



TIGER PERFORMANCE PRODUCTS, INC.

Aviation and Marine • Safety • Communications

***Tiger Communications™
Multifunction Modular Marine Radio Intercom System***

INSTALLATION AND OPERATING INSTRUCTION MANUAL

Attention Installer: To assure trouble free installation, please read the entire instructions through once before beginning.

Intercom System Features

1. Waterproof design with components either IP67 or IP68 rated.
2. Configuration-Specifically designed for permanent panel mount installation.
3. Up to an eight (8) position intercom with 2 push to talk positions.
4. Voice activated feature allows “hands free” intercommunication between the positions. Start speaking and the intercom instantly turns on to relay your message clearly to other headsets/helmets; stop talking and it turns off to reduce background noise. There’s no reason to raise your voice or turn your head to communicate.
5. Transmit capability allows the driver and co-driver positions to transmit over a radio via the push to talk buttons through their headset/helmet microphones. The intercom function is automatically disabled during transmitting, so that only the voice of the person communicating will be heard.
6. 3 radio switching capable with all intercom systems.
7. Radio monitoring capability allows radio output to be heard by all positions.
8. Hardware included – All hardware for headset/helmet panel mount jacks, PTT switches and other panel mount products is supplied with the system.
9. Distortion- Less than 1% total harmonic distortion.

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Intercom System Features Continued

10. Wireless- wireless headsets/helmets replace standard wired headsets and allow the user to use all standard features wirelessly through the intercom system.
11. Optional Bluetooth cell phone feature for driver and co-driver.
12. Warranty-All radio/intercom system components are constructed of high quality parts and carry a 1 year parts and labor warranty on defective parts and workmanship.

MADE PROUDLY IN THE USA!

What You'll Need

5/8" Drill Bit 3/4" Drill Bit Pilot Drill Bit Jig Saw or Similar Marker
Power Drill W/ Phillips Bit Tape Measure or Ruler Template(s) (Provided)
Sand Paper or File Multimeter (With DC reading)

Intercom Installation

The location that you select requires a minimum front panel area of 4 inches wide by 2.5 inches high. The depth behind the panel requires 5 inches plus cable access.

Caution: When finding location move vehicle controls through the limits of their travel while observing to make certain no intercom components interfere with any vehicle control components.

Panel Preparation

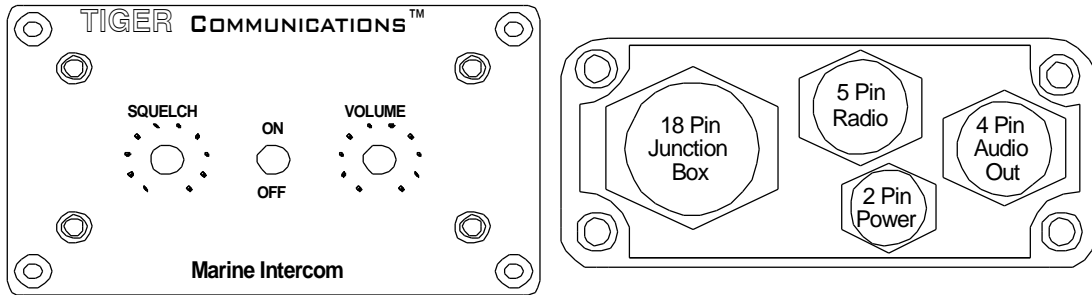
Intercom

1. Position the intercom template on the selected area and secure the template.
2. Locate the body on the template and drill 4 pilot holes at the corners of the body big enough to fit a cutting blade.
3. Remove template and connect the 4 holes with a straight edge and marker to make a rectangle.
4. Carefully cut out rectangle towards the inside of the box.
5. Once cut out roughly test fit intercom if the area is too small sand or file away some material and re-fit until intercom fits through hole.

- After fitting the intercom to the desired position attach the intercom to the panel with the included hardware.

Note: Actual template on page 12.

Monaural Intercom

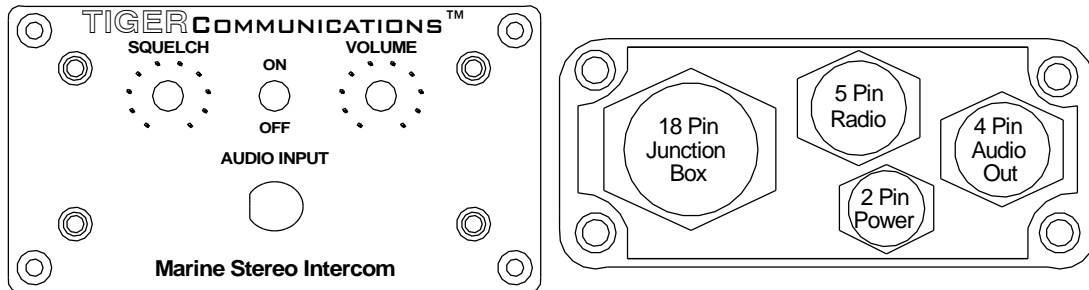


Front Panel

Back Panel

Monaural intercom systems have all standard features and relay all information in mono, including any external music systems. Mono Intercoms are also capable of being outfitted with any wireless Products.

Stereo Intercom

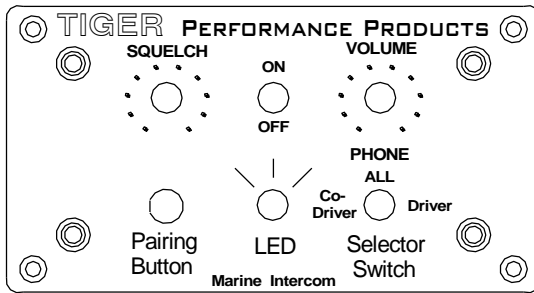


Front Panel

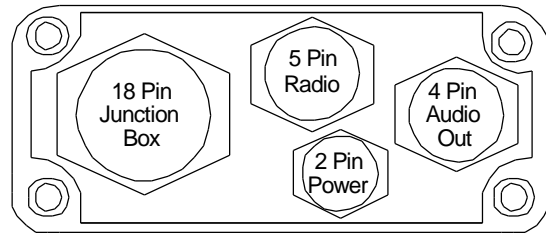
Back Panel

Stereo intercoms have all standard features and relay all information in both ears in high quality stereo, including any external music source. Stereo intercoms also feature an audio input jack on the front panel which allows the user to connect an i-pod, mp3 or other music device and play music that will be heard in all stations. All wireless products are compatible but will only function as a mono device on a stereo intercom.

Monaural Intercom with Wireless Phone Feature



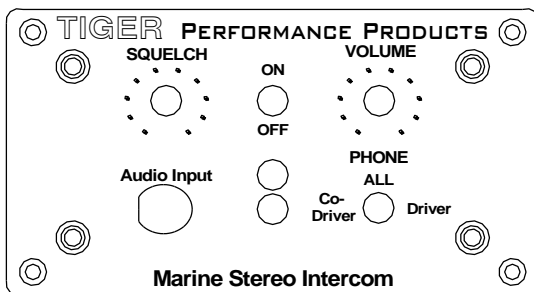
Front Panel



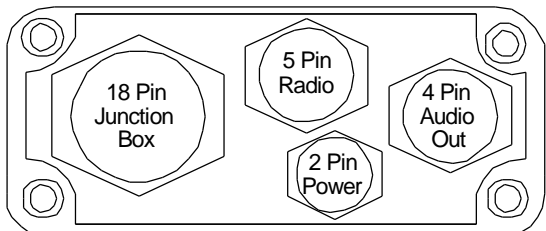
Back Panel

Monaural intercoms with wireless phone capabilities have all the same features of the standard monaural intercom but also have the ability to connect and communicate wirelessly through the intercom system. After connecting your cell phone with Bluetooth capability to the intercom system, you can make and receive phone calls while communicating through your headset/helmet. The user can also choose which stations can interact in the conversation simply by switching the toggle switch on the front panel to the driver, co-driver positions or the center position to allow all stations to interact in the conversation. For safety reasons you will hear the cell phone audio in one ear only, while passenger and radio conversations can be heard in the other.

Stereo Intercom with Wireless Phone Feature



Front Panel

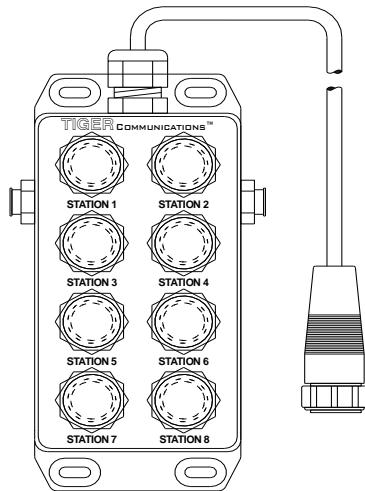


Back Panel

Stereo intercoms with the wireless phone capabilities have all the same features of the standard stereo intercom but also contain the same wireless phone capability of the monaural intercom with wireless phone feature. Phone conversations will only be heard in one ear for safety reasons and therefore audio cannot be heard in stereo.

Junction Box

1. First find a suitable area for the junction box, preferably behind dash to hide wires, taking in account that the junction box takes a minimum of 4 inches of depth.
2. Make sure the location you choose is within reach of the intercom.
3. Finally mount junction box with included hardware after making sure hardware does not interfere with anything behind mounting surface, and then run the cable to intercom.

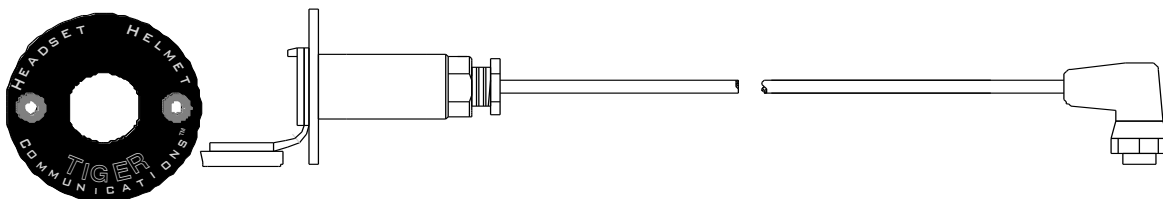


Available in 5 or 10 Foot lengths (Custom Cable Lengths upon Request)

Headset Helmet Jack Installation

Headset/Helmet Panel Mount Jack

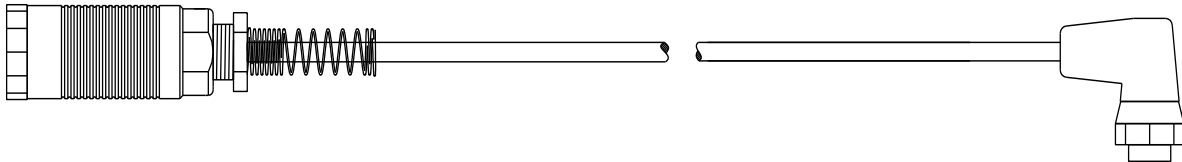
1. First find desired location for headset helmet jack keeping in mind what side cord comes out of headset and the length of the cable in comparison to the location of the junction box.
2. When finding location that the panel bezel requires a 2 inch diameter surface area for the mounting plate and a 3 inch depth.
3. After finding a suitable area mark hole location and drill a 3/4 inch hole in the center of the selected area.
4. After drilling hole(s) route cable(s) to proper position on junction box and plug in the cable. Attach the panel bezel to the cockpit surface using the provided hardware.
5. Repeat as many times as needed.



Cables Available in 1,5,10,15,20,25,30 and 35 foot lengths (Custom Cable Length upon Request)

Headset/Helmet Cable Mount Jack

1. For non-panel mount headset/helmet jacks simply route the cable(s) to the proper position on the junction box and plug in cable.
2. Secure any extra cable that is not needed with p-clamps and wire ties.
3. Repeat again for each additional jack.

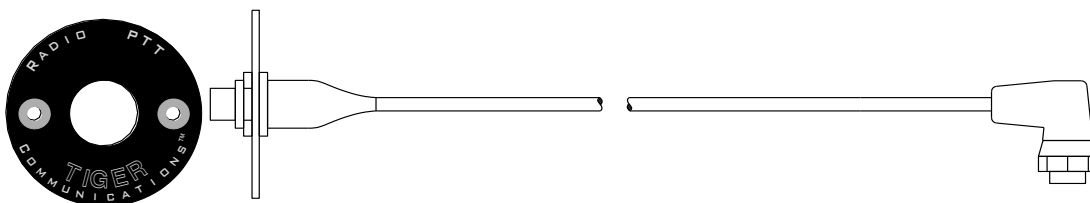


Cables Available in 1,5,10,15,20,25,30 and 35 foot lengths (Custom Cable Length upon Request)

Push to Talk Cable Assembly installation

Panel Mount Push to Talk Cable Assembly

1. Find the desired location keeping in mind that the cable must reach the junction box.
2. When finding a panel push to talk location keep in mind that the panel bezel requires a 1 3/4 inch diameter surface area for the mounting plate and a 2 inch depth.
3. After finding a suitable area and marking hole location drill a 5/8 hole in the center of the selected area.
4. After drilling hole(s) route cable(s) to proper position on junction box and plug in the cable. Attach the panel bezel to the cockpit surface using the provided hardware.
5. Repeat again for each panel mount push to talk.

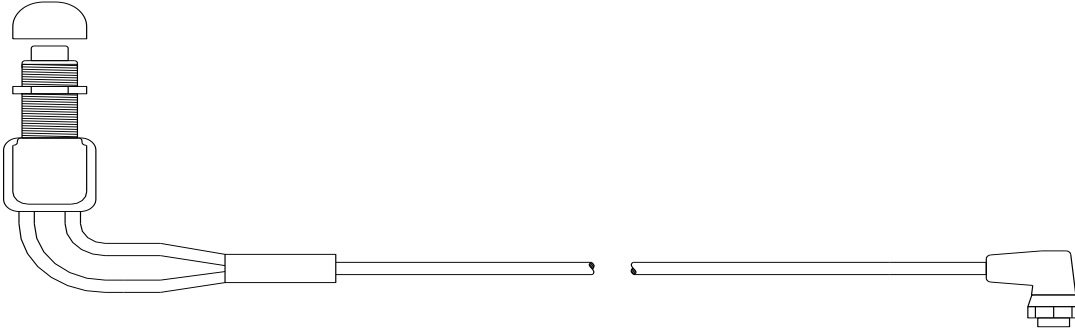


Cables Available in 5,10,15 and 20 foot lengths (Custom Cable Lengths upon Request)

Foot Mount Push to Talk Cable Assembly

1. Find a good location with easy access and within reach of user's foot.
2. When finding a location keep in mind that the depth required behind mounting surface is a minimum of 3 inches.
3. After finding a suitable area mark the hole location and drill a 5/8 inch hole in the center of the selected area

4. Route cable(s) to junction box and plug in cable, then remove black rubber button cover and thread brass nut as close to the body of the Push to talk as possible.
5. Insert Push to talk through the hole(s) behind the panel and start threading the black rubber cover until full range of push button is achieved.
6. Finally Tighten brass nut against the back side of the panel until it is tight against panel.
7. Repeat again for each foot push to talk.

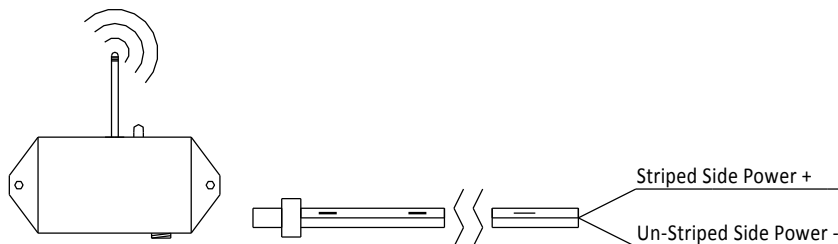


Cables Available in 5,10,15 and 20 foot lengths (Custom Cable Lengths upon Request)

Wireless Installation

Vehicle Powered Transceivers

1. Choose a suitable location for the transceiver body that will have the best line of sight to the wireless headset or helmet, making sure not to mount behind metal bulkhead or carbon fiber panel and also noting the length of the power cable and communication cables.
2. Attach body of transceiver with the provided hardware and route power and communication cables to their locations.
3. The power cable for the transceivers should preferably all be routed to a buss bar with a direct 12volt connection to the battery, with the striped side of the cable representing the + power to the transceiver.



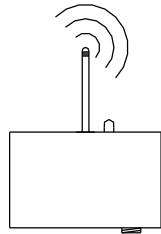
Vehicle Powered
Transceiver

12-28 Volt DC Power Cord

Available in a 6 Foot Length

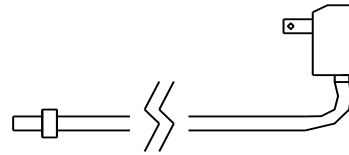
Battery Powered Transceivers

1. Choose a suitable location for the transceiver body that will have the best line of sight to the wireless headset or helmet, making sure not to mount behind metal bulkhead or carbon fiber panel and also noting the length of the communication cable.
2. Velcro or secure the body to the desired spot to prevent box from moving while in motion and allow for easy removal for re-charging.



Rechargeable Battery

Powered Transceiver



110 Volt AC Wall Charger

How to Pair Any Wireless Products

Any new wireless product straight out of the box should be paired and ready to use.

Headset/Helmet/Belt box

1. First initiate pairing at the transceiver side by pressing the power on off button and holding it for approximately 8 seconds or until the LED on the transceiver starts flashing amber only.
2. After making sure the mating device is turned off, press and hold the power on off button on the mating device for approximately 8 seconds or until the LED starts flashing amber.
3. Once flashing you will hear 3 beeps in the mating device signifying that the pairing process has begun.
4. After the pairing has begun the auto-connection takes about 45-50 seconds, after which both devices will flash only green.

Wireless Phone featured Intercom

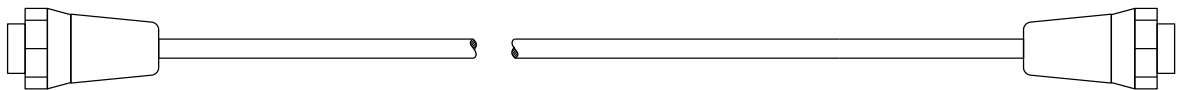
1. When pairing a cell phone first press and hold the pairing button on the front panel of your intercom system until the LED starts flashing amber.
2. Next activate the Bluetooth pairing on your cell phone and wait up to 10 seconds for your cell phone to find the intercom system.
3. After finding and selecting the intercom system it will ask for a 4 number pairing code to connect, when prompted enter "0000" and allow a few seconds for your cell phone to connect. Your phone will then read connected or similar and the LED on the intercom front panel will flash green when paired.

Radio installation

Note: The area selected must be in an easy to access area, must have a depth of 9 inches and have enough room on both sides of the radio to secure the screws on the flush mount bracket while still being able to reach the intercom with your selected radio cable.

Radio

1. Position the Radio template (where applicable) on the selected area, be sure that the template is square and level to the mounting surface and then secure the template.
2. Locate the body on the template and drill 4 pilot holes at the corners of the body big enough to fit a cutting blade.
3. Remove the template and connect the 4 holes with a straight edge and marker to make a rectangle.
4. Carefully cut out rectangle towards the inside of the line.
5. Roughly test fit Radio, if the area is too small sand or file away some material and re-fit until Radio fits through hole with no gaps.
6. After fitting the radio in the hole, from behind panel attach the mounting brackets to both sides of the radio and tighten the depth screws until the radio is tight against the panel.



Radio Cable Assembly

Cables Available in 5,10,15 and 20 foot length (Custom Cable Lengths upon Request)

Antenna Installation

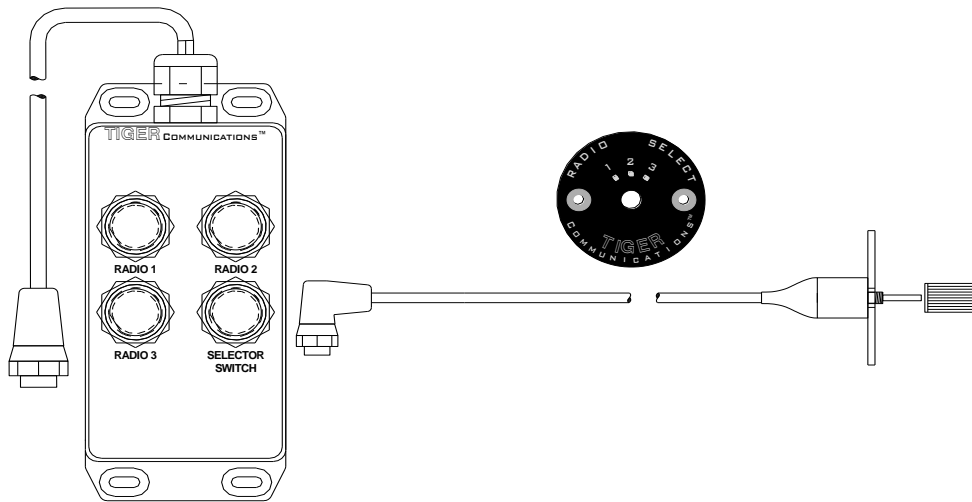
1. Choose a location that is the highest point possible for optimum 360 degree line of sight. Do not mount antenna below deck or near engine ignition or electrical wires.
2. After selecting area route cable to the radio screw in the cable and secure the bracket to the selected area with the provided hardware.

3 Radio Switch Box and Selector Switch

Radio Selector Switch Box

1. First find a suitable area for the switch box, preferably behind dash to hide wires, taking in account that the switch box takes a minimum of 4 inches of depth.
2. Make sure the location you choose is within reach of the intercom and radios.

3. Finally mount switch box with included hardware after making sure hardware does not interfere with anything behind mounting surface. Then run the cables to intercom.



Cables Available in a 5 foot length

Radio Selector Switch

1. Find the desired location keeping in mind that the cable must reach the junction box.
2. When finding the selector switch location remember that the panel bezel requires a 1 3/4 inch diameter surface area for the mounting plate and a 2 inch depth.
3. After finding a suitable area and marking hole location drill a 5/8 hole in the center of the selected area.
4. After drilling hole route cable to proper position on junction box and plug in the cable. Then attach the panel bezel to the cockpit surface using the provided hardware.

Final installation and Notes

Notes

When running cables the best way to route them is to run them through seldom used areas and use grommets on any surface it comes into contact with to prevent chaffing/wear to cables. Also use p-clamps as often as possible to keep cables from moving around.

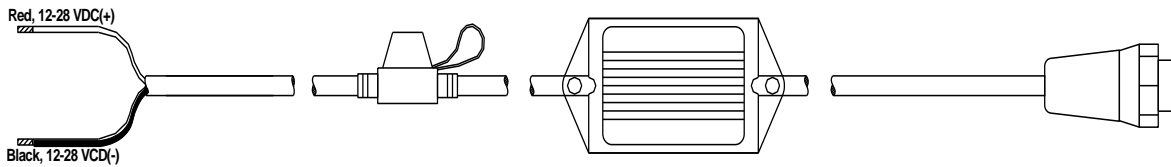
If at all possible DO NOT run power cables next to communication cables or near any radio related antenna or communication cables as it will possibly cause interference with the communication system.

Always coil up and wire tie any extra cable length DO NOT cut cables and re-terminate them as this may cause unintended problems to systems.

Any system provided by Tiger Performance should be run through an ignition noise suppressor to reduce noise through the communication system caused by the alternator.

Ignition Noise Suppressor

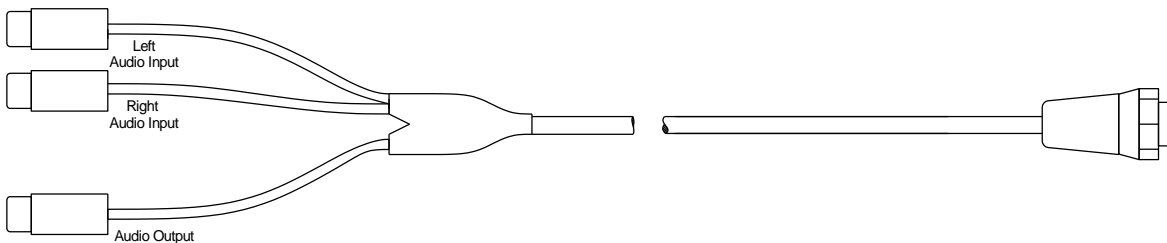
1. The ignition noise suppressor must be within reach of both the intercom and radio as it supplies power to both.
2. Secure the ignition noise suppressor to its location with the provided hardware
3. Connect the red and black wires to a direct 12-28 volt power source, red representing the power and the black representing the ground, then route power cables to the radio and the back of the intercom.



Cables Available in a 6 Foot Length

Audio In/Out

1. When applicable an audio In/Out cable allows the user to connect RCA cables from an external music source (CD, Radio, TV Ect.) to an intercom system via the 4 pin connector on the back panel.
2. This cable also has a third RCA connector to connect to a camera or other device for audio recording purposes.
3. To install simply plug the RCA connectors in the color corresponding jacks on your external source and match them up to the colors on the left and right channels of your audio input cable.
4. To install the audio output cable, plug a single RCA cable into your camera or other device and plug the other end into the audio out side of your audio in/out cable.



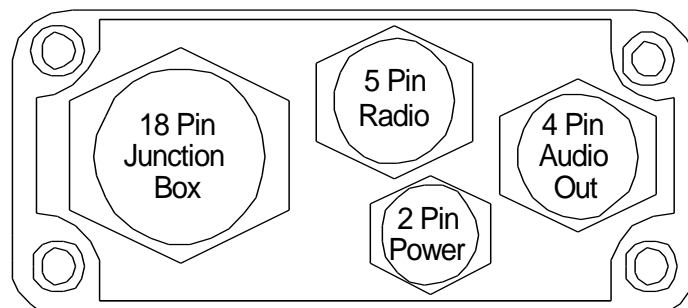
Cables Available in a 2 foot length

Installation Checklist and Adjustments

After the system is fully installed once again verify that all components do not interfere with any vehicle controls and all communication cables are as far away from power cables as possible.

Intercom

1. Make sure 18 pin junction box plug is in the back of the intercom.
2. Plug in 5 pin radio or 3 station radio switch box cable into the back of the intercom, if no radio is being used in the system cover the 5 pin connector with a dust cap.
3. Finally plug in the 4 pin audio in/out plug into the back of the intercom if applicable or cover with a dust cap.
4. Power up the system: and using a voltmeter and check to make sure you have DC voltage to the ignition noise suppressor 2 pin power plug approx. 12-15 volts DC.
5. Plug 2 pin ignition noise suppressor cable back in and power the intercom on with the toggle switch on the front panel, then temporarily turn both the volume and squelch knobs clockwise to the max. Position.
6. Activate a headset either by turning on a wireless headset/helmet on or by plugging a wired headset/helmet into a jack.
7. Make sure any microphone on-off buttons are activated and confirm the intercom is functioning as intended; you should be able to hear yourself talk.
8. Test all headsets and helmet combinations and verify that all stations work.
9. If a station does not work carefully review the instructions again and confirm everything has been installed properly.



Adjusting Squelch and volume

Squelch

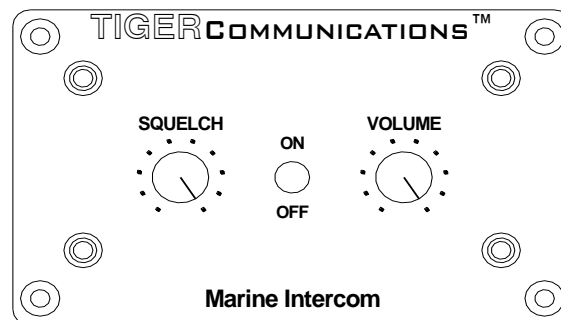
1. First turn intercom volume all the way to the clockwise to max position.
2. Put on headset and adjust squelch clockwise to max. position, you should be able to hear back ground noise easily.

3. Slowly turn the squelch knob counter clockwise until background noise can no longer be heard and speak into microphone to confirm that it will still pick up voice communication.

Volume

1. After adjusting squelch, slowly adjust the volume knob clockwise until the volume is at the desired level.

Note: Once set the volume and squelch should no longer need to be adjusted, other than minor adjustments depending on the environment.



Radio

1. Have another radio that can be tuned to the same frequency nearby to test operation.
2. Turn on radio and adjust squelch by turning knob clockwise until static is heard, after you hear static adjust knob counterclockwise until it stops.
3. For volume using a second radio call over the frequency and adjust the knob counter clockwise until the level you desire is achieved.
4. After adjusting squelch and volume take a headset/ helmet and press all push to talk buttons and talk into the microphone while listening to the second radio to confirm proper function.

3 Radio Switch Box Assembly

1. Have a radio(s) that can be tuned to the same frequency nearby to test operation.
2. Adjust volume and squelch on all radios.
3. Using the first push to talk station talk into a headset while listening to the second radio to confirm proper function and repeat for all additional radios.
4. After testing the first station move on to the second and test all additional radios once again confirming proper function.