

DIY PROJECT #4

FLEX 6400/6600 Radio or Maestro to Plantronics W720 Interface

P/N 4000-0057 Rev-B

Gene Hinkle, K5PA

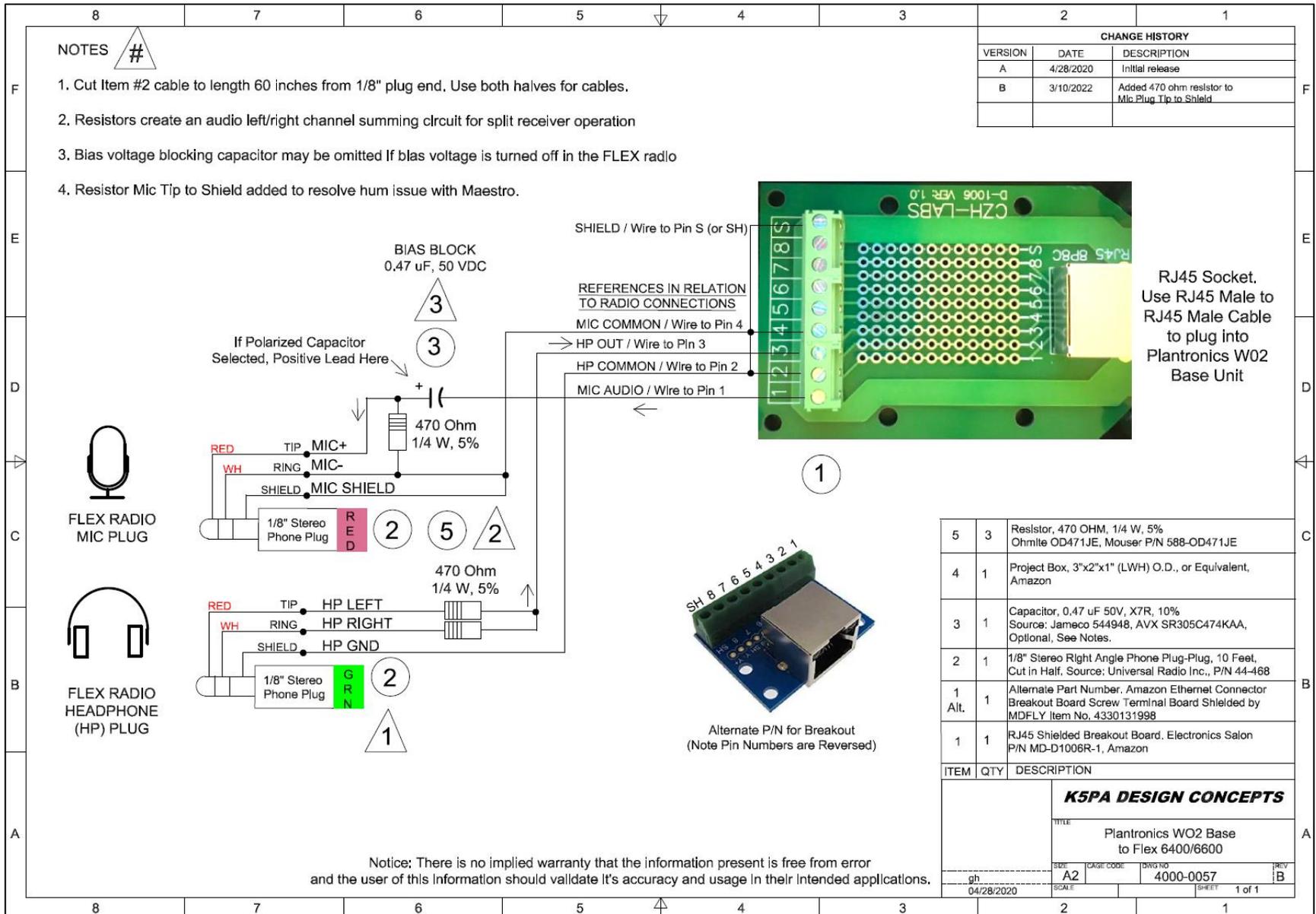
4/29/2020

Updated 3/10/2022

Also Check Out the CS520/W720 Resource Page

<https://cs520hams.k5pa.com>

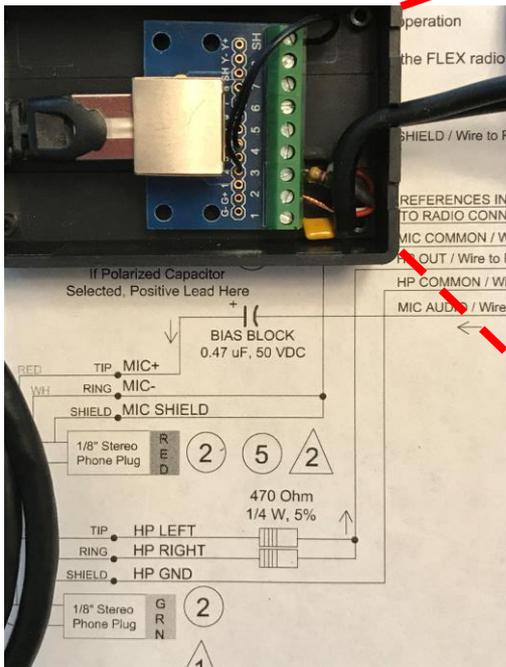
Schematic Diagram FLEX 6400-6600 to Plantronics W720 Wireless Headset (P/N 4000-0057 Rev-B)



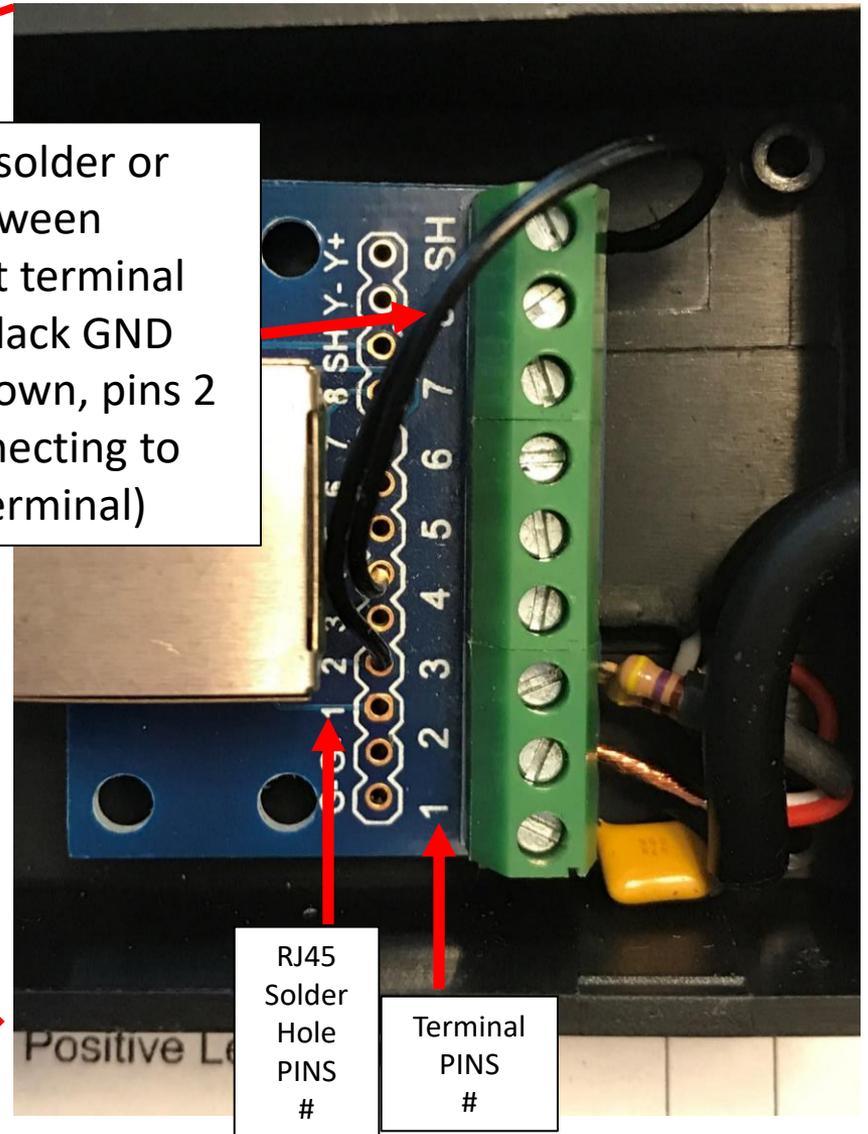
Bill of Materials 4000-0057 Rev-B

Date:		4/30/2020 updated 3/10/2022									
Bill of Materials Drawing 4000-0057 Rev B			FLEX 6400/6600 to Plantronics W720								
Item	Part No.	Part Description	Mfgr	Part No.	Vendor	URL of Vendor P/N	Qty	Item Cost	Extended Cost		
1	4000-0057	RJ45 Shielded Breakout Board. Electronics Salon	Electronics Salon	43237-2	Amazon	RJ45 8P8C Jack	1	\$ 8.99	\$ 8.99		
1 Alternate	4000-0057	Ethernet Connector Breadout Board Screw Terminal Board Shielded	MDFLY	4330131998	Amazon	MDFLY Breakout	1	\$ 3.89	\$ 3.89		
2	4000-0057	Mini to mini 3 cond cbl, 6 ft. (cut and discard both ends, need cable only for Foster cable)	Philmore	44-468	Univ. Radio Inc. (<a href="http://www.univers
al-radio.com/">http://www.univers al-radio.com/)	4103	2	\$ 3.99	\$ 7.98		
3	4000-0057	0.47 uF 50V, X7R, 10%	AVX	SR305C474KAA	Mouser	581-SR305C474KAA	1	\$ 0.99	\$ 0.99		
4	4000-0057	Project Box, Plastic Enclosure, Black, 3"x2"x1" (LWH) O.D., (OR EQUIVALENT)			Amazon		1		\$ -		
5	4000-0057	Resistor, 470 Ohms, 1/4W, 5%	Ohmite	OD471JE	Mouser	588-OD471JE	3	\$ 0.65	1.95		
6	4000-0057	C2G/Cables to Go 28690 Cat5E Molded Shielded (STP) Network Patch Cable, Black (3 Feet/0.91 Meters) (OR EQUIVALENT)	C2G/Cables to Go	28690	Amazon	28690	1	\$ 5.65	\$ 5.65		
							Quantity 1 Kits		\$ 29.45		

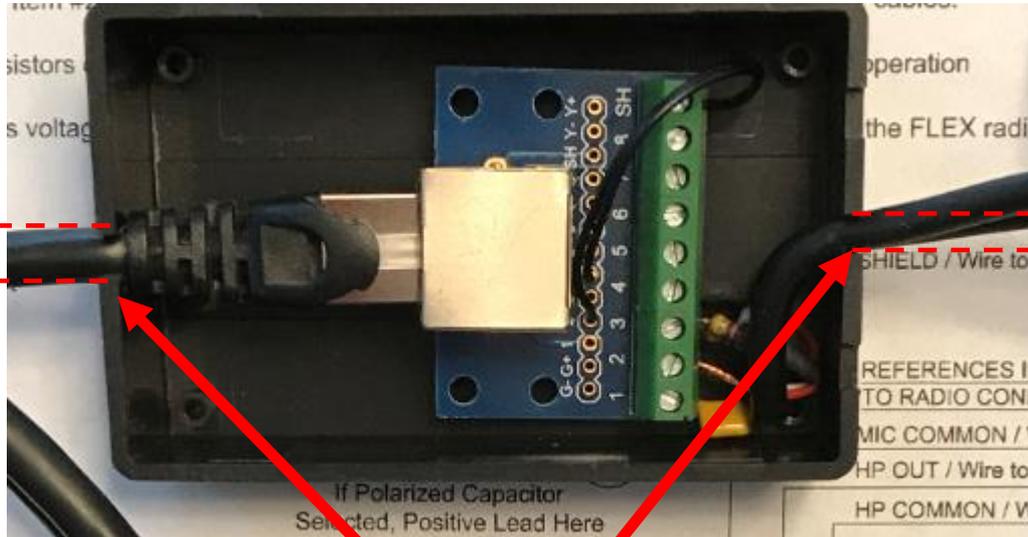
RJ45 Breakout For Making Connections in Box



You can solder or wire between breakout terminal Strips (Black GND wires shown, pins 2 & 4 connecting to Shield Terminal)



RJ45 Breakout For Making Connections in Box



Approx. 7/32 Inch Slot Width. Verify Prior To Cutting.

Approx. 1/8 Inch Slot Width. Verify Prior To Cutting.

Notch plastic wall to allow cables to slip into wall. Add top to box and you are done.

Connectivity Between Radio to Headset

AC/DC 9 V Adapter RJ45 Audio Mini-USB Sound Card



Rear View
W720 Base

Free end connects
to MIC (RED) and
Headphone (HP)(GREEN)
Connectors on Rear of FLEX

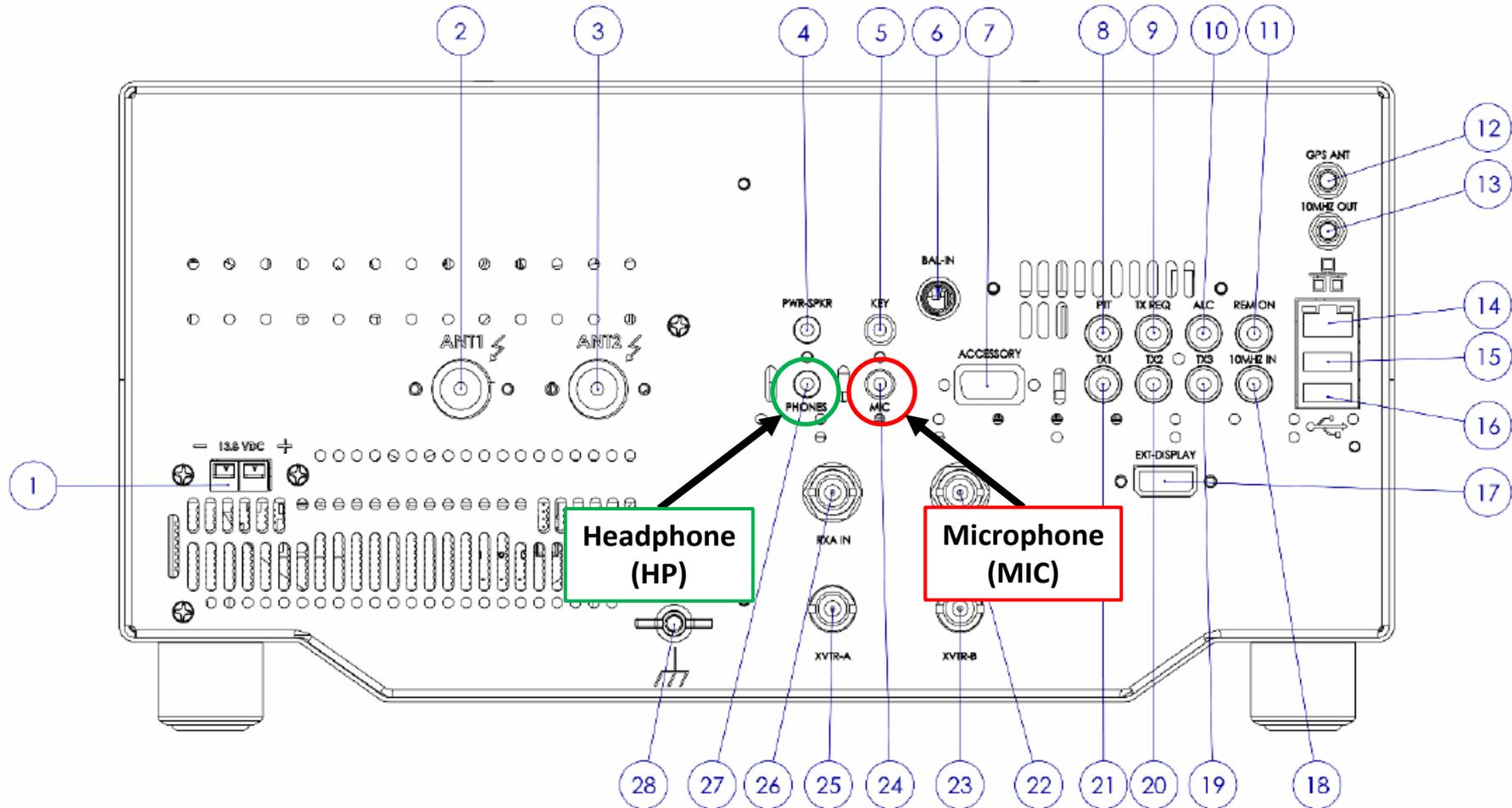
Plug Into W720 Base
(Shown as a Blue Cable
in Photo)



FLEX 6400/6600 Rear Connections

FLEX-6400/FLEX-6600 Hardware Reference Manual

7 REAR PANEL CONNECTIONS



Connection to Maestro

When used with Flex Radio

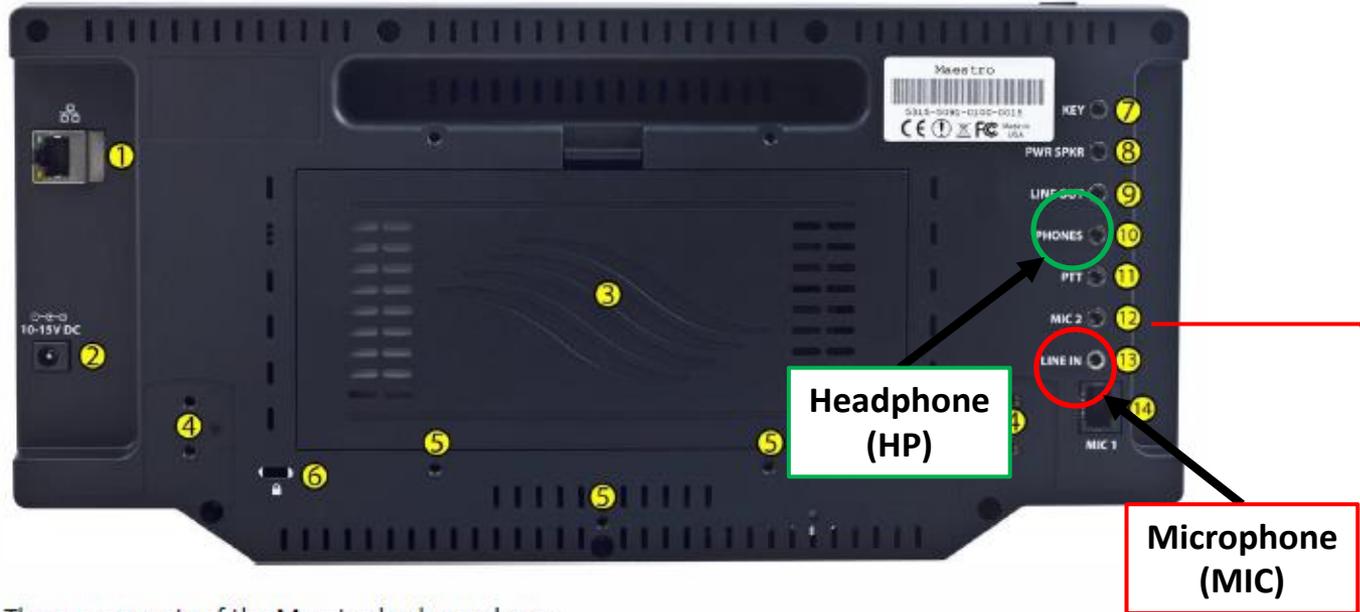


The components of the Maestro Front Panel are:

1. Eight-inch multi-touch sensitive full color high resolution display
2. Power On/Off button
3. Transceiver controls
4. Speaker

Maestro Rear Panel Connection

FLEX-6000 Signature Series – Maestro User Guide



The components of the Maestro back panel are:

1. Wired Ethernet port
2. External power port
3. Battery compartment
4. Tilt leg mounting points
5. Fixed leg mounting points
6. Physical security point
7. Morse key socket
8. Powered speakers socket
9. Line Out socket
10. Headphones socket
11. Push-To-Talk socket
12. ~~Microphone 2 socket~~
13. Line In socket
14. Microphone 1 socket

Headphone (HP)

Microphone (MIC)

DO NOT SELECT MIC 2 INPUT
The MIC Interface Transmit
Audio Plug Will Short the PTT to
GROUND!

Maestro MIC Audio Panel Setup

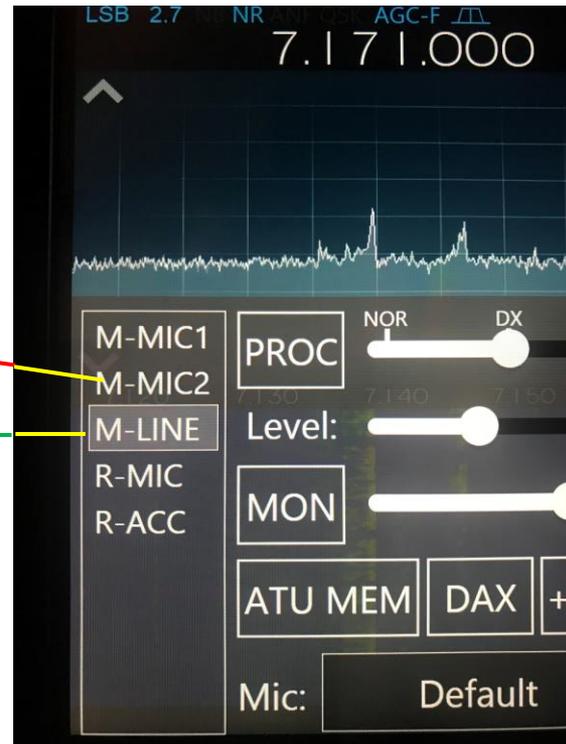
Tap > **RF PWR** located at middle of main screen below your call sign

Tap > **M-Line** on left side of screen (see below)

DO NOT SELECT M-MIC 2 INPUT

SELECT M-LINE INPUT

The M-LINE Selects the Correct Input for Plantronics Transmit Audio



DIY Project Completion

- Connect the wiring on the RJ45 breakout board
- Cut the RJ45 and Audio Cables (2) access slot
- Drop the breakout board into the box
- Plug the RJ45 into the CS520 or W720 base (W02) unit
- Connect the Interface Unit Mic and Headphone Plugs to
 - FLEX 6400/6600 – rear **Phones** and **Mic** jacks or
 - Maestro - rear **Phones** and **Line In** jacks
- DIY Project is Complete!