

Safety Certifications

Intrinsically Safe, Sécurité Intrinsèque

II 1 G Ex ia IIC T4 Ga

CE 2776

TRAC11ATEX11299X

-40°C ≤ T_A ≤ 40°C Um(max) 250VAC

IP67

Radio Certifications

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! Do not charge in the hazardous area.

WARNING! Do not open in the hazardous area.

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! Ne chargez pas dans une zone dangereuse

AVERTISSEMENT! Ne pas ouvrir dans une zone 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 pro-vide 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.

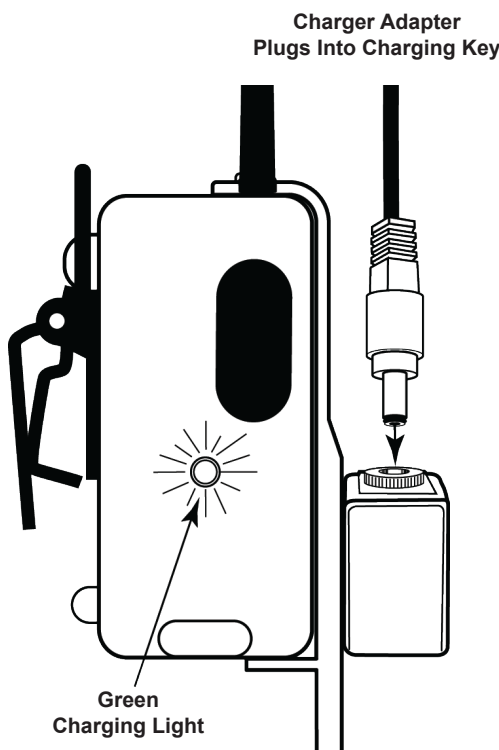


Micro TPASS® Repeater Rechargeable with Charging Key in Place



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 steady 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 steady Green glow is replaced by a flashing Green display.

Low Battery Alarm will sound when the battery has been exhausted to 20% of capacity (indicating approximately 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 enunciated 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

GRACE One (1) Year WARRANTY

Grace Industries Incorporated, of Fredonia PA 16124 USA, warrants products that it manufactures to be free from defects in workmanship and materials for a period of one (1) year from the original date purchase. This warranty does not apply to third party products sold by Grace Industries. Grace Industries will repair or replace, at their sole discretion, defective products free of charge. This warranty applies to products that Grace Industries deems defective in its sole discretion due to defects in material or workmanship under normal use and maintenance and where a defect was not caused by accident, misuse or abuse of the product and that no disassembly, repairs or parts replacement were made or attempted by other than Grace Industries' personnel. **GRACE INDUSTRIES, INCORPORATED SHALL NOT BE LIABLE FOR ANY DIRECT, INCIDENTAL OR CONSEQUENTIAL LOSS OR DAMAGE ARISING OUT OF THE USE OF THE PRODUCT OR FAILURE OF THE PRODUCT 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 OF ONE (1) YEAR FROM THE DATE OF ORIGINAL PURCHASE.** The warranty and liability set forth here are in lieu of all other warranties, expressed or implied, in law or in fact, including warranties of merchantability and fitness for a particular purpose.

Warranty claims process: 1) Obtain a Return Authorization Code or Number from Grace Industries corporate headquarters by calling phone number 724-962-9231, or by email correspondence to sales@graceindustries.com. 2) The product name, serial number, date and proof of purchase must be provided and 3) Return products including Return Authorization number, prepaid and accompanied by original proof of purchase that states the date and location of purchase to: Grace Industries, Inc., Repair Department, 305 Bend Hill Road, Fredonia, PA 16124, USA. Customer is responsible for all shipping costs, return shipping costs, handling, or any other fees associated with a warranty claim.

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®3 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.

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Micro TPASS® Repeater RECHARGEABLE USER'S INFORMATION Only To Be Removed By End User

ATEX CERTIFIED

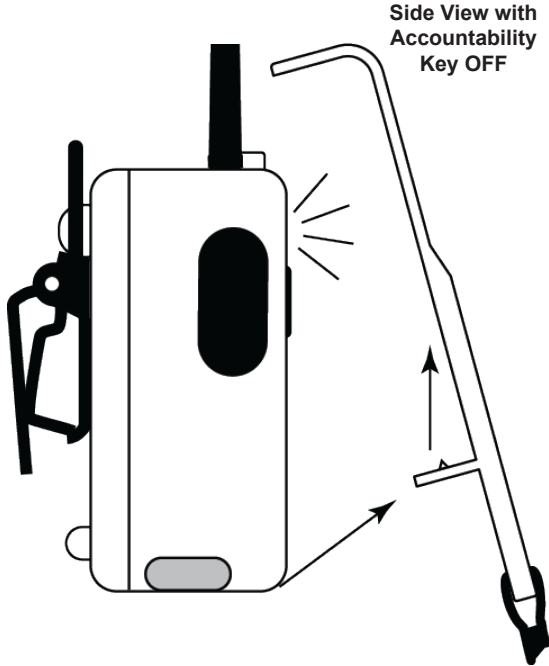
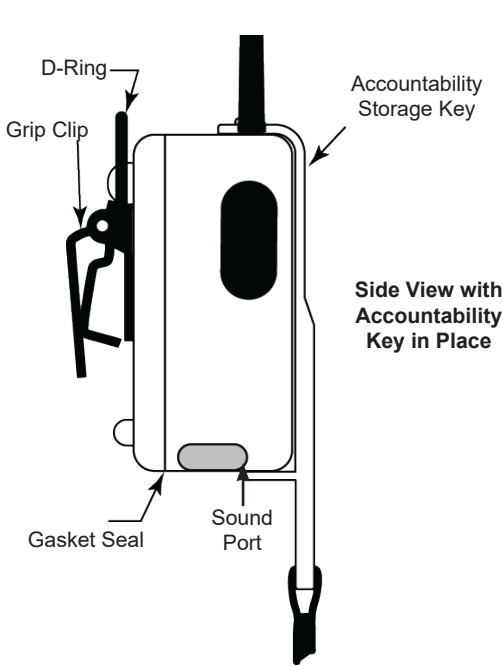
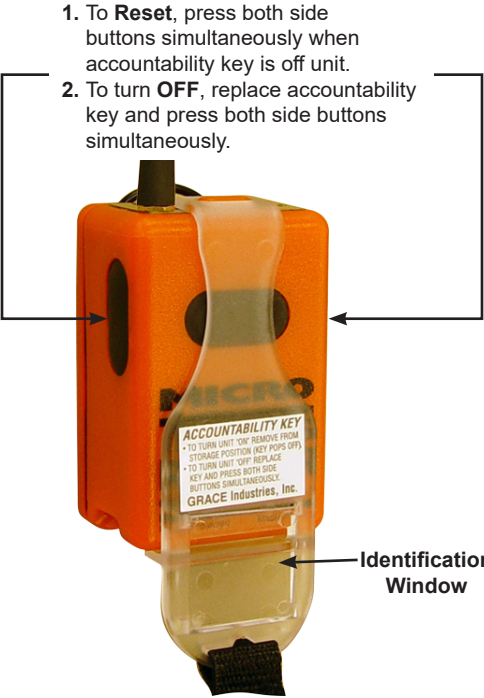


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GRACE
INDUSTRIES, INC.

Micro TPASS® Repeater Intrinsically 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.

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), 4-1/8" high (with antenna)

Weight: 7.3 ounces.

Case: rugged, high temperature, impact resistant, translucent, bright orange engineered plastic.

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

Antenna: short, threaded antenna for easy replacement

Radio Frequency: ISM license free, spread spectrum.

Battery: Intrinsically safe rechargeable Lithium-ion.

Battery Life: estimated at 40 hours in ON Mode.

Battery Charging: 120 VAC (standard) or 12VDC (optional adapter required) may be used *Available international power adapters rated for 100-240VAC input, with UL, FCC, CE, safety ratings.*

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 activating the unit, 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 a TPASS®, SuperCELL® SC500, or other worker worn device. Grace radio traffic can also be generated by sending a command from a Grace Accountability Base.

If proper operation of Micro TPASS® Repeater is questionable, remove unit from service and contact Grace Industries for assistance.