



**3025R·3020R·3015R·3010R  
FIRE APPARATUS INTERCOM REMOTE HEAD**



**3025 REMOTE HEAD**

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**INSTALLATION & OPERATION MANUAL**

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## **SYSTEM ORIENTATION**

### **SYSTEM OVERVIEW**

This manual provides an overview of the 3010R Series Intercom System and an introduction to its individual components. Figure 1 shows a typical system. Refer to this diagram for each component.

### **REMOTE HEAD**

The base unit has the ability to be remotely controlled by up to two remote heads. These panels function the same as the base unit front panel. Regardless of which button is pressed, all units will respond and update at the same time. Power to the unit is supplied through the CA cable from the intercom. The remote head can be mounted **INSIDE** the apparatus either flush on a surface or with a special bracket.

### **INTERCOM**

The main control unit for the 3010R Series Intercom System which contains all the controls and interface circuitry.

### **2-WAY RADIO**

The existing 2-way radio in the apparatus.

### **MOBILE RADIO INTERFACE CABLE**

Provides the interface connections between the 3010R Series Intercom Unit and the 2-way radio in the apparatus. There are many different cable assemblies available; the particular cable needed depends on the make and model of your radio. Contact your local Firecom dealer for more information regarding an interface cable specific to your radio.

### **POWER CABLE ASSEMBLY**

Provides the power connections for the 3010R Series Intercom Unit. The power connections should be made at the same place as the power connections for your radio.

### **HM-10 HEADSET MODULES**

Headsets are plugged into the headset modules to interface them into the system. The HM-10 is the standard headset module for use inside the apparatus.

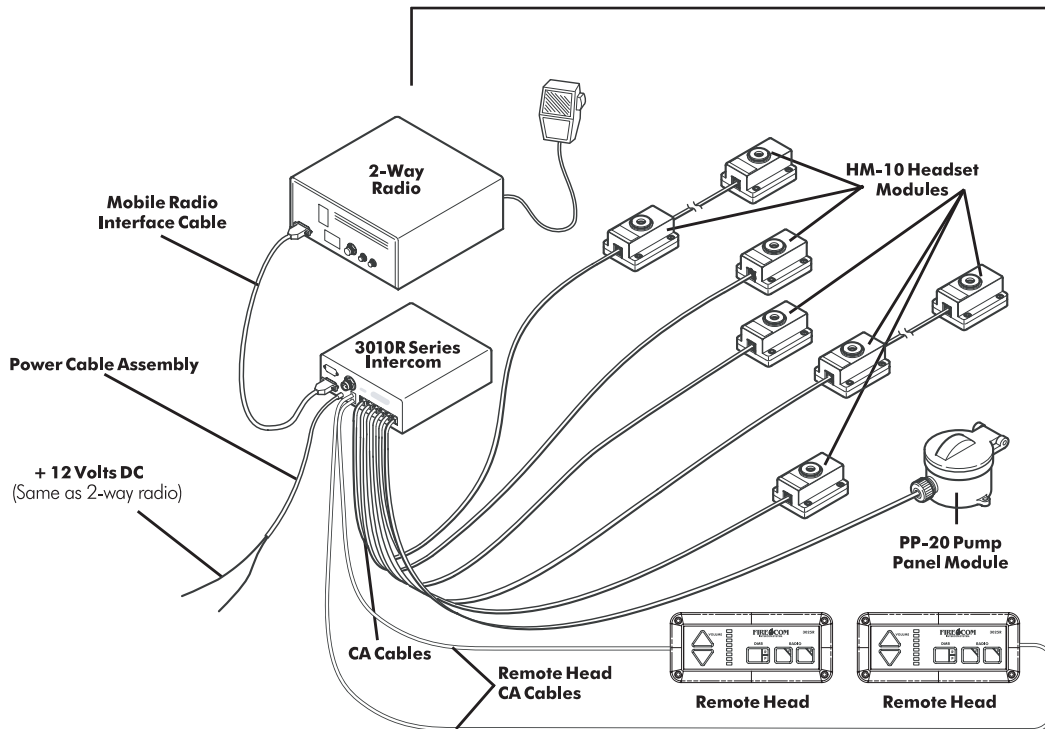
### **PP-20 PUMP PANEL MODULE**

A water-resistant headset module for use on the exterior of the apparatus (e.g. at the pump panel, at the tail-board, etc.).

# SYSTEM ORIENTATION

## CA CABLES

Six-conductor flat cable which connects the 3010R Series Intercom Unit to the HM-10, PP-20 headset modules and the remote heads.



**FIGURE 1:**  
3010R Series  
System Overview

## SYSTEM ORIENTATION

### REMOTE HEAD:

**REMOTE CONTROL 3010R:** Part Number: 108-1310-00

This will control the 3010R Intercom

**REMOTE CONTROL 3015R:** Part Number: 108-1315-00

This will control the 3015R Intercom

**REMOTE CONTROL 3020R:** Part Number: 108-1320-00

This will control the 3020R Intercom

**REMOTE CONTROL 3025R:** Part Number: 108-1325-00

This will control the 3025R Intercom

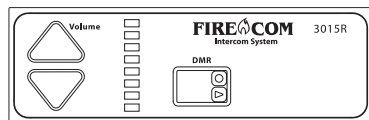
**BRACKET ASSEMBLY:** Part Number: 108-0303-00

Remote Kit



### MODEL 3010R

Intercom Communication  
Single-Radio Interface



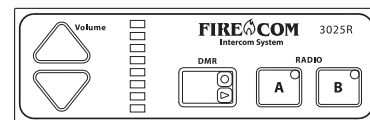
### MODEL 3015R

Intercom Communication  
Single Radio Interface  
Digital-Messsage Recorder



### MODEL 3020R

Intercom Communication  
Dual-Radio Interface



### MODEL 3025R

Intercom Communication  
Dual Radio Interface  
Digital-Messsage Recorder

## SYSTEM ORIENTATION

### 3010R SERIES FRONT PANEL

Figure 2 shows the front panel of the 3025R intercom. Listed below are the different items on the front panel and what they control/signify.

#### VOLUME UP & VOLUME DOWN BUTTONS

Adjust the master volume for the intercom system.

#### VOLUME INDICATOR LED'S

8 yellow LED's which indicate the master volume level setting. There are several volume changes between lights.

#### DIGITAL MESSAGE RECORDER BUTTON (3015R & 3025R ONLY)

Used for saving and playing a message that has been recorded by the digital message recorder (DMR).

#### PLAY LED (3015R & 3025R ONLY)

A green LED which indicates the digital message recorder is playing a recorded message.

#### RECORD LED (3015R & 3025R ONLY)

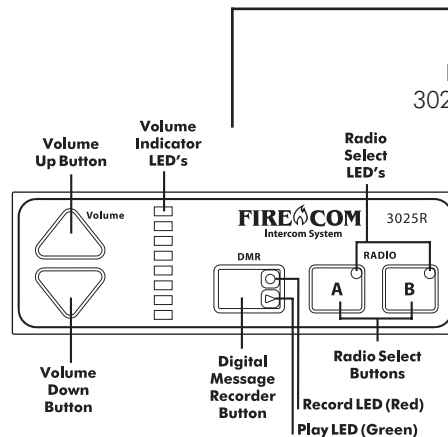
A red LED which indicates when the digital message recorder is recording a message.

#### RADIO SELECT BUTTONS (3020R & 3025R ONLY)

Used to select which radio will be transmitted on when the PTT on a radio-transmit headset is pressed.

#### RADIO SELECT LED'S (3020R & 3025R ONLY)

Lights up to show the status of the selected/keyed radio. Green when the radio is selected; red when the radio is keyed for transmission.



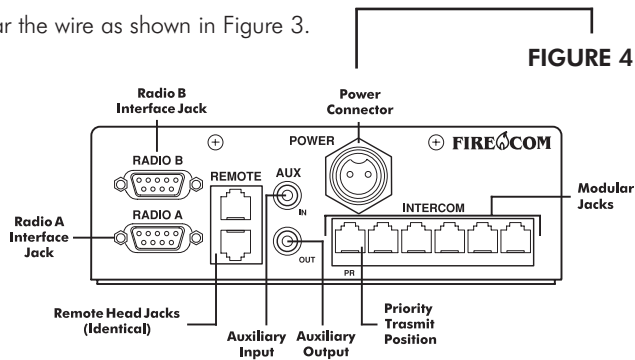
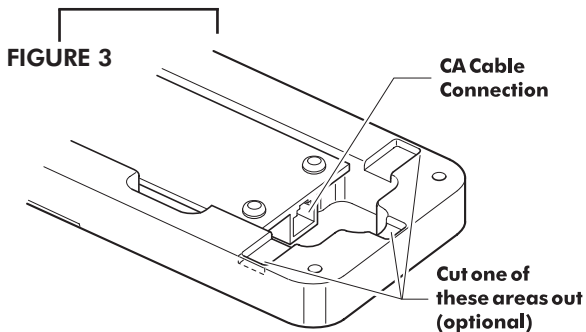
**FIGURE 2:**  
3025R Face Panel

# INSTALLATION

## INSTALLING THE REMOTE HEAD

One or two remote heads can be connected to the main base unit. The connections at the rear of the unit are identical in function. CA cables of the same style and pin-outs as the audio CA cables will work to mount the remotes. See page 6.

1. When mounting the remote head flush to a flat surface, use the unit as a template to mark and drill (4) mounting holes  $7/64$ " diameter for sheet metal screws or  $5/32$ " for machine screws.
2. The cable can exit the unit in (4) directions: Flush to the outside of the mounting plane in the up, down and right side direction or through the mounting plane on the back. When exiting up, down and right, a small wire groove is provided.
3. Cut a small piece of plastic from the desired groove to clear the wire as shown in Figure 3.



4. For an installation where the wire passes through the mounting surface, drill a  $3/8$ " hole and install the supplied rubber grommet. Pass the wire through.
5. Click the CA cable into the remote head modular jacks, as shown in Figure 4.
6. For inside installation, mount the panel with (4) screws making sure the cable is not pinched in the groove.

## INSTALLATION

- When mounting the remote head using the brackets, first plug in and thread the cable through the bracket assembly as shown in Figure. 5.
- Plug the CA cable into the remote head and secure the panel with (4) machine screws and nuts to the front of the bracket.

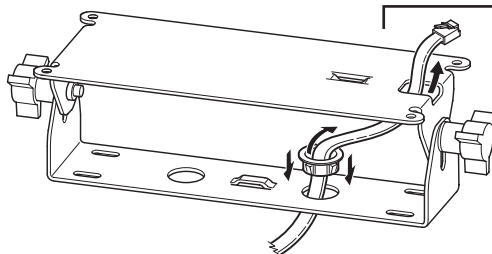


FIGURE 5

- Using the supplied cable ties, secure the CA cable to the bracket anchors as shown in Figure 6.

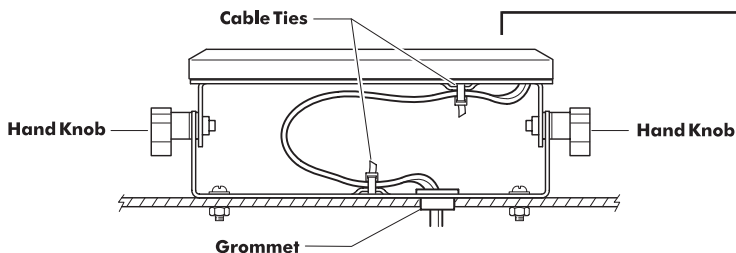


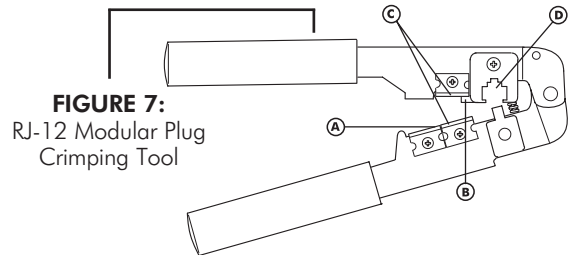
FIGURE 6

- Before installing the bracket to the mounting surface, drill a 3/4" hole at the wire location. Snap the grommet into the bracket as shown in Figure 6 and then use the bracket as a template to mark the mounting holes.
- Drill (4) mounting holes at 7/64" for #6 sheet metal screws or 9/64" for #6 machine screws.
- Mount the bracket and adjust the panel to a desirable viewing angle with the two hand knobs.

## MODULAR PLUG INSTALLATION

This section describes the installation of the RJ-12 modular plugs onto the flat CA cable.

1. Using the cutter blade on the crimping tool (labeled "A" in Figure 7), cut the flat CA cable so the cut is clean and 90 degrees to the sides of the cable.
2. Insert one end of the CA cable between the stripping blades (labeled "C" in Figure 6) until the end of the cable hits the stop (labeled "B" in Figure 7).



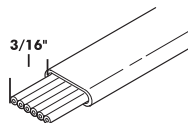
3. Squeeze the handles of the crimping tool together until the tool bottoms out.
4. While holding the handles together, pull the cable out of the tool.
5. The stripped insulation should expose approximately 3/16" of wire (Figure 8).
6. Push a RJ-12 modular plug into the plug holder on the crimping tool (labeled "D" in Figure 7) until the release tab on the plug locks into position.

7. Holding the cable so that the printed side of the cable is toward the release-tab on the plug, push the cable into the plug as far as it will go.

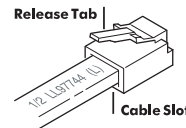
**ALWAYS make sure the printed side of the cable is facing the release-tab on the RJ-12 modular plug (Figure 9). This ensures proper orientation of the plug on each end of the cable.**

8. Squeeze the tool handles COMPLETELY together. You may feel the crimper finish punching the contacts through the insulation on the wires.
9. Let the handles spring open.
10. Push down on the release-tab on the RJ-12 modular plug (Figure 9) and remove the RJ-12 modular plug from the crimping tool.
11. Inspect the plug to ensure that the cable is held securely in place.
12. Repeat this procedure as necessary to install a RJ-12 modular plug on each end of the CA cables.

**FIGURE 8:**  
Stripped CA Cable



**FIGURE 9:**  
RJ-12 Modular Plug





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## SYSTEM TEST

### REMOTE HEAD TEST

1. Press the volume up and down arrow. Note the same changes on the base unit.
2. Press the DMR buttons. Note the same changes on the base unit.
3. Press the radio select buttons. Note the same changes on the base unit.

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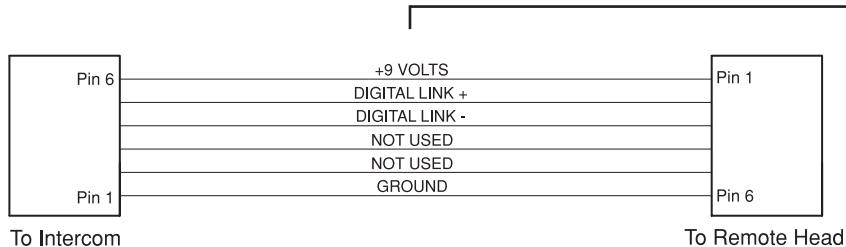
## ADVANCED TROUBLESHOOTING

### REMOTE HEAD DOESN'T WORK

1. Make sure the CA cable is inserted all the way.
2. Make sure the cable ends were installed correctly, see Figure 9 on page 6.
3. Check that the ribbon cable from the membrane switch is fully inserted into the edge connectors on the circuit board.
4. Contact Firecom for a Return Materials Authorization (RMA) number to return the remote head for repair.

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## ADVANCED TROUBLESHOOTING



**FIGURE 10:**  
Remote Head  
Wiring

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## **WARRANTY**

### **TWO-YEAR LIMITED WARRANTY TO ORIGINAL PURCHASER**

Sonetics Corporation warrants to the original purchaser of its products, that they will be free from defects in materials and workmanship, under normal and proper use, for the period of two years from date of purchase. Sonetics Corporation will repair or replace, at its option, any parts showing factory defects during this warranty period, subject to the following provisions. This warranty applies only to a new product which has been sold through authorized channels of distribution. All work under warranty must be performed by Sonetics Corporation. All returned products must be shipped to our address, freight prepaid, accompanied by a dated proof of purchase. This warranty is void if the purchaser or others attempt to repair, service or alter the product in any way. This warranty does not apply in the event of accident, abuse, improper installation, unauthorized repair, tampering, modification, fire, flood, collision, or other damage from external sources, including damage which is caused by user replaceable parts (leaking batteries, etc.). This warranty does not extend to any other equipment or apparatus to which this product may be attached or connected. The foregoing is your sole remedy for failure in service or defects. Sonetics Corporation shall not be liable under this or any implied warranty for incidental or consequential damages, nor for any installation or removal costs or other service fees. This warranty is in lieu of all other warranties, express or implied, including the warranty of merchantability or fitness of use, which are hereby excluded. To the extent that this exclusion is not legally enforceable, the duration of such implied warranties shall be limited to two years from date of purchase. No suit for breach of express or implied warranty may be brought after two years from date of purchase.



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