

# FSK 500

**IRL**  
700 TAYLOR RD.  
COLUMBUS, OH. 43230

REV. 7-1-81

## PARTS LIST

### RESISTORS

|     |        |     |        |     |                 |      |        |
|-----|--------|-----|--------|-----|-----------------|------|--------|
| R1  | 5.11 K | R31 | 1.00 K | R61 | 105 K           | R91  | 73.2 K |
| R2  | 6.98 K | R32 | 13.0 K | R62 | 679 Ω           | R92  | 10.0 K |
| R3  | 8.45 K | R33 | 14.7 K | R63 | 147 K           | R93  | 10.0 K |
| R4  | 12.4 K | R34 | 63.4 K | R64 | 147 K           | R94  | 73.2 K |
| R5  | 10.0 K | R35 | 51.1 K | R65 | 499 K           | R95  | 73.2 K |
| R6  | 105 K  | R36 | 806 K  | R66 | 10.0 K          | R96  | 73.2 K |
| R7  | 105 K  | R37 | 21.5 K | R67 | 10MEG           | R97  | 249 K  |
| R8  | 10.0 K | R38 | 20.0 K | R68 | 105 K           | R98  | 121 K  |
| R9  | 105 K  | R39 | 6.98 K | R69 | 2.25 K → 2.21 K | R99  | 453 K  |
| R10 | 105 K  | R40 | 2.15 K | R70 | 316 K           | R100 | 20.0 K |
| R11 | 316 K  | R41 | 10.0 K | R71 | 10.0 K          | R101 | 200 K  |
| R12 | 845 Ω  | R42 | 10.0 K | R72 | 10.0 K          | R102 | 105 K  |
| R13 | 10.0 K | R43 | 10.0 K | R73 | 10.0 K          | R103 | 105 K  |
| R14 | 10.0 K | R44 | 105 K  | R74 | 1.54 K          | R104 | 10.0 K |
| R15 | 845 Ω  | R45 | 105 K  | R75 | 2.61 K          | R105 | 10.0 K |
| R16 | 2.67 K | R46 | 105 K  | R76 | 3.83 K          | R106 | 1.69 K |
| R17 | 1.00 K | R47 | 105 K  | R77 | 10.0 K          | R107 | 20.0 K |
| R18 | 2.15 K | R48 | 10.0 K | R78 | 10.0 K          | R108 | 105 K  |
| R19 | 1.30 K | R49 | 13.0 K | R79 | 10.0 K          | R109 | 100 K  |
| R20 | 60.4 Ω | R50 | 14.7 K | R80 | 105 K           | R110 | 1.96 K |
| R21 | 316 K  | R51 | 63.4 K | R81 | 2.15 K          | R111 | 1.96 K |
| R22 | 6.98 K | R52 | 51.1 K | R82 | 316 K           | R112 | 105 K  |
| R23 | 100 K  | R53 | 80.6 K | R83 | 10.0 K          | R113 | 105 K  |
| R24 | 10.0 K | R54 | 21.5 K | R84 | 10.0 K          | R114 | 510 K  |
| R25 | 105 K  | R55 | 20.0 K | R85 | 10.0 K          | R115 | 10.0 K |
| R26 | 332 Ω  | R56 | 23.2 K | R86 | 10.0 K          | R116 | 56.2 K |
| R27 | 332 Ω  | R57 | 7.68 K | R87 | 1.00 K          | R117 | 4.99 K |
| R28 | 105 K  | R58 | 8.25 K | R88 | 11.8 K          | R118 | 10.0 K |
| R29 | 105 K  | R59 | 24.3 K | R89 | 105 K           | R119 | 1.00 K |
| R30 | 10.0 K | R60 | 1.96 K | R90 | 105 K           | R120 | 20.0 K |
|     |        |     |        |     |                 | R121 | 105 K  |

### CAPACITORS

|               |          |
|---------------|----------|
| C1 THRU C6    | .015 UF  |
| C7            | .0047 UF |
| C8, C9        | .015 UF  |
| C10           | .047 UF  |
| C11 THRU C17  | .015 UF  |
| C18           | .047 UF  |
| C19           | 3300 PF  |
| C20, C21      | .1 UF    |
| C30, C31      | 1000 UF  |
| C32           | 10 UF    |
| C33           | 1 UF     |
| C34, C35, C36 | 10 UF    |

### DIODES

|             |        |
|-------------|--------|
| D1, D2      | IN4148 |
| D3 THRU D6  | IN4001 |
| D7 THRU D27 | IN4148 |

### ZENERS

|        |               |
|--------|---------------|
| Z1     | IN4732 (4.7V) |
| Z2, Z3 | IN4735 (6.2V) |
| Z4     | IN4732        |

### TRANSISTORS

|        |              |
|--------|--------------|
| Q1     | TIP 47       |
| Q2, Q3 | 2N2222(T092) |

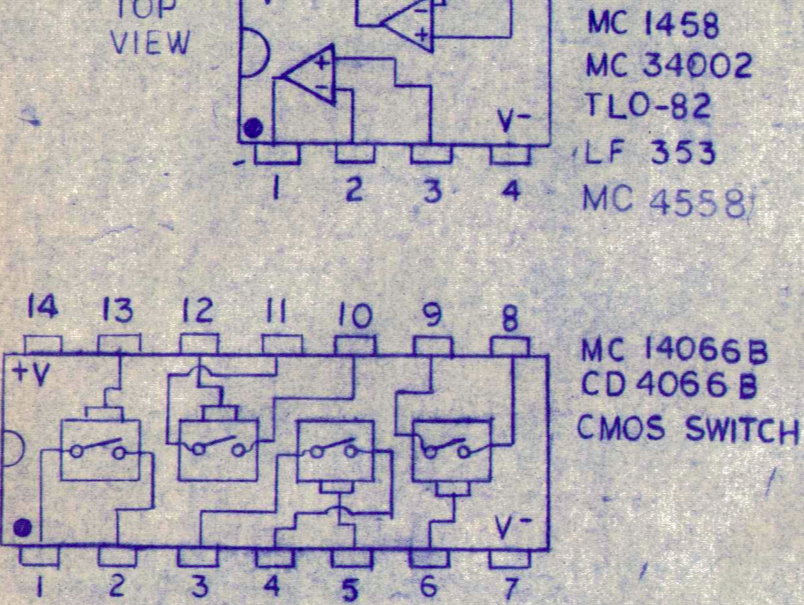
### FUSES

|         |          |
|---------|----------|
| F1      | 5A, 125V |
| F1 LAMP | 194      |

### INTEGRATED CIRCUITS

|              |        |
|--------------|--------|
| U1, U7, U9   | CD4066 |
| U2 THRU U5   | LF353  |
| U6           | MC1458 |
| U8           | LF353  |
| U10 THRU U14 | LF353  |
| U15 THRU U18 | MC1458 |

### PIN-OUT



NOTE: IF UNIT STRAPPED FOR RS-232, SERIAL IN MUST BE SHORTED TO RECEIVE

\* R122 100K  
R123 10K  
R124 10K

### NOTES

- D27 LOCATED LEFT OF R205
- R44
- ERROR ON BOARD SILK SCREEN HAS RESULTED IN TWO RESISTORS LABELED R19. R19(850) LOCATED BETWEEN SW1 AND SW4 IS 1.55K.
- U14 MUST BE TL082 OR LF353
- ANY 8 PIN INTEGRATED CIRCUIT MAY BE REPLACED BY AN LF353 OR TL082.
- R206 NOT MARKED, LOCATED ADJACENT TO R200

THIS JACK INCLUDED ON UNITS SN 50546 AND SUBS

JUMPER A-B EXCEPT WHEN LOOP IS IN USE, THEN JUMPER SHOULD BE B-C

JUMPER A-B=TTL  
JUMPER B-C=RS232