

# WIRELESS FIRST RESPONDER OPERATING MANUAL

Version: ETG-WFR-OPS-2017



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# STANDARD COMPONENTS & ACCESSORIES:



**Loudspeaker with Integrated/Internal VHF Wireless Receiver  
(includes 12v Rechargeable Battery)**



**AC Power Cord**



**AC Power Adapter/Charger**



**VHF Wireless Transmitter Pack  
(includes 9v Alkaline Battery)**



**Loudspeaker Custom/Padded Deployment Case**



**Remote Volume  
Control Dial**



**Headset Microphone  
with 1/8" (3.5mm)  
Plug**



**Lapel Microphone  
with 1/8" (3.5mm)  
Plug**



**Digital Voice Recorder  
(includes Micro USB Cable and (2) AA Alkaline Batteries)**



**Handheld Microphone  
with 1/4" (6.35mm) Plug**



**Audio Cable with 1/8"  
(3.5mm) Plugs**

## **IMPORTANT NOTE:**

**Standard Components & Accessories featured in this Operating Manual are subject to change without notice.**

# LOUDSPEAKER OVERVIEW/CONTROLS



1

The **WIRELESS AUDIO RECIEVER PLUG** allows unit to receive/project audio signals transmitted by the "VHF Wireless Transmitter Pack."

**IMPORTANT NOTE:** The **WIRELESS AUDIO RECIEVER PLUG** must be inserted into the **LINE IN** jack for the unit to be capable of receiving audio signals transmitted by the "VHF Wireless Transmitter Pack" (illustrated below).



If the **WIRELESS AUDIO RECIEVER PLUG** is not inserted into the **LINE IN** jack, the unit will not receive/project audio signals transmitted by the "VHF Wireless Transmitter Pack." See the "**REMOTE/RF WIRELESS OPERATIONS**" section of this manual for more information.

2

## COMPARTMENT FOR BATTERY AND SHOULDER STRAP

To insert the battery, open the compartment's cover. The bottom half of the compartment is used for the battery. Open the latch to access the battery compartment.

Insert battery as follows: The terminals must face the unit with the positive terminal (red) on the side of the unit's control panel (to the left, as seen from the rear panel). Insert battery and close the latch. Close the battery compartment.

**IMPORTANT NOTE:** The unit ships with an internal rechargeable battery that can power continuous operations for 6 to 8 hours (approx.). We recommend that battery is fully charged prior to initial operations. See the "**LOUDSPEAKER BATTERY CHARGING/MAINTENANCE**" section of this manual for more information

3

The rotary **MIC LEVEL** dial allows operator to adjust the volume projection level of the unit.

4

**POWER** switch turns the unit on and off. When turned on, the LED of the switch lights up.

5

**LOW BAT** LED indicates that the rechargeable battery needs to be charged.

6

**CHARGE** LED flashes yellow as long as the rechargeable battery is charging. It turns off when the battery is fully charged

7

Connect the supplied "Handheld Microphone with 1/4" (6.35mm) Plug" to the **MIC IN** jack for "**LOCAL/ WIRED OPERATIONS.**"

8

Connect an external audio source (Digital Voice Recorder, CD player, MP3 player, etc.) to the **LINE IN** jack for "**LOCAL/WIRED OPERATIONS.**"

9

Connect the power supply via the polarized **DC IN** connector. A fitting power adapter is supplied. Use the device only with the included power supply.

# VHF WIRELESS TRANSMITTER PACK OVERVIEW/CONTROLS



- 1** Connect the audio source that is to be wirelessly transmitted and projected through the Loudspeaker unit to the **MIC IN** jack. See the “**REMOTE/RF WIRELESS OPERATIONS**” section of this manual for more information.

**IMPORTANT NOTE:** The Loudspeaker unit’s **WIRELESS AUDIO RECEIVER PLUG** *must* be inserted into the **LINE IN** jack for the unit to receive/project the sound provided by the device that is connected to **MIC IN** jack of the “**VHF Wireless Transmitter Pack**” (illustrated below).



If the **WIRELESS AUDIO RECEIVER PLUG** is *not* inserted into the Loudspeaker unit’s **LINE IN** jack, the unit will *not* receive/project audio signals transmitted by the “**VHF Wireless Transmitter Pack**.”

- 2** Set the **POWER** switch to the “**TX OFF**” position to power off the unit.

- 3** Set the **POWER** switch to the “**TX F1 ON**” position to power on the unit/allow for wireless audio transmission.

**IMPORTANT NOTE:** The unit will **ONLY** be capable of wirelessly transmitting audio when the **POWER** switch is set to the “**TX F1 ON**” position. The unit will **NOT** wirelessly transmit audio if the **POWER** switch is set to the “**TX F2 ON**” position.

- 4** The **LED** will turn on when the **POWER** switch is set to the “**TX F1 ON**” or “**TX F2 ON**” position. The **LED** will turn off when the **POWER** switch is set to the “**TX OFF**” position.

**IMPORTANT NOTE:** The unit will **NOT** wirelessly transmit audio if the **POWER** switch is set to the “**TX F2 ON**” position.

- 5 9V BATTERY COMPARTMENT**  
To insert the battery, open the battery compartment by sliding the cover downwards. Insert the battery in accordance with the polarity (+/-) decal contained within the compartment. Once inserted, close the battery compartment by sliding the cover upwards.

**IMPORTANT NOTE:** The unit ships with a 9v alkaline non-rechargeable battery pre-installed. If the “**VHF Wireless Transmitter Pack**” does **NOT** power on (i.e. **LED** does **NOT** turn on), install a fresh/new 9v alkaline battery.

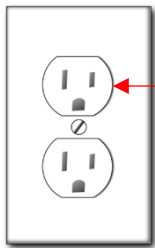


# LOUDSPEAKER BATTERY CHARGING/MAINTENANCE

The Loudspeaker unit ships with an internal rechargeable battery that can power continuous operations for 6 to 8 hours (approx.). We recommend that the Loudspeaker unit's battery is fully charged prior to initial operations as follows:

1. Connect the "**AC Power Adapter/Charger**" to the "**AC Power Cord**."
2. Connect the "**AC Power Cord**" to a 120v electrical wall outlet.
3. Insert the plug of the "**AC Power Adapter/Charger**" into the Loudspeaker unit's **DC IN** power jack.  
**NOTE:** The unit's **CHARGE** LED flashes yellow as long as the battery is charging. Battery charging may take up to (4) hours.
4. When the Loudspeaker unit's battery is fully charged (unit's **CHARGE** LED turns off), disconnect the "**AC Power Cord**" from the wall outlet and the "**AC Power Adapter/Charger**" from the unit.
5. Once fully charged, disconnect the "**AC Power Adapter/Charger**" and **AC Power Cord**."  
**IMPORTANT NOTE:** To prevent damage to the Loudspeaker unit's battery due to "overcharging," ALWAYS disconnect the "**AC Power Adapter/Charger**" after the battery has been fully charged.

## Loudspeaker Battery Charging Set-Up Diagram



120v Electrical  
Wall Outlet



AC Power Cord



AC Power  
Adapter/Charger



Loudspeaker Unit

## IMPORTANT BATTERY MAINTENANCE/STORAGE INFORMATION:

The Loudspeaker unit uses a sealed lead-acid gel battery that will slowly self-discharge when the unit is **NOT** in use.

Prior to storing the Loudspeaker unit for an extended period, fully charge the battery before storage and then charge again every (3) months.



The lead-acid battery needs to be recharged every (3) months for continued operation.

Please replace the battery if the Loudspeaker unit operating time noticeably decrease, even after a full charge cycle.

Replacement batteries may be purchased by contacting Enforcement Technology Group, Inc. (ETGI) directly at 414-276-4471.

# GENERAL OPERATING SAFETY GUIDELINES:

**Read, follow, heed all warnings and keep this operating manual.**

- Do **NOT** use the Loudspeaker unit near water or during severe weather.
- Clean only with dry cloth
- Do **NOT** throw, drop or aggressively handle the Loudspeaker unit and/or the VHF Wireless Transmitter Pack as they contain “sensitive” electronic components.
- **ALWAYS** place the Loudspeaker unit in its “***Custom/Padded Deployment Case***” for added protection during operations.
- To avoid feedback, Loudspeaker should be positioned at least 100 ft. (30m) away from communicator during “***REMOTE/RF WIRELESS OPERATIONS.***”
- Do **NOT** use components near **ANY** heat source such as radiators, heat registers, stoves or other devices (including amplifiers) that produce heat.
- Unplug the Loudspeaker unit during lightning storms.
- Refer all servicing to Enforcement Technology Group, Inc. (ETGI) personnel. Servicing is required when a component has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into a component, component has been exposed to rain or moisture, component does **NOT** operate normally or component has been dropped.
- **CAUTION!:** To reduce the risk of electric shock; do **NOT** remove the top cover (or the rear section) of the Loudspeaker unit as **NO** user serviceable parts are located inside.
- **CAUTION!:** The Loudspeaker unit contains a rechargeable battery. Rechargeable batteries must **NOT** be exposed to fire – this poses a **DANGER OF EXPLOSION**. Incorrectly replacing the battery poses a **DANGER OF EXPLOSION**. Only use batteries of the same type. The capacity of the battery may diminish at low temperatures.
- **CAUTION!:** The Loudspeaker unit is capable of delivering sound pressure levels in excess of 105dB, which may cause permanent hearing damage.
- **ALWAYS** perform the “***LOUDSPEAKER BATTERY CHARGING/MAINTENANCE***” procedures contained within this manual each time after the equipment has been deployed/used.



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# REMOTE/RF WIRELESS OPERATIONS:

## IMPORTANT WIRELESS AUDIO TRANSMISSION DETAILS:

The effective wireless audio transmission range between the supplied VHF Wireless Transmitter Pack and Loudspeaker unit is approximately 150 to 200 ft. (40 to 60m). There are several factors that can impact or prevent wireless signal transmission. To help ensure wireless signal transmission at the maximum effective range, please establish a clear, line of sight (LOS) path that is free of “obstacles” between the VHF Wireless Transmitter Pack and Loudspeaker unit during operations.

*To project an operator’s live voice wirelessly through the Loudspeaker unit via the supplied “Lapel Microphone” or “Headset Microphone,” please follow the instructions below:*

1. Prepare the Loudspeaker unit for “**REMOTE/RF WIRELESS OPERATIONS**” by inserting the **WIRELESS AUDIO RECEIVER PLUG** into the unit’s **LINE IN** jack. **IMPORTANT NOTE:** The **WIRELESS AUDIO RECIEVER PLUG** must be inserted into the **LINE IN** jack for the unit to be capable of receiving audio signals transmitted by the VHF Wireless Transmitter Pack (refer to diagram 1.0).



Diagram 1.0

2. Power up the Loudspeaker unit by pressing the unit’s **POWER** switch. **NOTE:** When powered up, the **POWER** switch LED will turn on.

3. Insert the male plug of the supplied “**Remote Volume Control Dial**” into the **MIC IN** jack of the VHF Wireless Transmitter Pack (refer to diagram 1.1).



Diagram 1.1

4. Connect the supplied “**Lapel Microphone**” or “**Headset Microphone**” by inserting the component’s male plug into the jack of the “**Remote Volume Control Dial**” that is connected to the VHF Wireless Transmitter Pack (refer to diagram 1.2 for illustration of “**Headset Microphone**” connection).



Diagram 1.2

5. Power on the VHF Wireless Transmitter Pack by setting the device’s **POWER** switch to the “**TX F1 ON**” position. **NOTE:** When powered on the unit’s LED will turn on.
6. The operator’s voice that is picked up by the microphone connected to the VHF Wireless Transmitter Pack via the “**Remote Volume Control Dial**” will be wirelessly transmitted and project through the Loudspeaker unit. **NOTE:** To increase/decrease the projection volume output level of the Loudspeaker unit, adjust the dial located on the “**Remote Volume Control Dial.**”

# REMOTE/RF WIRELESS OPERATIONS:

To project an external audio source (Digital Voice Recorder, CD player, MP3 player, etc.) wirelessly through the Loudspeaker unit, please follow the instructions below:

1. Prepare the Loudspeaker unit for “**REMOTE/RF WIRELESS OPERATIONS**” by inserting the **WIRELESS AUDIO RECEIVER PLUG** into the unit’s **LINE IN** jack. **IMPORTANT NOTE:** The **WIRELESS AUDIO RECIEVER PLUG** must be inserted into the **LINE IN** jack for the unit to be capable of receiving audio signals transmitted by the VHF Wireless Transmitter Pack (refer to diagram 1.0).
2. Power up the Loudspeaker unit by pressing the unit’s **POWER** switch. **NOTE:** When powered up, the **POWER** switch LED will turn on.
3. Insert a male plug of the supplied “**Audio Cable with 1/8” (3.5mm) Plugs**” into the **MIC IN** jack of the VHF Wireless Transmitter Pack (refer to diagram 1.1).



Diagram 1.0

4. Insert the remaining plug of the supplied “**Audio Cable with 1/8” (3.5mm) Plugs**” into the 1/8” (3.5mm) audio output jack (i.e EAR or SPEAKER) of the external audio source (refer to diagram 1.2 for illustration of “Digital Voice Recorder” connection).



Diagram 1.1



Diagram 1.2

5. Power on the VHF Wireless Transmitter Pack by setting the device’s **POWER** switch to the “**TX F1 ON**” position. **NOTE:** When powered on the unit’s LED will turn on.
6. Power up the external audio source that is connected to the VHF Wireless Transmitter Pack via the “**Audio Cable with 1/8” (3.5mm) Plugs.**”
7. To begin wireless audio transmission/projection, press/select the external audio device’s **PLAY** button/control. **NOTE:** To increase/decrease the projection volume output level of the Loudspeaker unit, adjust the volume controls located on the connected external audio source.



# LOCAL/WIRED OPERATIONS:

To project an operator's live voice through the Loudspeaker unit via the supplied "Handheld Microphone with 1/4" (6.35mm) Plug," please follow the instructions below:

1. Insert the plug of the supplied "Handheld Microphone with 1/4" (6.35mm) Plug" into the Loudspeaker unit's MIC IN jack (refer to diagram 1.0).



Diagram 1.0

2. Power up the Loudspeaker unit by pressing the unit's POWER switch.  
**NOTE:** When powered up, the POWER switch LED will turn on.
3. Activate the "Handheld Microphone with 1/4" (6.35mm) Plug" by setting the device's ON/OFF switch upwards to the ON position.
4. The operator's voice that is picked up by the "Handheld Microphone with 1/4" (6.35mm) Plug" will be projected through the Loudspeaker unit. **NOTE:** To increase/decrease the projection volume output level, adjust the Loudspeaker unit's rotary MIC LEVEL dial.

To project an external audio source (Digital Voice Recorder, CD player, MP3 player, etc.) through the Loudspeaker unit, please follow the instructions below:

1. Insert a male plug of the supplied "Audio Cable with 1/8" (3.5mm) Plugs" into the LINE IN jack of the Loudspeaker unit. (refer to diagram 1.1).



Diagram 1.1

2. Insert the remaining plug of the supplied "Audio Cable with 1/8" (3.5mm) Plugs" into the 1/8" (3.5mm) audio output jack (i.e EAR or SPEAKER) of the external audio source (refer to diagram 1.2 for illustration of "Digital Voice Recorder" connection).



Diagram 1.2

3. Power up the external audio source that is connected to the Loudspeaker unit via the "Audio Cable with 1/8" (3.5mm) Plugs."
4. To begin audio projection, press/select the external audio device's PLAY button/control. **NOTE:** To increase/decrease the projection volume output level of the Loudspeaker unit, adjust the volume controls located on the connected external audio source and/or the Loudspeaker unit's rotary MIC LEVEL dial.

# LOUDSPEAKER, VHF WIRELESS TRANSMITTER PACK & MICROPHONE SPECIFICATIONS

## Loudspeaker Specifications:

<b>WEIGHT:</b>	~ 8.1 lbs (3.67 kg) with battery installed
<b>DIMENSIONS:</b>	8.5" X 7.1" X 11.2" (217 mm X 180 mm X 284mm)
<b>INPUTS:</b>	
<b>MIC IN:</b>	¼" (6.35mm) TRS Connector Jack, Unbalanced
<b>LINE IN:</b>	1/8" (3.5mm) TRS Connector Jack, Unbalanced
<b>POWER:</b>	
<b>Power Supply:</b>	12vdc/2600mAh
<b>Charge Time:</b>	~ 4 hrs
<b>Operating Time:</b>	~ 6 to 8 hrs (unlimited when connected to external power)
<b>A/C Power Adapter/Charger:</b>	18vdc/3 A
<b>Mains Voltage:</b>	100-240v~, 50/60 Hz, 1.5 A (switching mode adapter)
<b>INTEGRATED/INTERNAL VHF WIRELESS RECEIVER:</b>	
<b>Rx FREQUENCY CHANNEL:</b>	VHF Frequency: 169.445 MHz,
<b>MODULATION SYSTEM:</b>	FM
<b>POWER SUPPLY:</b>	Integrated with Loudspeaker Rechargeable Battery
<b>POWER CONSUMPTION:</b>	25mA

## VHF Wireless Transmitter Pack Specifications:

<b>WEIGHT:</b>	~ 6 oz. (170.10 g) with battery installed
<b>DIMENSIONS:</b>	3.0" X 2.50" X 0.75" (144.30 mm X 63.5 mm X 19.05 mm)
<b>Tx FREQUENCY CHANNEL:</b>	VHF Frequency: 169.445 MHz
<b>MODULATION SYSTEM:</b>	FM
<b>EFFECTIVE Tx RANGE:</b>	150 to 200 ft.. (45 to 60m) Line of Sight (LOS)
<b>INPUT:</b>	1/8" (3.5mm) Jack
<b>POWER SUPPLY:</b>	9v Alkaline Battery (non-rechargeable)
<b>POWER CONSUMPTION:</b>	~ 30mA



## Microphone Specifications:

<b>LAPEL MICROPHONE:</b>	Omni-Directional/Electret Condenser with 1/8" (3.5mm) Plug
<b>HEADSET MICROPHONE:</b>	Omni-Directional/Electret Condenser with 1/8" (3.5mm) Plug
<b>HANDHELD MICROPHONE:</b>	Dynamic/Hyper-cardioid with 3 ft. (1m) Coiled Cable with ¼" (6.35mm) Plug



### **IMPORTANT NOTE:**

*Standard Components & Accessories featured in this Operating Manual are subject to change without notice.*