# Flesher Corporation

LO-TONE MANUAL

#### LO-TONE KIT

#### ASSEMBLY INSTRUCTIONS

The following instructions are for assembling the AFSK and Filter boards as a low tone set of boards. Flesher Corporation does not recommend these changes to be attempted on an already assembled board. These boards are through-hole plated and damage to the board may result without proper shop desoldering equipment. Therefore, we recommend these components to be placed on boards being assembled for the first time. It is important that the following instructions be followed closely to assure your operating pleasure. Refer to OPERATORS MANUAL for alignment after assembly.

Refer to page 1 of the UNIVERSAL FILTER assembly instruction booklet and make the following changes.

- ( ) On all instructions that say "SEE CHART", refer to resistance chart supplied with this set of instructions.
- ( ) R8 and R12 should say "SEE CHART" and refer to resistance chart supplied with this set of instructions.

Refer to page 3 of the UNIVERSAL FILTER assembly instruction booklet and make the following changes.

( ) Capacitors C1 through C8 should be marked .0luf mylar (2A103JT).

Refer to page 2 of the AFSK assembly instruction booklet and make the following changes.

- () The crystal to be installed will be the one supplied with this kit (3.6685 Mhz).
- ( ) Capacitor C3 is changed to .33uf mylar (23AK433).

Refer to page 3 of the AFSK assembly instruction booklet and make the following changes.

( ) Capacitor C4 is changed to .0015uf mylar (23BK215).

AFTER COMPLETING the AFSK board kit, a 50pf disc capacitor must be installed on the SOLDER SIDE of the AFSK board as shown below. Cut leads as short as possible to reach between pins 11 and 14 of IC 3 and solder.

#### LO-TONE KIT PARTS LIST

====	====	=====	=====	===:	=====	=====	====	=====		========		
P.N.				QUANITY								
-										-		
140	371	C	Crystal, 3.6685 Mhz									
110	171	C	Capacitor, .0015uf Mylar (23BK215)									
110	245		" .33uf Mylar (23AK433)									
110	130		" 50pf disc									
110	198		" .Øluf Mylar (2AlØ3JT)									
100	630	R	Resistor, 150 ohms, 5%, 1/4W (BRN-GRN-BRN)									
100	730		99	99	390	98	99	99	(ORG-WHT-BRN)	(6)		
101	245		**	99	51K	98	99	99	(GRN-BRN-ORG)	(1)		
101	250		10	89	56K	H	99	11	(GRN-BLU-ORG)	(2)		
101	37Ø		99	86	18ØK	W	99	**	(BRN-GRY-YEL)	(3)		
101	38Ø		99	99	200K	99	90	99	(RED-BLK-YEL)	(3)		
101	100		**	99	13K	99	88	99	(BRN-ORG-ORG)	(3)		
101	210		99	63	39K	19	89		(ORG-WHT-ORG)	(2)		

If it becomes necessary to order parts from Flesher Corporation, please use part numbers as indicated on these parts list.

### TU-300 UNIVERSAL FILTER RESISTANCE CHART

(LOW TONE)

FILTER	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
1275Hz	51K	NA	NA	NA	390	220K	56K	390	220K	10K	56K	390	220K	470K
1445Hz	NA	13K	13K	13K	390	200K	39K	390	200K	10K	39K	390	200K	470K
1700Hz	43K	NA	NA	NA	150	180K	43K	150	180K	10K	43K	150	180K	470K
2125Hz	68K	NA	NA	NA	620	270K	62K	620	270K	10K	62K	620	270K	470K

## TU-300 UNIVERSAL FILTER FREQUENCY SELECT DIODES







