Amplifier P/N 10023056
Amplifier RI P/N 10023057

ClearCommand™ Communications System

OPERATING AND MAINTENANCE INSTRUCTIONS

Voice Amplifier/Radio Interface

⚠ WARNING
Read this manual carefully if you have or will have the responsibility for using or servicing the product. The ClearCommand™ Communications System from MSA will perform as designed only if used and serviced according to the instructions. Otherwise, the product could fail to perform as designed, and persons who rely on this product could sustain serious personal injury or death.

The warranties made by MSA with respect to the product are voided if the product is not used according to the instructions in this manual. We encourage our customers to write or call for a demonstration of this equipment prior to use, or for any additional information relative to use or repairs. Call 1-800-MSA-2222 during regular working hours.

NIOSH and NFPA certified as an accessory for the Ultra Elite facepiece for use with the MSA MMR, MMR with Slide Connection and BMR breathing apparatus only.

ISO 9001 CERTIFIED
Quality System
MSA Safety Products Division • MSA Instrument Division

MSA

Be Sure.
Choose MSA.

MINE SAFETY APPLIANCES COMPANY
PITTSBURGH, PENNSYLVANIA, U.S.A. 15230

DESCRIPTION / PREPARING FOR USE

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NIOSH APPROVAL INFORMATION
CAUTIONS AND LIMITATIONS

I - Contains electrical parts which have not been evaluated as an ignition source in flammable or explosive atmospheres by MSHA/NIOSH.

N - Never substitute, modify, add, or omit parts. Use only exact replacement parts in the configuration as specified by the manufacturer.

S - Special or critical User's Instructions and/or specific use limitations apply. Refer to User's Instructions before donning.

SPECIAL USERS INSTRUCTIONS

1. Do not alter this unit. You will void the intrinsic-safety rating, and may affect the intrinsic-safety of the device.

2. Evaluate this unit and any radio transceiver with which it may be used before entering a hazardous atmosphere. Be certain that this unit is not affected adversely by radio frequency energy.

3. Evaluate this unit and any radio transceiver with which it may be used as a source of radio frequency interference to other apparatus before entering a hazardous atmosphere.

4. Misuse or abuse of the ClearCommand, or the equipment to which it is attached, or using this equipment in a manner or situation not intended by the manufacturers, may result in damage to the ClearCommand, or equipment connected to the ClearCommand, or may result in personal injury or death to the user or persons dependent on the user.

5. Always inspect the communications system for damage before use. If damage is found, tag the cable and immediately remove the device from service. NEVER USE A DAMAGED OR NON-FUNCTIONAL COMMUNICATIONS SYSTEM!

Note: The ClearCommand Amplifier or Amplifier RI are for use with an Ultra Elite facepiece. They cannot be used without the proper installation of the ClearCommand Bracket and Voicemitter Kit from MSA (P/N 10023055)

DESCRIPTION

The ClearCommand™ Communication System (Amplifier RI Version) allows a user to communicate clearly and easily, both face-to-face and over a hand-held radio, while wearing an SCBA equipped with a Ultra Elite facepiece.

The ClearCommand Voice Amplifier consists of three separate assemblies: An internal microphone assembly, a mounting bracket, and either a voice amplifier or a voice amplifier with radio interface. The voice amplifier RI (radio interface) includes an earspeaker and cable to connect to a radio unit. Each amplifier has a Low Battery LED indicator. The amplifier can be attached or removed from the facepiece in seconds without tools.

The amplifier operates from two standard AAA alkaline batteries and notifies the user when the batteries need replaced.

Intrinsically-Safe Rating

The ClearCommand Communication System is certified Intrinsically-Safe in the United States for use in Class 1, Division 1, Groups A, B, C, D, E, F, and G hazardous locations.

The ClearCommand Communication System is certified intrinsically-safe in Canada CAN CSA-C22-2- No. 157-92

Note: The intrinsically-safe level of any system which uses the ClearCommand is that of the lowest intrinsically-safe rating of any single component in the system.

⚠ CAUTION

Substitution of components may eliminate or compromise intrinsic safety.

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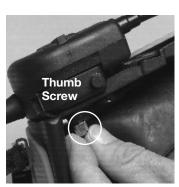
PREPARING FOR USE

PREPARING FOR USE

Assembly of Amplifier or Amplifier RI to Bracket

1. Ensure dust cover is removed from mounting bracket (two pins) connector.

Mounting Bracket Hook

2. Attach the amplifier onto the bracket with the hook at the front of the amplifier. Align the amplifier so two pins of the connector are correctly in position, press the amplifier into place on the bracket and tighten thumbscrew on back side of mounting bracket.

Thumb Screw

3. If not using radio, wrap the cable around the lens ring and connect the cable to the clip on the right side.

⚠ WARNING

Always test the ClearCommand Communication System for damage and be sure it operates properly before entering any hazardous atmosphere. Do not use this device unless it passes all inspection and operational tests. Failure to follow this precaution can result in serious personal injury or death.

Amplifier
1. Don the SCBA Ultra Elite facepiece following the instructions supplied with the SCBA.
2. Turn the Voice Amplifier ON:
   a. Depress the on/off button on the Amplifier and then release it.
   b. Look through the facepiece lens. A small, red LED should be illuminated at the top of the amplifier housing. If the LED is flashing, the battery is low and must be replaced before you use the Amplifier.

c. For amplifier full-time use, the on/off button must be ON. All face-piece audio is reproduced at the amplifier.

Note: The on/off button remains ON until you press and release the button. Always be sure to turn the unit OFF (red LED should not be illuminated) before storing the facepiece. If left ON, the battery will be depleted.

3. Speak into the facepiece in a normal voice. Your voice is projected from the amplifier's speaker.

Amplifier Radio Interface (RI)
Read and follow the Amplifier RI procedure. Be sure to observe all CAUTIONS, WARNINGS, and NOTES. Before donning the facepiece, check that the radio interface connector is attached to your radio before use.

Note: The Radio Interface must be used with the Amplifier RI On/off button turned ON.

Amplifier Radio Interface (RI) System Operations
1. Don the SCBA Ultra Elite facepiece following the instructions supplied with the SCBA.
2. Attach the Amplifier RI cable to the radio unit.
3. Adjust the radio volume control for an acceptable audio level.
4. All received audio will be heard on the earspeaker of the amplifier RI. Your radio's internal speaker is disabled in this configuration.
5. You can enable the Voice Amplifier for full-time use by depressing the amplifier's on/off button to turn the unit ON.
   a. If the amplifier is on, the red LED should be illuminated at the top of the amplifier housing.
   b. All facepiece audio is reproduced in the amplifier's speaker.
   c. All incoming radio transmissions is received in the Amplifier RI's earspeaker.

Using the Radio Without the Amplifier RI
To use the radio independent of the Amplifier RI detach the radio connector from the radio.

CLEANING AND MAINTENANCE

The ClearCommand should be cleaned and disinfected after each use. Follow an established cleaning and disinfecting program. Failure to follow this procedure can damage the Clear Command.

Remove the Amplifier from the Apparatus
1. Unscrew the thumbscrew and disconnect the amplifier.
2. Reconnect the dust cover in the (two pins) connector.

PREPARING FOR USE

CLEANING AND DISINFECTING

1. Prepare a cleaning solution by adding Confidence Plus™ Cleaner (P/N 10009971) to water, following the instructions on the Confidence Plus™ Cleaner container.

⚠ CAUTION

Never submerge the ClearCommand Communication System modules in water or any other liquid.

2. Clean by wiping with a damp sponge or cloth containing Confidence Plus Cleaner from MSA. Follow the directions on the Confidence Plus container for mixing directions and recommended times.

INSPECTION

1. Inspect the ClearCommand modules. Look for cracks or other signs of damage which could allow contaminants to enter the module housings. Check that the battery compartment is clear of moisture or debris.
2. Reassemble the amplifier module on the Ultra Elite facepiece.
3. Check out the system functions.
   a. Depress the on/off button on the ClearCommand unit and then release it.
   b. Look through the facepiece lens. The red LED should be illuminated at the top of the amplifier unit.
   c. Scrape your fingernail lightly across the voicemitter microphone grille of the voicemitter microphone assembly.
   d. You should hear this sound reproduced in the amplifier speaker.
   e. Depress and release the on/off button again to turn the unit OFF. The LED on the amplifier unit should be OFF.

STORAGE

To store the ClearCommand components, be sure that unit is in the OFF (red LED is not illuminated) position. For prolonged storage, remove the batteries to prevent battery corrosion. Store the units in a cool, dry place.

Installing the Batteries

⚠ CAUTION

Use only Duracell NEDA 24A or Eveready NEDA 24AC AAA alkaline batteries. Use of other batteries will void the intrinsic safety approval.

1. Loosen the thumbscrew to open battery door.
2. Insert two AAA batteries according to the battery orientation noted inside the compartment.
3. Close the battery door and tighten the thumbscrew.

Battery Disposal

In continuous service, battery life is approximately 14 to 16 hours. Battery life will vary depending on user conditions. The battery is not rechargeable. Do not dispose of the battery in fire. It may explode! Failure to follow this precaution can result in serious personal injury or death.

REPAIR PROCEDURES

Replacement Parts

Item	Part Number
Amplifier	10023056
Amplifier RI	10023057
Bracket and Voicemitter Kit (includes 4,6,7, & 8 & Screw)	10023055
Two Screws to Connect Mic. Wire to the Mounting Bracket	655337
Dust Cover, Screw, & Washer for Mic Wire Connection	10025123
Mounting Bracket Sub-assembly with Dust Dust Cover Attached	10024077
Voicemitter with Gasket Attached, Wire & Connection	10024076
Retaining Ring for Voicemitter	10023505
Cable Clip (with Longer Screw) for RI Pigtail	10024075
Amplifier Kit with Bracket and Voicemitter Kit (#3)	10024074
Amplifier RI Kit with Bracket and Voicemitter Kit (#3)	10024073
O-Ring for Mic. Connector	10025124