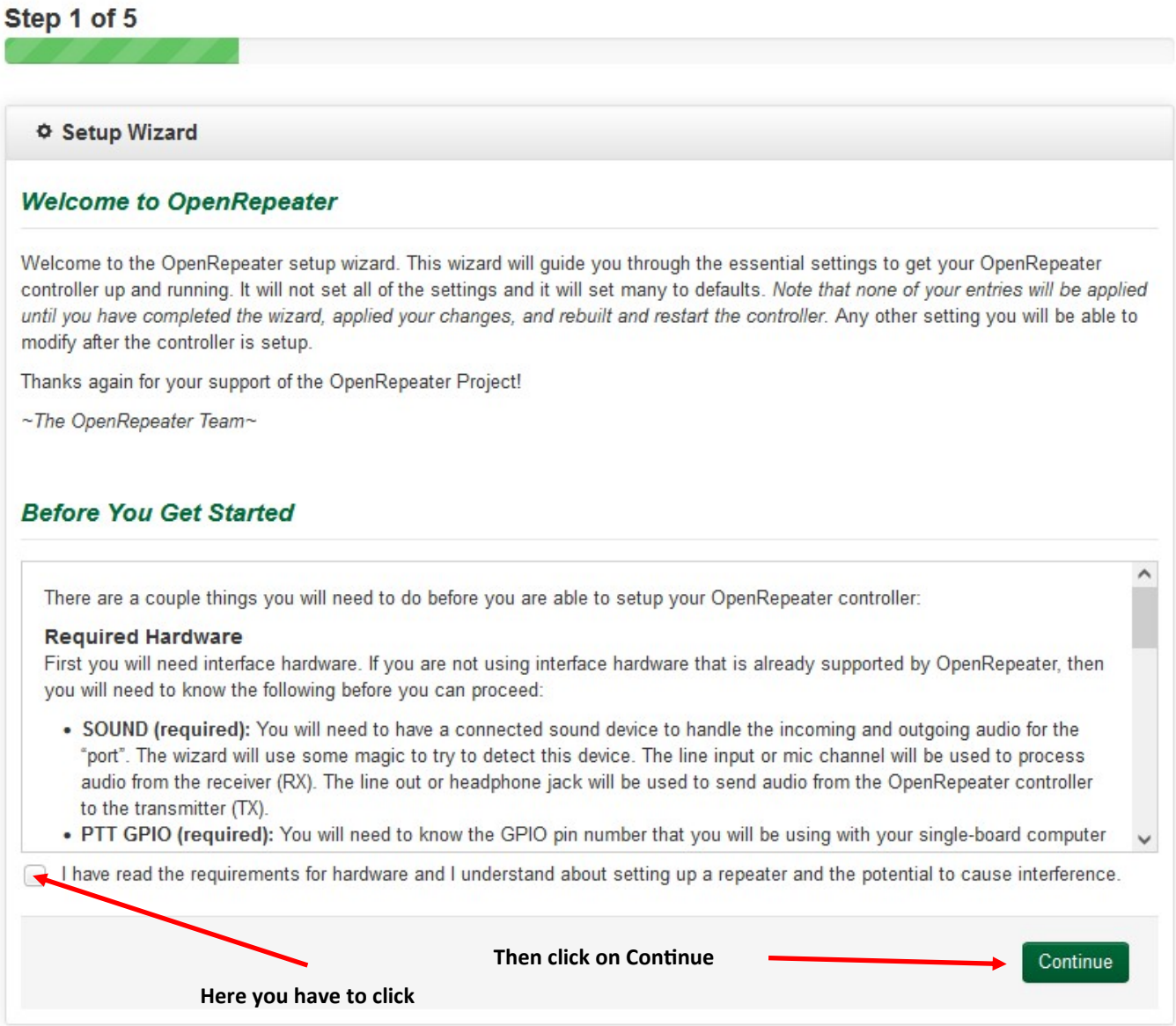
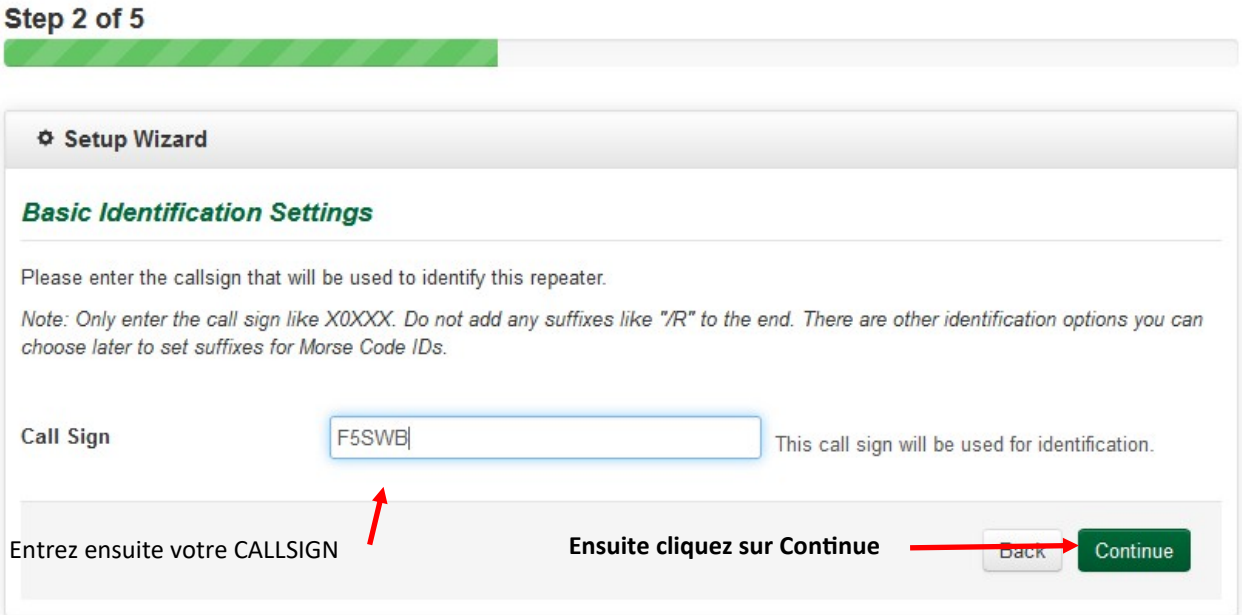
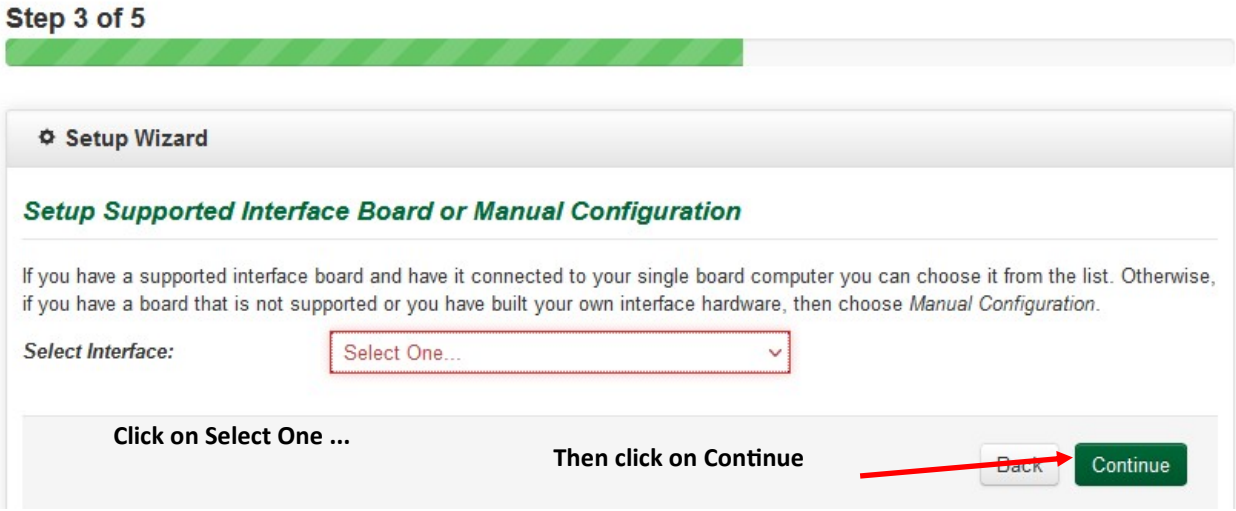


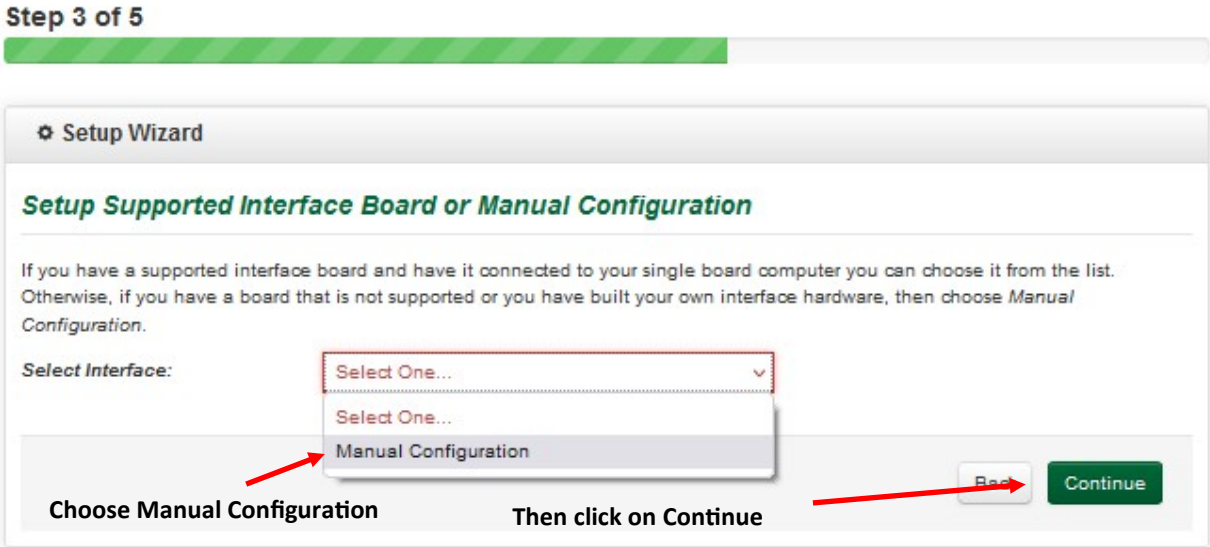


Once the IP address of your hotspot has been identified, enter admin and openrepeater as the password




Step 2 of 5
Setup Wizard
Basic Identification Settings
Please enter the callsign that will be used to identify this repeater.
Note: Only enter the call sign like X0XXX. Do not add any suffixes like "/R" to the end. There are other identification options you can choose later to set suffixes for Morse Code IDs.
Call Sign
F5SWB
This call sign will be used for identification.
Entrez ensuite votre CALLSIGN
Ensuite cliquez sur Continue
Back
Continue


Step 3 of 5
Setup Wizard
Setup Supported Interface Board or Manual Configuration
If you have a supported interface board and have it connected to your single board computer you can choose it from the list. Otherwise, if you have a board that is not supported or you have built your own interface hardware, then choose Manual Configuration.
Select Interface:
Select One...
Click on Select One ...
Then click on Continue
Back
Continue


Step 3 of 5
Setup Wizard
Setup Supported Interface Board or Manual Configuration
If you have a supported interface board and have it connected to your single board computer you can choose it from the list. Otherwise, if you have a board that is not supported or you have built your own interface hardware, then choose Manual Configuration.
Select Interface:
Select One...
Select One...
Manual Configuration
Choose Manual Configuration
Then click on Continue
Continue

Step 3 of 5

Setup Wizard

Setup Supported Interface Board or Manual Configuration

If you have a supported interface board and have it connected to your single board computer you can choose it from the list. Otherwise, if you have a board that is not supported or you have built your own interface hardware, then choose *Manual Configuration*.

Select Interface: Manual Configuration

Manually Setup the 1st Port

Ports are the audio and logic I/Os that interface the OpenRepeater controller with the transmitter and receiver to make the repeater function. This is done through other external circuitry. Since you have chosen to set this up manually, you must specify the settings for this hardware. It utilizes both a sound card and the GPIO pins to make up the port, usually a paired receiver and transmitter hence a repeater. Here you will setup the first port required to make the controller initially function. You will be able to add other ports later if you require them and your hardware supports them.

Receiver Settings (RX)

The receiver settings are what interface the OpenRepeater controller with your receive radio, or the input of the repeater. The most common and most reliable receive mode would be COS (Carrier Operated Switch). When the repeater's squelch opens (or tone squelch if you have a receive tone set in the radio) an electronic trigger from the radio interfaces with some basic circuitry to trigger an input GPIO pin on the OpenRepeater Controller to go low to ground (active state) and pull high when the squelch is closed. Audio from the output of the receiver is routed into the selected audio input for the port. Together these will make up the input side of the port and be repeated to the transmit side of the port and other ports or Echolink if enabled.

Receive Mode COS (Carrier Operated Switch)

This will determine how the repeater is activated. The COS Mode is recommended.

Receive GPIO Pin 23 Active High

Enter 23 for input

The GPIO input pin that will trigger the COS and whether it should be active high or low. See online documentation for wiring.

Receive Audio Input INPUT: wm8960-soundcard (Right)

The audio input that processes receive audio.

Choose the sound card

Transmitter Settings (TX)

The transmitter settings are used to interface the OpenRepeater controller with transmitter to rebroadcast transmissions and identification. The GPIO pin is use to trigger the PTT on the radio with some basic interface circuitry. The audio output of the controller interfaces with the audio/mic input on the transmitter.

Transmit GPIO Pin 17 Active High

Enter 17 for output

The GPIO output pin that controls PTT on the transmitter and whether it should be active high or low. See online documentation for wiring.

Transmit Audio Output OUTPUT: wm8960-soundcard (Right)

The audio output that sends audio to transmitter.

Choose the sound card

Then click on Continue

Back Continue

Step 4 of 5

Setup Wizard

Confirm Settings

Here is what you have entered. Please confirm that this is correct, if not use the back navigation at the bottom of each page to go back and make corrections. This will be the minimum requirements to get OpenRepeater up an running. Once you have verified it is working, you can change other settings. Upon continuing, the settings you have chosen below will be applied to the repeater configuration.

Repeater Callsign: **F5SWB**

Check your configuration

Manual Port Settings

Receive Mode: **COS (Carrier Operated Switch)**
Receive GPIO Pin: **23** (high)
Receive Audio Output: **INPUT: wm8960-soundcard (Right)**
Transmit GPIO Pin: **17** (high)
Transmit Audio Output: **OUTPUT: wm8960-soundcard (Right)**

Then click on Save Configuration

Back | Save Configuration

Step 5 of 5

Setup Wizard

Build Configuration Files

Almost Finished...Upon clicking the button below, the repeater configuration files will be generated and you will be logged out of the wizard. Upon logging in again, you will be presented with the full control panel. Check to make sure that the OpenRepeater controller is working in the basic setup before configuring other options. If the repeater is not working, then a system restart might be required in some cases. If you need further help, please visit OpenRepeater.com for more support.

Then click on Finish & Logout

Finish & Logout

openRepeater

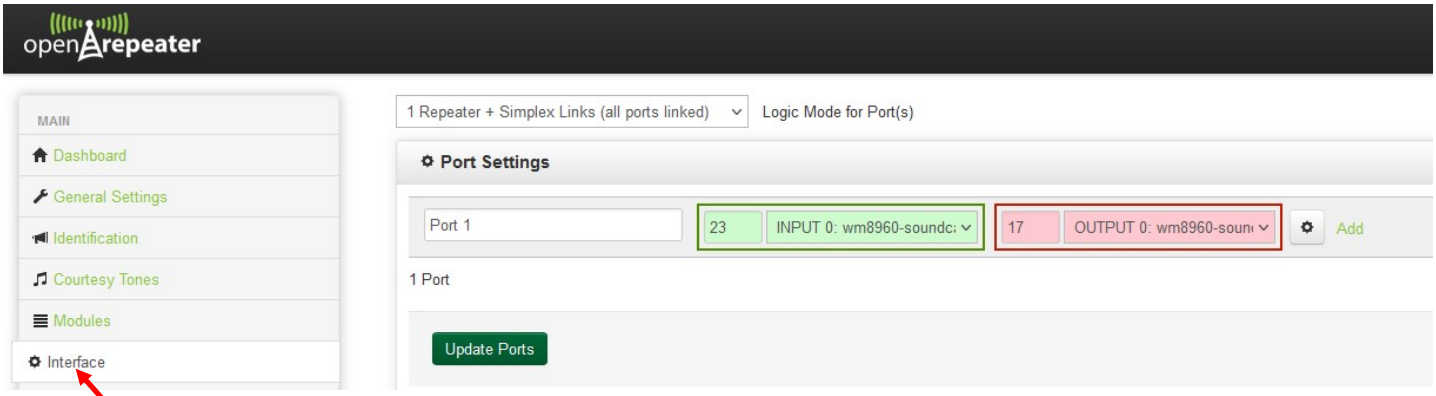
Please login with your Username and Password.

admin

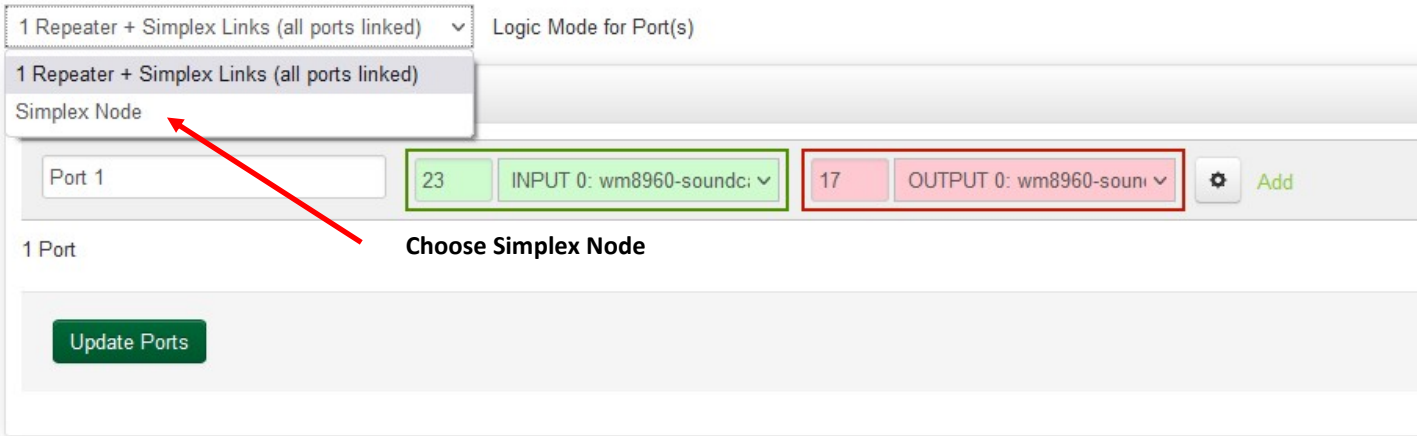
••••••••••••

Login

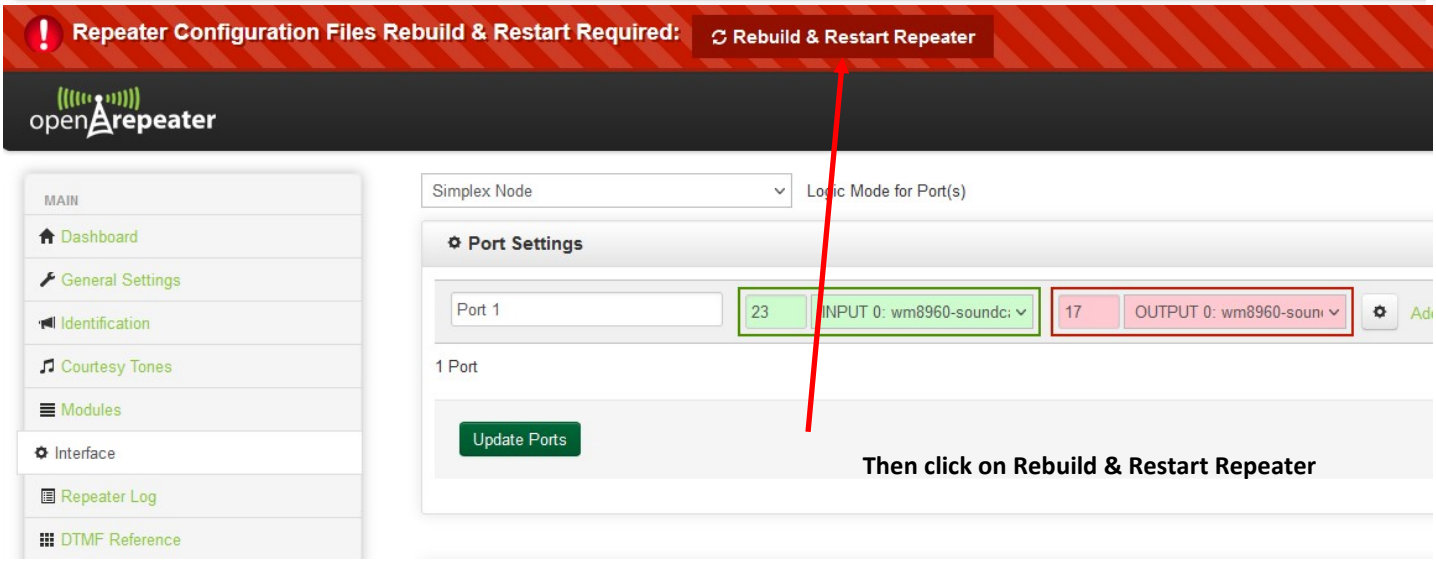
You will be redirected to the login page



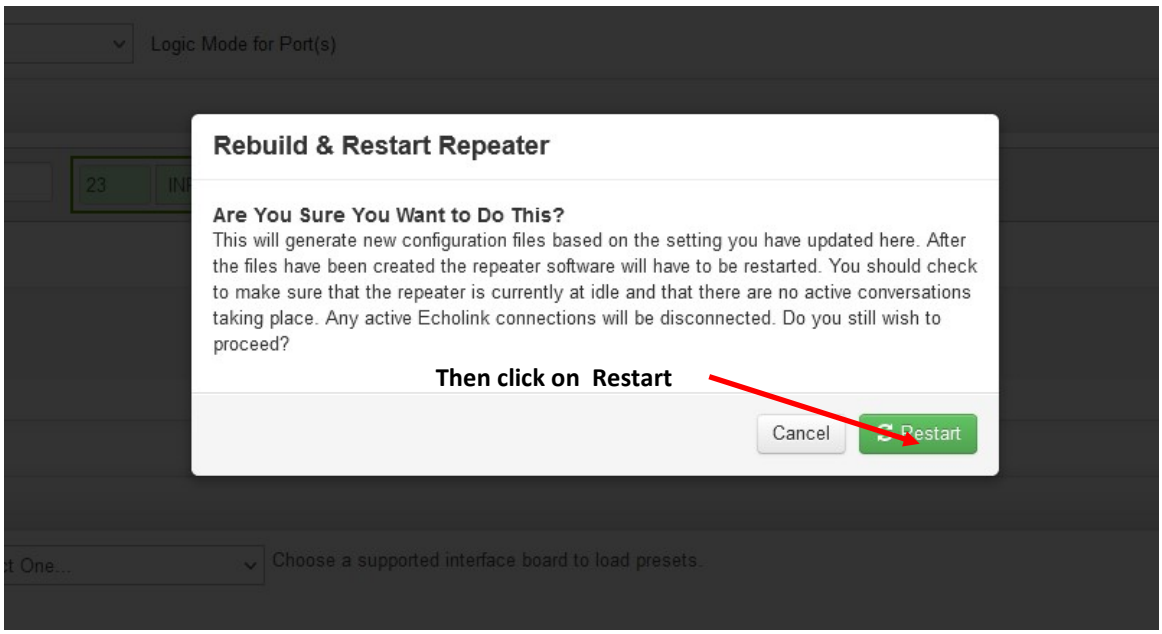
Click on Interface



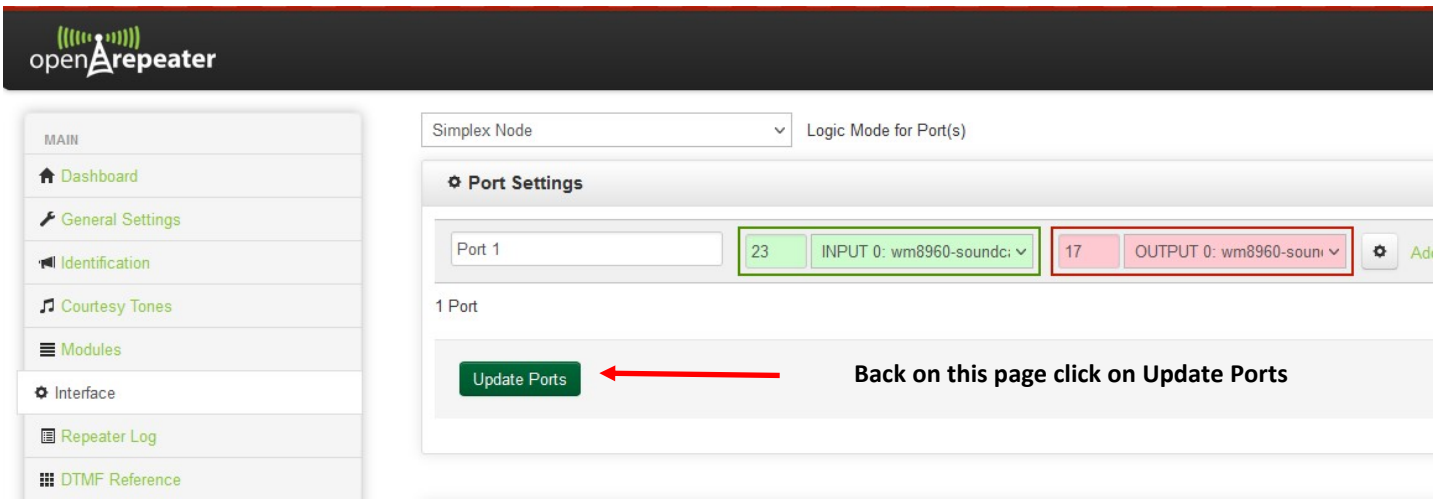
Choose Simplex Node



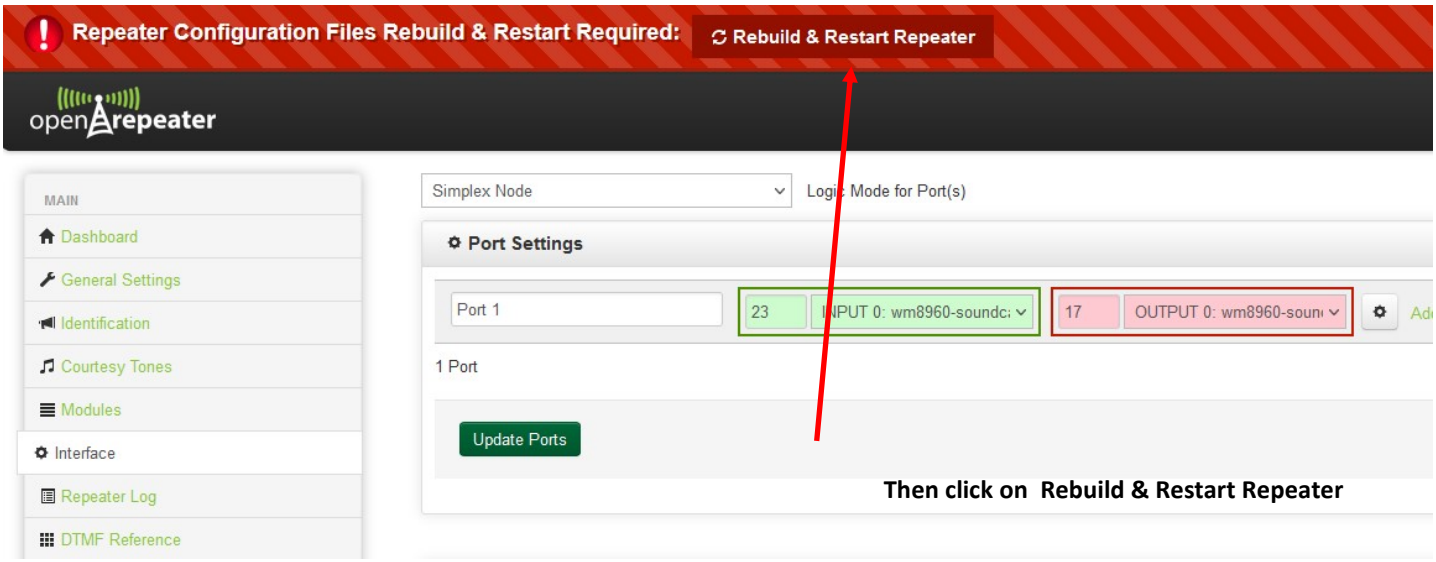
Then click on Rebuild & Restart Repeater



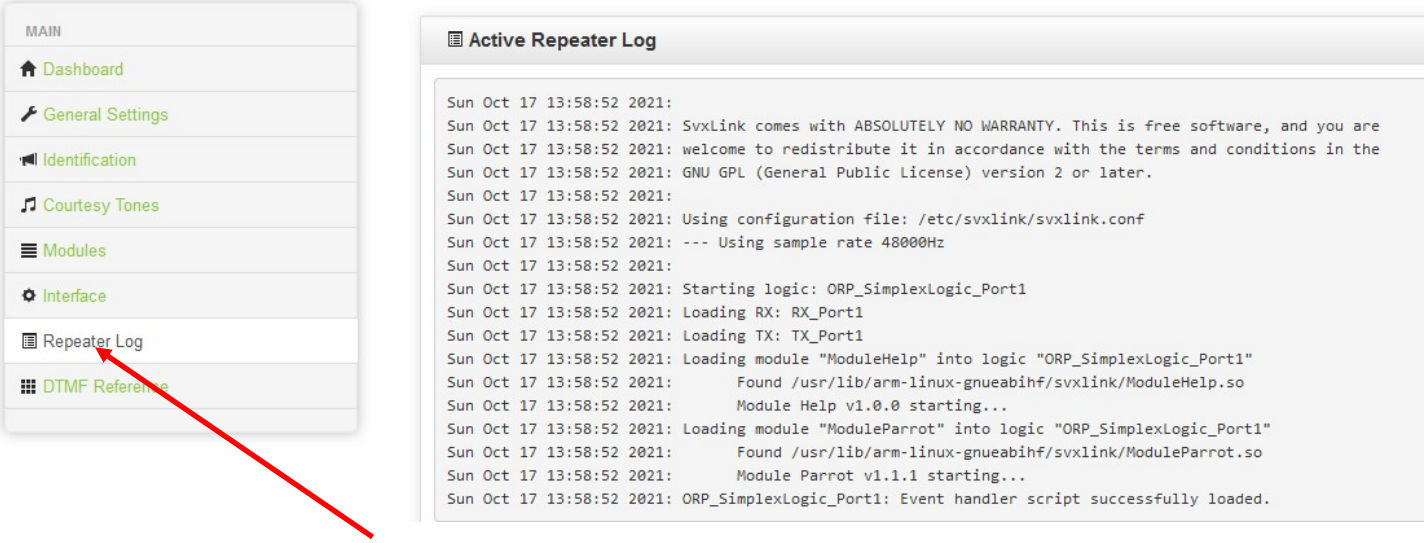
Then click on Restart



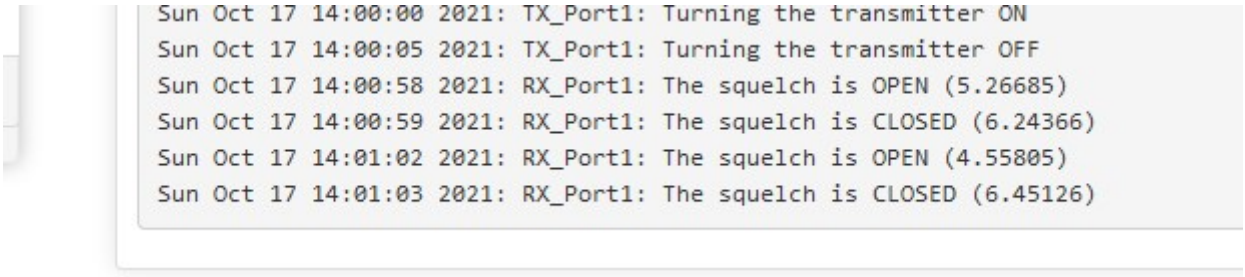
Back on this page click on Update Ports



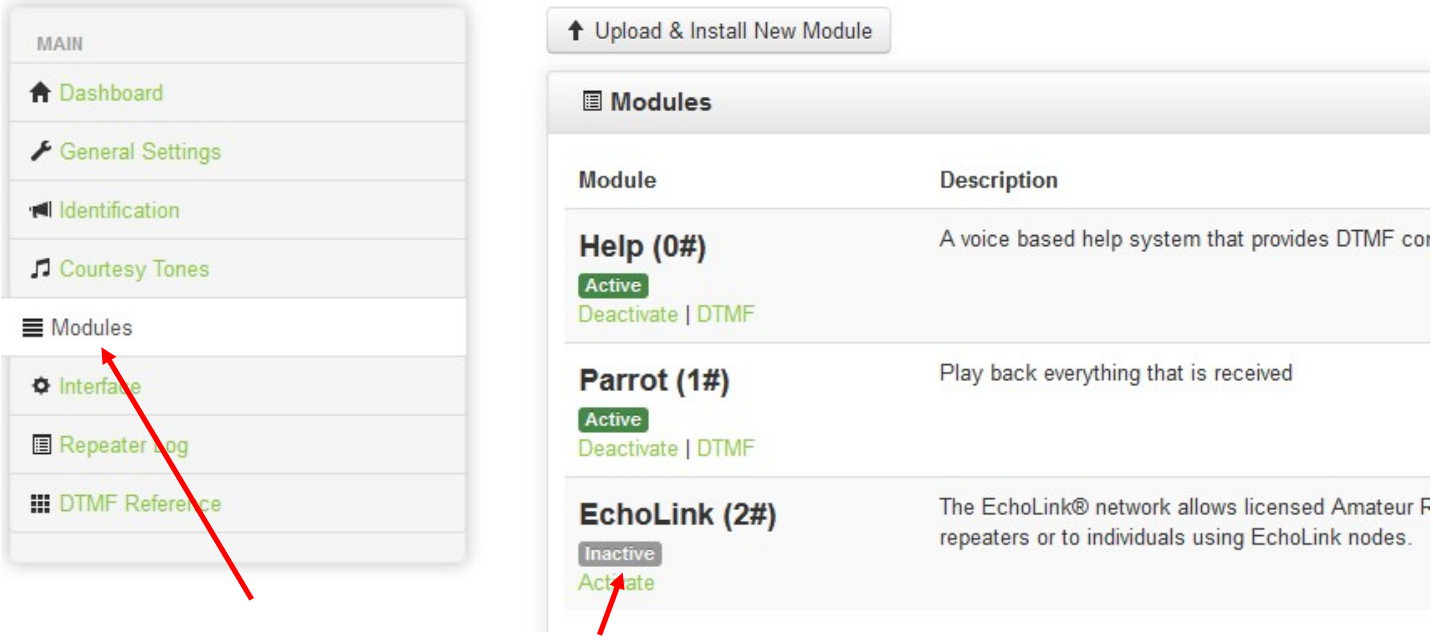
Then click on Rebuild & Restart Repeater



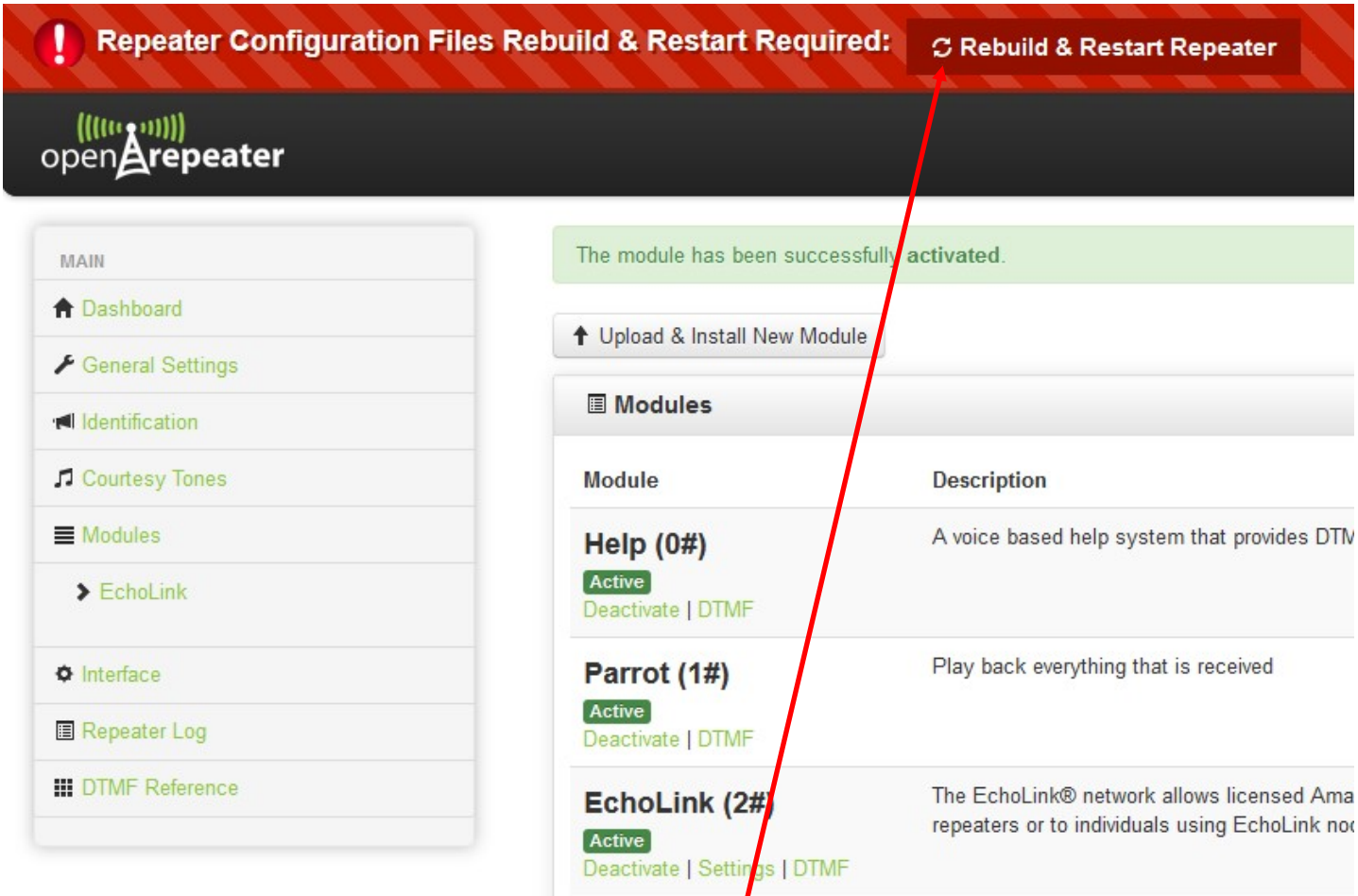
Click on Repeater Log to control that the sound card is working good



You should see a Tx and Rx when you use your transceiver

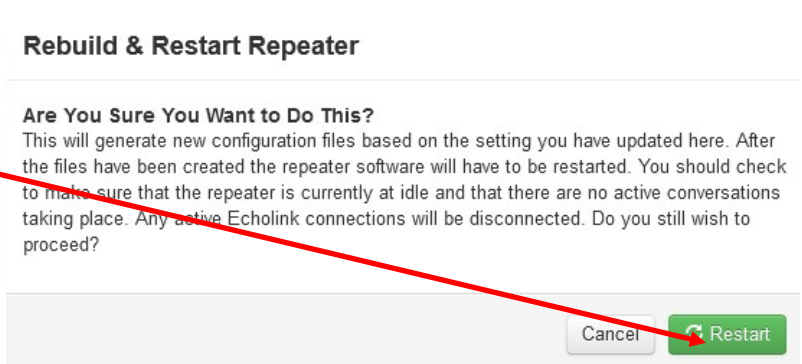


Select Modules, then click on Echolink / Activate



Then click on Rebuild & Restart Repeater

Then click on Restart



openRepeater

MAIN

- Dashboard
- General Settings
- Identification
- Courtesy Tones
- Modules
  - EchoLink
- Interface
- Repeater Log
- DTMF Reference

The module has been successfully **activated**.

Upload & Install New Module

Modules

Module	Description
Help (0#) Active Deactivate | DTMF	A voice based help system that provides DTM
Parrot (1#) Active Deactivate | DTMF	Play back everything that is received
EchoLink (2#) Active Deactivate | Settings | DTMF	The EchoLink® network allows licensed Ama repeaters or to individuals using EchoLink no

Then click on settings

Basic Settings

Module Timeout

60 secs — This is how many seconds of inactivity to wait for until the module is disabled.

EchoLink Callsign

The callsign to use to login to the EchoLink directory server.

EchoLink Password

Password — The EchoLink directory server password to use.

Sysop Name

OpenRepeater — The name of the person or club that is responsible for this system.

Location

The location of the station.

Description

Welcome to an Open Repeater Server — A longer description that is sent to remote stations upon connection. This des

Enter the EchoLink Callsign, EchoLink Password and finally Location

Basic Settings

Module Timeout

60 secs This is how many seconds of inactivity to wait for until the module is disabled.

EchoLink Callsign

F5SWB The callsign to use to login to the EchoLink directory server.

EchoLink Password

••••••••• The EchoLink directory server password to use.

Sysop Name

OpenRepeater The name of the person or club that is responsible for this system.

Location

Strasbourg The location of the station.

Description

Welcome to an Open Repeater Server A longer description that is sent to remote stations upon connection. This descripti

Proxy Settings (Optional)

Please see http://www.echolink.org/proxy.htm for details

Proxy Server

If set, connect to the given EchoLink proxy server host. All EchoLink connections, both incomi

Proxy Port

8100 Set the TCP port used for connecting to an EchoLink proxy server. Default is 8100.

Proxy Password

Set the EchoLink proxy password used when connecting to an EchoLink proxy server. Use th

Envoyer

Click on envoyer

Repeater Configuration Files Rebuild & Restart Required: Rebuild & Restart Repeater

Then click on Rebuild & Restart Repeater

Active Repeater Log

```
Sun Oct 17 14:15:22 2021: Loading RX: RX_Port1
Sun Oct 17 14:15:22 2021: Loading TX: TX_Port1
Sun Oct 17 14:15:22 2021: Loading module "ModuleHelp" into logic "ORP_SimplexLogic_Port1"
Sun Oct 17 14:15:22 2021:       Found /usr/lib/arm-linux-gnueabihf/svxlink/ModuleHelp.so
Sun Oct 17 14:15:22 2021:       Module Help v1.0.0 starting...
Sun Oct 17 14:15:22 2021: Loading module "ModuleParrot" into logic "ORP_SimplexLogic_Port1"
Sun Oct 17 14:15:22 2021:       Found /usr/lib/arm-linux-gnueabihf/svxlink/ModuleParrot.so
Sun Oct 17 14:15:22 2021:       Module Parrot v1.1.1 starting...
Sun Oct 17 14:15:22 2021: Loading module "ModuleEchoLink" into logic "ORP_SimplexLogic_Port1"
Sun Oct 17 14:15:22 2021:       Found /usr/lib/arm-linux-gnueabihf/svxlink/ModuleEchoLink.so
Sun Oct 17 14:15:22 2021:       Module EchoLink v1.5.0 starting...
Sun Oct 17 14:15:22 2021: ORP_SimplexLogic_Port1: Event handler script successfully loaded.
Sun Oct 17 14:15:22 2021: EchoLink directory status changed to ON
Sun Oct 17 14:15:23 2021: --- EchoLink directory server message: ---
Sun Oct 17 14:15:23 2021: EchoLink Server v2.6.103
Sun Oct 17 14:15:23 2021:
Sun Oct 17 14:15:23 2021: ECHO4: Frankfurt, Germany
Sun Oct 17 14:15:23 2021:
```

You could then control that your connection to EchoLink is active in the LOG.

```
Sun Oct 17 14:17:18 2021: ORP_SimplexLogic_Port1: Activating module Parrot...
Sun Oct 17 14:17:19 2021: TX_Port1: Turning the transmitter ON
Sun Oct 17 14:17:20 2021: TX_Port1: Turning the transmitter OFF
Sun Oct 17 14:17:24 2021: RX_Port1: The squelch is OPEN (2.31803)
Sun Oct 17 14:17:26 2021: RX_Port1: The squelch is CLOSED (4.74554)
Sun Oct 17 14:17:27 2021: TX_Port1: Turning the transmitter ON
Sun Oct 17 14:17:28 2021: TX_Port1: Turning the transmitter OFF
Sun Oct 17 14:17:29 2021: TX_Port1: Turning the transmitter ON
Sun Oct 17 14:17:31 2021: TX_Port1: Turning the transmitter OFF
```

You could control your modulation with the PARROT module sending the 1 # DTMF sequence

The settings of the sound card can be changed in ssh, Login : root Mdp : OpenRepeater

Launching the command : alsamixer

We advise to do a backup of the settings before doing all the modifications !!!!