**Spectra-Tac micor receiver (part-1)**
by Karl Shoemaker

## Spectra-Tac:

This supplement is to be used with the Micor receiver (SRG version) document found on SRG's web site. The spectra-Tac version is self-contained with its own power supplies (12 and 9.6) a nice, shielded 3 RU chassis, with a control shelf, for four card positions, and a type "N" female antenna port.

It uses an ACM (Audio Control Module) TLN6080B or TLN6956A which is a slide-in "card" in position 1. The card has the squelch, line level and other circuits. The line level will become the local speaker volume control. For tone receivers, it uses the TRN6083A PLM (PL module) in position 2. This card's pins and physical mounting is different from the mobile or Station-Compa types. If you are using carrier squelch mode the PLM won't be needed.

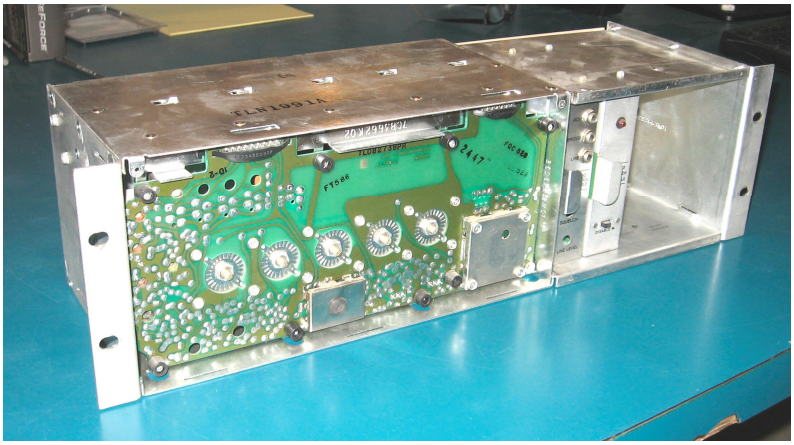

Note: "module" and "card" pretty much mean the same thing and may be used in this document and some others on the SRG web site.

Some of the ones available for this project came out of 800 MHz service. Therefore, the RF-IF board needed to be replaced with a hi-band one.

The cor board can be mounted on a stripped, unused card in position four. The local speaker is covered later in this document.

Currently, for SRG the STE (Status Tone Encoder) is not used, but would be in position three.

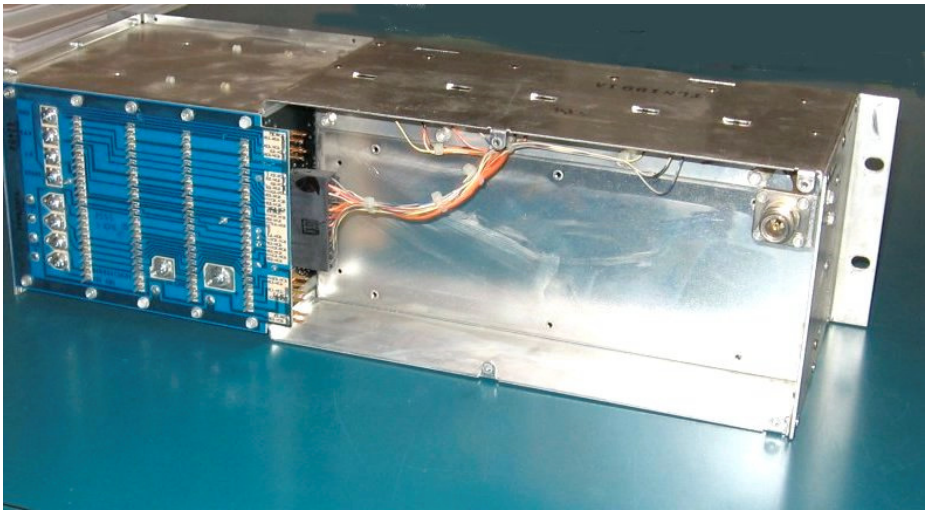
As with the other two types of mobile and compa (separate document), the receiver will be a self-contained unit; you just add the antenna and power (either 110vac or 12vdc). This type will require a different rack mount depth from the first two types. Take this into consideration when planning a station with limited space inside a cabinet near the front door.



Open rack/sites have better flexibility in this area however, are less secure against tampering.

As of 2020 the term "PLI" was changed to address all types of signaling therefore, is now know as "SDI" for Signal Decode Indication (or input).

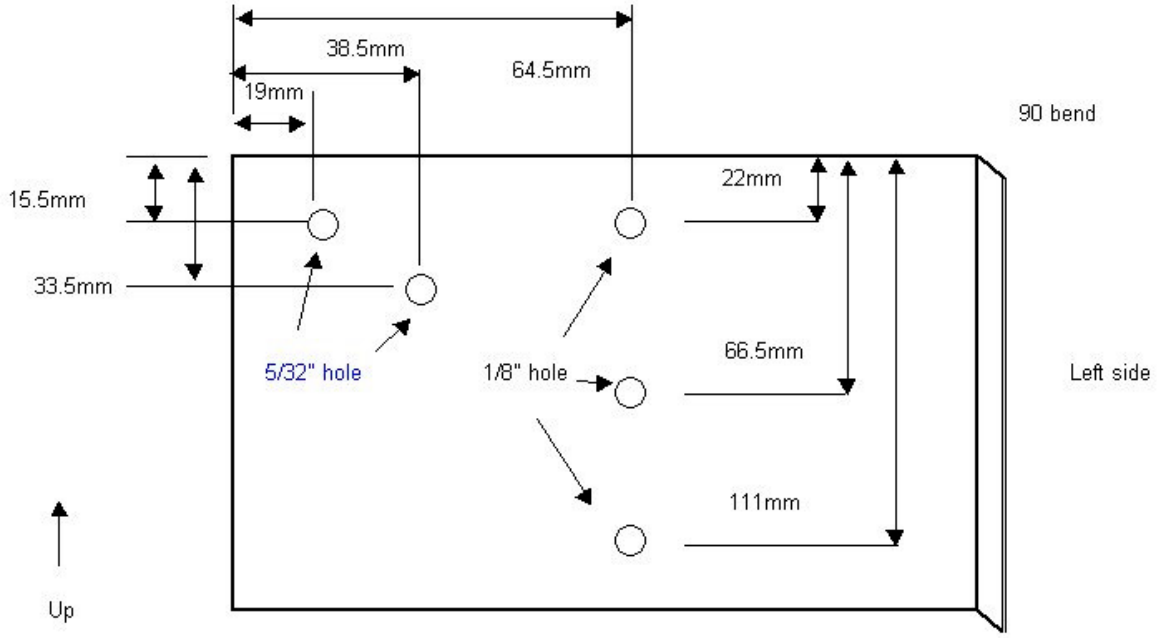
The Author changed the mount by removing the 15 small rivets and turning the side brackets around for front 19" rack mounting as shown here. As it should be, the "new" front access contains the RF board and the cards.

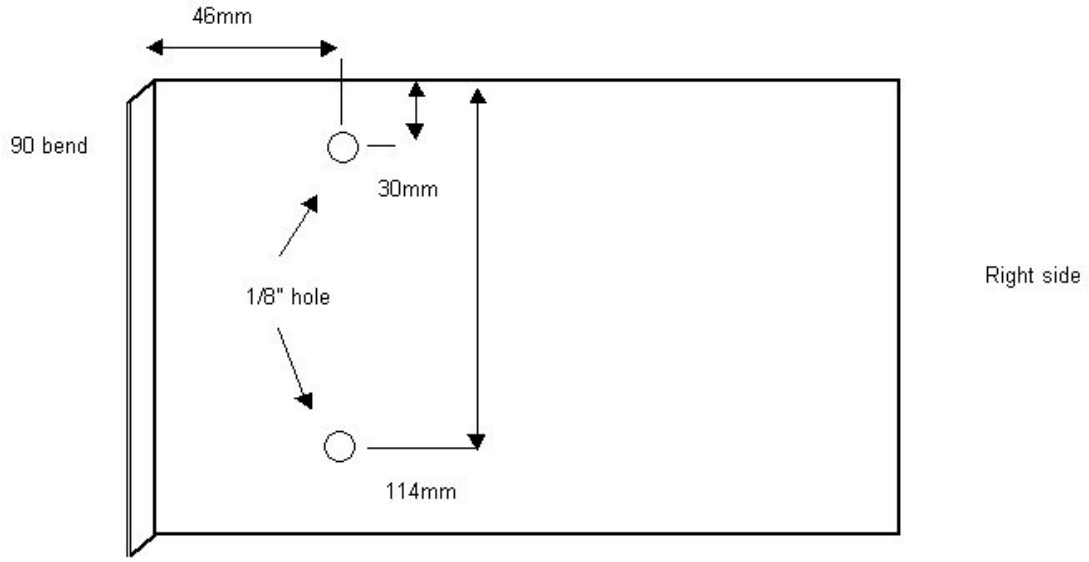


The image below shows the old mount but with the complete package with all covers assembled for reference only.

The new “rear” access contains the back-plane board for external connections and the RF port.

Also, the jumpers, hole & wires for the SM are not yet shown. Below are the seven hole locations for each side bracket. That’s including the two for the antenna connector bracket. “4-3” size rivets were used. 1/8” drill bit is used except for the RF port which is 5/32”.



Shown on the left is the prototype tested in a rack. On the right are several of the chassis mounting change done in one day with the electronics removed. While taken apart, they were cleaned from dust and a little corrosion. The RF deck, cards, power supply, etc. will be installed next. This arrangement appeared to be a good choice by the Author for all SRG (remote) receivers. In some cases, they will replace the mobile and compa (base) versions as well.

The OEM chassis had a foam pad to secure the top of the channel element. These were old and crusty so, they were replaced with 1” foam squares, 4” x 4”. On the right shows several chassis prepped with the 4 x 4 foam pads glued on the back.