

---148GTL-DX (Early-Late) - FACTS---

BAM

EARLY: A. S/N Range: 03000001-4498 to 13000001-1504

B. PLL Chip is MB8719

C. Crystal switching for LOW/MID/HIGH F_0 ranges.

(for further frequency increases the the standard 8719 modification may be utilized. *Or just switch the crystals.)

*Here is a discrepancy that would like to get cleared up as haven't run across an 'Early' unit to check it. If anyone can help on this; please do; and give serial no. of unit. (XX- the last two numbers!).

1. Schematic shows X-2 as 15.03MHz; X-3 as 15.48MHz; and X4 as 15.93MHz....if this the case 14.58MHz will take you down another 40 ch., and 16.38MHz will take you up 40 more..

2. Board layout diagram and Block diagram show X-2 is 15.48MHz; X-3 is 15.93MHz; and X-4 is 16.38MHz.... to go down another 40 ch. use 15.03MHz, and 16.83MHz for additional higher channels.

Of the 6 units I have seen all were 'Late' DX's, haven't even heard of anyone having an 'Early' yet.....

Good

LATE: A. S/N Range is above 13000001-1504

(Unit utilized for modification in Vol. 15 was #13015XX.)

B. ALL, (with exception of line-up) published in Vol. 15 and Vol. 16 of SCB was for 'Later' version (See OOP's this Vol.).

C. PLL Chip is MCL45106P; with 2 - MCL4008ECP, 4-bit full adders to accomplish logic switching via selector/range switch.

D. PLL Pinout below:

(Chip B+)Vdd--1	18--Vss(D.C. Gnd)
F in--2	17--Po
Osc in--3	16--P1
Osc out--4	15--P2
$\frac{1}{2}$ Osc--5	14--P3
* F_0 select--6	13--P4
\emptyset Det--7	12--P5
Lock Det--8	11--P6
P8--9	10--P7

*Logic 1=10KHz steps, Logic 0=5KHz steps, -SOMETIMES!!

Using above and information in Vols 15 & 16, can 'custom' modify the unit as you see fit with no problem... known frequency ranges on some 'Late' units are from 25.785MHz to 28.245MHz..Power output linearity??