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INSTALLATION MANUAL

SERIES 9500

MARINE INTERCOM SYSTEM

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Cautions and Warnings

READ AND SAVE THESE INSTRUCTIONS. Follow the instructions in this installation manual. These instructions must be followed to avoid damage to this product and associated equipment. Product operation and reliability depends on proper installation.



DO NOT INSTALL ANY DAVID CLARK COMPANY PRODUCT THAT APPEARS DAMAGED. Upon unpacking your David Clark product, inspect the contents for shipping damage. If damage is apparent, immediately file a claim with the carrier and notify your David Clark product supplier.



ELECTRICAL HAZARD - Disconnect electrical power when making any internal adjustments or repairs. All repairs should be performed by a representative or authorized agent of the David Clark Company.



STATIC HAZARD - Static electricity can damage components. Therefore, be sure to ground yourself before opening or installing components.

Parts/Tools List

Included Parts/Tools

q	U9500	Master Station	(40794G-03)	Qty: 1
q	U9510BS	Belt Station(s)	(40795G-03)	Customer Specified Qty
q	C95-12BS	Belt Station Cable (straight)	(40798G-01)	1 Req'd for each Belt Station
q	C95-15BS	Belt Station Cable (coiled)	(40872G-01)	1 Req'd for each Belt Station
q	C95-XXLN	System Cable	(40877G-XX)	1 Req'd for each Belt Station
q	C95-20RD	Radio Cable	(40919G-02)	1 Req'd for each Radio
q	C95-15RS	Remote PTT Cable	(40800G-01)	Optional
q	C95-20PW	Power Cable	(40919G-01)	Qty: 1
q	H9530	Over-the-Head Headset	(40864G-02)	Customer Specified Qty
q	H9540	Behind-the-Head Headset	(40797G-02)	Customer Specified Qty
q	C9500PR	Portable Radio Cord	(40799G-01)	1 Req'd for each Portable Radio
q	Master Station Mounting Kit		(40688G-62)	Qty: 1
q	Cable Fittings & Nuts			As Required
q	Blue 8-pin AMP connectors			1 per Belt Station and Radio
q	Yellow 3-pin AMP connector			Qty: 1
q	White 3-pin AMP connectors			1 per Remote PTT
q	AMP tool 59803-1 for blue & white connectors			Qty: 1
q	AMP tool 59804-1 for yellow connectors			Qty: 1
q	Labels for Cables		(19533P-53)	1 sheet

Customer Supplied Parts/Tools

q	Screwdriver Assortment			
q	Pen/Pencil			
q	Drill & Bits			
q	Heat Shrink tubing 1/8" & 3/8 Inch			
q	Wire Strippers			
q	Wire Cutters			
q	Needle-Nose pliers			
q	Tape Measure			
q	X-Acto/Razor knife			
q	Heat gun			
q	Radio adapters (for interfacing with radios—supplied by radio manufacturer)			
q	Pin assignments for each radio adapter (supplied by radio manufacturer)			

System Overview

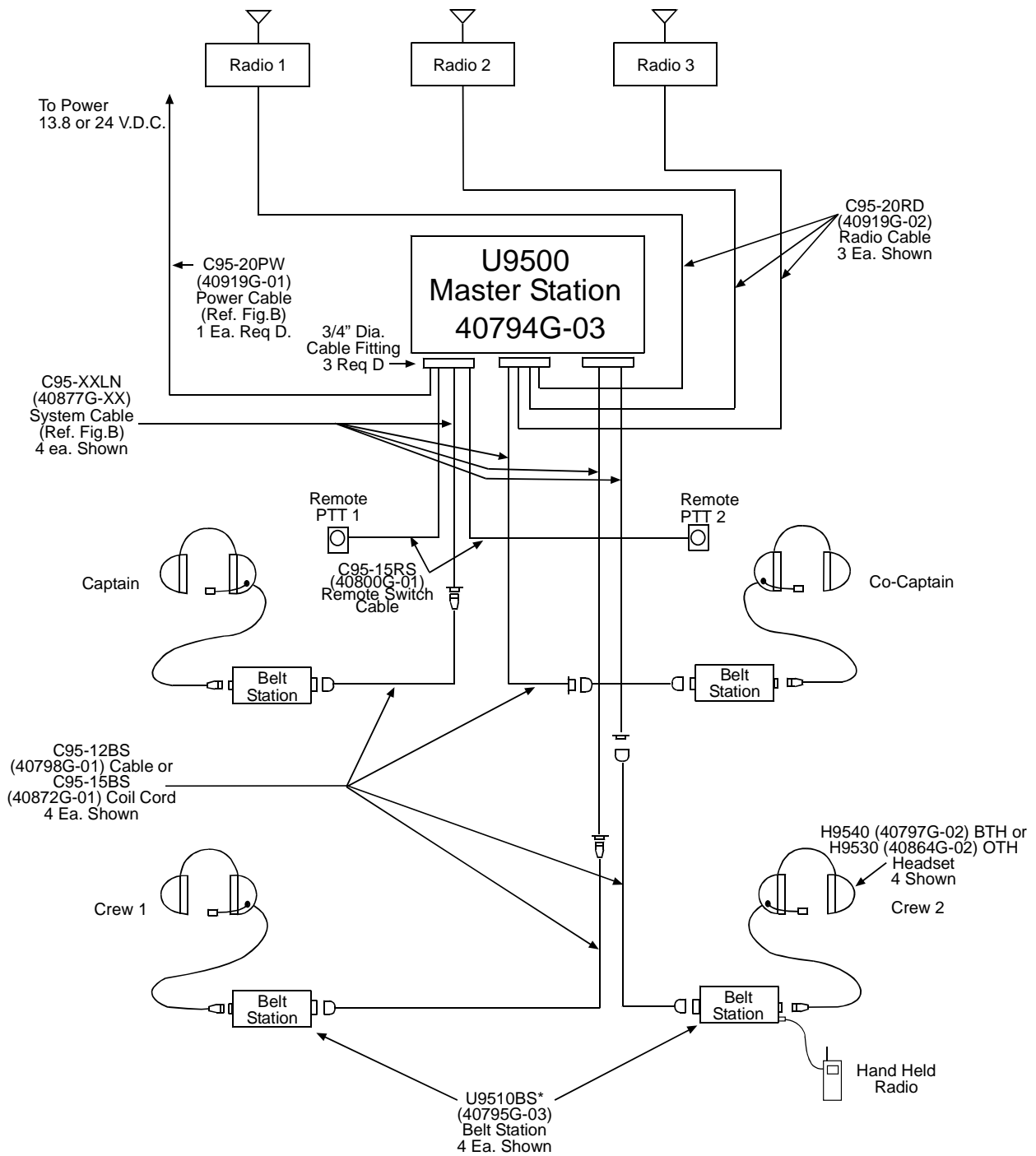
The Series 9500 Marine Intercom System is a weather-tight communication system designed for the marine environment. It allows a captain, co-captain, and two passengers* to communicate with each other over the intercom. All positions also have the ability to communicate through up to three mobile radios. Any one of these radios could be replaced with a Stereo or CD player.

Primary components of the system are indicated in **Table 1**. In addition, a basic layout of a 4-position system is shown in **Figure 1**.

Component	Parts and Model Numbers
Master Station	Master Station – Model Number: U9500
Headsets (up to 6)	Over-the-Head Style – Model Number: H9530 Behind-the-Head Style – Model Number: H9540
Cables	In-Line System Cable (1 per headset) <ul style="list-style-type: none"> • 10 ft length – Model Number: C95-10LN • 20 ft length – Model Number: C95-20LN • 30 ft length – Model Number: C95-30LN Belt Station Cable (1 per Belt Station) <ul style="list-style-type: none"> • Straight Cable – Model Number: C95-12BS • Coiled Cable – Model Number: C95-15BS Power Cable – Model Number: C95-20PW Radio Cable – Model Number: C95-20RD
Remote PTT Switch	Remote PTT Switch - Model Number C95-15RS
Belt Stations	Belt Station – Model Number: U9510BS <ul style="list-style-type: none"> • Belt Station Holster – Model Number: U9510BH

Table 1: System Components

* Up to 8 total positions is possible by modification. Call the David Clark Co, Inc Customer Service Dept. at 800.298.6235 for more information.



* Belt Station Holster U9510BH (40796G-01)

Figure 1: Typical 4-Person Layout

1. Mounting the Master Station

Parts/Tools Required

- q U9500 Master Station (40794G-03)
- q Philips-Head Screwdriver
- q Slotted Screwdriver
- q 11/32-inch nut driver or wrench
- q Tape Measure
- q Pencil
- q Drill
- q 3/16" Drill Bit
- q Master Station Mounting Kit (40688G-62)

Procedure

Location Considerations

Choose a location on a vertical wall that will allow access by the operator and also allow the cover to be removed should adjustments be necessary. The 3/4" cable fittings should be facing down toward the deck to reduce the chance moisture entering the enclosure. The Master Station is weather-tight, however the mounting location should be chosen to minimize direct water exposure.

Mounting

- q Using a Philips screwdriver, remove the 4 screws on the cover of the Master Station and lift off the cover. Observe the 4 mounting holes in each corner, as shown in **Figure 2**.
- q Position the Master Station Drilling Template on the mounting surface and mark each hole with a pencil.
- q Confirm the location and carefully drill each hole using the drill and 3/16" bit.
- q Position the Master Station on the mounting surface and insert a 3/16" machine screw into each mounting hole.
- q On the backside of the mounting wall, use a flat washer, a lock washer, and a nut to secure the Master Station (**Figure 2**).

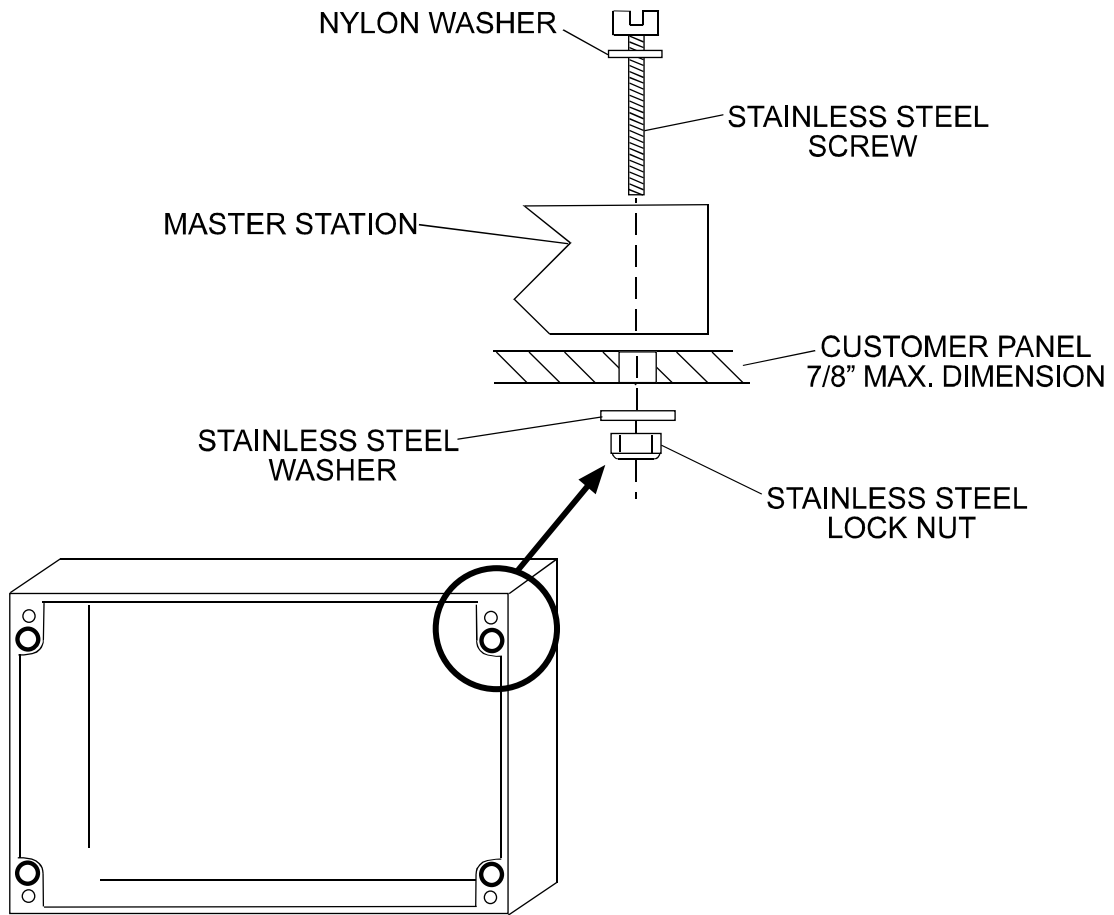
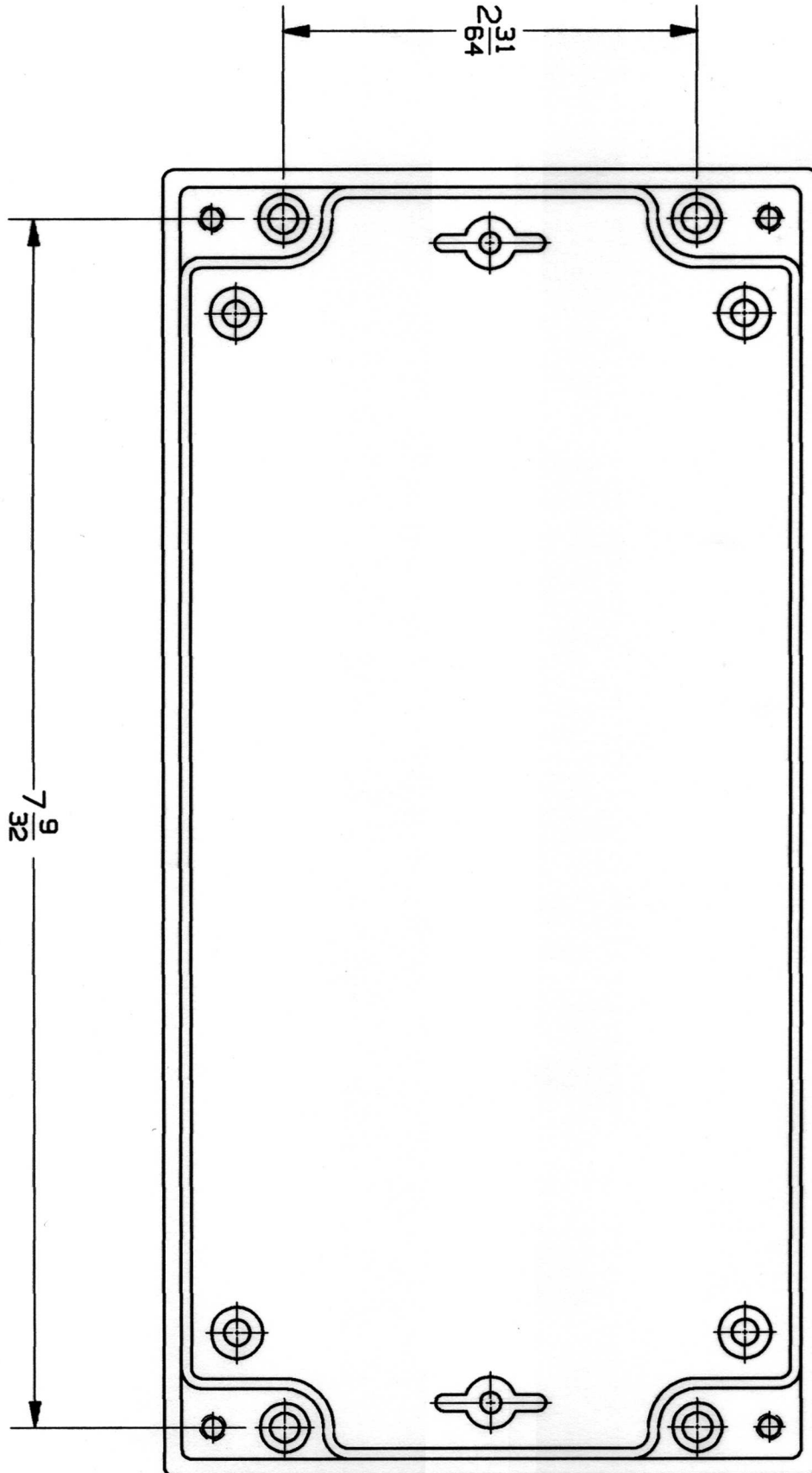


Figure 2: Mounting the Master Station



2. System Cable Wiring

Parts/Tools Required

- q C95-XXLN System Cable (40877G-XX) One for each Belt Station position to be installed
- q System Cable labels
- q Tape Measure

Procedure

- q Determine the locations of each intercom position. Choose locations based on the customer's requirements and maneuverability.
- q Determine the path of the cable between each position and the Master Station. The cable should be routed using under-deck conduits and be as far as possible from radio antenna coax cables and anywhere water may collect.
- q Route the cable. Start at the Belt Station location and feed the end with 2½" of insulation removed toward the Master Station. The end with the large Nexus jack connects to the Belt Station. Use grommets each time the cable is passed through a wall or surface. Use wire ties where necessary.
- q Determine the function of the position (Captain, Co-Captain, Crew1, Crew2). Insert the cable into the correct cable fitting on the Master Station. The correct fitting to use is dependant upon the function of the position, see **Appendix A**.
- q Pull cable through fitting approximately 2-3 ft to allow room for termination.
- q Using the provided cable labels, label the cable once it is through the fitting and inside the Master Station (**Figure 4**).
- q Repeat this procedure for each Belt Station position you are installing.
- q Termination of this end of the cable is performed in **Section 6**.

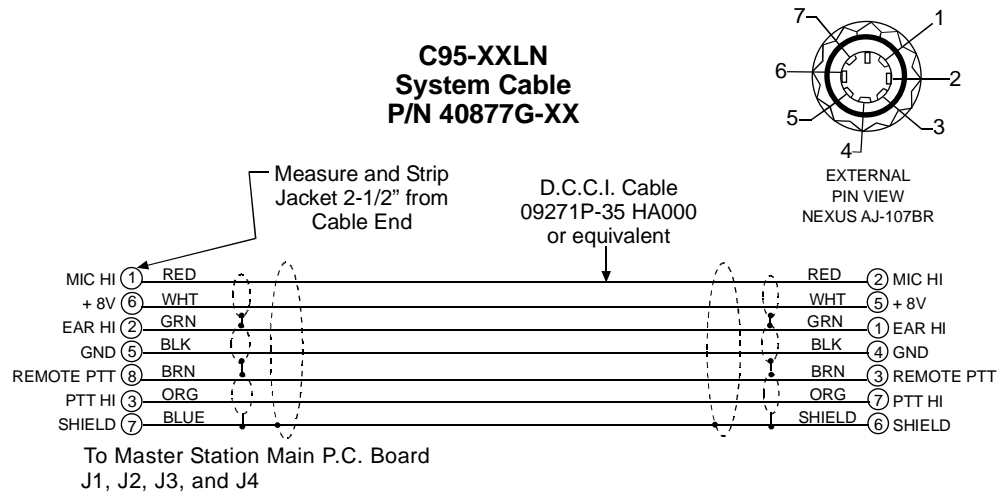


Figure 3

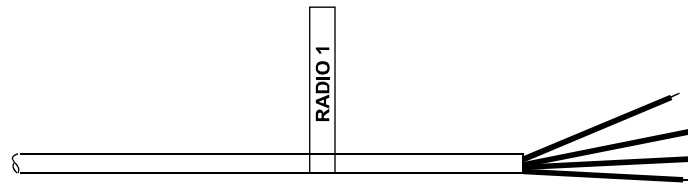


Figure 4: Correct use of cable labels

3. Radios

Parts/Tools Required

- q C95-20RD Radio Cable (40919G-02) One for each radio in the system, max of 3.
- q Radio adapters (for interfacing with radios; supplied by radio manufacturer)
- q Pin assignments for each radio adapter (supplied by radio manufacturer)
- q Tape Measure
- q Wire Cutters
- q Wire Strippers
- q Soldering Iron/Solder
- q Heat Shrink Tubing 1/8"
- q Heat Gun
- q Radio Cable labels

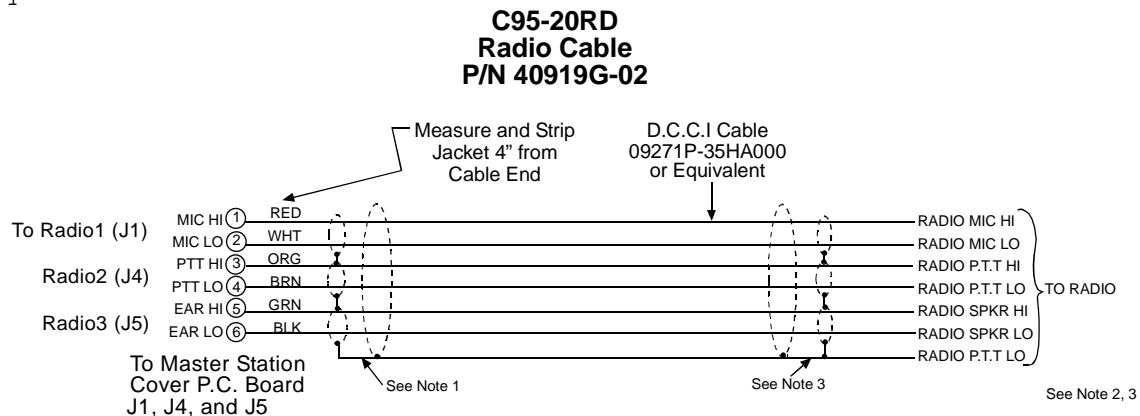


Figure 5

Procedure

- q Determine the locations of each radio. The radios should already be installed and tested.
- q Determine the path of the cable between each radio and the Master Station. The cable should be routed using under-deck conduits and be as far as possible from radio antenna coax cables and anywhere water may collect.
- q Measure the length of cable necessary, adding 3 ft as a service loop.
- q If necessary, trim the length of the cable to the length you just determined in the previous step. Be sure to trim the un-prepared Radio end of the cable. See **Figure 5** above.
- q Route the cable. Use grommets each time the cable is passed through a wall or surface. Use wire ties where necessary.
- q Determine which number radio this cable corresponds to (Radio 1, Radio 2 or Radio 3)
- q Feed the Master Station end of the cable through the correct cable fitting. The correct fitting to use is dependant upon which number radio this cable goes to. See **Appendix A**.
- q Pull cable through fitting approximately 2-3 ft to allow room for termination.
- q Using the provided cable labels, label the cable once it is through the fitting and inside the Master Station (Figure 4).
- q Review pin assignments for radio connector and determine which wires to connect to each pin. Using wire cutters and wire strippers, prepare the cable for the connector. Install the connector, using heat shrink tubing as necessary. The shield in this cable should be connected to GND or PTT LO on the radio, along with the Brown wire. See **Figure 5 & Appendix A**.
- q Repeat this procedure for each radio in the system.

4. Remote PTT (Optional)

Parts/Tools Required

- q C95-15RS Remote PTT Cable (40800G-01) Maximum of 2
- q Tape Measure
- q Wire Cutters
- q Wire Strippers
- q Remote PTT Cable Labels

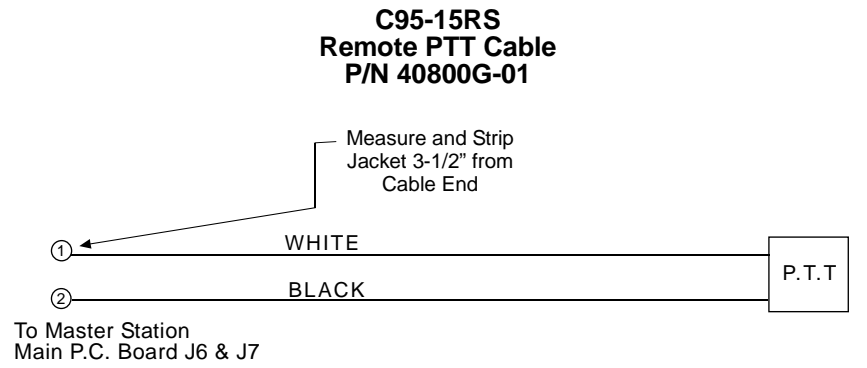


Figure 6

Procedure

- q Determine the locations of each PTT switch. Choose location based on customer requirement and accessibility (typically on the throttle).
- q Determine the path of the cable between each PTT switch location and the Master Station. The cable should be routed using under-deck conduits and be as far as possible from radio antenna coax cables and anywhere water may collect.
- q Estimate the length of the cable necessary, adding 3 ft as a service loop.
- q If necessary, trim the length of the cable to the length you just estimated. Be sure to trim the end of the cable that does NOT have the PTT switch.
- q Route the cable. Use grommets each time the cable is passed through a wall or surface. Use wire ties where necessary.
- q Determine which Remote PTT switch this cable corresponds to (Captain or Co-Captain).
- q Feed the Master Station end of the cable through the **F1** fitting on the Master Station. See **Appendix A**.
- q Pull cable through fitting approximately 2-3 ft to allow room for termination.
- q Using the provided cable labels, label the cable once it is through the fitting and inside the Master Station.
- q Repeat this process for the 2nd Remote PTT switch (if applicable).

5. Power Cable

Parts/Tools Required

- q C95-20PW Power Cable (40919G-01)
- q 2-Amp Circuit Breaker location on ship or David Clark 2-Amp Fuse kit (40688G-47)
- q Soldering iron or crimp terminals
- q Wire cutters
- q Tape Measure
- q Wire strippers
- q Power Cable label

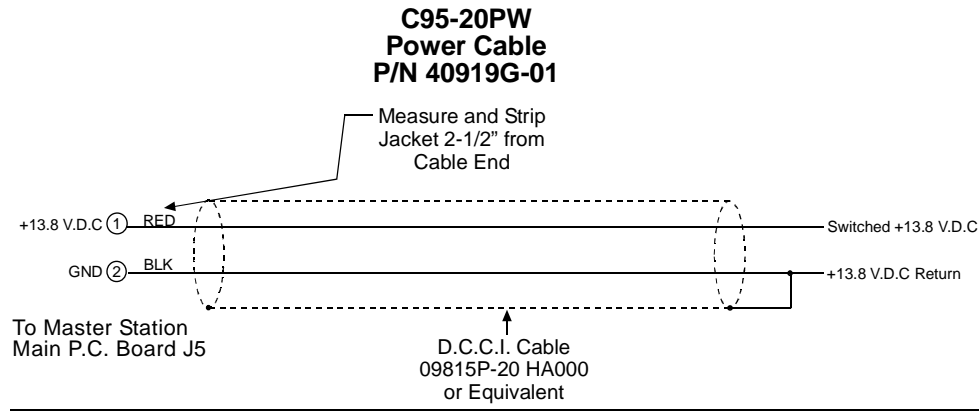


Figure 7

Procedure

- q Determine the location of the 11-30VDC source and Ground pick-off points
 - o Preferably a 2-Amp circuit breaker
 - o Connection method (solder, screw terminals, lugs, etc)
- q If only a higher-ampereage circuit breaker is available, it may be used, but the David Clark 2-Amp Fuse Kit (40688G-47) must also be used.
- q Determine the path of the cable between the power source and the Master Station. The cable should be routed using under-deck conduits and be as far as possible from radio antenna coax cables and anywhere water may collect.
- q Measure the length of cable necessary, adding 3 ft as a service loop.
- q If necessary, trim the length of the cable to the length you just determined in the previous step.
- q Route the cable. Use grommets each time the cable is passed through a wall or surface. Use wire ties where necessary.
- q Feed the Master Station end of the cable through the **F1** cable fitting. See **Appendix A**.
- q Pull cable through fitting approximately 2-3 ft to allow room for termination.
- q Using the provided cable labels, label the cable once it is through the fitting and inside the Master Station.

Before continuing, ensure that power is shut off to the point where you are going to connect the power cable

- q Using the wire cutters and wire strippers, prepare the power source end of the cable as shown in **Figure 8** below.
- q If using the David Clark 2-Amp Fuse Kit, please see **Appendix B** for assembly instructions.
- q Connect the cable to the power source
 - o Connect the RED to the positive (+) terminal.
 - o Connect the BLACK **and** SHIELD to the negative (-) terminal
- q Do not turn on power at this time, wait until **Section 9: Testing & Troubleshooting**.

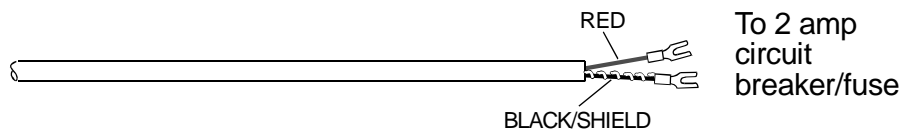


Figure 8: Power Cable

6. Master Station Internal Connections

Parts/Tools Required

- q Blue AMP connectors (One for each Radio cable and each System cable)
- q Yellow AMP connector (One required for Power cable)
- q White AMP connectors (One for each Remote PTT cable)
- q AMP tool 59803-1 for blue & white connectors
- q AMP tool 59804-1 for yellow connectors
- q Screwdriver (for top cover screws)
- q Waterproof sealant/caulking

Procedure

Affixing AMP Connectors to Cables

- q Using the chart in **Table 2** (next page), affix the correct connector to each cable.
 - o Use the **Correct AMP Tool** for each connector.
 - o See **Appendix C** for proper wiring and use of AMP tools.
- q Place the connector on a flat surface or suitable support to prevent rocking when inserting the wires.
- q Position wire over the contact in the AMP connector. Make sure the end of the wire does not extend over the shoulder of the connector. Start the wire into contact with finger.
- q Place appropriate tool on wire over contact so that the center line of the tool matches the contact. The tool must be positioned as shown in **Appendix C**.
- q Holding the tool handle perpendicular to the contact, apply a constant, direct pressure until the wire is terminated with the contact. Exert pressure in such a manner as to avoid contact damage.
- q Ensure that a good connection is made to each terminal on the connectors. The wires should look just like the picture. Trim cable and reinstall any connectors that are not done properly.

Cable Type	Connector(s) on Master Station	Connector Type	Correct AMP Tool	Connector Wiring Diagram
System Cables	Main Board: J1-J2-J3-J4	Blue Connector	59803-1	
Radio Cables	Cover Board: J1-J4-J5	Blue Connector	59803-1	
PTT Cables	Main Board: J6-J7	Small White Connector	59803-1	
Power Cable	Main Board: J5	Large Yellow Connector	59804-1	

Table 2: Affixing Amp Connectors

Attaching AMP Connectors to Master Station

- q Using **Figure 8**, Plug each AMP connector onto the proper mating pins on the board.
- q Double-check that the pins on each connector are aligned correctly and that each connector is plugged into the correct set of pins.
- q Pull any slack in each cable through the cable fittings. Tighten cable fittings snugly, but by hand.
- q Use a waterproof sealant or caulking to fill any unused holes in the fittings.
- q To ensure proper fitting of top cover, route cables as shown in **Figure 8**.
- q Carefully place cover on the Master Station, watching for any wires that might be in the way or stick out the sides.
- q Use the 4 screws to securely tighten the cover.

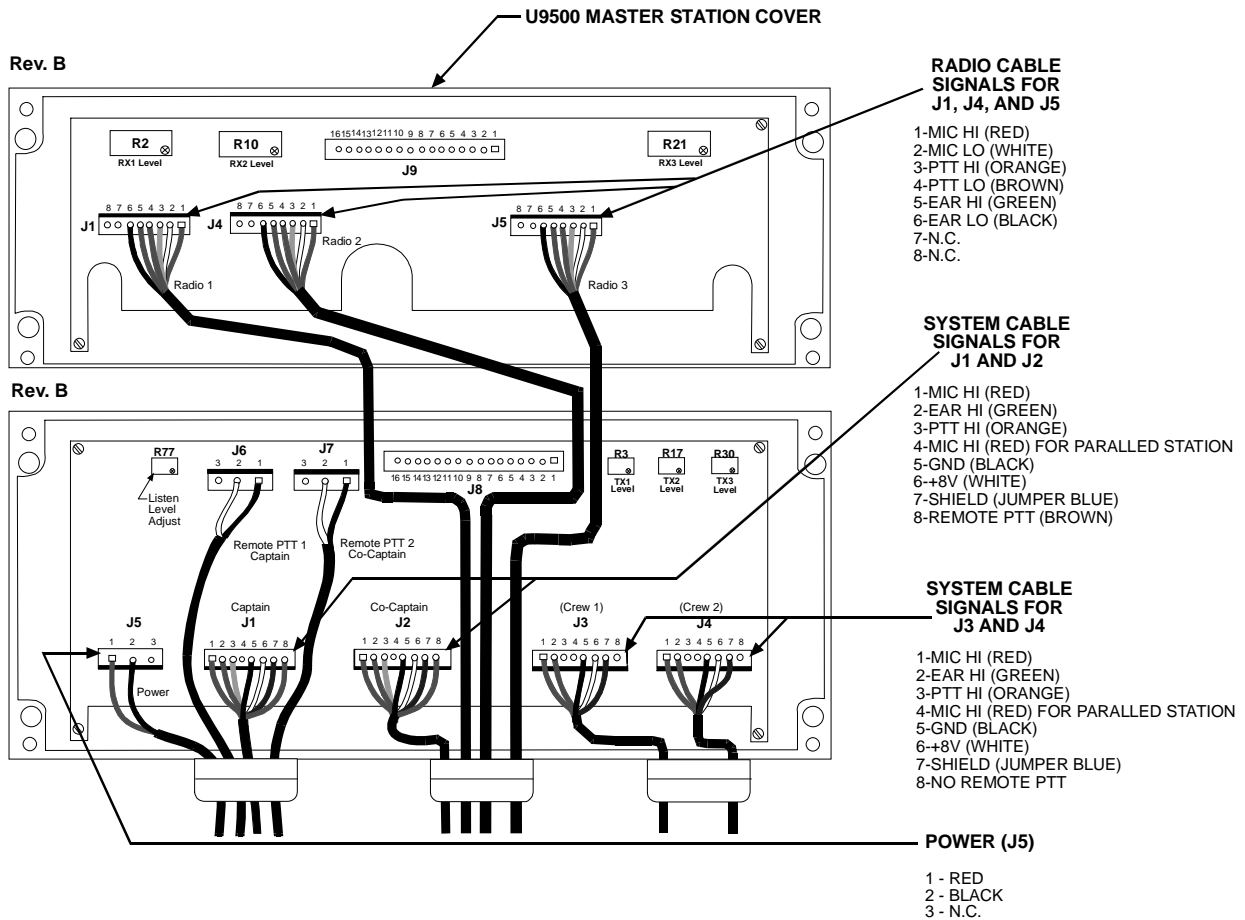


Figure 9: Master Station Internal Connections

7. Connecting Headsets & Belt Stations

Parts/Tools Required

- q C95-10BS Belt Station(s)
- q C95-12/15BS Belt Station Cable(s) (straight or coiled)
- q H9530/H9540 Headset(s)
- q Hand-held radio (optional)
- q Cord for hand-held radio (optional)

Procedure

- q Examine **Figure 10** which shows the interconnections on the Belt Station.
- q Connect the black/green connector on the headset cable to the black/green jack on the Belt Station by aligning the colored lines and pushing together until they lock. To remove, turn collar counter-clockwise and pull.
- q Connect the black/red connector on the Belt Station Cable to the black/red jack on the Belt Station by aligning the colored lines and pushing together until they lock. To remove, turn collar counter-clockwise and pull.
- q Connect the system end of the Belt Station Cable (large black/green plug) to the mating jack on the System Cable by aligning the keyway and pushing until it locks into place. To remove, simply pull apart.
- q If you are also connecting a hand-held radio, connect the yellow/black end of the hand-held radio cable to the yellow/black jack on the Belt Station. The other end connects to the radio. Always be sure the hand-held radio is off while connecting or disconnecting from the Belt Station.
- q Repeat the procedure for each Belt Station location in the system.

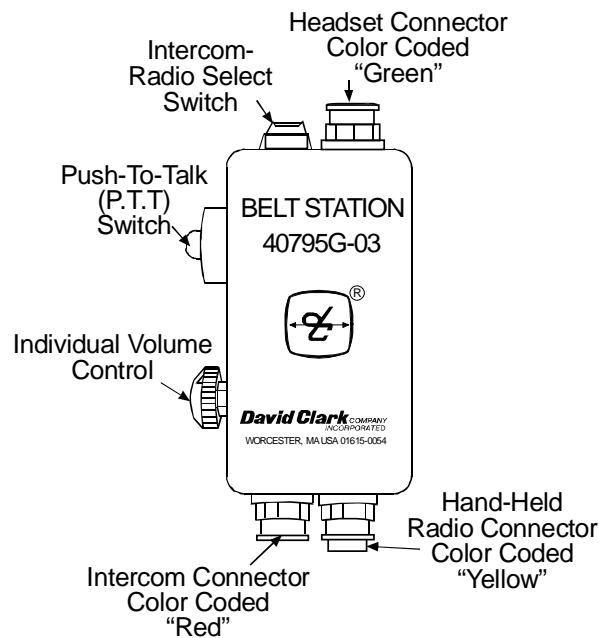


Figure 10: Belt Station Connections

8. Operation

Operation of Master Station

The Master Station controls radio access and volume levels for the 9500 Marine Intercom System.

1. *Radio Rx Volume* adjusts the receive audio level of all three radios on the intercom.
2. *System Volume* adjusts the voice level of all of the users on the intercom.
3. The toggle switches control whether the Rx audio from the radios can be heard. Each radio has its own Rx Audio On/Off switch.
4. The *Radio Select* switch determines which radio is active for transmitting.

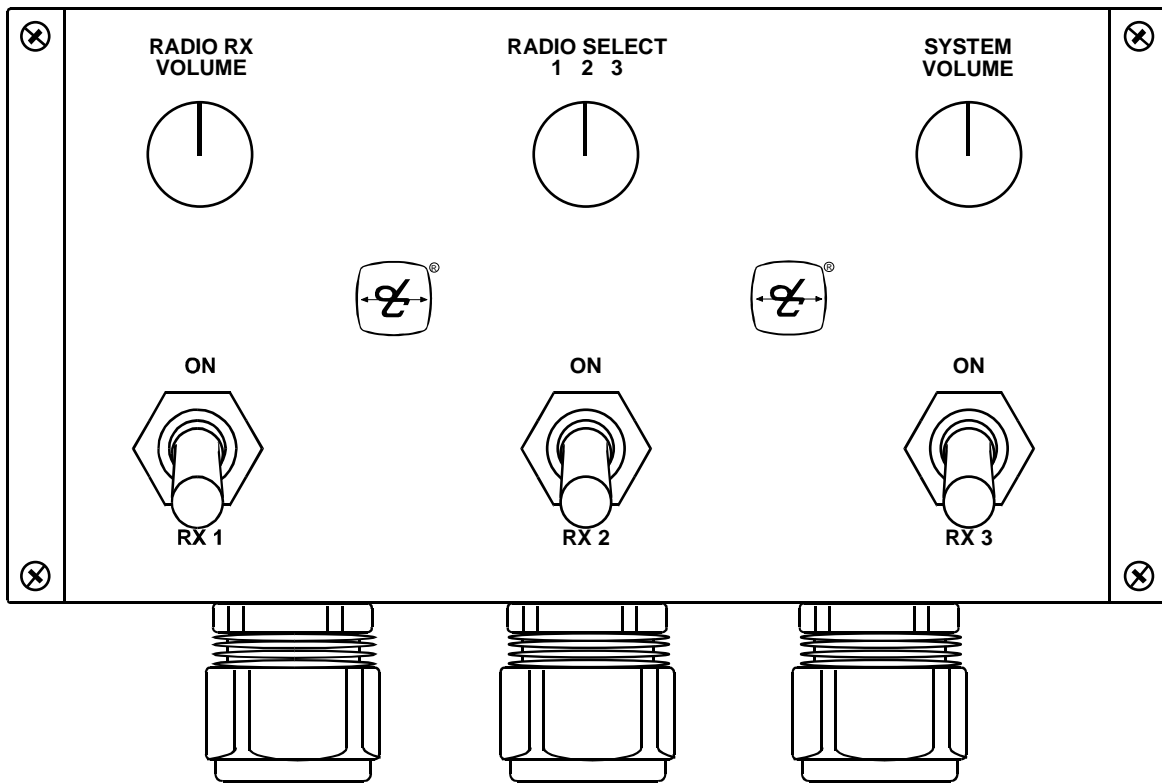


Figure 11: Master Station Controls

Operation of Belt Station

The Belt Station is a dual-purpose interface allowing for intercom or stand-alone use. When the Belt Station is connected to the 9500 Intercom System, it's user can access the boat's radios and speak with other users on the intercom. When disconnected from the intercom, operation defaults to the user's handheld radio (if present). See **Tables 3&4** for details of operation.

Belt Station Connected to Intercom, with or without Hand-Held Attached

Intercom/Radio Switch Position	Connected to Intercom?	PTT function	Headset Can Hear:
IC	YES	PTT enables user to speak over intercom; No ship radio transmit	Intercom, Ship radio, Hand-held radio (if connected)
RAD	YES	User has "hot mic" over intercom; PTT enables transmit over ship radio	Intercom, Ship radio, Hand-held radio (if connected)

Table 3: Belt Station Operation when connected to 9500 Marine Intercom System

Belt Station with Hand-Held Radio Attached and **NOT** Connected to Intercom

Intercom/Radio Switch Position	Connected to Intercom?	PTT function	Headset Can Hear:
IC	NO	PTT enables transmit over hand-held radio	Hand-held radio
RAD	NO	PTT enables transmit over hand-held radio; VOX also enabled (if supported by radio)	Hand-held radio

Table 4: Stand-alone Belt Station operation

9. Testing & Troubleshooting

Parts/Tools Required

- q Completion of the previous sections in their entirety
- q An assistant (optional)

Test Procedure

- q Double-Check all connections and wiring from the previous sections.
- q Complete connections of power cables to power source.
- q Turn on power at the source.
- q From each Belt Station verify intercom communication.
 - o With IC/RAD switch in RAD mode the user has “hot-mic” over intercom.
 - o With IC/RAD switch in IC mode the user must press the PTT to talk over the intercom.
- q From each Belt Station verify receive and transmit capability over each radio in the system.
 - o Flip switches for each radio on the Master Station to the ON position (up).
 - § Verify receive audio from each radio.
 - o IC/RAD switch must be in RAD mode, only then does PTT key the radio.
 - o At the Master Station, switch to each radio with the selector switch and verify PTT/Mic.
 - § This switch controls which radio the Belt Stations have Mic/PTT access to.
 - o Open the squelch on each radio and verify that it is heard in each headset.
- q Test portable radio access from each Belt Station
 - o Connect portable radio to Belt Station.
 - o With Belt Station also connected to main system, the user should only have Rx access to hand-held radio.
 - o Remove Red connector (intercom) from the Belt Station.
 - o Confirm Tx & Rx to hand-held radio.

Troubleshooting

Symptom	Possible Cause(s)
Cannot hear any audio in headset(s)	<ol style="list-style-type: none"> 1. Power to system turned on? 2. System Volume setting up to an audible level? 3. Radio Volume settings up to an audible level?
Cannot speak over intercom	<ol style="list-style-type: none"> 1. Power to system turned on? 2. Belt Station IC/RAD switch in IC mode? If so, need to PTT for intercom
No (or low) radio receive audio	<ol style="list-style-type: none"> 1. Power to system turned on? 2. Radio turned on? 3. Radio's volume setting up to an audible level (on radio)? 4. Check radio settings/wiring.
No boat radio transmit	<ol style="list-style-type: none"> 1. Power to system turned on? 2. Radio turned on? 3. Belt Station IC/RAD switch in IC mode? Must be in RAD mode. 4. Check radio settings/wiring.
No handheld radio transmit	<ol style="list-style-type: none"> 1. Power-off and then power-on the handheld radio
Too low or too high radio transmit audio	<ol style="list-style-type: none"> 2. See Appendix D for adjustment information.
Belt Station not receiving/transmitting	<ol style="list-style-type: none"> 1. Check above suggestions 2. Check Belt Station wiring
Other audio level problems	<ol style="list-style-type: none"> 1. See Appendix D for adjustment information.

Appendix A

Master Station Internal Connections

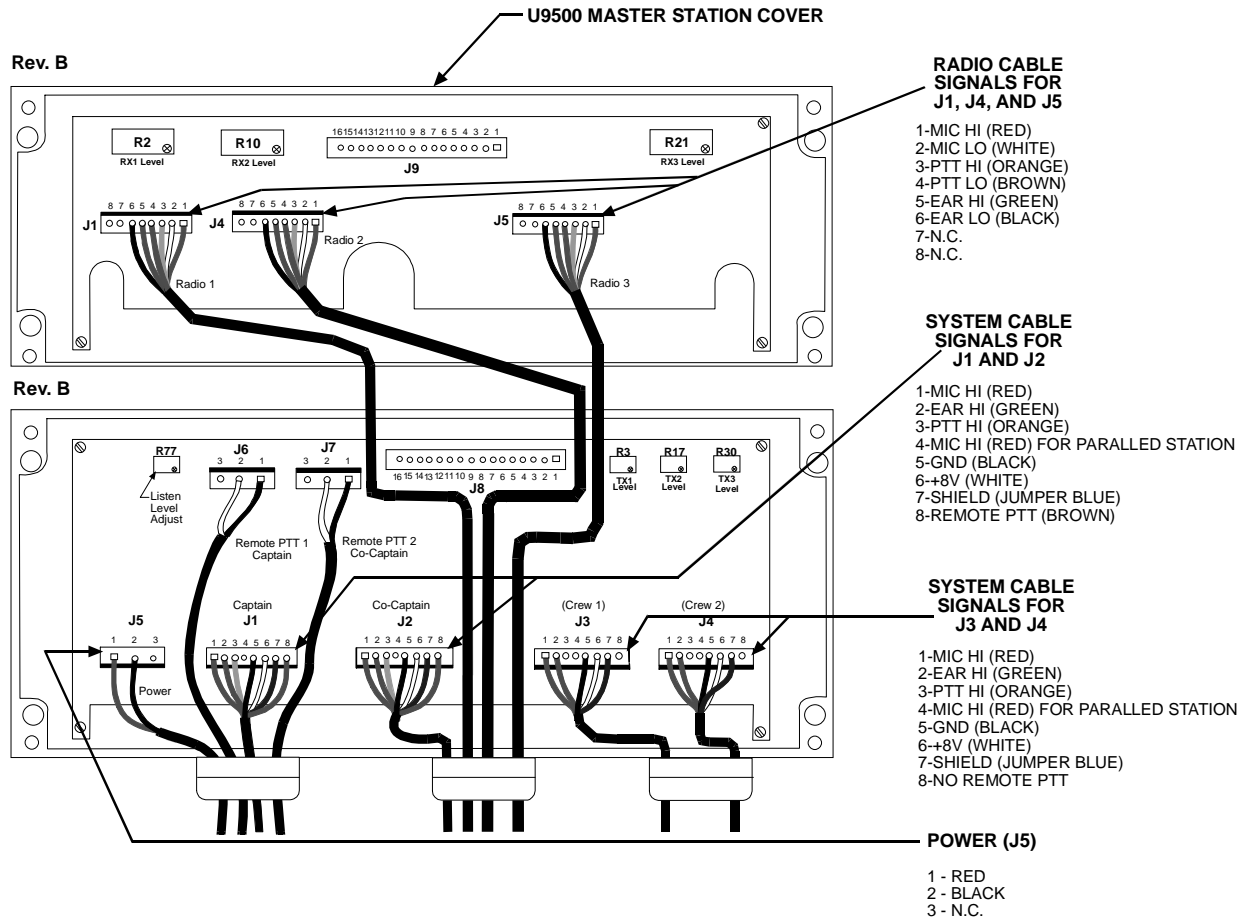


Figure A1: Master Station Internal Connections

Appendix B

P/N 40688G-47 Waterproof Fuse Kit Installation Instructions

Parts/Tools Required

- 1/8-inch diameter heat shrink tubing
- Wire strippers
- Crimp tool (Radio Shack P/N 64-409 or equivalent)
- Crimp terminals
- 2-Amp fuse kit

Procedure

1. Using a heat gun, install 1/8" diameter heat shrink tubing* over one end of the 4" red wire (supplied). Install the second piece of 1/8" diameter heat shrink tubing over the red wire on the C98-20PW Power Cable.
2. Thread red wire of power cord with heat shrink tubing* into one end of fuse holder.
3. Thread the heat shrink end of the 4-inch red wire into other end of fuse holder.
4. Strip insulation on both wires 1/4 inch.
5. Crimp fuse clips to both wires. (Recommended crimp tool Radio Shack No. 64-409 or equivalent).
6. Insert 2 amp fuse.
7. Snap two halves of housing together.

* Note: The heat shrink tubing is necessary in order to provide weather tightness.

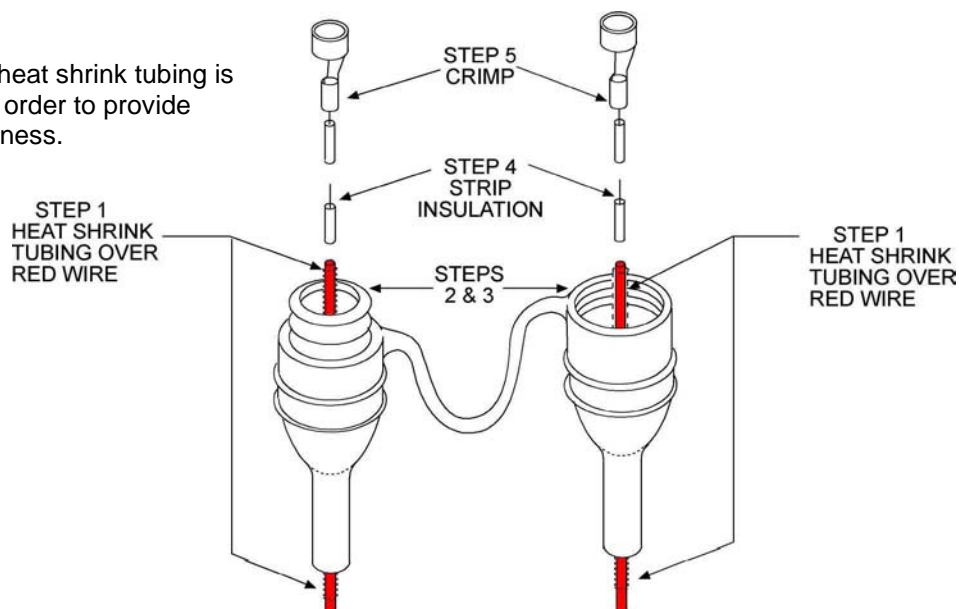


Figure B1: Proper assembly of Fuse Holder Kit (40688G-47)

Appendix C

AMP INSERTION TOOLS 59803-1 AND 59804-1

The tool number is stamped on the tool side and the Amp marking is molded on both sides. Insertion tool 59803-1 is designed for connectors with contacts on .100-in. centers (MTA 100), and insertion tool 59804-1 is designed for connectors with .156-in. centers (MTA 156).

INSERTION PROCEDURES

1. Place the connector block on a flat surface or suitable support to prevent possible rocking when inserting the wire.
2. Position wire over the contact in the MTA connector. Make sure the end of the wire does not extend over the shoulder of the connector. Start the wire into contact with finger.
3. Place appropriate tool on wire over contact so that the centerline of the tool matches the contact. The tool must be positioned as shown in Figure below.
4. Holding the tool handle perpendicular to the contact, apply a constant, direct pressure until the wire is terminated with the contact. Exert pressure in such a manner as to avoid contact damage.
5. Remove tool and inspect contact for proper wire insertion. If necessary, repeat the operation.

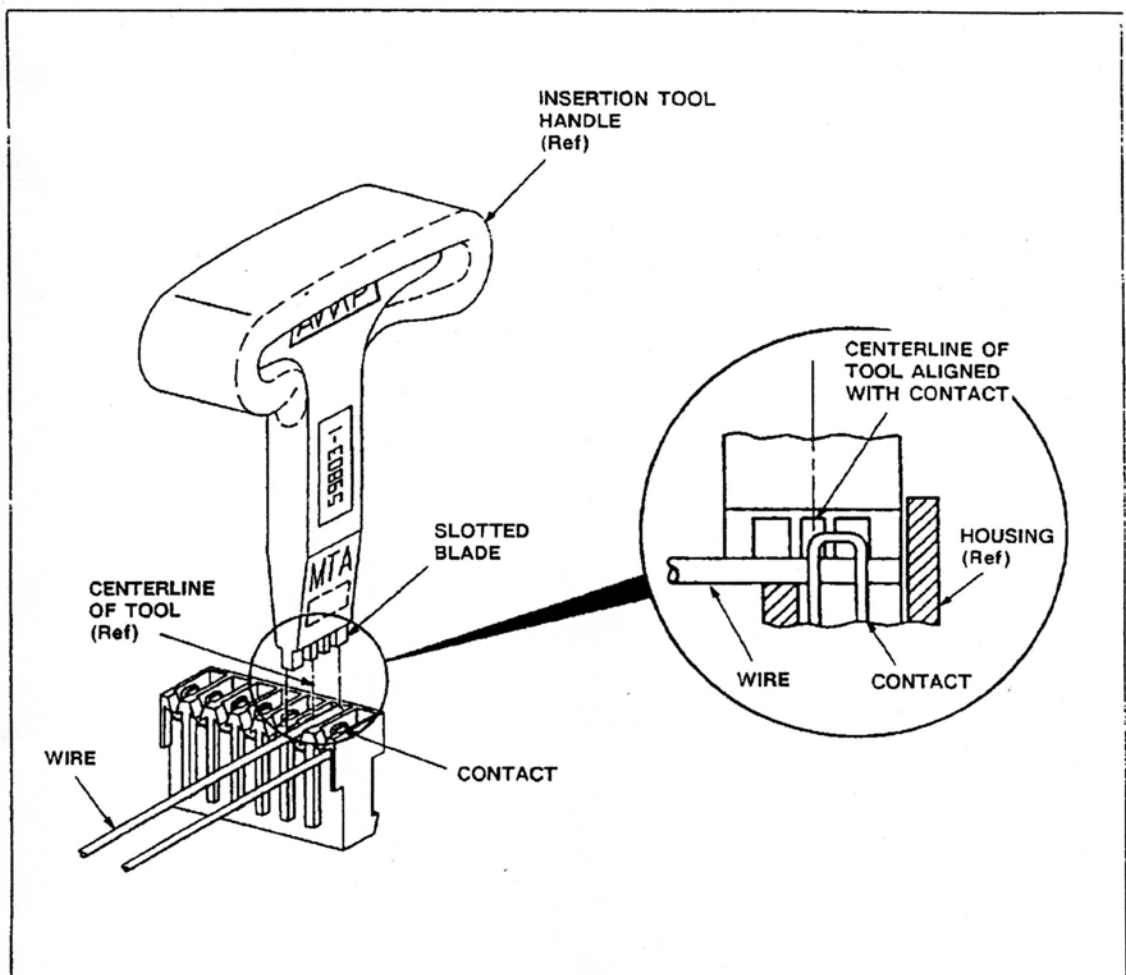


Figure C1: Insertion Tool

Appendix D

Master Station Adjustments

Radio Transmit Level Adjustments

These adjustments have been pre-set to optimum levels and should not need to be performed in the field. However, they are included in this section should their adjustment be necessary.

To increase or decrease the transmit mic audio level for Radio 1, locate and adjust R3 on the inside of the U9500 Master Station. For Radio 2, locate and adjust R17. For Radio 3, locate and adjust R30. (see **Figure A1** for the locations of these components). Turning the potentiometers clockwise will increase the levels and counter-clockwise will decrease the levels. Use a jeweler's screwdriver to make these adjustments. Please note that these are multi-turn potentiometers, so several rotations may be necessary to achieve the desired results.

It is also important not to increase the levels so much as to over-modulate the radios. This is in violation of FCC regulations and will seriously degrade the quality of the transmissions. If you have the equipment to measure the modulation, 4-4.5 KHz is an optimum deviation level.

Radio Receive Level Adjustments

The factory has pre-set the receive audio adjustment potentiometers to levels which should be acceptable in most applications. Should the need arise to change these settings, the installer may do so by the following procedure:

To increase or decrease the receive audio levels for Radio 1, locate and adjust R2 inside the U9500 Master Station. For Radio 2, locate and adjust R10. For Radio 2, locate and adjust R21 (see **Figure A1** for the locations of these components). Please note that these are multi-turn potentiometers, so several rotations may be necessary to achieve the desired results.

System Volume Level Adjustment

The system volume (intercom volume) level is adjusted from the U9500 Master Station's *System Volume* knob. These instructions are provided should additional adjustment be necessary.

To increase or decrease the system volume level, locate and adjust R77 (See **Figure A1**). Please note that this is a multi-turn potentiometer, so several rotations may be necessary to achieve the desired result.

Appendix E

Master Station Specifications

Enclosure:	Weather-tight RFI shielded enclosure for increased reliability Cast Aluminum "Aluform" NEMA enclosure black
Operating Temperature:	-40C to +60C
Frequency Response:	300 Hz to 3 kHz
Output Levels:	System output adjustable to headset ears: 0.25V _{RMS} to 3.0 V _{RMS} with normal speech levels.
Radio TX Audio:	System provides transformer-coupled Radio TX Audio output (600 ohms secondary) with a level adjustment. Radio 1 and 2 each have a maximum output level of 870 mV _{RMS} . The maximum output level of Radio 3 is 1.7 V _{RMS} . TX Audio outputs for all three radios are based on a 98 dB SPL 1/4" from the headset microphone.
Radio RX Audio:	System has transformer-coupled audio input (600 ohms primary) and can be adjusted for various input levels (depending on Radio Volume Setting).
Radio Inputs:	Provides connection for up to three mobile radios.
Radio Connection:	MTA-100 Amp Closed End Housing with pins spaced on 0.100" centers. Header is mounted onto PC board and cable is secured with a waterproof cable fitting on the Master Station housing.
Crew Members:	Up to 8 headsets (pairs wired in parallel)
Power Requirements:	13.8 or 24 Volts DC (Maximum Current 1A)
Dimension:	7.87" L x 3.94" W x 2.36" H
Weight:	2.48 lbs.

Table 5: Master Station Specification