

Connection Notes: RIM_RC210 to RC210 Repeater Controller

What follows below are excerpts from SimpleUSB.conf and RPT.conf as found on a working AllStar node. They can be used as guidelines as to how to configure a node to work with the RC-210 specific RIM_Lite module.

SimpleUSB.conf:

```
[general]
[usb]
eeprom = 1
hdwtype = 0
; Receiver parameters
rxboost = 0 ; 0 = 20db attenuator inserted, 1= 20db attenuator removed
carrierfrom = usbinvert; no,usb,usbinvert
              ; no - no carrier detection at all
               ; usb - from the COR line on the USB sound fob (Active high)
               ; usbinvert - from the inverted COR line on the USB sound fob (Active low)
ctcssfrom = usbinvert ; no,usb,usbinvert
               ; no - CTCSS decoding, system will be carrier squelch
              ; usb - CTCSS decoding using input from USB sound fob (Active high)
               ; usbinvert - from the inverted CTCSS line on the USB sound fob (Active low)
deemphasis = no
plfilter = no
;rxondelay =
; Transmitter parameters
txmixa = voice
                       ; Left channel output (A): no,voice,tone,composite,auxvoice
                        ; no - Do not output anything
                        ; voice - output voice only
                        ; Right channel output (B): no,voice,tone,composite,auxvoice
txmixb = no
                        ; See txmixa above.
preemphasis = 0
txboost = 0
invertptt = 0
duplex = 1
                        ; 1 - full duplex
```

RPT.conf:

rxchannel = SimpleUSB/usb ; Rx audio/signalling channel duplex = 0 ; 0 = Half duplex with no telemetry tones or hang time.

Special Case: Full duplex if linktolink is set to yes.

This mode is preferred when interfacing with an external multiport repeater controller.

; 1 = Half duplex with telemetry tones and hang time. Does not repeat audio.

This mode is preferred when interfacing a simplex node.

; 2 = Full Duplex with telemetry tones and hang time.; This mode is preferred when interfacing a repeater.

; 3 = Full Duplex with telemetry tones and hang time, but no repeated audio.

; 4 = Full Duplex with telemetry tones and hang time. Repeated audio only when the autopatch is down.

linktolink = yes ; "YES" when used with duplex=0 above when using an external controller

RC-210 settings:

Configuration of the RC210 is fairly straight forward. (It is the same as a full duplex link radio.) The following example assumes the RIM_RC210 is connected to port #3.

Under Timers Tab:

Active Hangtimer for port 3 should be set to "0"

Under Port Switches Tab: (Port 3)

Transmitter Enable should be CHECKED Receiver Enable should be CHECKED Repeater Mode should be UNCHECKED Access Mode should be CARRIER

Everything else is optional - set them as needed for your particular installation.

Remember that you will have to configure linking between the repeater ports and the link port. (Port 3) – Consult the Arcom documentation)

Port Jumpers:

Remove Port 3 DE-EMPHASIS jumper JP9 (You now have FLAT audio on Port 3)
Remove Port 3 CTCSS jumper JP5 (if you want to extinguish the CTCSS LED from being on all the time)
Install Port 3 COS jumper JP6 for COS active LOW (Pins 1 & 2)