

# Selectone

## ST-020B / ST-025B APPLICATION NOTE # 0400

FOR USE WITH : Motorola MAXTRAC MTX-840 & GM300 APPROVAL DATE: 19FEB99 BY: RTS

### CONNECTIONS

| Note | Pin # | ST-02x Function            | Wire Color | Host Radio Connection                 |
|------|-------|----------------------------|------------|---------------------------------------|
|      | 3     | (+) Supply                 | Red        | J6-1 9.6V                             |
|      | 9     | (-) Supply                 | Black      | J6-11 GND                             |
|      | 11    | Rx Audio Input             | Blue       | Junction U552 and C561                |
|      | 1     | Rx Audio Output            | Wht/Blu    | Junction R562 and C561                |
|      | 12    | Tx Audio Input             | Green      | Collector Q651                        |
| 5    | 13    | Tx Audio Output            | Wht/Grn    | Junction C652 and R655                |
|      | 6     | PTT Input                  | Yellow     | J6-4 T/R Shift                        |
|      | 10    | PTT Output / Code Select 3 | Blk/Yel    | Cust Select ST-020B, Not Used ST-025B |
| 7    | 7     | Monitor/Clear/Ciphered     | Brown      | S1103 FPC                             |
| 2,3  | 8     | Amp. Enable                | Blk/Brn    | Collector Q509                        |
|      | 5     | Code Select 2              | Blk/Org    | Cust Select ST-020B, Not Used ST-025B |
|      | 2     | RS-232 Input/Code Select 1 | Violet     | Cust Select ST-020B, Not Used ST-025B |
| 4,6  | 4     | RS-232 / BEEP Output       | Wht/Org    | U553-2                                |

### Notes:

1. Remove C561 & C652 from the radio.
2. Remove R41 on the ST-02xB.
3. Place a wire jumper across R37 on the ST-02xB.
4. Place a 15K resistor to GND from the Wht/Org wire.
5. Add a .0068 $\mu$ F cap (Removed C652) in series with the Wht/Grn wire.
6. Add a .1 $\mu$ F cap (Removed C561) in series with the Wht/blu wire.
7. This application uses the double click mode with the radio audio mute button.

### Configuration Settings for Product Manager

|                |                                  |                |                                  |              |
|----------------|----------------------------------|----------------|----------------------------------|--------------|
| Operating Mode |                                  | Switched       | <input checked="" type="radio"/> | Double Click |
| Power Up Mode  |                                  | Ciphered       | <input checked="" type="radio"/> | Clear        |
| LED Operation  | <input checked="" type="radio"/> | Active Low     |                                  | Active High  |
| Transmit Alert | <input checked="" type="radio"/> | On             |                                  | Off          |
| Transmit Delay |                                  | System Related |                                  |              |
| Code Key #1    |                                  | User Selected  |                                  |              |
| Code Key #2    |                                  | User Selected  |                                  |              |
| Code Key #3    |                                  | User Selected  |                                  |              |
| Code Key #4    |                                  | User Selected  |                                  |              |