Upgrade Instruction
Convert MRX214 to MRX414

CAUTION
ELECTROSTATIC
SENSITIVE
DEVICES
DO NOT OPEN OR HANDLE
EXCEPT AT A
STATIC FREE WORKSTATION
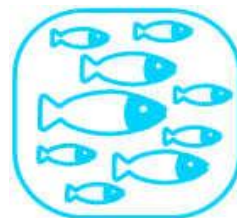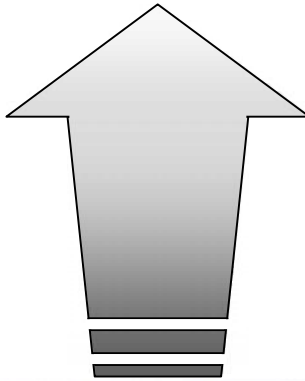
BEFORE YOU BEGIN...
1. Read all instructions and review requirements
2. If you do not have access to the needed equipment or you do not feel comfortable or
   qualified to perform this upgrade, contact your dealer or Zaxcom to arrange for this
   upgrade to be done at an authorized service/repair center or at the Zaxcom factory.

WHAT YOU GET IN THE BOX
1. MRX Daughter Card (in ESD Bag)
2. 4 spacers, unthreaded
3. Replacement "MRX414" model number label for Serial Tag
4. Upgrade Instruction -- printed copy not included. Download from Zaxcom website.
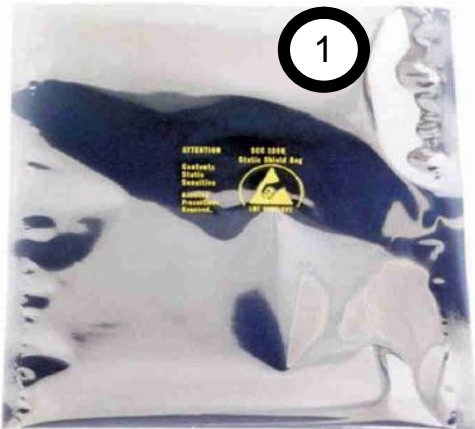

TOOLS YOU WILL NEED
T1. #1 Phillips Screwdriver
T2. 5/32" Nutdriver with reduced diameter tip
    (tip must fit in tight space between fragile components)
T3. Dental pick or similar small tool to pry open the case

STEP 1

1a. OPEN the ESD Bag and remove the MRX Daughter Card.

1b. VERIFY that the Block Code (L, M, H) marked on the board agrees with Block Code on the the Serial# Tag on the MRX214 module being upgraded. If the Block Code does not match, Do NOT Install the upgrade. The Block Code must match. You CANNOT mix Blocks within the module. Contact Zaxcom.
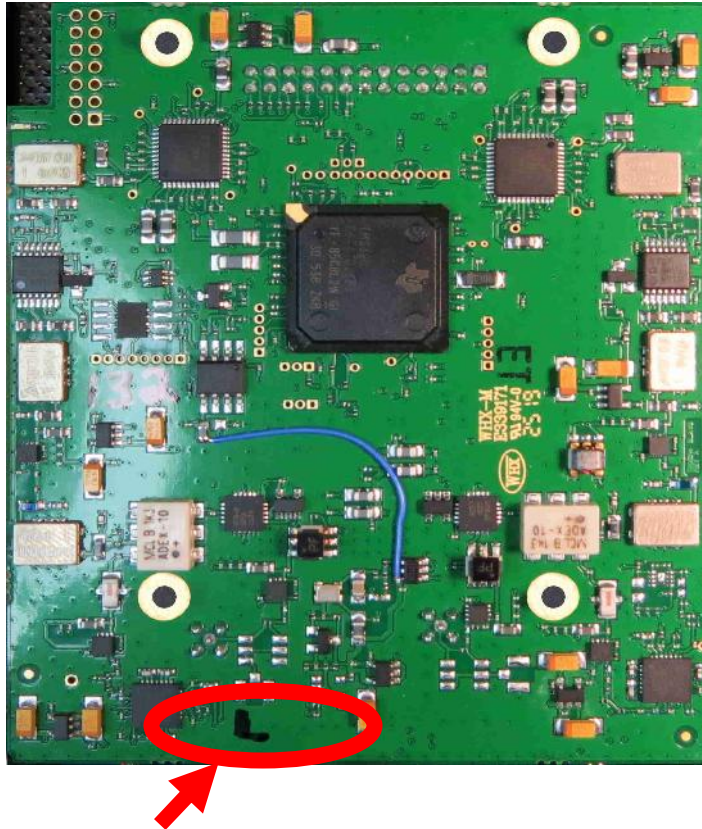
Block Codes L-M-H (Frequency Range)
L = Blocks 20-23 (512-614MHz)
M = Blocks 21ish-25ish (550-660MHz)
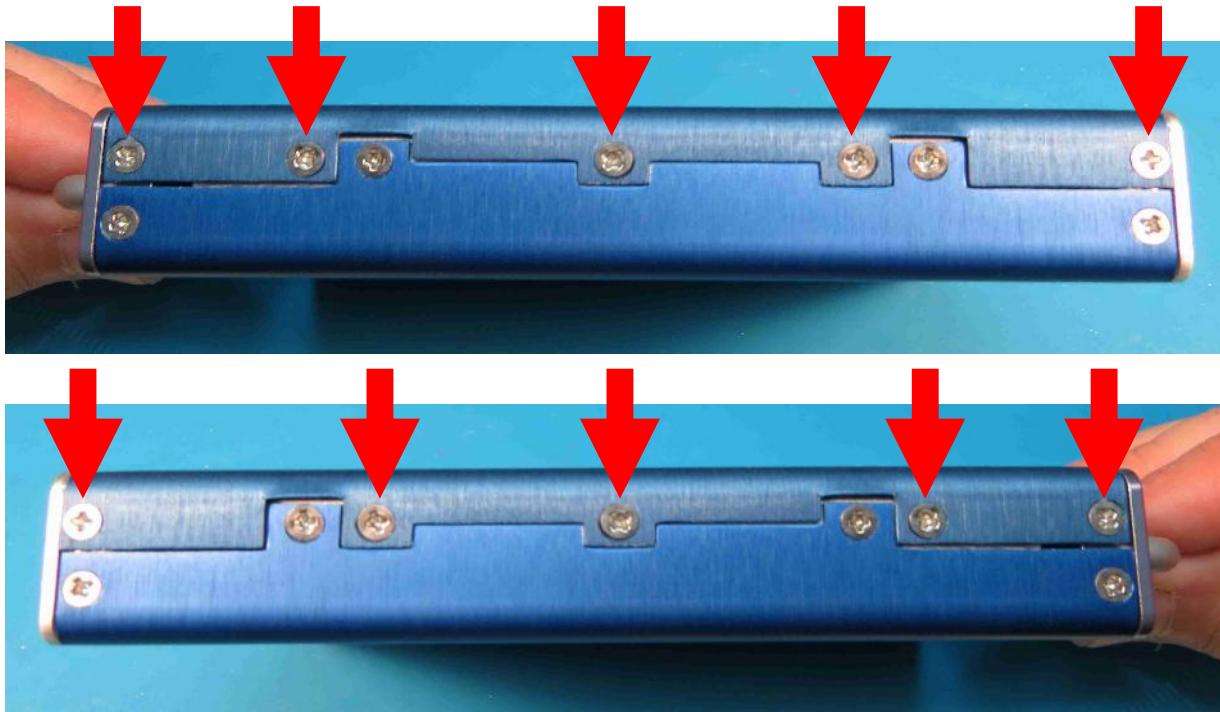H = Blocks 23-26 (596-698 MHz)

STEP 2

Flip the MRX214 Module being upgraded upside down….bottom cover up.

STEP 3

Use a #1 Phillips screwdriver to remove five (5) screws on each side that secure bottom cover.

STEP 4
Bottom cover screws removed. <u>Do Not</u> remove the top cover screws, four (4) on each side.

STEP 5
Use a #1 Phillips screwdriver to remove the bottom cover screw at rear of module.
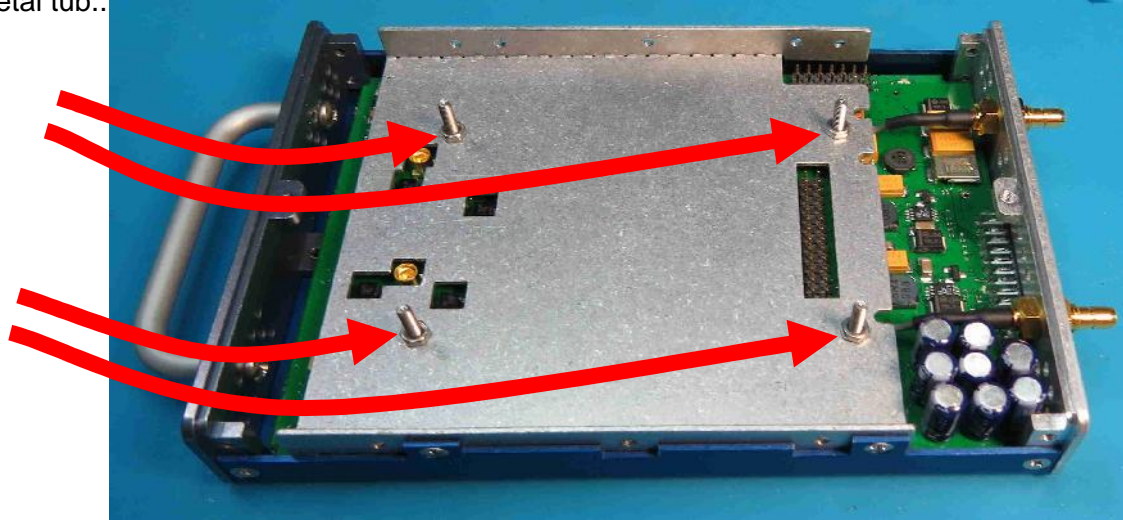
STEP 6
Use a dental pick or similar tool to carefully pry case open and remove bottom cover.
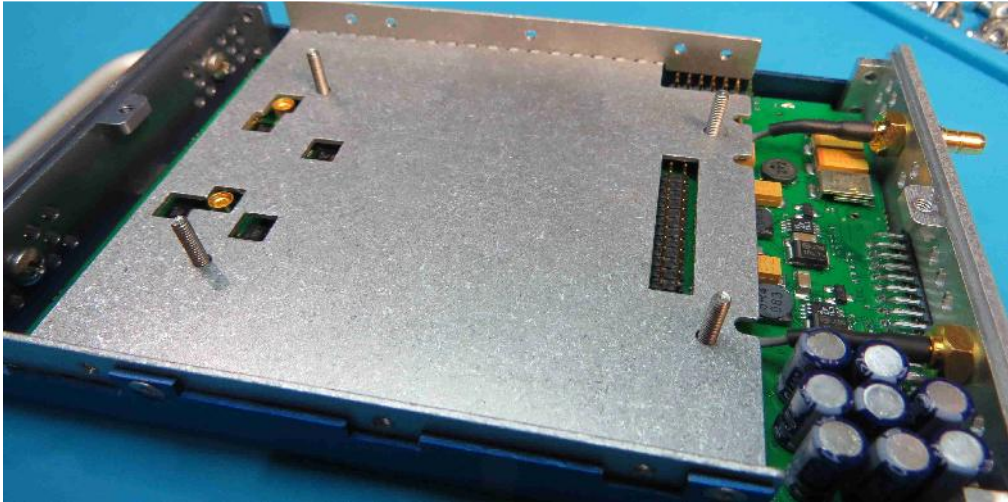
STEP 7

Bottom cover is removed. Use a 5/32" Hex nut driver and remove the four (4) nuts that secure metal tub..

STEP 8

Four (4) hex nuts are removed.

STEP 9

Install four (4) spacers on the studs…they slide on (not threaded).

STEP 10

10a. INSTALL MRX Daughter Card at an angle to clear tab on front panel while aligning front studs with holes in board

10b. Continue to carefully lay board down into tub while getting the rear studs to pass through holes in board and seating the two RF connectors (toward front) and 2x28 header (toward rear).

>> You may feel or hear a slight click as the RF connectors engage fully.
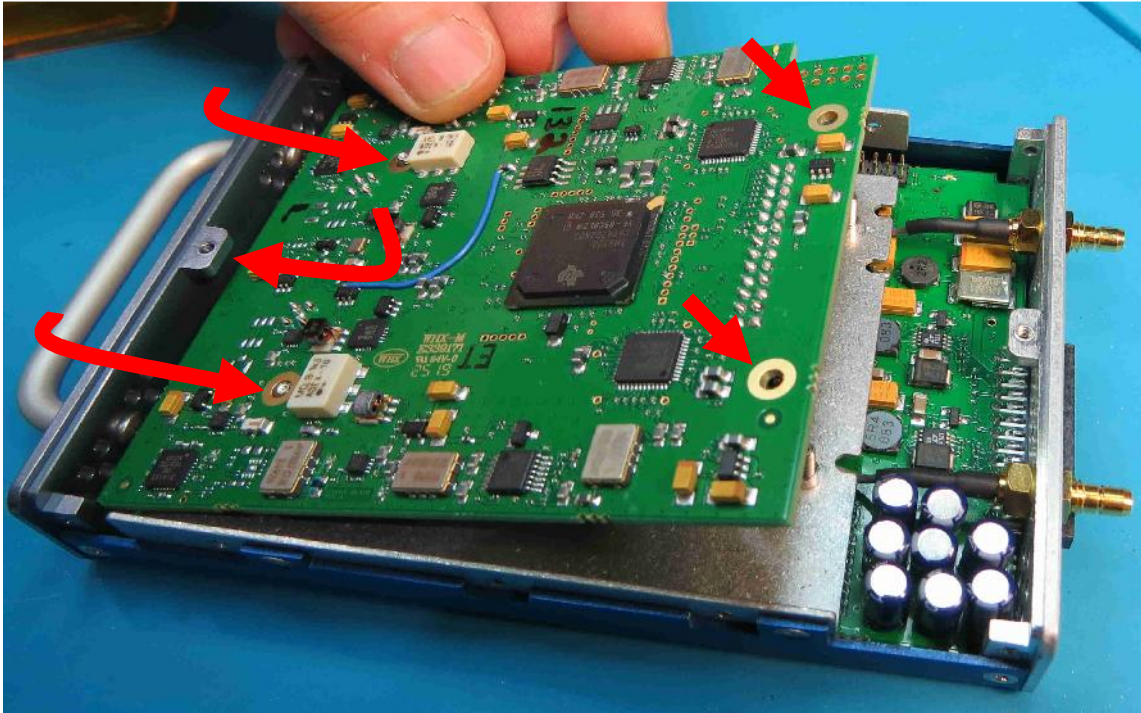
STEP 11

Press straight down on the area two (2) RF connectors and middle of the 2x28 header to be sure they are fully seated.
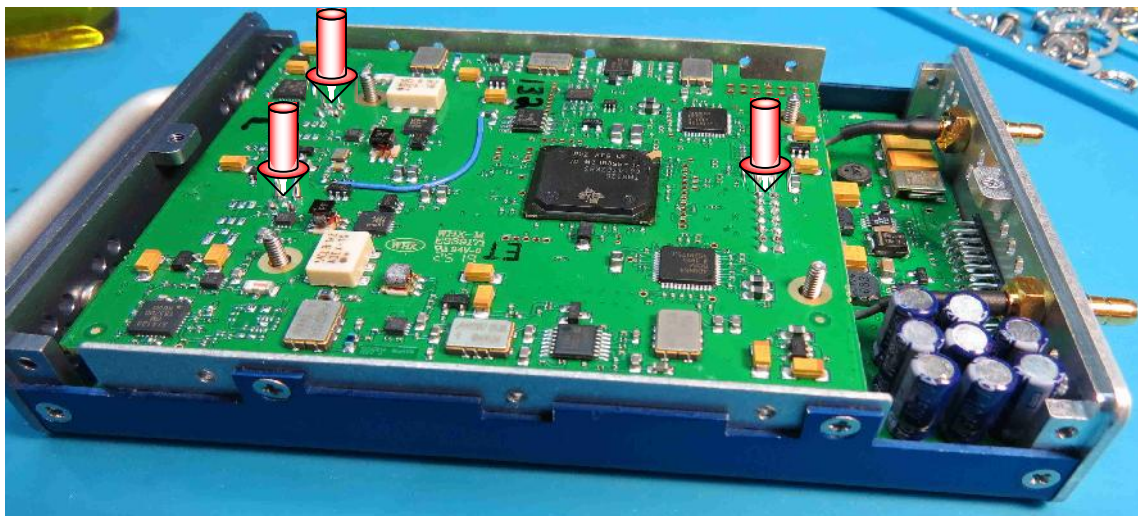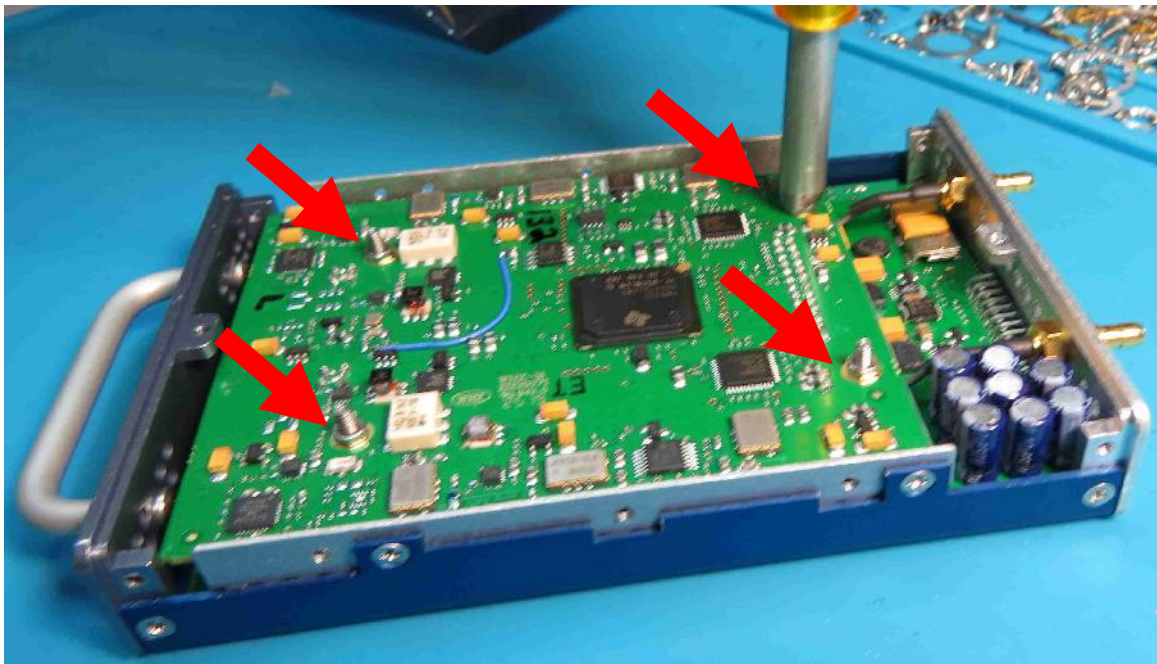
STEP 12
MRX Daughter Card is fully seated and connectors are engaged.

STEP 13
Use 5/32" Hex nut driver to install the four hex nuts. Be careful to not damage the nearby componets.

STEP 14

MRX Daughter is installed, connectors seated, and nuts are tightened.

STEP 15

Replace bottom cover and re-install screws-- five on each side and one at rear of module.

STEP 16

Place the new "MRX414" model label over the "MRX214" on the module's Serial# Tag.
Position MRX414 model label so that it covers the MRX214 text and does not cover over the
-L/-M/-H Block Code.

Continue to STEP 17 - Operational Test…...

STEP 17 - OPERATIONAL TEST

17a. VERIFY that the upgraded MRX414 module is operational by installing it into a receiver slot in a NOVA or other MRX/QRX compatible receiver unit (RX12, STRX12, etc).

17b. ACCESS the WIRELESS RECEIVER SETUP MENU and verify that the upgraded MRX414 modue shows four (4) receiver channels. (For NOVA, press the "F9" button.)
The display you see depends on the unit the module is installed in and the frmware version of the unit.

>> If the upgraded module shows four (4) receiver channels, the upgrade is succesful and the MRX414 module is now ready to use!

>> If the upgraded module DOES NOT indicate four (4) receiver channels, it is not operating correctly. Contact Zaxcom for assistance.

Using NOVA with latest firmware, the display will show:

BEFORE Upgrade….
MRX214 2-Channel Receiver
NOVA WIRELESS SETUP MENU Screen
with module installed in receiver slot 1
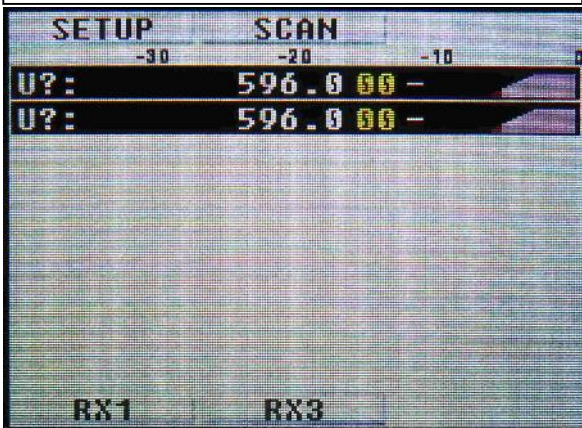
AFTER Upgrade….
MRX414 4-Channel Receiver
NOVA WIRELESS SETUP MENU Screen
with module installed in receiver slot 1
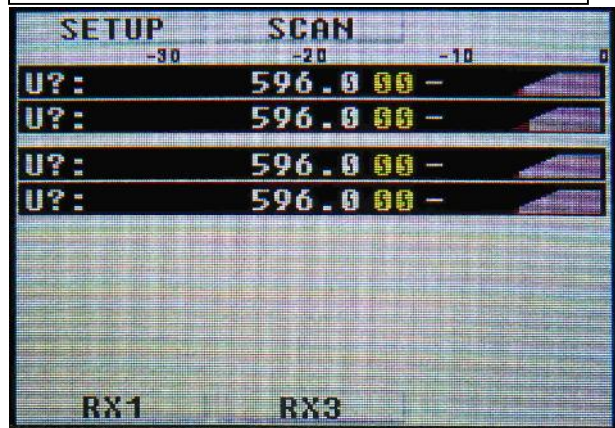
NOTES

Revision History

Rev1 01/27/2020 - Original Issue. pjp
Rev2 01/28/2020 - Pg3 Step2 and Pg6 Step8 add callout arrows. Pjp
Rev3 02/04/2020 - Pg 3 thru Pg11 Renumber steps
                    - Pg3, Pg10 Step17, to Step16 Revise label change
                    - Pg10,11 Step18, to Step 17 OpTest Revise and add screen images

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