## **Multiband Radio Configuration**

Most newer Doodle Labs radios are multiband radios. In the software, each band is treated as a submodel, and switching bands is done by switching to a different submodel. Even the RM-2450 variants of the Mesh Rider radio support two submodels, the RM-2450-xxxx submodel, and the RM-2455-xxxx submodel (xxxx depends on the form factor). It is possible to switch to a different band through both the GUI and the CLI.

## **Band Switching using the GUI**

Navigate to network configuration -> wireless. Choose the desired operating band in the drop-down box at the top of the page and click Change.

DL smartradio-301a4ebb01 - Wirele: >	× +				• – <b>•</b>
← → C ☆ ▲ Not secur	re   10.223.187.1/cgi-bin/luci/mini/network/wire	ess			🖈 💐 🗑 🦊 🧔 🖈 🗐 🛕 Paused
DOOD\@ Iabs	Smart Radio model: MB-0001-2J-XS, active	frequency band: 1675 MHz 🗸	Change		
Smart Radio MAC #301a4ebb01	Wireless Overview				
Status	Generic MAC80211 802.11bgn (radio0)				Add
Network Configuration	© 0% SSID simpleconfig   Mode Client Wireless is disabled or not associated				Edit Remove
Simple Configuration Wireless Interfaces Traffic Prioritization	Associated Stations				
	SSID	MAC-Address	Host	Signal / Noise	RX Rate / TX Rate
Advanced Settings	No information available				
Mesh Rider					

Fig. 4 Wireless band selection for Helix models

It is also possible to perform a fast band switch through the *Sense* menu.

## **Band Switching using the CLI**

You can SSH into the radio to get to it's command prompt. In order to execute a band switch through the CLI, you first need to know the submodel name. You can get a list of submodel names using the following command.

```
$ cat /usr/share/.doodlelabs/fes/$(fes_model.sh get parent)
sub_model0="RM-1675-2L-X"
```

```
sub_model1="RM-1815-2L-X"
sub_model2="RM-2065-2L-X"
sub_model3="RM-2245-2L-X"
sub_model4="RM-2350-2L-X"
sub_model5="RM-2455-2L-X"
```

You can then run the script /usr/share/simpleconfig/band\_switching.sh <submodel>. For example, to switch to the 1815-MHz band, use the command

/usr/share/simpleconfig/band\_switching.sh RM-1815-2L-X

Note that after switching bands, the radio will be in the default channel. If you have the messaging system set up, a better way to switch bands is detailed in the *Sense* guide. This will allow you to distribute band switching commands across the network.