DX ENGINEERING

TGR-SL-USB
SignaLink™ USB

Cable List - Rev 58

Last Update - 21 December 2016
Last Tigertronics Update - 23 November 2016

Tigertronics SignaLink™ USB Digital Interface - Cable Interface Listing

Tigertronics Grants Pass, Oregon

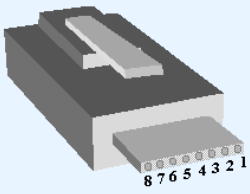
SignaLink Jumper Settings & Wiring Information For Base & Mobile Radios

References to other non-USB models have been removed from the original Tigertronics document.

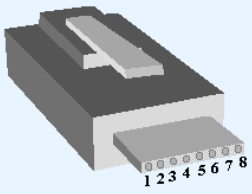
Warning: **Tigertronics has not verified the accuracy of all of the radio wiring information that is provided here. This information is provided for reference only and is NOT intended to replace the jumper installation procedure in the "Connecting The Radio" section of the SignaLink Installation Manual. It is essential that you double-check this information against your radio's manual before doing the actual installation. While it is fairly simple to install the SignaLink, it is possible to DAMAGE YOUR RADIO or the SignaLink by incorrectly installing it!**

IMPORTANT NOTES

- **SignaLink USB Users -** The SignaLink USB is always powered by the computer's USB jack. When installing the jumpers for the SignaLink USB using the settings shown here and in our other documentation, please disregard the PWR jumper (do **NOT** install it!). All other jumper settings are the same. Note that if you mistakenly install the PWR jumper, it will make no difference in the operation of the unit as this pin is not internally connected.
- **Select The Correct Diagram -** When viewing the jumper settings below, **BE CERTAIN THAT YOU ARE LOOKING AT THE CORRECT DIAGRAM** for the radio connector that you will be using. For any given radio, there are likely to be different jumper settings for the Mic, Data and Accessory Port connectors.
- **RJ-45 Mic Connectors -** There is a lack of standardization in the way that radio manufacturers number their RJ-45 mic connectors. We have numbered our connector according to the dominant industry standard as shown to the right. Icom and Radio Shack also follow this standard, but Kenwood, Yaesu and some others do not. You need to be very careful to determine how *your* mic connector is numbered to avoid reversing connections!



SignaLink™, Industry Standard



Kenwood, Yaesu, Some Others

- **PTT** - You should verify in your radio manual that the radio PTT requirements do not exceed the specifications of the SignaLink keying circuit (please refer to the SignaLink manual) and that the PTT line is "Grounded" to make the radio transmit. If your radio exceeds the specifications listed or requires some other keying arrangement, then please contact our Technical Support Staff for suggestions.
- **POWER** - The SignaLink USB is always powered by the computer's USB jack. When installing the jumpers for the SignaLink USB, please disregard the PWR jumper. All other jumper settings are the same. If you mistakenly install the PWR jumper, everything is OK as this pin is NOT connected inside the unit.
- **Jumper Wire Color -** The jumper wires in the diagrams below are shown in color for illustrative purposes only. The color of the wires means nothing - they're just easier to see! The actual jumper wires that are included with the SignaLink are all the same color and can be used to jumper any signal.

Note that the SignaLink USB is always powered by the computer, so you can disregard the PWR jumper when installing this unit.

- **RECEIVE AUDIO / SPEAKER AUDIO** - Receive Audio is available on the Mic, Data, and Accessory Port connectors of most radios. If Receive Audio is not shown in the jumper settings for your radio, then consult your radio manual to see if it is available. If it is not, then you will need to connect a mono cable between your radio's External Speaker or headphone jack, and the "Speaker" jack on the back of the SignaLink. See the SignaLink Installation Manual for details.

Tigertronics SignaLink Combos

TGR-SLUSB13I-P	**COMBO:** TGR-SL-USB, TGR-SL-CAB13I	**SignalLink USB, with Built-In Sound Card, 13-Pin DIN Cable for Icom Acc. Port, Combo**
TGR-SLUSB13K-P	**COMBO:** TGR-SL-USB, TGR-SL-CAB13K	**SignalLink USB, with Built-In Sound Card, 13-Pin DIN Cable for Kenwood Acc. Port, Combo**
TGR-SLUSB4R-P	**COMBO:** TGR-SL-USB, TGR-SL-CAB4R	**SignalLink USB, with Built-In Sound Card, 4-Pin Round Mic Cable, Combo**
TGR-SLUSB5PD-P	**COMBO:** TGR-SL-USB, TGR-SL-CAB5PD	**SignalLink USB, with Built-In Sound Card, 5-Pin DIN Cable, Combo**
TGR-SLUSB6PM-P	**COMBO:** TGR-SL-USB, TGR-SL-CAB6PM	**SignalLink USB, with Built-In Sound Card, 6-Pin mini DIN Cable, Combo**
TGR-SLUSB8PD-P	**COMBO:** TGR-SL-USB, TGR-SL-CAB8PD	**SignalLink USB, with Built-In Sound Card, 8-Pin DIN Cable, Combo**
TGR-SLUSB8R-P	**COMBO:** TGR-SL-USB, TGR-SL-CAB8R	**SignalLink USB, with Built-In Sound Card, 8-Pin Round Mic Cable, Combo**
TGR-SLUSBHTW-P	**COMBO:** TGR-SL-USB, TGR-SLCABHTW	**SignalLink USB, with Built-In Sound Card, 36 in. Length Cable, Combo**
TGR-SLUSBHTY-P	**COMBO:** TGR-SL-USB, TGR-SLCABHTY	**SignalLink USB, with Built-In Sound Card, 36 in. Length YaesuCable, Combo**
TGR-SLUSBK3-P	**COMBO:** TGR-SL-USB, TGR-SL-CABK3	**SignalLink USB, with Built-In Sound Card, Elecraft K3's rear panel Line In/Out and PTT jacks, Combo**
TGR-SLUSBKX3-P	**COMBO:** TGR-SL-USB, TGR-SLCABKX3	**SignalLink USB, with Built-In Sound Card, Elecraft KX3's Mic and Phones jacks, Combo**
TGR-SLUSBNC-P	**COMBO:** TGR-SL-USB, TGR-SL-CABNC	**SignalLink USB, with Built-In Sound Card, Un-terminated Radio Cable, Combo**
TGR-SLUSBRJ1-P	**COMBO:** TGR-SL-USB, TGR-SL-CABRJ1	**SignalLink USB, with Built-In Sound Card, RJ-11 Mic Cable, Combo**
TGR-SLUSBRJ4-P	**COMBO:** TGR-SL-USB, TGR-SL-CABRJ4	**SignalLink USB, with Built-In Sound Card, RJ-45 Mic Cable, Combo**

The Tigertronics SL-USB SignaLink is sold as a combo package that includes the SignaLink USB, one Radio Cable, one USB Cable, one software disc, jumper wires and instructions.

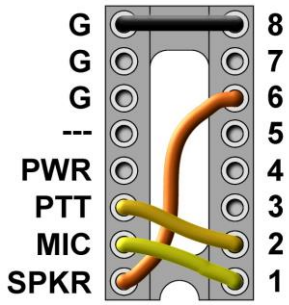
Cables are available separately.

SELECT A MANUFACTURER

NOTE: Please read the "Important Notes" above BEFORE you select your jumper settings. This will save time and may help prevent you from making a mistake that could possibly damage the SignaLink or your radio. Note that the SignaLink USB does NOT use the PWR jumper wire, so you can disregard this jumper during installation. All other jumper settings are the same.

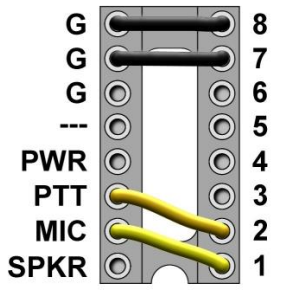
ADI

8-Pin Round Mic Connector - TGR-SLUSB8R-P

Radio Models	Pin-out	Notes	JP-1
AR-146 AR-147 AR-446	Pin 1 - Mic Input Pin 2 - PTT Pin 3 - N/C Pin 4 - N/C Pin 5 - N/C Pin 6 - Speaker** Pin 7 - N/C Pin 8 - GND	** Speaker audio is available on some models. Check your radio manual for availability of these signals and add the appropriate jumpers.	

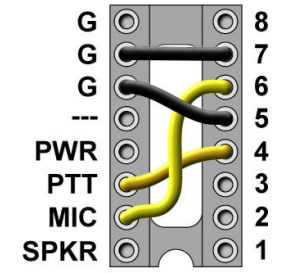
ALINCO

8-Pin Round Mic Connector - TGR- SLUSB8R-P

Radio Models	Pin-out	Notes	JP-1
ALD-24T ALR-22T/22HT/72T DR-110T/112T DR-130T/135E/135T DR-150/235T DR-430T/435E/435T DR-510T/570T DR-590T/592T/599T DR-600T/610E/610T DR-620E/620T/1200 DX-70T/70TH/70EH DX-77 DX-SR8T/E	Pin 1 - Mic Input Pin 2 - PTT Pin 3 - N/C Pin 4 - N/C Pin 5 - N/C Pin 6 - N/C** Pin 7 - GND Pin 8 - GND	** Speaker audio is available on some models. Check your radio manual for availability of these signals and add the appropriate jumpers.	

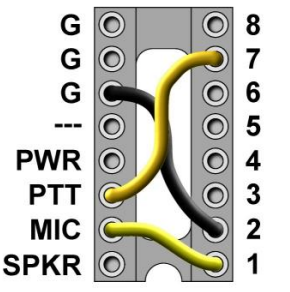
ALINCO

RJ-45 Mic Connector - TGR-SLUSBRJ4-P

Radio Models	Pin-out	Notes	JP-1
DR-605E/605T	Pin 1 - N/C Pin 2 - N/C Pin 3 - N/C Pin 4 - PTT Pin 5 - Mic GND Pin 6 - Mic Input Pin 7 - GND Pin 8 - N/C	**Speaker audio is available on some models. Check your radio manual for availability of these signals and add the appropriate jumpers.**	

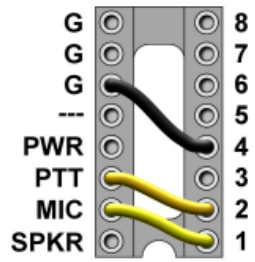
AZDEN

8-Pin Round Mic Connector - TGR-SLUSB8R-P

Radio Models	Pin-out	Notes	JP-1
PCS-5000 PCS-6000 PCS-7000	Pin 1 - Mic Input Pin 2 - GND Pin 3 - N/C Pin 4 - N/C Pin 5 - N/C Pin 6 - N/C Pin 7 - PTT Pin 8 - N/C	Speaker audio is available on some models. Check your radio manual for availability of these signals and add the appropriate jumpers.	

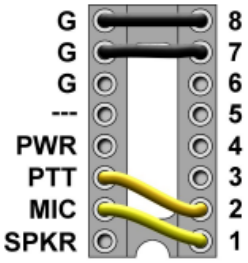
DRAKE

4-Pin Round Mic Connector - TGR-SLUSB4R-P

Radio Models	Pin-out	Notes	JP-1
TR-7 TR-22 TR-33 UV-3	Pin 1 – Mic Input Pin 2 – PTT Pin 3 – N/C Pin 4 – GND		

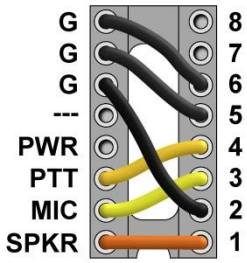
ELECRAFT

8-Pin Round Mic Connector - TGR-SLUSB8R-P

Radio Models	Pin-out	Notes	JP-1
K2 K3	Pin 1 - Mic Pin 2 - PTT Pin 3 - NC Pin 4 - NC Pin 5 - NC Pin 6 - +5VDC Pin 7 - GND Pin 8 - GND	The Mic jack on the K2 can be wired a number of different ways, so before installing the jumper wires, you MUST verify that the pin-out of your K2 matches that shown here.	

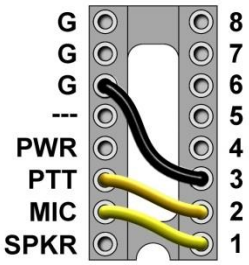
ELECRAFT

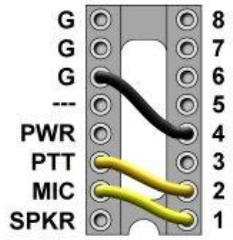
Rear Panel Audio In, Audio Out and PTT connectors - TGR-SLUSBK3-P

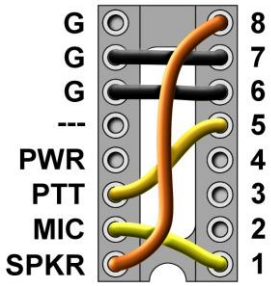
Radio Models	Pin-out	Notes	JP-1
K3 only Check the SLMODK3 Jumper Module list	Pin 1 - SPKR Pin 2 - GND Pin 3 - MIC Pin 4 - PTT Pin 5 - GND Pin 6 - GND Pin 7 - N/C Pin 8 - N/C	Some customers have found that the K3's "Line In" gain (menu setting) is set to zero by default, thereby resulting in no power output when transmitting. If up experience this problem, then please consult your radio manual for instructions on turning up this control. Note that the K3 also has a menu setting for the "Line Out" level, which can be turned up if needed to increase the RX Audio going into the SignaLink	

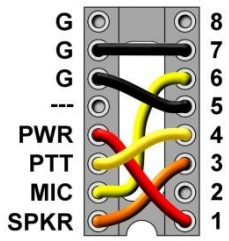
ELECRAFT

Mic Connector - TGR-SLUSBKX3-P

Radio Models	Pin-out	Notes	JP-1
KX2 KX3 *NOTE: The new KX2 uses the same radio cable and jumper module as the KX3* Check the SLMODKX3 Jumper Module list	Pin 1 - MIC Pin 2 - PTT Pin 3 - GND Pin 4 - N/C Pin 5 - N/C Pin 6 - N/C Pin 7 - N/C Pin 8 - N/C	Two cable connections are required from the SignaLink to the Elecraft KX3 as follows: Connect the RJ-45 end of the SLCABKX3 radio cable to the SignaLink's "Radio" connector. Connect the 4-pin **right-angle** TRRS plug to the KX2/3's "Mic" jack, being sure to fully insert the plug. Connect the supplied **right-angle** mono audio cable between the SignaLink's "SPKR" jack, and the KX2/3's "Phones" jack. Be sure that both plugs are fully inserted. KX2/3 Radio Settings: 1 - The "Mic Bias" setting in the KX2/3's menu system should be turned OFF if you are using jumper wires. This setting can be left ON if you are using our SLMODKX3 jumper module as it has a built-in DC blocking capacitor. 2 - The "Mic Btn" setting should be set to either "PTT", or "PTT Up.Dn.". 3 - We recommend turning the KX2/3's "Audio Effects" feature OFF, as it will likely cause receive problems during digital operation.	

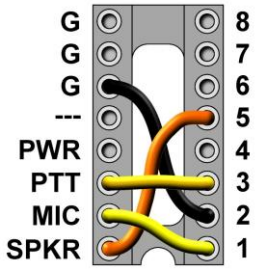
ICOM	4-Pin Round Mic Connector - TGR-SLUSB4R-P		
Radio Models	**Pin-out**	**Notes**	**JP-1**
IC-22 IC-202/215/245/280 IC-402 IC-502/551 IC-701	Pin 1 – Mic Input Pin 2 – PTT Pin 3 – N/C Pin 4 – GND		

ICOM	8-Pin Round Mic Connector - TGR-SLUSB8R-P		
Radio Models	**Pin-out**	**Notes**	**JP-1**
IC-22U/25/27/28 IC-37A/38A/375 IC-45/47/48 IC-228/229/251AE IC-255/260/271/290 IC-471/475/490 IC-505/551/560/575 IC-707/718/720/725/726 IC-728/729/730/735 IC-736/737/738/740/745 IC-746/746PRO IC-751 IC-756/756PRO IC-756PROII/PROIII IC-761/765/775/781 IC-820H/901/910 IC-1201/1271/1275 IC-2400/2500 IC-3200/3210/3220/3230 IC-7400/7410/7600/7700 IC-7800 Check the SLMOD8RI Jumper Module list	Pin 1 – Mic Input Pin 2 – N/C** Pin 3 – N/C Pin 4 – N/C Pin 5 – PTT Pin 6 – GND Pin 7 – GND Pin 8 – Speaker**	**Speaker audio (usually Pin #8) is available on some models. Check your radio manual for availability of these signals and add the appropriate jumpers. **IMPORTANT:** This diagram is for the MIC JACK only. If the SignaLink is attached to your radio's 8-pin Accessory Port, then please see the diagram below under "8-pin DIN Accessory Port Connector". **Check Other Listings for these radios - you may be able to use the DIN, PACKET, ACCESSORY, or DATA jack**	

ICOM	RJ-45 Mic Connector - TGR-SLUSBRJ4-P		
Radio Models	**Pin-out**	**Notes**	**JP-1**
IC-207H**/208H** IC-281A/281E/281H IC-703/706/706MKII IC-2000 IC-2100H**/2200H** IC-2300H** IC-2700**/2720H** IC-2730A/E** IC-2800**/2820** IC-7000**/ IC-7100** IC-V8000** ID-800H** /880** ID-5100A/E**	Pin 1 – +8V*** Pin 2 – N/C Pin 3 – Speaker*** Pin 4 – PTT Pin 5 – GND (mic) Pin 6 – Mic Input Pin 7 – GND Pin 8 – N/C	***Speaker audio is available on some models. Check your radio manual for availability of these signals and add the appropriate jumpers. **Speaker Audio is NOT available on the Mic jack of this radio , so doNOT install the SPKR jumper wire. Instead, use the supplied audio cable as detailed in the SignaLink USB manual.. Check Other Listings for these radios - you may be able to use the DIN, PACKET, ACCESSORY, or DATA jack	

ICOM

6-Pin Mini DIN Data Port Connector - TGR-SLUSB6PM-P

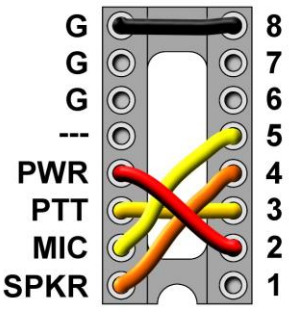
Radio Models	Pin-out	Notes	JP-1
IC-207H/208H IC-2720H IC-2800**** IC-2820 IC-703** IC-706MKIIG** IC-746PRO*** IC-7000*** IC-7100 IC-7400 IC-910H## ID-880 IC-9100 Check the SLMOD6PM Jumper Module list	Pin 1 – Data In Pin 2 – Ground Pin 3 – PTT Pin 4 – 9600 Out Pin 5 – 1200 Out Pin 6 – Squelch	For special signals requiring un-filtered "discriminator" audio, you will need to move the "SPKR" jumper to pin #4 (9600 baud output). Note that some newer radios do NOT provide this output, so this may not apply to your radio. ****703 - If you are using the Data Port on this radio, then you must set menu #36 to 1200.** ****706MKIIG - If you are using the Data Port on this radio, then you must set menu #29 to 1200.** ***IC-746PRO / IC-7000 - Some users have reported that this radio has a very sensitive Data Port, making power adjustments with the SignaLink USB's TX knob somewhat touchy. ******Mic audio is NOT muted on this radio.** **## IC-910H: You will need to connect the SignaLink to the "Main" data port connection on this radio (not the "Sub" port)**	

***NOTE: **The SignaLink USB's TX control is "touchy", making it difficult to control my RF power** - This is most likely because the radio's Mic, Data or Accy Port gain control is set too high, but before continuing, please be sure that you have NOT installed special jumper JP3 inside the SignaLink. This jumper is rarely needed, and will normally cause the SignaLink to provide too much audio to the radio making adjustment of the TX knob difficult.
If the SignaLink is attached to your radio's Mic jack, then you can resolve this issue by turning the radio's Mic Gain control down. If the SignaLink is attached to the radio's Data or Accy Port, then your radio likely has a menu setting or trimmer to adjust the gain. This gain adjustment is often called "Packet Input Level" or "Packet Gain", but may have another name, so check your radio manual carefully. Note that the radio's Mic Gain control on some older radios may also affect the Data/Accy Port (TS-440 for example), so you should check this as well.
If the above solutions don't help, then we suggest that you install Special Jumper JP4 inside the SignaLink and LOWER the software "Wave" control for the SignaLink's sound card. Note that the "wave" control is the "Applications" volume control if you are using Windows Vista, or Windows 7. The "Wave" control can be lowered to just *above* the point where the SignaLink's PTT LED turns OFF, so as to provide minimal TX Audio to the radio while insuring that the SignaLink's PTT circuit functions correctly. We recommend finding this threshold while transmitting a steady test tone, and with the SignaLink's Delay knob set to minimum.

***NOTE: If you are using an ICOM **IC-7000**, **IC-746PRO**, or **Yaesu FT-450**, please note that some customers have reported that these radios have unusually sensitive Data Ports, which can make adjustment of the SignaLink's TX knob somewhat difficult. If this is the case with your radio (and the solutions listed above don't work), then you can easily resolve the issue by replacing the SignaLink's "Mic" jumper wire with a standard 1/4 watt size resistor. Both a 47K and 100K resistor have been reported by several customers to allow easy adjustment of the power level. Please note that you **DO NOT** solder this resistor. It simply plugs into the JP1 socket in place of the MIC jumper wire. **Be sure that you use a 1/4 watt size resistor, so that you do not damage the SignaLink's socket!**

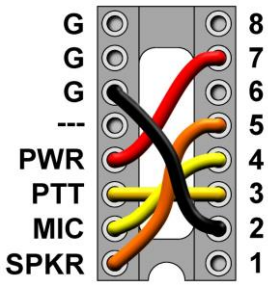
ICOM

24 Pin DIN Accessory Port Connector - TGR-SLUSBNC-P

Radio Models	Pin-out	Notes	JP-1
IC-251AE IC-730 IC-751	Pin 1 - N/C Pin 2 - +13.8V Pin 3 - PTT Pin 4 - AF Out Pin 5 - Mic Input Pin 6 - N/C Pin 7 - N/C Pin 8 - GND Pins 9-24 N/C	**24-pin DIN Accessory Port Connector** - Tigertronics does not manufacture a cable for the ICOM 24-pin Accessory Port connector, but you can easily build one using our un-terminated radio cable (p/n SL-CABNC). To build your cable, simply wire it straight-through for pin numbers 1-8 (Pin #1 to Pin #1, Pin #2 to Pin #2, etc.). Note that your cable MUST be wired straight-through or the jumper settings shown below will NOT work, and you might DAMAGE YOUR RADIO OR THE SIGNALINK! Pins marked as "N/C" are not used by the SignaLink, but might be connected internally inside the radio.	

ICOM

8-Pin DIN Accessory Port Connector - TGR-SLUSB8PD-P

Radio Models	Pin-out	Notes	JP-1
IC-275A IC-575A/H IC-707 IC-725/726/728/729 IC-735/736/737/738 IC-7400 IC-746** IC-746 PRO** IC-756 / 756PRO IC-756 PROII / III IC-761/765 IC-775/775DSP IC-781 IC-7600/7700/7800 IC-820H***/821H IC-910H/970 IC-M600 IC-M700 PRO IC-M710 IC-M802	Pin 1 - RTTY or N/C Pin 2 - Ground Pin 3 - Send Pin 4 - Mod In Pin 5 - AF Out Pin 6 - Squelch Pin 7 - +13.8V Pin 8 - ALC Check the SLMOD8PD Jumper Module list	**IMPORTANT: This diagram is for the ACCY PORT only. If the SignaLink is attached to your radio's 8-pin Round Mic Jack, then please see the diagram above under "8-Pin Round MIC Connector".** IC-756PRO users should use digital mode "D-USB" or "D-LSB". **Some customers have reported that the IC-746 (early model only) does NOT mute the Mic when keyed from the Accy Port. If this is the case with your radio, then you will need to turn the radio's Mic Gain down and/or unplug the microphone. **Due to the design of the IC-746PRO, this jack does NOT support VHF operation. If you want to operate both HF and VHF, then you'll need to use the 6-pin mini-DIN Data Port instead. **IC-746PRO users should use "USB/LSB Data" mode (not regular USB/LSB). ***IC-820H users need to set the Modulation Input Sensitivity switch to "Low", and the Baud Rate Selection switch to "AMOD".**	

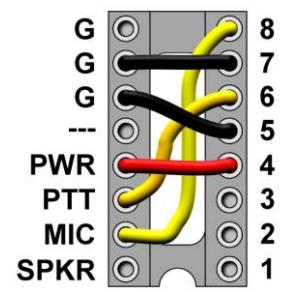
ICOM

13-Pin DIN Accessory Port Connector - TGR-SLUSB13I-P

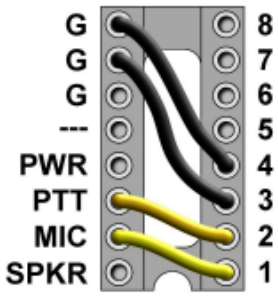
Radio Models	Pin-out	Notes	JP-1
IC-78 IC-703 IC-706 IC-706 MkII IC-706 MkIIg IC-718*** IC-7000** IC-7100** IC-7200 IC-7300 IC-7410 IC-9100 Check the SLMOD13I Jumper Module list	Tigertronics manufactures a special cable for ICOM 13-pin Accessory Ports. If you would like to build your own 13-pin cable (not recommended!), please contact our Technical Support Staff for pin-out and wiring information.	For VHF operation on the IC-706 and IC-706MKII you will need to move the PTT jumper to Pin #4. For VHF/UHF operation on the IC-706MKIIG and IC-7000, you should turn the following menu item to OFF: **Item #30 for IC-706MKIIG** **Item #20 for IC-7000** This will force the radio to use the same PTT pin for all bands so will not need to change the SignaLink's jumper settings. ***This radio does NOT mute the Mic jack when using the Accy Port, so you will need to turn the Mic Gain down. **This radio does NOT mute the Mic jack when using the Accy Port, so you will need to turn the Mic Gain down, or use the 6-pin Mini Din Data Port instead.	

Japan Radio Company

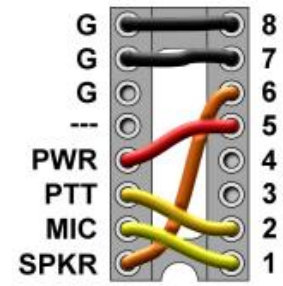
8-Pin Round Mic Connector - TGR-SLUSB8R-P

Radio Models	Pin-out	Notes	JP-1
JST-145 JST-245	Pin 1 - N/C Pin 2 - N/C Pin 3 - N/C Pin 4 - +9V Pin 5 - GND Pin 6 - PTT Pin 7 - Mic GND Pin 8 - Mic Input		

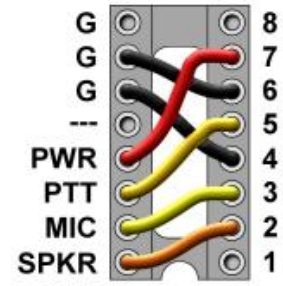
KENWOOD — 4-Pin Round Mic Connector - TGR-SLUSB4R-P

Radio Models	Pin-out	Notes	JP-1
TR-7200A TR-7400A TR-7500 TS-120S/130S/180S TS-511S/520/530 TS-600 TS-700 TS-820/830	Pin 1 – Mic Input Pin 2 – PTT Pin 3 – GND Pin 4 – Mic GND	**Check Other Listings for these radios - you may be able to use the DIN, PACKET, ACCESSORY, or DATA jack**	

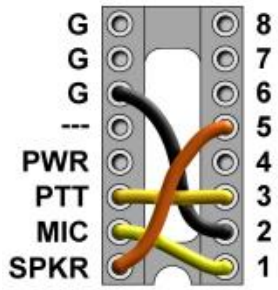
KENWOOD — 8-Pin Round Mic Connector - TGR-SLUSB8R-P

Radio Models	Pin-out	Notes	JP-1
TM-201/211/221/231 TM-241/2530/2550 TM-321/331/3530/401 TM-421/431/441/521 TM-531/541/621/631 TM-701/721/731 TM-2570 TR-50/751/851 TS-50/60/140 TS-430/440/450 TS-570/590 TS-660/670/680/690 TS-701/711/780/790 TS-811/850/870 TS-930/940/950/990 TS-2000 TW-4000/4100 Check the SLMOD8RK Jumper Module list	Pin 1 – Mic Input Pin 2 – PTT Pin 3 – N/C Pin 4 – N/C Pin 5 – 8 VDC** Pin 6 – Speaker** Pin 7 – Mic GND Pin 8 – GND	** Speaker audio is not available on some models. Check your radio manual for availability of these signals and add the appropriate jumpers. **Check Other Listings for these radios - you may be able to use the DIN, PACKET, ACCESSORY, or DATA jack**	

KENWOOD — RJ-45 Mic Connector - TGR-SLUSBRJ4-P

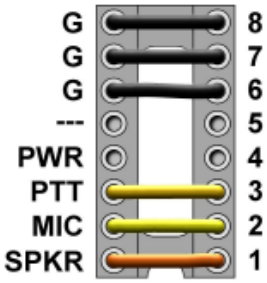
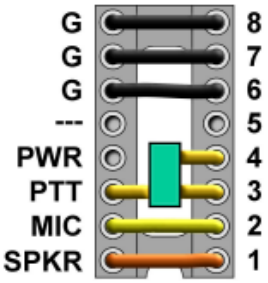
Radio Models	Pin-out	Notes	JP-1
TK-90 TK-7102H / 7108M/HM TK-7160E/M/HM / 7162E TK-7180E / 7189E TK-8108M/HM TK-8160E/M TK-8162E / 8180E / 8189 TM-251/255/261/271/281 TM-451/455/461 TM-641/642 TM-732/733/741/742 TM-941/942 TM-D700/D700A TM-D710/710A/E TM-G707 TM-V7A/V71A/V71E TM-V708 TS-480HX/SAT	Pin 1 – NC Pin 2 – Speaker** Pin 3 – Mic Pin 4 – GND Pin 5 – PTT Pin 6 – GND Pin 7 – +8V** Pin 8 – NC	**Speaker audio is available on some models. Check your radio manual for availability of these features and add the appropriate jumpers. **Check Other Listings for these radios - you may be able to use the DIN, PACKET, ACCESSORY, or DATA jack**	

KENWOOD — 6-Pin Mini DIN Port Connector - TGR-SLUSB6PM-P

Radio Models	Pin-out	Notes	JP-1
TM-251/255 TM-271**/271A** TM-451/455 TM-D700/D700A TM-D710/710A/E TM-G707 TM-733A TM-V7/V7A/V71A TM-V708 TS-480HX/SAT Check the SLMOD6PM Jumper Module list	Pin 1 – Data In Pin 2 – Ground Pin 3 – PTT Pin 4 – 9600 Out Pin 5 – 1200 Out Pin 6 – Squelch	For special signals requiring un-filtered "discriminator" audio, you will need to move the "SPKR" jumper to pin #4 (9600 baud output). Note that some newer radios do NOT provide this output, so this may not apply to your radio. **Only European models of the TM-271 and TM-271A have the 6-pin mini-DIN Data Port. All other models will need to use the RJ-45 Mic cable. **Check Other Listings for these radios - you may be able to use the DIN, PACKET, ACCESSORY, or DATA jack**	

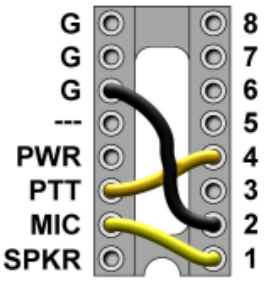
KENWOOD — 13-Pin DIN Accessory Port Connector - TGR-SLUSB13K-P

Our 13-pin cable works with ALL Kenwood radio's that have a 13-pin Accessory Port, however there are two possible jumper settings. If your radio is not listed in Figure 1 or Figure 2, then you will need to try both jumper settings to determine which PTT configuration your radio requires. We suggest that you try the settings in Figure 1 first. **Your radio will NOT be damaged if you install the PTT jumper using the wrong configuration - you just won't be able to transmit!** After you have installed the jumpers, be sure to set the sound card audio levels as outlined in the SignaLink manual. If you do not set the levels correctly, then the SignaLink may not transmit, and you might mistake the problem for incorrect jumper settings.

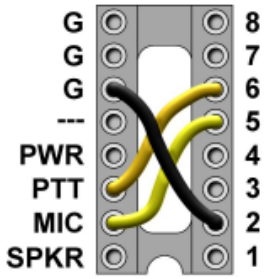
Figure 1	Figure 2	Notes
		**TS-2000** users should set Menu 50F to 1200 Baud. Menu 50B can be used to increase the radio's power output if it is too low. We suggest that you change these menu items even if they already appear to be set correctly. Set 50B to zero, and then to five. Set 50F to 9600, and then to 1200. To increase the Receive Audio Level on the TS-2000, you can adjust menu 50C. **TS-570** users should set Menu #33 to 1 or 2 (a setting of zero will result in no transmit power). Menu #34 should be set at 4-5 and can be increased to provide more Receive Audio if needed. **TS-940** users need to use the jumper settings shown in figure 1, except for the PTT jumper. The PTT jumper should be connected to pin #4 instead of pin #3. **TS-440** users please note that your radio's Mic Gain control will affect your power output. We suggest setting this control to 50% and then adjust it as needed so that the SignaLink's TX knob can be used to adjust the power output properly.
This configuration is the most common and works with early Kenwood radios such as the **TS-140, TS-450S, TS-870** and **TS-950.** Some newer radios such as the **TS-570D, TS-590S, TS-990** and **TS-2000/X** also use these settings.	This configuration is less common and is used by some newer radios (**TS-690** for example) and some older radios such as the **TS-440**. These settings are identical to those in Figure 1, except for the PTT jumper, which has been replaced by a diode module (supplied with cable).	

*** Can use the SLMOD13K Jumper Module for Kenwood radios that have the 13 Pin Din Accessory Port Connector - *See additional notes in Module Jumper section***

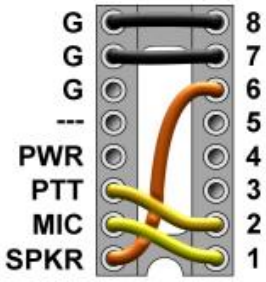
MIDLAND — 4-Pin Round Mic Connector - TGR-SLUSB4R-P

Radio Models	Pin-out	Notes	JP-1
13-510	Pin 1 – Mic Input Pin 2 – GND Pin 3 – N/C Pin 4 – PTT		

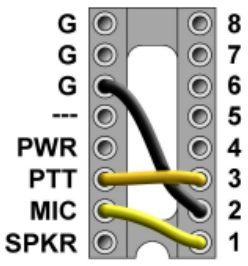
RADIO SHACK — RJ-45 Mic Connector - TGR-SLUSBRJ4-P

Radio Models	Pin-out	Notes	JP-1
HTX-212 HTX-242	Pin 1 – N/C Pin 2 – GND Pin 3 – N/C Pin 4 – N/C Pin 5 – Mic Input Pin 6 – PTT Pin 7 – N/C Pin 8 – N/C	Speaker audio is available on some models. Check your radio manual for availability of these signals and add the appropriate jumpers.	

SGC — 8-Pin Round Mic Connector - TGR-SLUSB8R-P

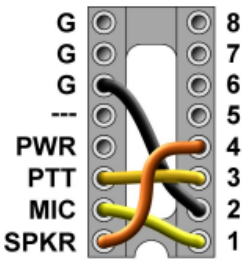
Radio Models	Pin-out	Notes	JP-1
SGC-2020	Pin 1 – Mic Pin 2 – PTT Pin 3 – N/C Pin 4 – N/C Pin 5 – N/C Pin 6 – RX Audio Pin 7 – Mic GND Pin 8 – GND		

TEN-TEC — 4-Pin Round Mic Connector - TGR-SLUSB4R-P

Radio Models	Pin-out	Notes	JP-1
Corsair 561 Omni VI Pegasus Scout	Pin 1 – Mic Input Pin 2 – GND Pin 3 – PTT Pin 4 – N/C	These jumper settings work with most Ten-Tec Mic jacks (not just the Pegasus). However you should verify that your radio has the same pin-out before installing them. Check Other Listings for these radios - you may be able to use the DIN, PACKET, ACCESSORY, or DATA jack	

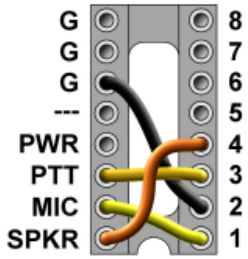
TEN-TEC

5-Pin DIN Accessory Connector - TGR-SLUSB5PD-P

Radio Models	Pin-out	Notes	JP-1
Argonaut V Jupiter Omni VII Pegasus Check the SLMOD5PD Jumper Module list	Pin 1 - Mic Input Pin 2 - GND Pin 3 - PTT Pin 4 - AF Output Pin 5 - NC	The Ten-Tec Jupiter must be in "Line" to use the ACCY jack (set in radio menu).	

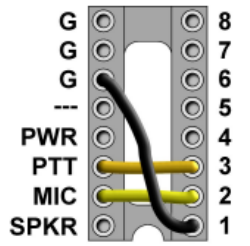
TEN-TEC

8-Pin DIN Accessory Connector - TGR-SLUSB8PD-P

Radio Models	Pin-out	Notes	JP-1
Argonaut VI Eagle Orion** Orion II *** TEN-TEC Delta II Users: Our 8-pin DIN cable is NOT compatible with the TEN-TEC Delta II. You must connect the SignaLink to this radio's 4-pin Mic jack.	Pin 1 - Aux In Pin 2 - GND Pin 3 - PTT Pin 4 - Line Out** Pin 5 - NC Pin 6 - Line Out** Pin 7 - FSK Pin 8 - NC	**On the original Orion, the "Audio" menu determines what audio is available on pins 4 and 6, so the SPKR jumper will need to be set accordingly. ***On the Orion II, Pin #4 is ALWAYS the audio output. Can use the SLMOD5PD Plug & Play per Tigertonics e-mail of 8June2011	

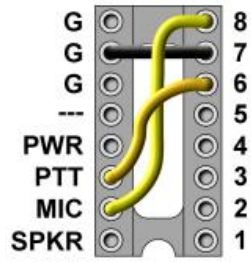
YAESU

4-Pin Round Mic Connector - TGR-SLUSB4R-P

Radio Models	Pin-out	Notes	JP-1
FT-7B FT-101 FT-101ZD FT-221 FT-225 FT-227R FT-901DM	Pin 1 – GND Pin 2 – Mic Input Pin 3 – PTT Pin 4 – N/C		

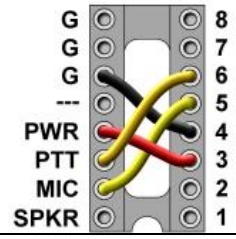
YAESU

8-Pin Round Mic Connector - TGR-SLUSB8R-P

Radio Models	Pin-out	Notes	JP-1
FT-1 FT-102/107/107M FT-290 FT-707/736/736R FT-747/757 FT-757GX/767GX FT-840 FT-847** FT-890** FT-920**/950**/980** FT-990** FT-1000**/1000D** FT-1000MP**/DX1200** FT-2000/2200 FT-DX5000** FT-5100 Check the SLMOD8RY Jumper Module list	Pin 1 – N/C Pin 2 – N/C Pin 3 – N/C Pin 4 – N/C Pin 5 – N/C Pin 6 – PTT Pin 7 – GND Pin 8 – Mic Input	**On the FT-890, FT-980, FT-990, and the FT-1000 and 1000D, you should also jumper Pin #2 and Pin #5 to Ground. **On the FT-847, FT-920, FT-950, FT-1000MP and FTDX5000, you should also jumper Pin #5 to Ground. Speaker audio is available on some models. Check your radio manual for availability of these signals and add the appropriate jumpers. **Check Other Listings for these radios - you may be able to use the DIN, PACKET, ACCESSORY, or DATA jack** **When using the SLMOD8RY** - check jumpers: G1 + G2 installed for: FT-890/980/990/1000/1000D (picture in section on modules) Only G1 installed for: FT-847/920/950/1000MP	

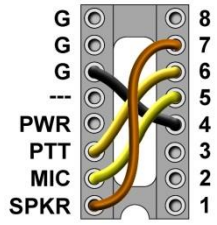
YAESU

RJ-11 Mic Connector - TGR-SLUSBRJ1-P

Radio Models	Pin-out	Notes	JP-1
FT-90/90R FT-100** FT-1500M FT-1802 / 1900R FT-2600/2800M/2900R FT-7800R/7900R FTM-350 FTM-3100R/3200DR	Pin 1 – N/C Pin 2 – N/C Pin 3 – +9V Pin 4 – GND Pin 5 – Mic Input Pin 6 – SW1 Pin 7 – N/C Pin 8 – N/C	**With the FT-100, the PTT jumper MUST be replaced with a standard 1/4 watt 27k resistor. Other Yaesu models with an RJ-11 Mic jack might also use these same settings (check your radio manual). **Check Other Listings for these radios - you may be able to use the DIN, PACKET, ACCESSORY, or DATA jack**	

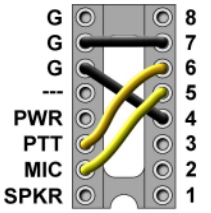
YAESU

RJ-45 Mic Connector - TGR-SLUSBRJ4-P

Radio Models	Pin-out	Notes	JP-1
FT-2400 FT-2500 System 600	Pin 1 – N/C Pin 2 – See text Pin 3 – PTT Pin 4 – Mic Input Pin 5 – GND Pin 6 – N/C Pin 7 – See text Pin 8 – N/C	Speaker audio is available on some models. Check your radio manual for availability of these signals and add the appropriate jumpers. Add either a jumper from Pin 7 to Pin SPKR, or as shown Pin 2 to SPKR. **Check Other Listings for these radios - you may be able to use the DIN, PACKET, ACCESSORY, or DATA jack**	

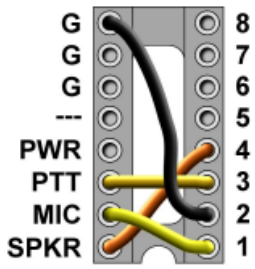
YAESU

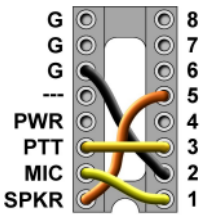
RJ-45 Mic Connector - TGR-SLUSBRJ4-P

Radio Models	Pin-out	Notes	JP-1
FT-450 FT-600 FT-817/857/897 FT-900 VX-2100/2200	Pin 1 – N/C Pin 2 – N/C Pin 3 – N/C Pin 4 – Mic GND Pin 5 – Mic Pin 6 – PTT Pin 7 – GND Pin 8 – N/C	Receive Audio is not available on this connector. **Check Other Listings for these radios - you may be able to use the DIN, PACKET, ACCESSORY, or DATA jack**	

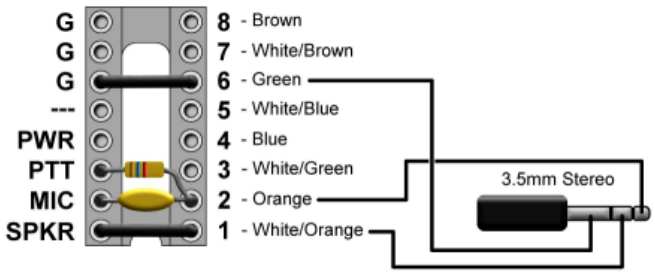
YAESU

5-Pin DIN Packet Connector - TGR-SLUSB5PD-P

Radio Models	Pin-out	Notes	JP-1
FT-920* FT-1000*** FT-1000D*** FT-1000MP## FT-1000MPMKV** FT-1000MPMKV-Field** FT-2000 FTDX-5000/D/MP FTDX-9000/D/MP Check the SLMOD5PD Jumper Module List	Pin 1 – Data In Pin 2 – GND Pin 3 – PTT Pin 4 – Data Out Pin 5 – NC	*On the FT-920, the AFSK/FSK switch MUST be set to AFSK, and you must be in "Data" mode (push the front panel "Data" button). The Mic Gain control appears to affect the operation of the Packet jack, so we suggest setting this to 50% and then adjusting as needed.. **The FT-1000MPMKV and FT-1000MKV Field MUST be in "Packet" mode (NOT USB!) for digital operation. For PSK31 or other "USB" digital modes, you'll need to set your radio's "User Mode" (selection 8-6) to "PS31U". This will configure the radio to look at the Packet jack and use the correct side band for PSK31. For more detailed information on this (including settings for other modes), see "Digital Modem Operation" in your radio manual. ***The 5-pin DIN jack on this radio supports only FM and LSB, which are not compatible with the majority of digital modes. We recommend connecting the SignaLink to the Mic jack instead. ## A link to detailed setup information for this radio is available on the TigerTronics web site.	

YAESU	6-Pin Mini DIN Data Port Connector - TGR-SLUSB6PM-P		
Radio Models	**Pin-out**	**Notes**	**JP-1**
FT-100/100D FT-817/817ND FT-450* FT-840**/847** FT-857/897 FT-950***/991 FT-1500M FT-7100/7800R FT-7900R FT-8000/8100/8500 FT-8800R/8900R FTDX-1200 FTDX-3000 FTM-100DR## FTM-350** FTM-400## VX-1700 Check the SLMOD6PM Jumper Module list	Pin 1 – Data In Pin 2 – Ground Pin 3 – PTT Pin 4 – 9600 Out Pin 5 – 1200 Out Pin 6 – Squelch	For special signals requiring un-filtered "discriminator" audio, you will need to move the "SPKR" jumper to pin #4 (9600 baud output). Note that some newer radios do NOT provide this output, so this may not apply to your radio. Power is not available on any 6-pin mini DIN Data Port, so you will need to use external power for the SignaLink Model SL-1+. *FT-450 - Some users have reported that this radio has a very sensitive Data Port, making power adjustments with the SignaLink USB's TX knob somewhat touchy. If this is the case with your radio, then please check the Signalink web page for a simple solution to this problem. ***FT-950 - Some users of this radio have reported that the Notch Filter is turned on after a hard reset. If you see a "hole" in your waterfall display, then please make sure that your Notch Filter is turned OFF. **The 6-pin mini-DIN Data Port on the FT-840 and FT-847 supports FM and LSB only. It may also function only on VHF (not HF). Because of this, we recommend using the Mic jack, or on the FT-847, the Data I/O jack (see below). **The FTM-350 requires Yaesu's CT-141 adapter to convert from it's (unusual) 8-pin mini-DIN connector to a standard 6-pin mini-DIN. This adapter should be available from any authorized Yaesu dealer ## The FTM-100DR and FTM-400 requires Yaesu's CT-164 adapter to convert from it's 10-pin mini-DIN connector to a standard 6-pin mini-DIN. This adapter should be available from any authorized Yaesu dealer.	

***NOTE: If you are using an ICOM IC-7000, IC-746PRO, or **Yaesu FT-450**, please note that some customers have reported that these radios have unusually sensitive Data Ports, which can make adjustment of the SignaLink's TX knob somewhat difficult. If this is the case with your radio (and the solutions listed above don't work), then you can easily resolve the issue by replacing the SignaLink's "Mic" jumper wire with a standard 1/4 watt size resistor. Both a 47K and 100K resistor have been reported by several customers to allow easy adjustment of the power level. Please note that you **DO NOT** solder this resistor. It simply plugs into the JP1 socket in place of the MIC jumper wire. **Be sure that you use a 1/4 watt size resistor, so that you do not damage the SignaLink's socket!**

YAESU FT-847 ONLY	3.5 mm Stereo "Data I/O" Jack - TGR-SLUSBNC-P
Notes	**JP-1**
For the FT-847, we recommend that you attach the SignaLink to the "Data I/O" jack. This jack works for all modes and will let you keep your microphone plugged into the radio. We do not stock a cable for this jack however, so you will need to build your own using one of our un-terminated radio cables. The picture shows how to wire this cable and install the jumper wires. Notes: 1. R1 = 2.7k 1/4 watt resistor, C1 = 0.1uf non-polarized capacitor 2. To prevent damage to socket JP1, the diameter of R1 and C1's leads should be no larger than those of the supplied jumper wires (24 gauge). 3. The wire colors shown are for our un-terminated ("NC" cable. Other cables may not be wired the same.	

Unterminated RJ-45 Cable - TGR-SL-CABNC

Cable Lengths	
3ft Length	SLCAB13I SLCAB13K SLCAB5PD SLCAB6PM SLCAB8PD SLCABK3 SLCABNC
18 Inch Length	SLCAB4R SLCAB8R SLCABRJ1
2ft Length	SLCABRJ4

Refer to the DX Engineering web site for
Jumper Module information.

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