IF YOU HAVE ANY MICROPHONE INFORMATION YOU WOULD LIKE TO ADD TO HELP OTHER RADIO AMATEURS-PLEASE E-MAIL ME.  rg4wpw@ntlworld.com  

MY SINCERE THANKS GO TO THE RADIO AMATEURS WORLDWIDE WHO HAVE CONTRIBUTED WITH THEIR FEEDBACK, INFORMATION AND CORRECTION'S.

PLEASE NOTE!

During the past seven years many hours have been spent drawing diagrams producing photographs, compiling these lists and cross checking this information for error's. I accept no responsibility for any error's or problems that may result from using this information. I would appreciate your feedback if any error's or omissions are noted in the diagrams or listing. I accept no responsibility for information that is copied from this website and reproduced in any format on other websites. Some information is copyright and remains the property of the respective equipment manufacturer or diagram designer/photographer. If you wish to use any of this information on your website please contact me I will be delighted to assist you.

73 de Roy G4WPW
POPULAR MICROPHONE PLUG AND SOCKET PINOUTS.
7 pin mic plug

[Image of a 7 pin mic plug]

photo g4wpw

8 pin plug

[Image of an 8 pin plug]

photo g4wpw
diagrams g4wpw
X=(cannon x) L=(Latch) R=(rubber compound)
KENWOOD MICROPHONES.

KENWOOD- MC-10 MICROPHONE.
KENWOOD- MC-30 / 35 MICROPHONE.
KENWOOD- MC-42S MICROPHONE.
KENWOOD- MC-43 MICROPHONE.
KENWOOD- MC-44 MICROPHONE.
KENWOOD- MC-45 MICROPHONE (mk1).
KENWOOD- MC-45 MICROPHONE (mk2).
KENWOOD- MC-46 MICROPHONE.
KENWOOD- MC-47 MICROPHONE.
KENWOOD- MC-48B MICROPHONE.
KENWOOD- MC-50 MICROPHONE.
KENWOOD- MC-53DM MICROPHONE.
KENWOOD - MC-55 MICROPHONE.
KENWOOD - MC-57 MICROPHONE.
KENWOOD - MC-58 MICROPHONE.
KENWOOD - MC-59 MICROPHONE.
KENWOOD - MC-60 MICROPHONE.
KENWOOD - MC-60A MICROPHONE.
KENWOOD - MC-80 MICROPHONE.
KENWOOD - MC-85 MICROPHONE.
KENWOOD - MC-85 SCHEMATIC.pdf
KENWOOD - MC-90 MICROPHONE.
KENWOOD - SMC-25 SMC-30 SPEAKER/MIC.
KENWOOD - SMC-32 SPEAKER/MIC.
KENWOOD - SMC-33 SPEAKER/MIC.
KENWOOD - SMC-32 SMC-33 SMC-34 SCHEMATIC.pdf
KENWOOD - KMC-9C KMC-30 KMC-32 KMC-35 KMC-36 MICROPHONES.

MJ-88 CONNECTING CABLE.

KENWOOD MICROPHONE COMPATIBILITY LIST.pdf

MORE KENWOOD CONNECTION INFO.pdf file

KENWOOD INSTRUCTION MANUAL & CONTROL SOFTWARE.


KENWOOD (Handheld Tranceiver's )-TR-2500 TR-2600
PIN1     MIC
PIN2     PTT
PIN3     PTT/EARTH
PIN4     SCREEN AND EARTH

7 PIN REMOTE PLUG/SOCKET.

PIN1     SPEAKER OUT
PIN2     RELAY COMMON GROUND/EARTH
PIN3     PTT FOR FOOT SWITCH
PIN4     RELAY CLOSED ON TRANSMIT
PIN5     RELAY OPEN ON TRANSMIT
PIN6     ALC INPUT
PIN7     +12 VOLTS ON TRANSMIT (10 Ma Max)
PLUG     SHELL EARTH.

6 PIN ACC PLUG/SOCKET.

PIN1     SIGNAL GROUND/EARTH
PIN2     TRANSMIT DATA
PIN3     RECEIVE DATA
PIN4     CTS ENABLE TX
PIN5     RTS ENABLE RX
PIN6     N/C
SHELL    EARTH

13 PIN ACC2 PLUG.

PIN1     N/C
PIN2     N/C
PIN3     RX AUDIO OUT
PIN4     SCREEN FOR PIN3
PIN5     SQUELCH CONTROL OR N/C
PIN6         S/METER OUTPUT
PIN7         N/C
PIN8         CHASSIS/GROUND
PIN9         PTT- STANDARD MIC INPUT IS MUTED
PIN10        N/C
PIN11        MIC INPUT
PIN12        SCREEN FOR PIN 11
PIN13        PTT- STANDARD MIC INPUT IS ACTIVE
SHELL        EARTH

KENWOOD-TR9000-9030-9130-9300-9500-7700-7730-7750-7800-7850-7930-7950-8400
PIN1         MIC
PIN2         PTT
PIN3         DOWN
PIN6/CENTER EARTH
PIN4         UP
PIN5         NC + 8VOLT SOME MODELS

KENWOOD-TR7600-TR7625
PIN1         MIC
PIN2         PTT
PIN3         N/C
PIN4         CHASSIS/GROUND
PIN5         MIC SCREEN

KENWOOD-TS480 ( 8 Pin modular Plug )
PIN1         UP
PIN2         +8 VOLTS
PIN3         GND
PIN4         PTT
PIN5         MIC GND
PIN6         MIC
PIN7         N/C
PIN8         DOWN
UPDATE.

Some errors in the TS-480 schematics leading to RF feedback when using other than the stock microphone have been noted by Kenwood, if this problem is experienced reverse the connections to pin3 and pin5.

TR-3200-7900-7950-50-751-851
TM-621-631-701-721-731-2530-2550-2570
TW4000-4100

<table>
<thead>
<tr>
<th>PIN</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MIC</td>
</tr>
<tr>
<td>2</td>
<td>PTT</td>
</tr>
<tr>
<td>3</td>
<td>DOWN</td>
</tr>
<tr>
<td>4</td>
<td>UP</td>
</tr>
<tr>
<td>5</td>
<td>+8VOLT Some models ( 10 Ma )</td>
</tr>
<tr>
<td>6</td>
<td>N/C Some models</td>
</tr>
<tr>
<td>7</td>
<td>MIC GROUND.</td>
</tr>
<tr>
<td>8</td>
<td>GROUND ( STBY )</td>
</tr>
</tbody>
</table>

KENWOOD-
TMG-707 TMD-700 TMD700A TMV-71A.TMV-71E-V7A.

KENWOOD PMR TRANCEIVER MODELS-
TK-90-7108HM-7108M-7160E-7160HM-7160M-7162E-7180E-7189E
8108HM-8108M-8160E-8160M-8162E-8180E-8189-TK90 ( see KMC-30 /32 /35 above )

<table>
<thead>
<tr>
<th>PIN</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>UP</td>
</tr>
<tr>
<td>2</td>
<td>+8 VOLTS (100ma max)</td>
</tr>
<tr>
<td>3</td>
<td>GND</td>
</tr>
<tr>
<td>4</td>
<td>PTT</td>
</tr>
<tr>
<td>5</td>
<td>MIC GND</td>
</tr>
</tbody>
</table>
KENWOOD-TM-271A (8 Pin modular Plug)

<table>
<thead>
<tr>
<th>PIN</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIN1</td>
<td>N/C</td>
</tr>
<tr>
<td>PIN2</td>
<td>+8 VOLTS (100ma max)</td>
</tr>
<tr>
<td>PIN3</td>
<td>GND</td>
</tr>
<tr>
<td>PIN4</td>
<td>PTT</td>
</tr>
<tr>
<td>PIN5</td>
<td>MIC GND</td>
</tr>
<tr>
<td>PIN6</td>
<td>MIC (600 ohm impedance)</td>
</tr>
<tr>
<td>PIN7</td>
<td>N/C</td>
</tr>
<tr>
<td>PIN8</td>
<td>KEYPAD SERIAL DATA.</td>
</tr>
</tbody>
</table>
YAESU MICROPHONES.

YAESU- YM-34. Microphone
YAESU- YM-35. Microphone
YAESU- YM-36. Microphone
YAESU- YM-37. Microphone
YAESU- YM-38. Microphone
YAESU- YM-40. Microphone
YAESU- YM-47. Microphone.
YAESU- YM-49. Microphone.
YAESU- YM-50. Microphone.
YAESU- YD-844. Microphone.
YAESU- YE-7A. Microphone.
YAESU- MD-1B8. Microphone.
YAESU- MD-1C8. Microphone.
YAESU- MH-1A3B. Microphone.
YAESU- MH-1B8. Microphone.
YAESU- MH-10E8 MH-10F8. Microphone.
YAESU- MH-12A2B. Microphone.
YAESU- MH-14A8. Microphone.
YAESU- MH-18A2B. Microphone.
YAESU- MH-19A2B. Microphone.
YAESU- MH-25A8J. Microphone.
YAESU- MH-29A2B. Microphone.
YAESU- MH-31A8J. Microphone.
YAESU- MH-32A2B. Microphone.
YAESU- MH-34C2B. Microphone.
YAESU- MH-36A6J DTMF Microphone.
YAESU- MH-36B6JS Microphone.
YAESU- MH-36D8 Microphone.
YAESU- MH-36E8J DTMF Microphone.
YAESU- MH-37A4B Microphone.
YAESU MICROPHONE COMPATIBILITY LIST.

YAESU (Handheld Transceiver's) VX-1R VXF-1 VX-2R VX-2E VX-3R VX-5R VX-10 VXF-10 VX-110 VX-130 VX-131 VX-132 VX-150 VX-160 VX-180 VX-210 VX-210A VX-300 VX-400 VX-410 VX-420

(see MH34 ABOVE)

YAESU (Handheld Transceiver's) FT-10R FT-40R FT-50R FT-60R

(see MH-37A4B ABOVE)

YAESU FT-50R FT-60R
YAESU (Handheld Transceiver's) FT-51R (see MH-32A2B MH-34C2)

YAESU (Handheld Transceiver's) FT-51RII

YAESU (Handheld Transceiver's) FT-470 FT-411 FT-811 FT-911 (see MH-32A2B MH-34C2)

YAESU (Handheld Transceiver's) FT-23 FT-73 FT-23RII FT-73RII (see MH-32A2B MH-34C2)
YAESU (Handheld Transceivers) FT-530 (see MH-12A2B MH-18A2B)

YAESU POLICE AND PUBLIC SAFETY CHANNELISED TRANSCIEVERS
VXR-1000 VXR-7000

(See MH-25A8J and MD-11A8J microphones above)

<table>
<thead>
<tr>
<th>PIN</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MIC UP</td>
</tr>
<tr>
<td>2</td>
<td>EARTH</td>
</tr>
<tr>
<td>3</td>
<td>FAST SCAN</td>
</tr>
<tr>
<td>4</td>
<td>PTT</td>
</tr>
<tr>
<td>5</td>
<td>SCREEN/EARTH</td>
</tr>
<tr>
<td>6</td>
<td>MIC</td>
</tr>
</tbody>
</table>

YAESU-FT736-FT747GX-FT757GX-FT650-FT840-FT890-FT900-FT920-FT990-FT990D-FT847
FT1000-FT1000D-FT1000MP + MKV

<table>
<thead>
<tr>
<th>PIN</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MIC UP</td>
</tr>
<tr>
<td>2</td>
<td>EARTH ( + 5VOLTS FT847-FT920-FT1000MP )</td>
</tr>
<tr>
<td>3</td>
<td>DOWN</td>
</tr>
<tr>
<td>4</td>
<td>FAST SCAN</td>
</tr>
<tr>
<td>5</td>
<td>EARTH</td>
</tr>
<tr>
<td>6</td>
<td>PTT</td>
</tr>
<tr>
<td>7</td>
<td>SCREEN/EARTH</td>
</tr>
<tr>
<td>8</td>
<td>MIC</td>
</tr>
</tbody>
</table>

YAESUFTONE-FT77-FT102-FT707-FT767-FT767GX-FT980

<table>
<thead>
<tr>
<th>PIN</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MIC UP</td>
</tr>
<tr>
<td>2</td>
<td>+ 5 VOLTS</td>
</tr>
<tr>
<td>3</td>
<td>DOWN</td>
</tr>
</tbody>
</table>
PIN4        FAST SCAN
PIN5        CAUTION INTERCONNECTED TO PIN 2. (+5 VOLTS)
PIN6        PTT
PIN7        SCREEN/EARTH
PIN8        MIC

YAESU FT480R-FT780R (see YM-40 above)
PIN1 green  MIC UP
PIN2 yellow EARTH/COMMON U/DOWN.
PIN3 blue   DOWN
PIN4 brown  TONE CALL/LOCK
PIN5 orange EARTH TONE CALL/LOCK
PIN6 red    PTT
PIN7 black  SCREEN/EARTH
PIN8 white  MIC

YAESU FT726 (see MD1-B8 MH1-B8 Microphone above)
PIN1       UP
PIN2       COMMON U/DOWN
PIN3       DOWN
PIN4       FAST SCAN
PIN5       EARTH
PIN6       PTT
PIN7       SCREEN/EARTH
PIN8       MIC

YAESU CPU2500R-CPU2500RK SOMMERKAMP FT227
PIN1       UP
PIN2       COMMON U/DOWN
PIN3       DOWN
PIN4       PTT
PIN5       GROUND MIC/PTT
PIN6       MIC
YAESU FT75-FT221R-FT223-FT101B-FT101E-FT101Z-FT101ZD-FT301D-FT902-FT902DM. (see YD148/YD844 microphone above.)

- **PIN1** MIC SCREEN/EARmH (PTT EARTH ON FT101B/101E.FT101Z/101ZD.FT902/902DM.)
- **PIN2** MIC
- **PIN3** PTT
- **PIN4** EARTH ON FT221R. (N/C ON FT101Z/101ZD.FT101B/101E.FT902/902DM.)

YAESU FTDX-100 FTDX-400 FTDX-401 FTDX-560 FT-200 FT-250 (See YD-148 microphone above.)

![Mic Plug Diagram](image)

YAESU FT201-FT125C-FTC212-FT2B-FT300C-FT224-FT225RD-FT2FB-FT223-FT220-FTC212-FT300C FT301. FT7-FT227R-FT227RA-FT227RX-FT250-FT401B-FT501-FT625-FL101. (See YD-148 microphone above.)

YAESU FT950

- **PIN1** MIC UP
- **PIN2** + 5 VOLTS
- **PIN3** DOWN
- **PIN4** FAST SCAN
- **PIN5** GROUND
- **PIN6** PTT
- **PIN7** SCREEN/EARmH
- **PIN8** MIC
**YAESU FT840-FT990.**
- PIN1: UP
- PIN2: GROUND
- PIN3: DOWN
- PIN4: FAST
- PIN5: GROUND (INTERCONNECTED ON TRANCEIVER TO PIN 2.)
- PIN6: PTT
- PIN7: MIC GROUND/SCREEN
- PIN8: MIC

**YAESU FT2200.**
- PIN1: UP
- PIN2: + 5 VOLTS
- PIN3: DOWN
- PIN4: SPEAKER.
- PIN5: ACC.
- PIN6: PTT
- PIN7: MIC GROUND/SCREEN
- PIN8: MIC

**YAESU FT2500.**
8 Pin round plug.
- PIN1: CALL BUTTON.
- PIN2: RX AUDIO.
- PIN3: PTT.
- PIN4: MIC.
- PIN5: GROUND.
- PIN6: + 5 VOLTS
- PIN7: UP.
- PIN8: DOWN.
**YAESU FT2400H.**

<table>
<thead>
<tr>
<th>PIN</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CALL BUTTON.</td>
</tr>
<tr>
<td>2</td>
<td>RX AUDIO.</td>
</tr>
<tr>
<td>3</td>
<td>PTT.</td>
</tr>
<tr>
<td>4</td>
<td>MIC.</td>
</tr>
<tr>
<td>5</td>
<td>GROUND.</td>
</tr>
<tr>
<td>6</td>
<td>+ 5 VOLTS</td>
</tr>
<tr>
<td>7</td>
<td>UP.</td>
</tr>
<tr>
<td>8</td>
<td>DOWN.</td>
</tr>
</tbody>
</table>

**YAESU FT5100.**

<table>
<thead>
<tr>
<th>PIN</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>UP</td>
</tr>
<tr>
<td>2</td>
<td>+ 5 VOLTS</td>
</tr>
<tr>
<td>3</td>
<td>DOWN</td>
</tr>
<tr>
<td>4</td>
<td>SPEAKER</td>
</tr>
<tr>
<td>5</td>
<td>BAND</td>
</tr>
<tr>
<td>6</td>
<td>PTT</td>
</tr>
<tr>
<td>7</td>
<td>EARTH</td>
</tr>
<tr>
<td>8</td>
<td>MIC</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>PIN</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>UP</td>
</tr>
<tr>
<td>2</td>
<td>+5 VOLT</td>
</tr>
<tr>
<td>3</td>
<td>DOWN</td>
</tr>
<tr>
<td>4</td>
<td>SPEAKER</td>
</tr>
<tr>
<td>5</td>
<td>CPU/TONE SW</td>
</tr>
<tr>
<td>6</td>
<td>PTT</td>
</tr>
<tr>
<td>7</td>
<td>GROUND</td>
</tr>
</tbody>
</table>
PIN8  MIC

Yaesu FT230R-FT290R-FT690 FT730-FT790R
PIN1  MIC SCREEN/EARTH
PIN2  MIC
PIN3  PTT
PIN4  + 12VOLT ( + 5 VOLTS FT730-FT290R )
PIN5  SPEAKER
PIN6  UP
PIN7  DOWN

Yaesu FT290RII-FT690RII-FT790RII (see MH-10E8 /MH-10F8 above )
PIN1  UP
PIN2  + 5 VOLTS
PIN3  DOWN
PIN4  SPEAKER
PIN5  N/C
PIN6  PTT
PIN7  GROUND
PIN8  MIC

YaesuFT215-FT715-FT3700-FT3800-FT3900-FT4600-FT4800-FT4900-FT5800
PIN1  UP
PIN2  + 5 VOLTS
PIN3  DOWN
PIN4  N/C
PIN5  RECALL
PIN6  RESET
PIN7  GROUND
PIN8  MIC
YAESU FT708R-FT208R HAND HELD.
(mini) 6 PIN
PIN1       MIC (white)
PIN2       SPEAKER (black)
PIN3       PTT (red)
PIN4       MIC SCREEN
PIN5       NC
PIN6       SPEAKER (blue)

YAESU-FT897-FT857-FT817-FT900-FT-450-FT2000 (8 pin Modular Plug)
PIN1       FAST SCAN
PIN2       GROUND
PIN3       PTT
PIN4       MIC
PIN5       MIC GROUND
PIN6       + 5VOLT
PIN7       UP
PIN8       DOWN

YAESU-FT1500-FT1802E-FT2800-FT7800M-FT800E-FT8900R (6 Pin modular Plug)
(See MH-48 microphone above)
PIN1       SW2
PIN2       SW1
PIN3       + 8VOLT
PIN4       GROUND
PIN5       MIC
PIN6       PTT (clone FT1802E)
YAESU-FTM-10R/E (WITH BUILT IN MICROPHONE AND BLUE TOOTH.)

NEEDS MEK-M10 ADAPTER TO USE THE FOLLOWING EXTERNAL MICROPHONES

MH-68 A6J WATERPROOF MIC
MH-68 B6J WATERPROOF MIC

YAESU-FTDX9000D (3 pin XLR Plug front panel) PLUS (8 pin Plug rear panel.)

(3 pin XLR)

PIN1        MIC GRND.
PIN2        MIC HOT.
PIN3        MIC COLD.

(8 pin Plug rear panel.)

PIN1        UP.
PIN2        +5 VOLTS.
PIN3        DOWN.
PIN4        FAST SCAN.
PIN5        GROUND.
PIN6        PTT.
PIN7        MIC GROUND.
PIN8        MIC.

YAESU-FT100-FT90-FT8100 (6 pin Modular Plug) (SEE MH-36 microphone above.)

PIN1        Multi-function switching for P,P1,P2 SW2.
PIN2        N.C. 9600bps packet data out FT90
PIN3        +9VOLT
PIN4        EARTH
PIN5        MIC.
PIN6        SW1.PTT,UP,DOWN,Acc
**Connector Pinouts**

<table>
<thead>
<tr>
<th>BAND DATA</th>
<th>CAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. +13.5V</td>
<td>1. GND</td>
</tr>
<tr>
<td>2. TX GND</td>
<td>2. SERIAL OUT</td>
</tr>
<tr>
<td>3. GND</td>
<td>3. SERIAL IN</td>
</tr>
<tr>
<td>4. BAND DATA A</td>
<td>4. PTT</td>
</tr>
<tr>
<td>5. BAND DATA B</td>
<td>5. S/PFD</td>
</tr>
<tr>
<td>6. BAND DATA C</td>
<td>6. NC</td>
</tr>
<tr>
<td>7. BAND DATA D</td>
<td></td>
</tr>
<tr>
<td>8. UNFAR</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>TUNER 1 (used w / FC-800)</th>
<th>TUNER 2 (used w / FC-10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. GND</td>
<td>1. +13.5V</td>
</tr>
<tr>
<td>2. +13.5V</td>
<td>2. TX GND</td>
</tr>
<tr>
<td>3. DATA</td>
<td>3. GND</td>
</tr>
<tr>
<td>4. GND</td>
<td>4. DATA IN</td>
</tr>
<tr>
<td>5. GNDed by FC-800</td>
<td>5. DATA OUT</td>
</tr>
</tbody>
</table>

Yaesu "cat"pinout connections.

**MORE YAESU INFORMATION**

(click for) - YAESU FT-100 SERIES CONNECTION DIAGRAMS.  
(click for) - YAESU FT-600 SERIES CONNECTION DIAGRAMS.  
(click for) - YAESU FT-707 SERIES CONNECTION DIAGRAMS.  
(click for) - YAESU FT-726 SERIES CONNECTION DIAGRAMS.  
(click for) - YAESU FT-736 SERIES CONNECTION DIAGRAMS.  
(click for) - YAESU FT-747 SERIES CONNECTION DIAGRAMS.  
(click for) - YAESU FT-757 SERIES CONNECTION DIAGRAMS.  
(click for) - YAESU FT-767 SERIES CONNECTION DIAGRAMS.  
(click for) - YAESU FT-817 SERIES CONNECTION DIAGRAMS.  
(click for) - YAESU FT-847 SERIES CONNECTION DIAGRAMS.  
(click for) - YAESU FT-920 SERIES CONNECTION DIAGRAMS.  
(click for) - YAESU FT-980 SERIES CONNECTION DIAGRAMS.  
(click for) - YAESU FT-990 SERIES CONNECTION DIAGRAMS.  
(click for) - YAESU FT-1000MP SERIES CONNECTION DIAGRAMS.
ICOM.

ICOM-IC7400-IC746-IC746PRO-IC756PRO-IC7700-IC7800 (see HM-36 below)

- **PIN1**: MIC + DC VOLTS FOR ICOM ONLY MICROPHONE
- **PIN2**: + 8VOLTS 10Ma TO AVOID DAMAGING THE REGULATOR DO NOT SHORT TO GROUND
- **PIN3**: UP/DOWN
- **PIN4**: SQUELCH
- **PIN5**: PTT
- **PIN6**: GROUND
- **PIN7**: MIC SCREEN/ EARTH
- **PIN8**: AUDIO OUT

ICOM-IC703-IC706MK1-IC706MK2-IC706MK3-IC2000-IC2000H (8 Pin Modular Plug)

- **PIN1**: + 8VOLT
- **PIN2**: UP/DOWN
- **PIN3**: AUDIO OUT
- **PIN4**: PTT
- **PIN5**: MIC GROUND
- **PIN6**: MIC
- **PIN7**: GROUND/ EARTH
- **PIN8**: SQUELCH

ICOM-ICE-208-IC2100H-IC2200H-IC2725E-IC2820-(See HM-133 below) (8 Pin Modular Plug)

- **PIN1**: + 8VOLT OUTPUT ( 10 ma max )
- **PIN2**: UP/DOWN
- **PIN3**: + 8VOLTS IN ( No connection IC2100H )
- **PIN4**: PTT
PIN5       MIC GROUND
PIN6       MIC
PIN7       GROUND/EARTH
PIN8       DATA IN ( No connection IC2100H )

ICOM-IC-7000 (8 Pin Modular Plug)

IMPORTANT! SEE HM-151 MICROPHONE INFO BELOW.

PIN1       + 8VOLT OUTPUT ( 10 ma max )
PIN2       UP/DOWN
PIN3       + 8VOLTS SW
PIN4       PTT
PIN5       MIC GROUND
PIN6       MIC
PIN7       GROUND/EARTH
PIN8       DATA IN

ICOM-IC-2800 (8 Pin Modular Plug) SEE HM-98 MICROPHONE BELOW.

PIN1       + 8VOLT OUTPUT ( 10 ma max )
PIN2       UP/DOWN
PIN3       + 8VOLTS SW
PIN4       PTT
PIN5       MIC GROUND
PIN6       MIC
PIN7       GROUND/EARTH
PIN8       DATA IN

<table>
<thead>
<tr>
<th>PIN1</th>
<th>MIC (yellow)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIN2</td>
<td>PTT (red)</td>
</tr>
<tr>
<td></td>
<td>external speaker plug ( green)</td>
</tr>
<tr>
<td>PIN4</td>
<td>GROUND (black)</td>
</tr>
</tbody>
</table>


(SEE HM-46 HM75A HM-131 BELOW)

ICOM HAND HELD- IC4A/AT/E-IC3A/AT-IC12A/AT/E

Electret type

Dynamic type

[Diagram showing connections for different types of microphones]
ICOM HAND HELD- ICT8A- ICT8E

ICOM-IC-211

PIN1  MIC
PIN2  PTT
PIN3  N/C
PIN4  GROUND.

ICOM

0-2500-3200-3210-3220
6-728-729-730-735-736-737/A
70-1200-1201-1271-1275

PIN1  MIC (yellow)
PIN2  REPEATER TONE (+ 8/9 volts some models)
PIN3  UP/DOWN
PIN4  N/C (squelch some models)
PIN5  PTT (red)
PIN6  EARTH (black)
PIN7  MIC SCREEN
PIN8  N/C (green) (external speaker some models)
ICOM-IC24G-IC251E-IC451E. (See SM-5 hand mic & SM-5 desc mic.)

<table>
<thead>
<tr>
<th>PIN</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIN1</td>
<td>MIC (white. connection at + 9VOLTS above earth)</td>
</tr>
<tr>
<td>PIN2</td>
<td>NC</td>
</tr>
<tr>
<td>PIN3</td>
<td>NC</td>
</tr>
<tr>
<td>PIN4</td>
<td>NC</td>
</tr>
<tr>
<td>PIN5</td>
<td>PTT (red)</td>
</tr>
<tr>
<td>PIN6</td>
<td>PTT (black)</td>
</tr>
<tr>
<td>PIN7</td>
<td>MIC SCREEN</td>
</tr>
<tr>
<td>PIN8</td>
<td>NC</td>
</tr>
</tbody>
</table>

ICOM MICROPHONES.

ICOM- SM2 MIC CONNECTIONS.
ICOM- SM5 MIC CONNECTIONS.
ICOM- SM6 MIC CONNECTIONS.
ICOM- SM8 MIC CONNECTIONS.
ICOM- SM10 MIC CONNECTIONS.
ICOM- SM20 MIC CONNECTIONS.
MORE- SM20 MIC INFORMATION.
ICOM- IC-HM5 MIC CONNECTIONS.
ICOM- IC-HM7 HAND MIC CONNECTIONS.
ICOM- IC-HM10 MIC CONNECTIONS.
ICOM- IC-HM11 MIC CONNECTIONS.
ICOM- IC-HM12 MIC CONNECTIONS.
ICOM- HM12 MIC CONNECTIONS.
MORE- IC-HM12 MIC INFORMATION.
ICOM- IC-HM14 MIC CONNECTIONS.
ICOM- IC-HM15 MIC CONNECTIONS.
ICOM- HM-22 MIC CONNECTIONS.
ICOM- HM-23 MIC CONNECTIONS.
ICOM- HM-24 MIC CONNECTIONS.
ICOM- HM-36 MIC CONNECTIONS.
ICOM- HM-46 MIC CONNECTIONS.
ICOM- HM-54 MIC CONNECTIONS.
ICOM- HM-56/56A MIC CONNECTIONS.
ICOM- HM-75A MIC CONNECTIONS.
ICOM- HM77-HM78-HM79-HM95-HM97 MIC CONNECTIONS.
ICOM- HM-90 WIRELESS MIC CONNECTIONS.
ICOM- HM-98 MIC CONNECTIONS.
ICOM- HM-103 MIC CONNECTIONS.
ICOM- HM-113-113V MIC CONNECTIONS.
ICOM- HM-118-118TN MIC CONNECTIONS.
ICOM- HM-131 MIC CONNECTIONS.
ICOM- HM-133 MIC CONNECTIONS.
ICOM- HM-151 MIC CONNECTIONS (IC-7000).
ICOM- HM-154 MIC CONNECTIONS.
ICOM- HM-128L-HM-153L-HM-158L-HM-166L EARPHONE MIC CONNECTIONS.
IC-821H- ACC SOCKET CONNECTIONS.

click for MORE ICOM INFORMATION.
click for ICOM MICROPHONE COMPATIBILITY LIST.
click for ICOM CONNECTING CABLE REFERENCE LIST.
click to DOWNLOAD ICOM MANUALS FREE.

CAUTION!

IF YOU WISH TO USE THE FOLLOWING ICOM MICROPHONE'S (model's below) ON TRANCEIVERS OTHER THAN ICOM, CHECK THIS link INFORMATION ALSO

Modification to enable Icom microphone's to be used on non Icom Tranceivers

Diagram g4wpw
MICROPHONE MODEL'S
IC-SM8 IC-SM6 IC-HM7 IC-HM11 IC-HM12 IC-HM14 IC-HM15 IC-HM22 IC-HM24 IC-HM36

ALINCO.

Click here to Download ALINCO Instruction/Service manuals FREE.

PIN 1  MIC (yellow)
PIN 2  PTT (orange)
PIN 3  DWN (white)
PIN 4  UP (green)
PIN 5  +5v (red) max current 25mA
PIN 6  (purple) see notes:
PIN 7  MIC GND (black/shield)
PIN 8  GND (grey)

Note:
PIN 6 info:
- DR-590/592/599/600 = bus line for remote commands from mic
- DR-110/111/570 = no connection
- DR-130 = pc programming bus

View from cable side of plug

ALINCO MOBILE RADIO'S

ALINCO DX70-DX70T-DX77-DR135-DR135-DR150E-DR150TE-DR430-DR510-DR570-DR590-DR592T-DR599T-DR600T-DR610
ALR22H-ALD24T-ALR22T-ALR72T-DR110-DR112-DR-M03-DR-M06

PIN1  MIC
PIN2  PTT
PIN3  DOWN
PIN4  UP
PIN5  + 5VOLT ( Max current 25mA )
PIN6  AUDIO OUT ( remote DR150TE-DR590-DR592-DR599-DR600 ) SEE ABOVE DIAGRAM REFERENCE.
PIN7  MIC SCREEN/ EARTH
PIN8  EARTH
ALINCO DR140-DR605 (Modular Plug)

PIN1        UP.
PIN2        GROUND.
PIN3        MIC.
PIN4        MIC GROUND.
PIN5        PTT.
PIN6        N/C.
PIN7        DOWN.
PIN8        + 5 VOLTS.

ALINCO 22T/E, 24E/T

PIN1         MIC
PIN2         PTT
PIN3         DOWN
PIN4         UP
PIN5         + 8VOLT
PIN6         N/C
PIN7         MIC EARTH
PIN8         GROUND

ALINCO EMS-14, - ADONIS AM-508E, - WATSON AM308 MICROPHONE COLOR CODING.

YELLOW       MIC
SCREEN       EARTH (ground)
GREY          PTT (+ VOLTAGE FEED ON ADONIS D80)
BLUE          PTT EARTH ON WATSON 308.
PURPLE        PTT EARTH (ground)
GREEN         MIC UP
ORANGE        COMMON (connect to ground)
WHITE         MIC DOWN (+ VOLTS WATSON AM-308)
BLACK         MIC DOWN ON WATSON AM-308
RED           + VOLTS FEED (PTT ON ADONIS D80 AND WATSON AM-308)
ALINCO DMR610 DR-135 DR-435.

PIN 1    MIC
PIN 2    PTT
PIN 3    DOWN
PIN 4    UP
PIN 5    +5 VOLTS
PIN 6    REMOTE CONTROL
PIN 7    SCREEN    EARTH (ground)
PIN 8    GND

ALINCO. DJ-S11 DJ-41 DJ-180 DJ-190 DJ-191 DJ-491G DJ-G1 DJ-G5

**SPEAKER PLUG**
3.5 mm mono jack  
- Ground  
- Speaker

**MIC PLUG**
2.5 mm stereo jack  
- Ground  
- PTT  
- Mic
ALINCO, DJ-560 DJ-580

ALINCO HANDHELD, DJ-V17 DJ-V17E DJ-V17T DJ-V17TFH DJ-47E DJ-47T DJ-47T1 DJ-47T2

click for schematic

ALINCO MICROPHONES

EMS-5A MIC CONNECTIONS.
EMS-14 MIC CONNECTIONS.
EMS-42 MIC CONNECTIONS.
EMS-45 MIC CONNECTIONS.
EMS-46 MIC CONNECTIONS.
EMS-47 MIC CONNECTIONS.
EMS-51 MIC CONNECTIONS.
EMS-52 MIC CONNECTIONS.
EMS-53 MIC CONNECTIONS.
EMS-52 / 53 MIC SCHEMATICS.
EMS-54 MIC CONNECTIONS.
EMS-55 MIC CONNECTIONS.
EMS-54 / 55 MIC SCHEMATICS.
EMS-56 MIC CONNECTIONS.
EMS-56 MIC SCHEMATIC.
EMS-57 MIC CONNECTIONS.
EMS-57 MIC SCHEMATIC.
ADONIS.

ADONIS- AM-DX1 MICROPHONE INSTRUCTIONS AND SCHEMATIC.pdf
ADONIS- AM-308 MICROPHONE INSTRUCTIONS AND SCHEMATIC.pdf
ADONIS- AM-508e MICROPHONE INSTRUCTIONS AND SCHEMATIC.pdf
ADONIS- AM-708 MICROPHONE INSTRUCTIONS AND SCHEMATIC.pdf
ADONIS- AM-7500e MICROPHONE INSTRUCTIONS AND SCHEMATIC.pdf
ADONIS- AM-308 / AM-508 / AM-608 / AM-708 / AM-7500E MICROPHONE PHOTO'S

ADONIS MICROPHONE INTERCONNECTING CABLE INFO.

ADONIS MICROPHONE CONVERSION LEADS FOR AM-708 ABOVE.

ADONIS LEAD NUMBER D-88K AS-327 (Connections for Kenwood configuration)
SILVER PLUG END (tranceiver). ORANGE PLUG END (connected to microphone).
PIN 1 YELLOW. connected to PIN 2.YELLOW. (mic)
PIN 2 RED. .. PIN 3.RED. (ptt)
PIN 3 WHITE. .. PIN 6.WHITE. (down)
PIN 4 GREEN. .. PIN 5.GREEN. (up)
PIN 5 GREY. .. PIN 8.GREY. (+volts DC feed)
PIN 6 N/C. .. PIN 4.PURPLE. (ptt ground)
PIN 7 SCREEN. .. PIN 1.SCREEN. (mic ground)
PIN 8 ORANGE+PURPLE. .. PIN 7.ORANGE. (up/down common ground)

ADONIS LEAD NUMBER D-80K AS-340
This is sold as a spare lead with only orange (mic end) plug fitted.
ORANGE PLUG END (connected to microphone).
PIN 2.YELLOW. (mic)
PIN 3.RED. (ptt)
PIN 6.WHITE. (down)
PIN 5.GREEN. (up)
PIN 8.GREY. (+volts DC feed)
PIN 4.PURPLE. (ptt ground)
PIN 1.SCREEN. (mic ground)
PIN 7.ORANGE. (up/down common ground)

COLOURS AND CONNECTIONS ON THE ORANGE (mic) PLUG ENDS OF LEADS ARE IDENTICAL.
STANDARD ADONIS MICROPHONE COLOR CODING

YELLOW. (mic)

RED. (ptt)

WHITE. (down)

GREEN. (up)

GREY. (+volts DC feed)

PURPLE. (ptt ground)

SCREEN. (mic ground)

ORANGE. (up/down common ground)

ADI.

ADI AR-146 AR-446

8 PIN ROUND PLUG.

PIN 1  MIC.
PIN 2  PTT.
PIN 3  DOWN.
PIN 4  UP.
PIN 5  + 8VOLTS ( max 150 Ma ).
PIN 6  RX AUDIO OUT.
PIN 7  MIC SCREEN.
PIN 8  GROUND.
ASTATIC.

ASTATIC 531 schematic.

ASTATIC D104 schematic.

ASTATIC MICROPHONE WIRING REFERENCE pdf

ATLAS.

ATLAS TRANCEIVERS MODELS.-TX110-180-210-215-350XL.
ATLAS-VX5 VOX UNIT.

AZDEN.

PCS-5000-6000-7000
PIN 1     MIC.
PIN 2     MIC GROUND.
PIN 3     -
PIN 4     DOWN.
PIN 5     UP.
PIN 6     COMMON GROUND.
PIN 7     PTT.
PIN 8     +13.8 VOLTS

AZDEN-PCM-463 MICROPHONE INFO.
COLLINS.


![Collins Microphone Diagram]

COLLINS SM1/SM3 MICROPHONE INFO.

DRAKE.

DRAKE. TR-5 TR-7 TR-7A

4 PIN PLUG.

<table>
<thead>
<tr>
<th>PIN 1</th>
<th>PIN 2</th>
<th>PIN 3/4</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIC.</td>
<td>PTT.</td>
<td>EARTH/GROUND</td>
</tr>
</tbody>
</table>

![Drake Microphone Diagram]

DRAKE. TR-3 TR-4 TR-4B TR-4C T-4XC T-4XB

(S230 Mic Plug.)

![Drake Microphone Diagram]

Diagram g4wpw
FDK.

FDK. MULTI-UII MULTI-II MULTI-700E MULTI-700EX MULTI-2700

4 PIN ROUND PLUG.
PIN 1/4   GROUND / MIC SREEN
PIN 2     PTT.
PIN 3     MIC.

FDK. MULTI-750A MULTI-750E

6 PIN ROUND PLUG.
PIN 1     MIC
PIN 2     PTT.
PIN 3     UP.
PIN 4     + 5V
PIN 5     GROUND.
PIN 6     DOWN.

HALLICRAFTER.

HT-46

HALLICRAFTER. HT-40 HT-37

HEATHKIT.

Heathkit- SB-100 / SB-104 mic Connection
Heathkit- HW-12 / HW-22 mic Connection
Heathkit- HW-17 mic Connection

HEIL.

HM-10 DUAL, GM-4, GM-5, GMV. HANDIMIC-HM-4, HM-5, HM-iC, HM-PRO. CLASSIC.
4 PIN XLR PLUG.

PIN 1    GROUND/SHIELD.
PIN 2    MIC.
PIN 3/4  PTT.

PRO-20, PRO-30, PRO-40, CLASSIC PRO, HERITAGE.

3 PIN XLR PLUG.

UNBALANCED OUTPUT.
PIN 1    SHIELD.
PIN 2    + MIC.
PIN 3    - MIC. (connected to pin 1)

BALANCED OUTPUT.
PIN 1    SHIELD.
PIN 2    + MIC OUTPUT
PIN 3    - MIC GROUND

THE HEIL CONNECTION SYSTEM.

MORE INFORMATION FROM THE HEIL WEBSITE.
JRC.

JST-100 JST-100D JST-100S JST-110 JST-135 JST-145 JST-245.

- PIN1: MIC UP
- PIN2: NC
- PIN3: MIC DOWN
- PIN4: + 9 VOLTS
- PIN5: PTT EARTH
- PIN6: PTT
- PIN7: MIC EARTH
- PIN8: MIC

NVT-56 / 57 / 58 MICROPHONE INFO.

KDK.

KDK. FM-2016 FM-2025

4 PIN ROUND PLUG.
- PIN 1: PTT GROUND.
- PIN 2: PTT.
- PIN 3: MIC SCREEN.
- PIN 4: MIC.

KDK. FM-2030 FM-2033

6 PIN ROUND PLUG.
- PIN 1: UP/DOWN GROUND.
- PIN 2: UP.
- PIN 3: DOWN.
- PIN 4: PTT.
- PIN 5: MIC.
- PIN 6: MIC SCREEN/GROUND.
**KDK DM-TT1 MICROPHONE**

**KDK TM-2 MICROPHONE**

**KDK DM-100 MICROPHONE**

**KW.**

**KW TRANSMITTERS / TRANCEIVERS**

**MFJ.**

**MFJ-8621. DATA CONNECTIONS.** Must be configured for 1200 baud operation.

*Note: This radio has un-squelched output. Use "software DCD"*

<table>
<thead>
<tr>
<th>PIN</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIN1</td>
<td>AFSK In (yellow)</td>
</tr>
<tr>
<td>PIN2</td>
<td>GROUND/EARTH (black)</td>
</tr>
<tr>
<td>PIN3</td>
<td>PTT (red)</td>
</tr>
<tr>
<td>PIN4</td>
<td>AFSK Out (green)</td>
</tr>
</tbody>
</table>

**MFJ-297 MF-J299 MICROPHONES.**

<table>
<thead>
<tr>
<th>PIN</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIN1</td>
<td>MIC GROUND</td>
</tr>
<tr>
<td>PIN2</td>
<td>MIC</td>
</tr>
</tbody>
</table>
PIN3       PTT
PIN4       PTT GROUND
PIN5       UP
PIN6       DOWN
PIN7       COMMON UP/DOWN
PIN8       DC VOLTS.

MFJ-434 VOICE KEYER INFO.pdf

NAVICO.

AMR-1000/S.
PIN1        MIC GROUND 0VOLTS
PIN2        PHONES
PIN3        CRADLE
PIN4        PTT
PIN5        MIC
PIN6        +12 VOLTS
PIN7        DOWN
PIN8        UP

NEC.

NEC. CQ110E

4 PIN ROUND PLUG.
PIN 1+4   ( INTERCONNECTED ) GROUND / MIC SCREEN
PIN 2     PTT.
PIN 3     MIC.

43
RADIO SHACK.

RADIO SHACK. (Modular Connector)

PIN2  GROUND/EARTH (black)
green  EXTERNAL SPEAKER
PIN5  MIC (yellow)
PIN6  PTT (red)

---

RADIO SHACK- HTX-100 MICROPHONE INFO.

RADIO SHACK- HTX-252 MICROPHONE INFO.(pdf)

---

SGC.

SG-2020.

PIN 1  MIC.
PIN 2  PTT.
PIN 3  OPT 1.
PIN 4  OPT 2.
PIN 5  N/C.
PIN 6  RX AUDIO OUT.
PIN 7  MIC GROUND.
PIN 8  GROUND.
SOMMERKAMP

TS-280FM TS-480FM.

ACCESSORY JACK

The 8-pin DIN standard accessory jack has the following internal connections:
1. Microphone input (2600–10K ohm) 6. +12V for VOX unit etc.
2. Transmit/Receive switching 7. AF out for selective call.
3. Ground (SP) 8. EXT. Squelch
4. Audio output (28–10K ohm) Case = ground
5. Internal speaker.

Always operate the transceiver with the microphone plug inserted in the microphone jack, or with the following external connections:

1. Microphone with VOX

5. External microphone/Speaker with PTT.

2. Headset or Telephoneset with PTT.

6. Internal connection

3. External microphone

7. Internal connection with SP selection switch

4. Headset or Telephoneset with VOX

8. Parrot 76

SOMMERKAMP

FT-307CBM (see YAESU FT-107)

FT-277ZD (see YAESU FT-101ZD)
FT-767DX (see YAESU FT-707)

FT-7B (see YAESU FT-7)

---

**STANDARD.**

**C58-C78-C88-C1100-C4100-C5800-C7800-C8800-C8900**

- PIN 1: MIC.
- PIN 2: PTT.
- PIN 3: SPEAKER.
- PIN 4: COMMON (NOTE: +8VOLTS ON THIS CONNECTION.)
- PIN 5: DOWN.
- PIN 6: UP.
- PIN 7: GROUND.

Note: 0.001uF capacitor is connected between pin 1 and pin 7.

---

**STANDARD.**

**C5000-C5200-C6000-C6000S**

- PIN 1: MIC.
- PIN 2: PTT.
- PIN 3: SPEAKER.
- PIN 4: COMMON.
- PIN 5: UP.
- PIN 6: DOWN.
- PIN 7: CALL.
- PIN 8: GROUND.

---

**STANDARD.**

**C5900 (8 pin modular type plug.)**

- PIN 1
- PIN 2
- PIN 3
- PIN 4: PTT.
- PIN 5: GROUND.
- PIN 6: MIC.
- PIN 7
- PIN 8
SWAN.

SWAN 100MX- SS-200A-250C-350-400-500-500C-700CX-750.

SHURE.

Shure- 444 schematic.
Shure- 522 schematic.
Shure- 527B schematic.
Shure- 550L schematic.

MORE SHURE MICROPHONE INFO.

TEN TEC.

ORION / ARGONAUT / JUPITER info and Schematic.

TEN-TEC ORION - ARGONAUT - JUPITER - OMNI VI - PARAGON - DELTA II - CORSAIR - SCOUT-555
4 PIN PLUG.

<table>
<thead>
<tr>
<th>PIN</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIN1</td>
<td>MIC +</td>
</tr>
<tr>
<td>PIN2</td>
<td>MIC -</td>
</tr>
<tr>
<td>PIN3</td>
<td>PTT</td>
</tr>
<tr>
<td>PIN4</td>
<td>+9 VOLTS</td>
</tr>
</tbody>
</table>
SHELL/CHASSIS=GROUND

TEN-TEC ORION II / OMNI VII.
8 PIN PLUG.

<table>
<thead>
<tr>
<th>PIN</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIN1</td>
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<tr>
<td>PIN2</td>
<td>+10 VOLTS</td>
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<tr>
<td>PIN3</td>
<td>N/C</td>
</tr>
<tr>
<td>PIN4</td>
<td>N/C</td>
</tr>
<tr>
<td>PIN5</td>
<td>GROUND</td>
</tr>
<tr>
<td>PIN6</td>
<td>PTT</td>
</tr>
<tr>
<td>PIN7</td>
<td>MIC EARTH</td>
</tr>
<tr>
<td>PIN8</td>
<td>MIC</td>
</tr>
</tbody>
</table>

OMNI-VII microphone info and Schematic.

ORION-II microphone info and Schematic.

TEN-TEC 705 MICROPHONE pdf

TURNER.

TURNER- EXPANDER 500.schematic.

TURNER- EXPANDER 500 AMPLIFIER .schematic.

TURNER- M+2U - JM+2U.schematic.

TURNER- SUPER SIDEKICK and +3 schematic.

TURNER- ROAD KING 56.schematic.

TURNER- RK60 / RK60J / PLUS+2 / M+3.schematic.
AUDIO SECTION

(The above information is consistently cross checked and updated)

last - update

25th-OCT-2007

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G4WPW HOME PAGE.