

VK-64 CABLE MANUAL

Revision 1.00
February 2003

VKC-8 for 8 pin microphone connectors
VKC-4 for 4 pin microphone connectors

There are two cables coming out of the DB-9 connector. The function of each is:

Gray cable, 30" long, 8 or 4 pin connector, male pins: The microphone connects to this connector.

Gray cable, 36" long, 8 or 4 pin connector, female pins: This cable plugs into your transmitter microphone connector.

Assembly Instructions

The VK-64 Cable comes partially assembled. The hard part is done for you. Connections to the DB-9 are the most difficult to make and have been completed and tested for you. You must solder the connectors for the microphone and transmitter microphone jack since there is no standard for pin connections. The cable ends have been pre-cut and tinned to make this procedure as quick and easy as possible.

Use care when assembling your cable. A little extra care will ensure that you will not have a cable failure right in the middle of a contest or while trying to work that all time new country! If you are unsure of your soldering skills, have someone with more soldering experience do the work for you.

Assembly Tip: Mate the two connectors together before beginning to solder to their pins. That way if the heat from your iron softens the plastic, the pins will remain in proper alignment.

- 1) Locate your transmitter type on the attached sheet for the proper pin connections. If your transmitter is not found, you will need to find the correct pin connections from your transmitter manual.
- 2) Find the connector with the female pins. This is the plug that will connect to your transmitter.
- 3) Remove the set screw and slide the metal housing over the end of the cable marked TRANSMITTER.
- 4) Solder the white wire to the connector pin used for audio for your transmitter type.

- 5) Solder the shield wire to the connector pin used for audio ground. Note that this wire is covered with clear heat shrink tubing to prevent shorts.
- 6) Solder the red wire to the connector pin used for PTT.
- 7) Solder the black wire to the connector pin used for PTT ground. **IF YOUR TRANSCIEVER HAS SEPARATE AUDIO AND PTT GROUNDS, DO NOT CONNECT THEM TOGETHER OR YOU WILL EXPERIENCE SEVERE AUDIO HUM.**
- 8) Slide the housing over the end of the cable and secure with the set screw.
- 9) Find the connector with the male pins.
- 10) Remove the set screw and slide the metal housing over the end of the cable marked MICROPHONE.
- 11) Solder the white wire to the connector pin used for audio for your transmitter type.
- 12) Solder the shield wire to the connector pin used for audio ground. Note that this wire is covered with clear heat shrink tubing to prevent shorts.
- 13) Solder the red wire to the connector pin used for PTT.
- 14) Solder the black wire to the connector pin used for PTT ground. **IF YOUR TRANSCIEVER HAS SEPARATE AUDIO AND PTT GROUNDS, DO NOT CONNECT THEM TOGETHER OR YOU WILL EXPERIENCE SEVERE AUDIO HUM.**
- 15) Solder the green wire to the connector pin used for +5V. Cut off this wire for ICOM radios. ICOM puts the voltage on the audio signal. If you use a microphone that requires DC voltage you will need to install a jumper at JP1 on the VK-64 main circuit board. See the VK-64 user manual for more information.
- 16) Slide the housing over the end of the cable and secure with the set screw.
- 17) Using the attached signal list, ohm out the two newly installed connectors with the end of the DB-9 connector.
- 18) As a final check, mate the two connectors and ensure continuity between the following DB-9 pins. Also, ensure that there are no shorts between pins 1, 2, 3, 6 and 7 on the DB-9.
 - Pins 6 and 8 (Audio)
 - Pins 1 and 4 (Audio ground)
 - Pins 7 and 9 (PTT)
 - Pins 2 and 5 (PTT GND)

DB-9 Signals

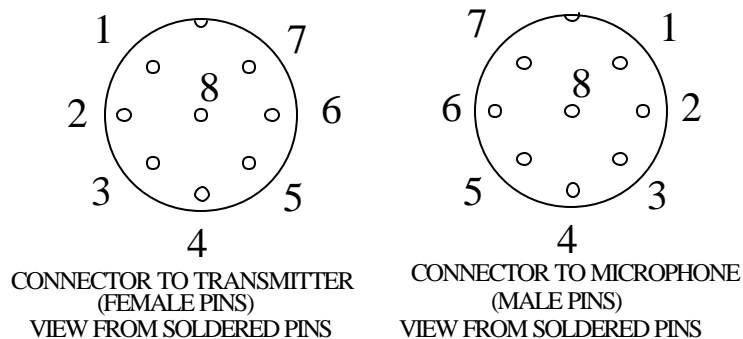
DB9 Pin	Cable	Color	Signal
1	Microphone	shield (clear)	Audio GND
2	Microphone	Black	PTT GND
3	Microphone ¹	Green	+5V ²
4	Transmitter	shield (clear)	Audio GND
5	Transmitter	Black	PTT GND
6	Microphone	White	Audio
7	Microphone	Red	PTT
8	Transmitter	White	Audio
9	Transmitter	Red	PTT

Notes:

¹Cut off this wire for use with ICOM radios.

²Some radios supply 8V. Be sure your microphone is compatible before using the voltage supplied by the VK-64.

VK-64 Cable - Connector Wiring Guide



Radio Type	Audio (white)	Audio GND (shield)	PTT (red)	PTT GND (black)	+5V (green) mic connector only
FT-1000MP	8	7	6	5	2
IC765	1	7	5	6	Do not connect
Kenwood TS-850/930	1	7	2	8	5

Unified Microsystems
PO Box 133
Slinger, WI 53086
<http://www.qth.com/w9xt>