

MOTOROLA CM540-SYSTEM 500/ELECTROSCAN (00S09 -PLL Chip)  
40 Ch./10 Ch. Scan - Microprocessor Controlled C.B. Xcvr.

This unit isn't readily found on the 'junk' sales. Top quality and well designed, the Microprocessor is very good. Was bought in '78 for \$285 and only in shop twice since then - (1st time for being hooked up backwards; this time for RF Amp transistor - got zapped by a Linear up close).

A Factory Service Manual is necessity for working on this unit in depth - also the parts are not lettered on PCB - and if you don't really know electronics when you hit the microprocessor circuitry TROUBLE.....

Customer didn't want any modification done to this particular as is in wife's car. But have noticed an odd thing about the PLL chip - 00S09 (Pin out is similar to the following: MC145104, MM55104/114/124, MN6040A, and SM5104 PLL chips).. Logic level of the 00S09 is 9.1VDC being the only difference - so theory wise should convert the same as SM5104. Pin-out function of unit is as follows:

|                                       |   |
|---------------------------------------|---|
| 9.1 VDC (chip B+)Vdd-1                | 16-D.C. Ground                            |
| Fin-2                                 | 15-P0, Logic Input-LSB                    |
| Osc in-3                              | 14-P1, " "                                |
| Osc out-4                             | 13-P2, " "                                |
| (*-no conn.)-5                        | 12-P3, " "                                |
| Phase Det.-6                          | 11-P4, " "                                |
| (*-no conn.)-7                        | 10-P5, " "                                |
| Tied high, Vdd logic)-8<br>level ,P7) | 9-(Tied High, Vdd logic<br>(level, P6.... |

\*(5)..Frequency select, 10KHz and 5KHz steps.

\*(7)..Lock Detector,

Tune-up: RX - L101, L102, L103, T104, T105, T106..

TX - you've either got it or you don't, however power may be increased by changing values of R-307 and R-305. (If both resistors in circuit remove, and replace only R-305 with a 30 ohm 5% 1/2W. Don't exceed 5W deadkey with original final...for modulation increase if needed try removing R-205, then Q201...)