

Safety Certifications

Intrinsically Safe, Sécurité Intrinsèque

II 1 G Ex ia IIC T4 Ga
 CE 0891
 TRAC11ATEX11299X
 $-40^{\circ}\text{C} \leq T_A \leq 40^{\circ}\text{C}$
 IP67
 FCC ID: J5XT3HEP -- Meets FCC Part 15
 IC: 5916A-T3HEP -- Complies with Canadian ICES-003

WARNINGS!

WARNING! Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

WARNING! To prevent ignition of a hazardous atmosphere, battery must only be charged in an area known to be nonhazardous.

WARNING! Substitution of components may impair intrinsic safety.

AVERTISSEMENT! Les changements ou modifications non expressément approuvés par la partie responsable de la conformité pourraient annuler l'autorité de l'utilisateur à utiliser cet équipement.

AVERTISSEMENT! Pour éviter l'inflammation d'une atmosphère dangereuse, les batterie doivent être chargées seulement dans une zone connu comme être non dangereuse.

AVERTISSEMENT! La substitution de composants peut compromettre la sécurité intrinsèque.

FCC Statements

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Industry Canada Statements

This Class A digital apparatus complies with Canadian ICES-003.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada. (select the class for your device)

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

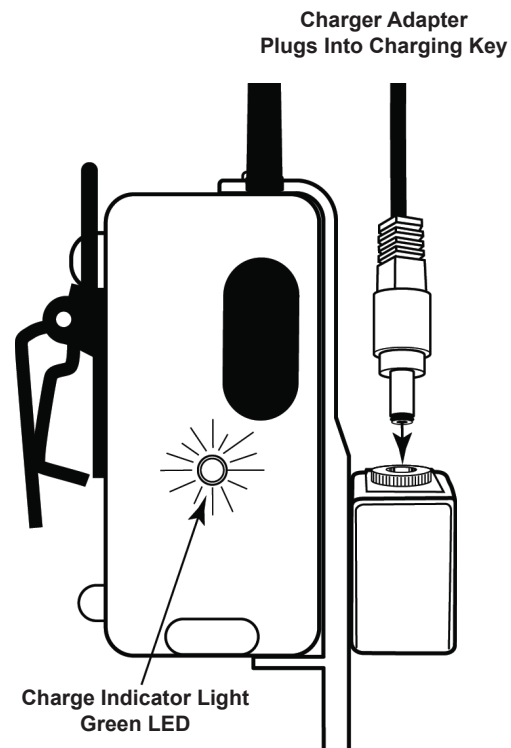


Micro TPASS® Repeater Rechargeable with Charging Key in Place



Micro TPASS® Repeater Rechargeable with Accountability Key in Place

Battery Charging LED Display



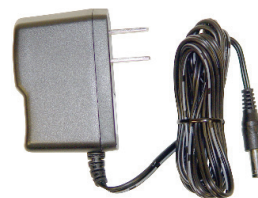
Charging: When the charging key is in place and plugged into a power source, a Green LED will glow below the left side button (left side when facing the Micro TPASS® Repeater).

Charging Complete: Unit is fully charged when the Charge Indicator Light is flashing Green.

The Low Battery Alarm will sound when the battery has been exhausted to 20% of capacity (indicating approx. 1 hour operating time remains). Charging the battery is necessary when Low Battery Alarm sounds.

The Low Battery Alarm is an easily recognized series of two audio beep tones every five seconds when the Micro TPASS® Repeater is ON.

Grace Industries, Inc. assumes no liability for mechanical, electrical, or other types of battery failure.



120 VAC Charger Adapter



Optional 12 VDC Charger Adapter Available

Warranty Information

Grace Industries, Inc. warrants the unit to be free from defects in workmanship and materials for a period of one year from date of purchase. This warranty is valid only when the returned unit is accompanied by a sales receipt or other proof of purchase that states the date and location of purchase. Grace Industries, Inc. will not repair or replace any merchandise under warranty which has been damaged because of accident, misuse or abuse of the unit while in possession or control of the consumer or outside of Grace Industries Inc's control. This warranty is void if any attempt to repair or replace parts was made or attempted by other than qualified Grace Industries, Inc. personnel. This warranty is void if any of the sealed compartments are opened or tampered with. Send all returned merchandise, prepaid and accompanied by proof of purchase to: Grace Industries, Inc., Repair Division, 305 Bend Hill Road, Fredonia, PA 16124. Customer is responsible for return shipping. Grace Industries, Inc. shall not be liable for any direct, incidental or other consequential loss or damage arising out of the failure of the device to operate.

The sole and exclusive remedy under all guarantees or warranties, expressed or implied, is strictly limited to repair or replacement as herein provided. ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF FITNESS AND MERCHANTABILITY, ARE HEREBY LIMITED IN DURATION TO A PERIOD ENDING ONE (1) YEAR FROM THE DATE OF PURCHASE. The warranty and liability set forth in the prior paragraphs are in lieu of all other warranties, expressed or implied, in law or in fact, including implied warranties of merchantability and fitness for a particular purpose. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which may vary from state to state.

The information contained in this booklet is believed to be accurate and reliable. Grace Industries, Inc. provides this information as a guide only.

Micro TPASS® Repeater technical assistance is available by contacting Grace Industries, Inc. at (724) 962-9231 or by email at info@graceindustries.com.

For training purposes a copy of this information is available by contacting Grace Industries, Inc.

www.graceindustries.com
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P/N: Micro TPASS Repeater-R ATEX 0317 UI

Micro TPASS® Repeater

RECHARGEABLE

USER'S INFORMATION

Only To Be Removed By End User

ATEX CERTIFIED



Front View with Accountability Key in Place

MADE IN USA

Grace Industries, Inc.
www.graceindustries.com
 Ph. 724-962-9231 • Fax 724-962-3611

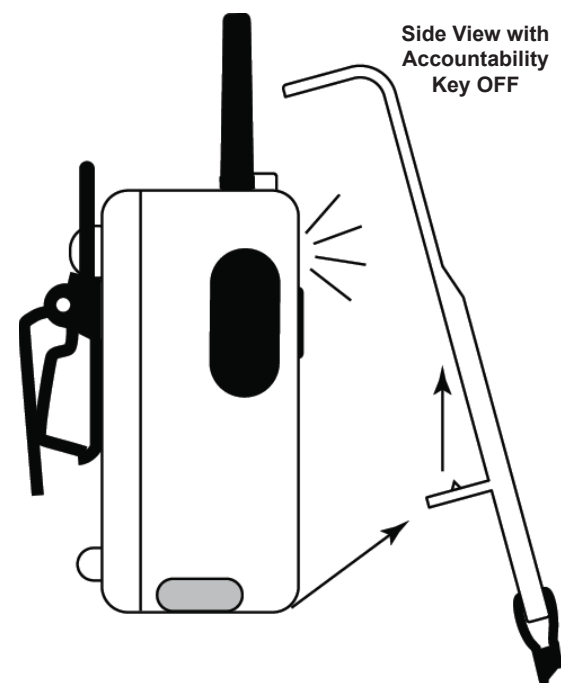
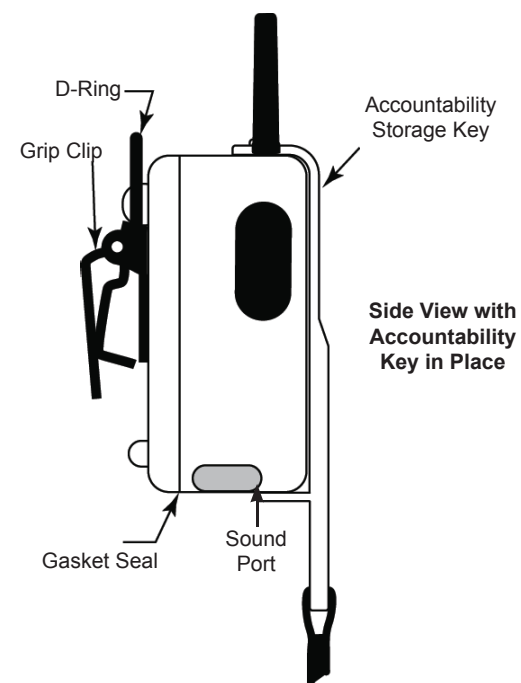
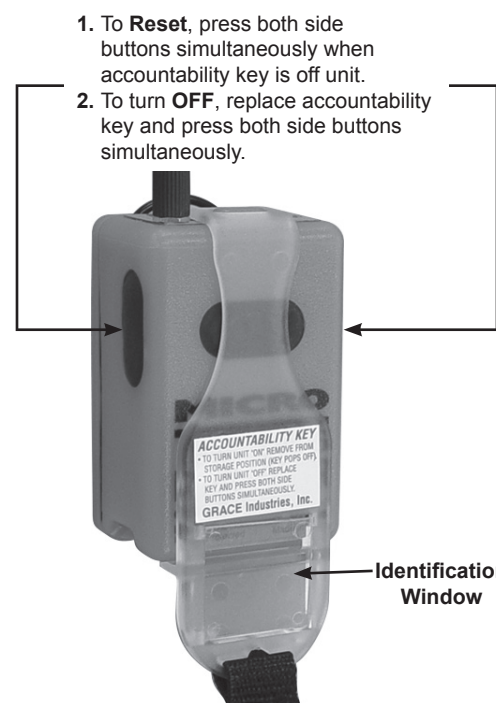
Front View Without Accountability Key



GRACE INDUSTRIES, INC.
 Solutions for Life Safety

Micro TPASS® Repeater Intrinsicly Safe Rechargeable Micro Repeater Operating Instructions

Always test the unit prior to each use



MICRO TPASS® REPEATER

Micro TPASS® Repeater is a small, lightweight, portable signaling device that operates interactively with Grace Confined Space and Firefighter In-Command® Emergency Signaling and Accountability Systems.

By receiving and re-transmitting Grace radio commands, the Micro TPASS® Repeater enhances the overall system performance over open distances or within indoor environments where poor radio propagation is encountered.

Micro TPASS® Repeater is used on both the Grace legacy Radio-G and Radio-H platforms. The Micro TPASS® Repeater will only function on one of these platforms and will only function on its respective radio platform. Exercise caution and understand this limitation if attempting to use the Micro TPASS® Repeater in situations where mixed Radio-G and Radio-H platforms are used.

The Micro TPASS® Repeater is omni-directional, very easy to operate, and is the same size as the TPASS®3. **NOTE: Micro TPASS® Repeater IS NOT a PASS (Personal Alert Safety System).**

Micro TPASS® Repeater Operation

To turn the Micro TPASS® Repeater ON, remove the Accountability Key. An escalating series of audio tones will be heard indicating the Micro TPASS® Repeater is ON and operational.

- Micro TPASS® Repeater transmits an ON message.
- Two Red LEDs flash when messages are received and retransmitted.

- When the Accountability Key is removed during operation, the Micro TPASS® Repeater will be silent and two Red LEDs flash when messages are received and retransmitted.
- When the Accountability Key is replaced during operation, the audio tone is activated and two Red LEDs flash when messages are received and retransmitted.
- The Micro TPASS® Repeater retransmits check-in, change of status, Alarm and Evacuation signals.

To turn the Micro TPASS® Repeater OFF, replace the Accountability Key and momentarily press both side buttons simultaneously. De-escalating sweeping audio tones will be heard and LED activity will cease.

Micro TPASS® Repeater Find Function

By using In-Command® Full Crew or In-Command® First-In Fire Fighter Emergency Signaling and Accountability Systems, it is possible to select all or individual Micro TPASS® Repeaters and send an EVAC command. The EVAC command acts as a find function on the Micro TPASS® Repeater. The Micro TPASS® Repeater will emit a special audio tone and activate Red flashing LED's as a visual indicator. This feature is a tool to collect the Micro TPASS® Repeater after use on the fire ground.

Reset or turn the Micro TPASS® Repeater OFF to clear the Find Function.

Mode Selection

AUTO-ON ACTIVATION

- Remove Accountability Key to automatically activate the unit.

RESET

- Check-in signals can be sent by simultaneously pressing both side buttons.

OFF

- Turn OFF Micro TPASS® Repeater by replacing the Accountability Key (or Charging Key) and then pressing both side buttons

Visual / Audio Mode Display

OFF

- No LED display.

ON

- A series of escalating, loud audio tones when turned on.
- Two Red LEDs flash when messages are received and re-transmitted.
- **With Accountability Key in place:** Audio tone is activated when signals are received and retransmitted.

FIND FUNCTION

- Rapid flashing of top Red LED.
- A loud, alternating audio tone.

Micro TPASS® Repeater Maintenance

Micro TPASS® Repeater requires minimum maintenance and will provide years of service.

Please Observe These Guidelines

- At the end of each use, clean unit with a damp cloth. **DO NOT use cleaning solvents.**
- After each use, inspect unit for signs of physical damage. **Remove unit from service if physical damage is observed.**
- Store Micro TPASS® Repeater in a dry, well ventilated area consistent with battery manufacturer requirements. Recommended storage conditions are: 50° to 77°F (10° to 25°C) at no more than 65% relative humidity.
- Units contaminated by chemical or radioactive materials must be disposed of or decontaminated in accordance with all applicable regulatory standards.
- **DO NOT mark or apply paint to Micro TPASS® Repeater.**

Specifications

Dimensions: 2-1/8" wide, by 2-1/4" deep (with clip), 5" high (with antenna)

Weight: 7.3 ounces.

Case: Bright Orange, translucent polycarbonate, rugged, water resistant, impact resistant and temperature resistant.

Methods of Attachment: rugged Grip Clip and D-ring for versatility in attaching to gear.

Antenna: short, threaded antenna for easy replacement

Frequency Range: 902-928 MHz

Battery: Intrinsically safe Lithium-ion.

Battery Life: estimated at 30 hours in ON Mode.

Battery Charging: 120 VAC (standard) or 12VDC (optional adapter required) may be used

Battery Charging Time: 6 to 8 hrs

Battery Charging Cycles: 500

Product Life: Approximately 3 to 5 years or longer, depending on fitness for use. Fitness for use is best determined by the end user through a proper inspection and maintenance program. Product should be retired from service when damaged or returned to Grace Industries for evaluation and repair if applicable.

Limitations

To reduce risk of serious injury or loss of life, ensure Micro TPASS® Repeater is fully operational by testing and inspecting the unit prior to use. Use of a Micro TPASS® Repeater maintenance and training program including recharging exhausted or low batteries is required for safe and proper use.

After charging the Micro TPASS® Repeater, always test by affixing the Accountability Key and listening for the transmit and receive "chirp" sounds that signify the presence of Grace radio traffic. To generate Grace radio traffic, use the reset function of the TPASS® or SuperCELL® SC500; or select the Micro TPASS® Repeater and initiate an EVAC command from the In-Command® Emergency Signaling and Accountability System. Exercise the same caution as explained in the recognized proper use of Grace legacy Radio-G and Radio-H platforms. If proper operation of Micro TPASS® Repeater is questionable, remove unit from service and contact Grace Industries for assistance.