

# Selectone

**ST-50 Series**

**APPLICATION NOTE # 0406**

**FOR USE WITH : MOTOROLA M120**

REV: A 1-18-00 BY:CPE

This note applies to Logic Board HLN8074B

## CONNECTIONS

Note	Pin #	ST-050 Function	Wire Color	Host Radio Connection
	3	(+) Supply	Red	J6-1 9.6V
	9	(-) Supply	Black	J6-11 GROUND
1	11	Rx Audio Input	Blue	JUNCTION OF U552 AND C561
1	1	Rx Audio Output	Wht/Blu	JUNCTION OF R562 AND C561
2	12	Tx Audio Input	Green	Q651 COLLECTOR
2	13	Tx Audio Output	Wht/Grn	JUNCTION OF C652 AND R655
	6	PTT Input	Yellow	J8-13
	10	PTT Output	Blk/Yel	J8-13
	7	Monitor/Clear/Ciphered	Brown	USER SWITCH (TOGGLE see note 5)
	8	Amp. Enable	Blk/Brn	N/A
	5	COS	Blk/Org	COLLECTOR Q501
	2	RS-232 Input	Violet	N/A
	4	RS-232 Output	Wht/Org	N/A

### Notes:

1. REMOVE C561.
  2. REMOVE C652.
  3. ADD A .0068uF CAP (REMOVED C652) IN SERIES WITH WHT/GRN WIRE.
  4. ADD A .022uF CAP (REMOVED C561) IN SERIES WITH WHT/BLU WIRE.
  5. BROWN PIN #7 MUST HAVE A PULL-UP RESISTER TO SWITCHED SUPPLY.
- Clear/Cipher is selected with a toggle switch to ground. Ground = Cipher. Open = Clear.

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### **Configuration Settings for Product Manager**

The following settings, with most recent updates is available from the Selectone web site [www.selectone.com](http://www.selectone.com).

### **Operating Mode Tab**

<b>Tx PowerUp Mode</b>		Ciphered	<b>X</b>	Clear
<b>Functional Rx Conditions</b>	<b>X</b>	Ciphered	<b>X</b>	Clear
<b>COS (Carrier Operated Switch)</b>		Active Low	<b>X</b>	Active High
<b>User Code Key Selection</b>		Double Click	<b>X</b>	Toggle
<b>PTT Input</b>		Active Low	<b>X</b>	Common PTT
<b>PTT Output</b>		Active Low		Active High
<b>Special Functions</b>	<b>X</b>	Amp. Enable		Special PTT In/Out
<b>Missed Sync Reset</b>			<b>X</b>	Power Save
<b>Initial Synchronization Delay</b>				ABOVE 300mS

### **Audio Levels Tab**

<b>Receiver Input Level</b>	<b>2000</b>				
<b>Receiver Output Level</b>	<b>2000</b>				
<b>Microphone Input Level</b>	<b>2000</b>				
<b>Microphone Output Level</b>	<b>502</b>				
<b>Synchronization Level</b>		<b>3dB</b>	<b>9dB</b>	<b>15dB</b>	<b>X 21dB</b>
<b>Segment Filtering</b>	RX Threshold = 250		TX Threshold = 255		