

## Maspro ST9 / 12 / Grundig GRD Satellite receiver modifications

The most useful receiver I have modified is an analogue Maspro ST12 (Grundig GRD 300). This is an analogue satellite Set Top Box which has hidden menus that allow you to increase the video gain etc.

Information from the great [Satcure](#) website:-

### **GRD model**

Pin number: 2355

Astra reset code: 2601

Warning, the reset wipes out all channel names.

Service mode PIN: 3105 (not GRD150 or 250)

MM=001, NT=004 (008 GRD300), NL=001, NC=100 (140 GRD280, 150 GRD300), AS=010, NN=100 (070 GRD280), MOD=001, VG=043, AG=026, BIT=028 (156 GRD280, 154 GRD300).

MM= Memory Module

NT= Number of Timers

NL= Number of Languages

NC= Number of Channels (x2)

MOD= PAL G or PAL I

AG= Audio Gain

VG = Video Gain (if set too high produces bright, streaky, grainy picture).

### **GRD300**

#### **Why is the vacuum fluorescent display dim/dead?**

Usually because one or more of the 10uF electrolytics on the display panel has died. Replace them all and check for poor solder joints as well. Note that all vacuum fluorescent display tubes have a "burn" mark. During manufacture, a tiny piece of magnesium is ignited inside the tube in order to use up any remaining oxygen after the air has been sucked out.

#### **STR300T/Maspro ST12** You can access a special menu on the receiver by pressing

'MENU' '2' '5' code '1910'

This takes you into the set-up menus.

To change the sound output from PAL I to PAL B/G once you get into this menu, change the MT setting to 000.

### **GRD280/Maspro ST9**

#### **Why do I get poor pictures? (looks like weak signal)**

Check the video gain setting and video bandwidth setting.

**Can I get more channels?** Yes! In the secret service menu, increase the NC setting to 150.

This will give the maximum of 300 channels.

#### **Can I get more timer settings?**

Yes! In the secret service menu, increase the NT setting to 008.

This will give the maximum of 8 timer settings.

**Can I get more channel names?**

Yes! In the secret service menu, increase the NN setting to 090.  
This will give 180 channel names.

**Can I alter the video gain?**

Yes! In the secret service menu, change the VG setting to 032 as a compromise for both Astra and Eutelsat.  
For Astra only, set NN between 043 and 046.  
For ET1 only, set NN between 020 and 030.

**Can I alter the audio volume?**

Yes! In the secret service menu, change the AG setting (normally 026).  
This affects the setting in the main menu.

**Can I change the RF modulator sound output from PAL-I to PAL-G ?**

Yes! In the secret service menu, change the MOD setting from 001 to 000.

**Can I \*really\* screw things up so my receiver will NEVER work again?**

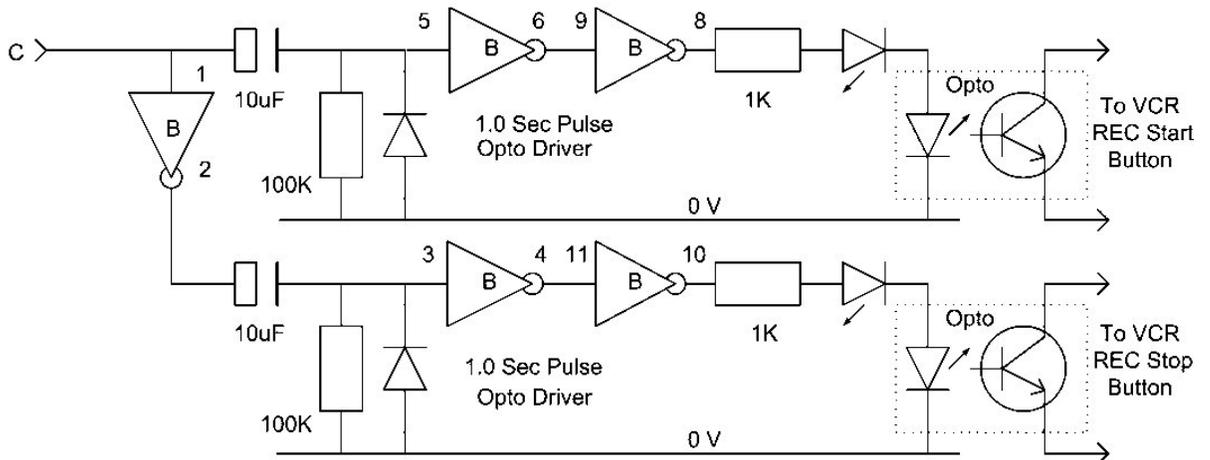
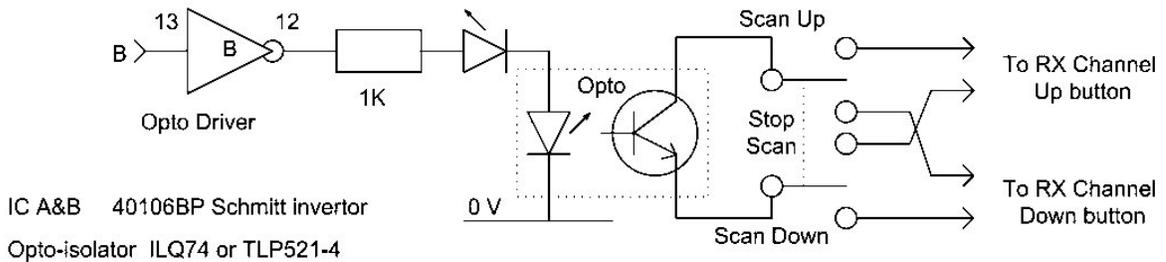
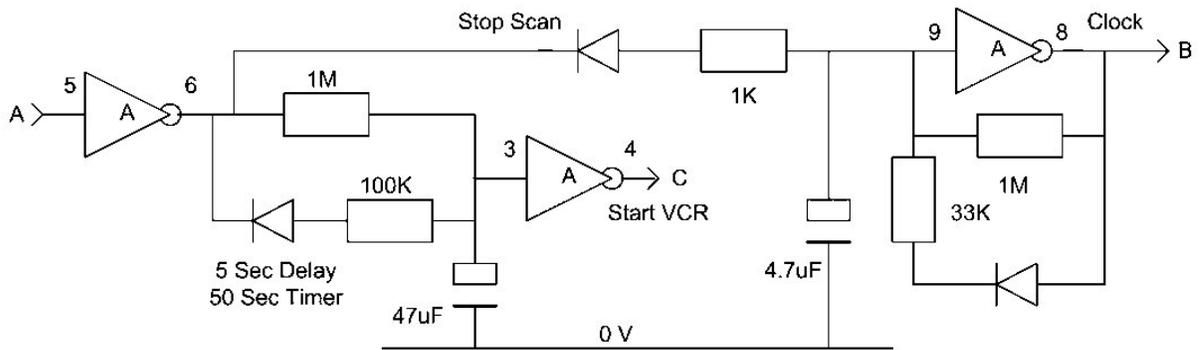
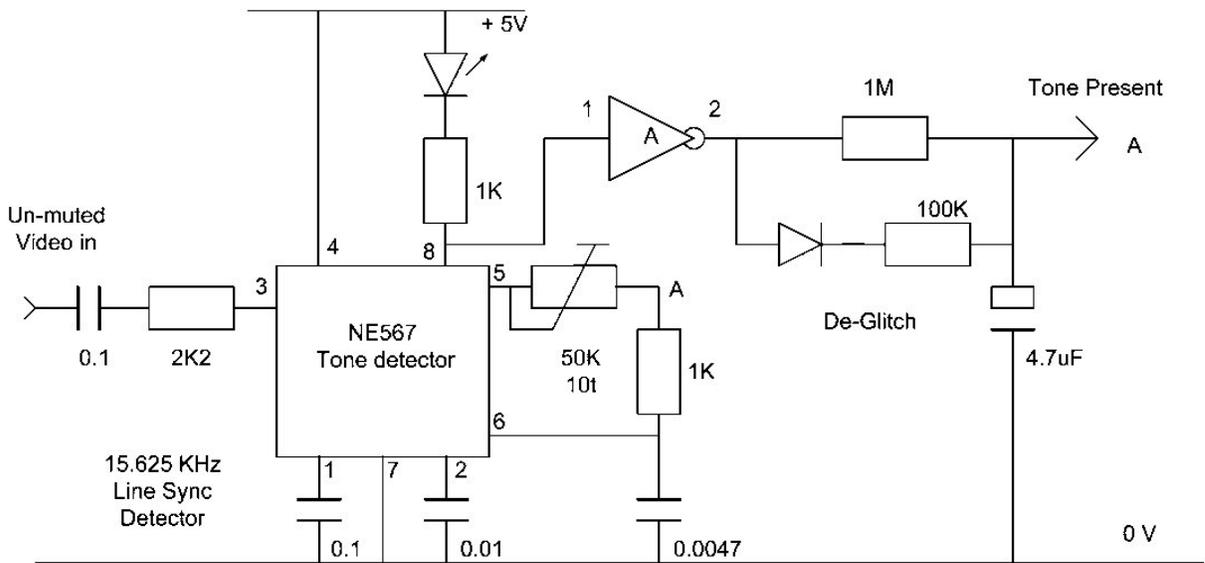
Yes! In the secret service menu, change ANY setting which is not mentioned above OR change more than one setting at a time without testing the receiver. I guarantee that your receiver will never work again.

1. WRITE DOWN the existing parameters so you can put them back to normal.
2. NEVER change more than ONE parameter at a time and CHECK EVERY CHANNEL after you make such a change.

The memory is limited so if you allocate memory for 300 channels, you won't have enough left to name them all. Trying to do so will cause ... let's say "interesting effects"!

The great feature of this receiver is that it displays an on screen display with a title and tuning parameters for a few seconds when the up and down buttons are used to step onto the next pre-programmed channel.

By adding a simple circuit to automatically simulate 'up' button presses it is possible to make the receiver 'scan' a number of pre-determined frequencies. An extra addition to the circuit can be used to stop the scan when video sync is detected and either start a video recorder or sound a warning buzzer to let you know that here is some activity.



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