PYRAMID MODEL #: 2012 / 3012 / 2017 Merlin / 2016
RADIO MODEL: Maxon SM-4150
ENGINEER: C. Carbajal

APPROVAL   INITIALS
ENGINEER
DEPT. HEAD

Connections:

	Pyramid	Function	Radio
	Black/Shield	Ground	IC6 Pin 2
	White	Tx Audio Out	Mic Connector Pin 4
	Blue	On Air Detect	N/C
	Green	PTT Out	Mic Connector Pin 3
	Red	Switched B+	IC6 Pin 2
	Yellow	Rx Audio In	PL3 Pin 1
	Violet	COR	IC105 Pin 36
	Brown	RX Audio Mute	N/C
	Grey	Mic Mute / Ch. Chng.	N/C

Merlin Jumpers:				**Pyramid Program:**		
	J1	[In]	Tx audio level		Mobile COR Polarity:	Low
	J2	[In]	Local PTT Loop		Mobile Type:	Conv.
	J4	[In]	COR Pull Up		On-Air Polarity:	Low
2012 Jumpers:					I/O Pin 9	N/A
	J1	[In]	Tx audio level			
	J2	[In]	Local PTT Loop			
	J3	[In]	COR Pull Up			
2016 Jumpers:						
	J1	[In]	Local PTT Loop			
	J2	[In]	TX audio level			

Additional Modifications (2012 / 2016 / Merlin):

Additional Modifications (Radio):

1. The Maxon mobile is not able to transmit while the mic is on hook. Add the following circuit in the microphone between the hookswitch wire (yellow) and the PCB located at the base of the mic:

2. On Merlin PCB Rev. A-B, 2012 units and 2016 units add a 1K Ohm resistor from pin 36 to pin 40 of IC105 in the Maxon SM-4150 radio

Note: If you want to use the 2012/Merlin to change channels on the mobile radio, connect the grey wire (I/O Pin 9) to IC103 Pin 13 and program I/O Pin 9 in the 2012/Merlin for Channel Change / Method Pulse. You can only have 2 groups in the radio to use the channel change feature.