Conversion of 9003 Receiver to 70cm Preamp.

The board is a FM digital receiver board. Reset pin for the detector was omitted and these boards became scrap. It has a 7.7 MHz wide RFM filter centered @ 433.92 MHz, P/N SF2136E, http://www.rfm.com/products/spec_sheet.php?record=SF2136E

A 15dB gain LNA follows it. The filter makes it perfect for receiving satellites in a metropolitan areas, where there is a considerable number of strong signals in the commercial 450 to 470 MHz band. The filter offers 40 dB or greater rejection for the commercial signals.

Conversion is simple
1. Remove cutoff coax cable and install a PCB mount SMA connector.
2. Remove and discard HC49S Crystal.
3. Cut power to receiver section, and remove R2. See Photo.
4. Remove L2 and install coax center conductor to the junction of L2 and C9
5. Ground coax shield to the ground tab for the crystal removed in step 2
6. Connect power and ground to J3. Pin 2 is (+) and pin 3 is (-)

This completes the conversion. Power is 5 to 10 VDC, I used a 9V transistor battery. Power consumption is ~20 mA.

Any questions, contact Art kc6uqh@amsat.org
PHOTO:

- Crystal
- L2
- R2
- J3 Pin 2
- Cut Trace
- +5 to 10V
- Install SMA here