

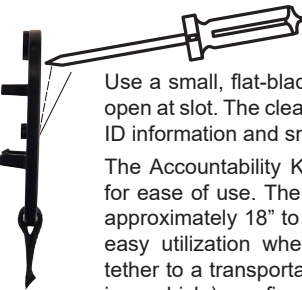
TPASS®5 GPS with Accountability Key in Place

- 1. To **Reset**, press both side buttons simultaneously when Accountability Key is off unit.
- 2. To turn **OFF**, replace Accountability Key and press both side buttons simultaneously.



Accountability Key

TPASS®5 Accountability Key can be personalized to the specific identity of the user. The clear Identification Window easily snaps into place to protect enclosed information (photo, name, number, dept ID, barcodes, etc.) and provide quick identification.

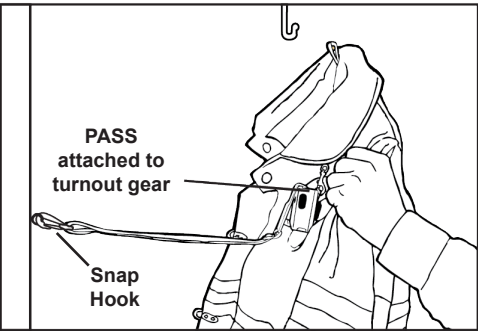


Use a small, flat-blade screwdriver to pry window open at slot. The clear ID Window will release. Add ID information and snap window back in place.

The Accountability Key has an adjustable tether for ease of use. The tether can be adjusted from approximately 18" to 36" in length. This allows for easy utilization whether you are anchoring the tether to a transportation position (such as a seat in a vehicle) or a fixed storage position (such as in the fire station).

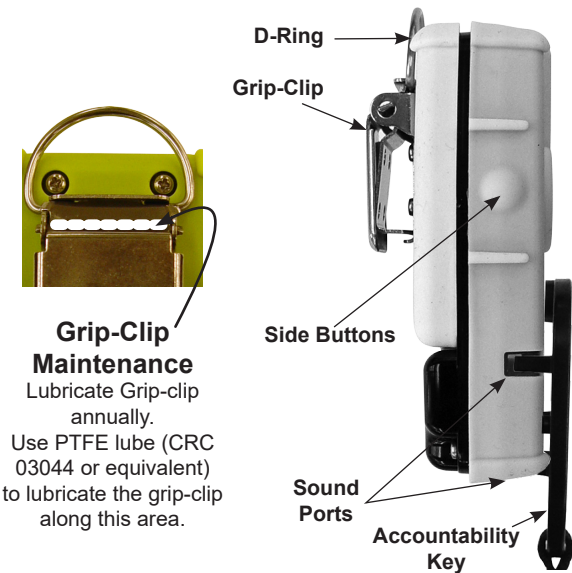
Accountability Keys are available with various length tethers to facilitate operational needs.

Pull Away Tether for Auto-On Activation from Storage Positions



Snap hook attached to Transportation or Fixed Storage Position. Pull turnout gear away, tether tightens and pulls Accountability Key off the TPASS®5, automatically activating TPASS®5 into the Sensing Mode.

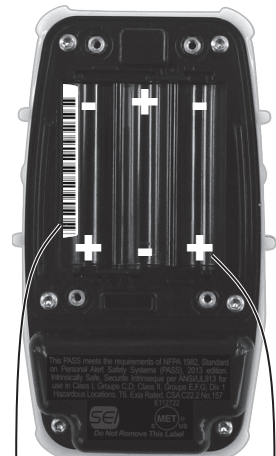
Side View with Accountability Key in Place



Auto-On Activation



Battery Chamber



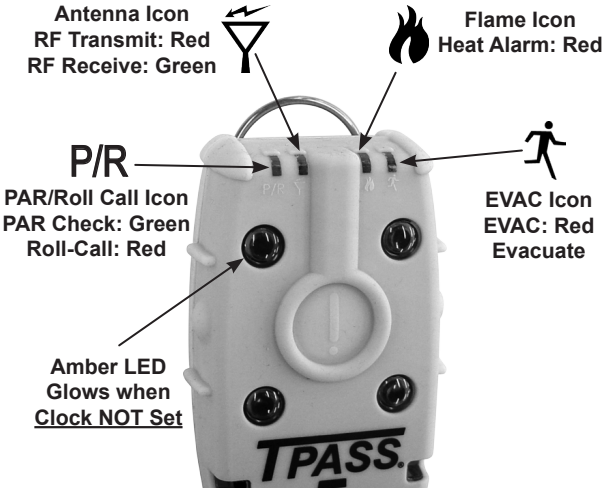
Serial Number



Inside Battery Cover

Battery Orientation

LED Status Indicators



Safety Certifications

This PASS meets the requirements of NFPA 1970, Standard on Personal Alert Safety Systems (PASS), 2025 edition.

Intrinsically Safe per ANSI/UL913 6th edition for use in Class 1, Groups C, D; and Class II, Groups E, F, G; Division 1 Hazardous Locations; Class III, Division 1 & 2.

Certified to CSA C22.2 No. 157-92 3rd edition.

Radio Certifications

FCC ID: J5XT5HIP -- Meets FCC Part 15

IC: 5916A-T5HIP -- Complies with Canadian ICES-003

Intrinsically Safe, Sécurité Intrinsèque Additional Certifications

CE

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, batteries must only be changed in an area known to be nonhazardous.

WARNING! To reduce the risk of explosion, do not mix new batteries with used batteries, or mix batteries from different manufacturers.

WARNING! Substitution of components may impair intrinsic safety. After battery replacement, always test TPASS®5 to insure proper operation.

AVERTISSEMENTS!

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! Afin de prévenir les inflammations des atmosphères dangereuses, ne changer les batteries que dans des emplacements désignés non dangereux.

AVERTISSEMENT! Pour réduire le risque d'explosion, ne pas mélanger des piles neuves avec des piles usagées, ou mélanger des piles de fabricants différents.

AVERTISSEMENT! La substitution de composants peut compromettre la sécurité intrinsèque. Après le remplacement de la batterie, toujours tester TPASS®5 pour assurer un fonctionnement correct.

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.

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 of 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 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., Service 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. TPASS®5 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.

TPASS®5 issues may be reported at any time to Grace Industries, Inc. at 724-962-9231. After working with the manufacturer to resolve any issues, they may be reported to SEI at 703-442-5732.

www.graceindustries.com

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P/N: TP5 GPS UI 0226

TPASS®5 GPS USER'S INFORMATION Only To Be Removed By End User



MADE IN USA

Front View without Accountability Key in Place

Grace Industries, Inc.

www.graceindustries.com

Ph. 724-962-9231 • Fax 724-962-3611



Front View with Accountability Key in Place

GRACE INDUSTRIES, INC. Solutions for Life Safety

READ INSTRUCTIONS BEFORE USE

TPASS®5 GPS Intended Use

TPASS®5 is a motion-sensing, radio telemetry PASS device designed for use by firefighters, first-responders, and industrial users engaged in firefighting, rescue, and other hazardous duties. TPASS®5 provides distinct audible and visual alarms for indicating a user is in distress. The TPASS®5 also incorporates Evacuate, PAR, and Roll-Call signaling that establishes an Automated Accountability System when used with other Grace monitoring equipment. TPASS®5 has a very loud audio alarm, allowing rescue personnel to rapidly pinpoint the location of the firefighter or worker in distress.

It is highly recommended that all personnel be thoroughly trained in the proper use and operation of TPASS®5, including other Grace equipment such as the In-Command Automated Accountability System prior to use. Always inspect and test TPASS®5 prior to use. Failure to do so may expose the user to serious injury or loss of life. WARNING! When using TPASS®5 with the In-Command computer/tablet, ensure In-Command Computer Speakers Are Not Muted During Firefighting Activities As Emergency Alarms May Not Be Noticed.

TPASS®5 GPS Features

- Auto-On Activation by Removal of Accountability Key
- Distress Button Alarm Activation
- Pre-Alert: Audible Warning Before Full Alarm
- Automated Accountability System using In-Command
- Radio telemetry for immediate notification of firefighter emergency distress
- No voice radio needed for Evacuation signaling and user acknowledgment
- Automated PAR check signaling without using a voice radio, configurable time from In-Command
- Roll-Call signaling without voice radio, configurable from In-Command
- Audible and Visual Indicators for all Modes of Operation
- High performance radio signaling with RF repeating capability

Operating Instructions

ACTIVATING TPASS®5: When the TPASS®5 is removed from a storage position, the Accountability Key automatically detaches, activating TPASS®5 into the motion **Sensing Mode**.

During activation, an operational signal of escalating audio tones will be heard and an alternating display of two Green LEDs indicates the TPASS®5 is in **Sensing Mode**. When TPASS®5 is activated, its internal radio transmits signals that are received and displayed on In-Command.

In motion sensing mode, TPASS®5 will strobe two Green LEDs in opposing corners, alternating to the opposite corners when motion is sensed.

PRE-ALERT MODE: After approximately 18 to 23 seconds of no motion, TPASS®5 begins an audible Pre-Alert sound and an alternating Green and Yellow LED display. The Pre-Alert sound progressively becomes louder, indicating TPASS®5 is closer to going into **Alarm**.

ALARM MODE: There are two methods of activating the Alarm Mode.

- 1) **MOTION-ALARM:** After 30 to 35 seconds of no motion, TPASS®5 enters the **Alarm Mode**.
- 2) **DISTRESS ALARM:** PASS user can activate **Alarm Mode** at any time (from **Sensing Mode** or **Off Mode**) by pressing the Emergency Distress Button.

ALARM MODE is indicated by a rapid pulsing of four front Red LEDs while sounding a loud audio alarm. During Alarm, an emergency radio signal is transmitted to In-Command alerting other personnel of a firefighter in distress.

Reset the Alarm Mode and return TPASS®5 to **Sensing Mode** by simultaneously pressing both side buttons.

TURN OFF: To turn TPASS®5 **OFF**, replace Accountability Key and press both side buttons simultaneously. A brief series of de-escalating audio tones will be heard and all LED activity will cease.

TPASS®5 GPS SPECIAL FEATURES

EVACUATE: In-Command and TPASS®5 have an Evacuate (EVAC) signaling feature that allows incident command to signal one, many, or all firefighters to Evacuate or leave the structure. The TPASS®5 Evacuate function is activated from the In-Command software or from a SuperCELL SC500-IC (SC500-IC is only capable of Evacuating all RF PASS). When an EVAC signal is received by a TPASS®5, the top red EVAC LED and all four front LEDs will strobe, accompanied by a loud and unique audio alarm tone easily distinguished from all other TPASS®5 audio tones. This EVAC audio tone sound is a stepped de-escalating tone ending in the higher start tone. **It is highly recommended that all firefighters and incident command personnel test and become familiar with the EVAC command process and identify the audible EVAC tone sound from the TPASS®5 prior to actual use.** When the EVAC command signal is received by the TPASS®5 there is automatic RF signaling back to the In-Command indicating **receive acknowledg-**

ment of the EVAC command. The TPASS®5 user manually acknowledges receipt of the EVAC command by simultaneously pressing both of the side buttons to initiate RF signaling back to In-Command. During the EVAC process, the TPASS®5 remains in motion sensing mode.

***In-Command software version 3.05.0100 (or higher) is required for support of ABANDON and VOLUNTARY WITHDRAWAL features ***

ABANDON: In-Command and TPASS®5 have an ABANDON signaling feature that allows incident command to signal one, many, or all firefighters to immediately ABANDON or leave the structure or area. The ABANDON signaling feature is intended to be a higher-level, urgent emergency signal to the firefighter indicating imminent harm may occur and immediate high-level danger may be present. The ABANDON function is activated from the In-Command software. When an ABANDON signal is received by a TPASS®5, the top red EVAC LED and all four front LEDs will strobe, accompanied by a loud and unique audio alarm tone easily distinguished from all other TPASS®5 audio tones. This ABANDON audio tone sound is a multi-chirp, two-step pulsed tone. Note, while the EVAC and ABANDON share the same LED indication, the audible alert tones are distinctly different. **It is highly recommended that all firefighters and incident command personnel test and become familiar with the ABANDON command process and identify the audible ABANDON tone sound from the TPASS®5 prior to actual use.** When the ABANDON command signal is received by the TPASS®5, there is automatic RF signaling back to the In-Command indicating **receive acknowledgment** of the ABANDON command. TPASS®5 user manually acknowledges receipt of the ABANDON command by simultaneously pressing both of the side buttons to initiate RF signaling back to In-Command. During the ABANDON process, the TPASS®5 remains in motion sensing mode.

VOLUNTARY WITHDRAWAL: The Voluntary Withdrawal feature, referred to as WITHDRAWAL, is a useful signal that allows the firefighter to alert incident command they are leaving or exiting a building, hot-zone, or assigned area and returning to a safe-zone on their own accord. A firefighter initiates the WITHDRAWAL signal by simultaneously pressing and holding the side buttons for 3 seconds until an audible, escalating chirp tone is heard. Upon WITHDRAWAL activation by the user, an RF signal is sent to the In-Command where the WITHDRAWAL status is shown, indicating the user has signaled WITHDRAWAL. While in WITHDRAWAL mode, the TPASS®5 periodically chirps as a prompt to the firefighter. Once the user returns to the safe-zone, he can deactivate the WITHDRAWAL by pressing and holding the side buttons for 3 seconds. De-escalating chirp tones verify WITHDRAWAL mode has been exited. **It is highly recommended that all firefighters and incident command personnel test and become familiar with the WITHDRAWAL process and identify the audible WITHDRAWAL entry and exit audible tone sounds from the TPASS®5 prior to actual use.** During the WITHDRAWAL process, the TPASS®5 remains in motion sensing mode and always has its distress alarm button operational and additionally, the EVAC, ABANDON, PAR and ROLL-CALL features remain active.

PAR CHECK: TPASS®5 and In-Command system provides for an automated Personnel-Accountability-Report without the need to use voice radios. The In-Command PC software is configurable to allow an incident commander to periodically signal each TPASS®5 user and solicit a response indicating their presence. When TPASS®5 receives the PAR check signal from In-Command, it will automatically transmit a receive-acknowledgment. The top Green P/R LED will strobe, two front Yellow LEDs (upper right and lower left) will strobe, and begin sounding a unique audible alert that sounds like “ba deetle deet”. The audible PAR alert remains until the user presses both side buttons which cancels the audible alarm and transmits the PAR manual-acknowledgment signal to In-Command. See the In-Command user’s manual for a more detailed description of auto and manual PAR checks.

ROLL-CALL: TPASS®5 and In-Command system provides an automated Roll-Call-Report without the need to use voice radios. The In-Command PC software is configurable to allow an incident commander to signal each user and solicit a response indicating their presence during a Roll-Call. When TPASS®5 receives the Roll-Call signal from In-Command, it will automatically reply by transmitting a receive-acknowledgment. The top Red P/R LED will strobe, all four front Yellow LEDs will strobe, and TPASS®5 will begin sounding a unique audible alert that sounds like “ba deetle deet”. The audible Roll-Call alert continues until the user presses both side buttons which cancels the audible alarm and transmits the Roll-Call manual-acknowledgment signal to In-Command. See the In-Command user’s manual for a more detailed description of Roll-Call.

LOSS of SIGNAL: TPASS®5 and In-Command system monitors for loss of RF signal when the TPASS®5 is in Sensing Mode. When no RF signal is detected, TPASS®5 will indicate this by a periodic, alternate flashing of Green and Red at the Antenna LED.

GPS: TPASS®5 units with GPS scan for the GPS location from the global GPS satellite network. The TPASS®5 will display GPS detection status through the LED display, and the detected location will be included in the telemetry data sent to In-Command. NOTE: The TPASS®5 will not detect a GPS signal in a building and any other location that does not have a view of the sky.

Visual / Audio Mode Display

OFF

- Accountability Key in place with no LED display.

CLOCK NOT SET

- A series of four audio tones, 'long-short-long-short' (– • – •), when accountability key is removed to activate unit.
- Followed by steady ON display of upper left Amber LED.
- See *Internal Clock Status* section to set the clock.

ON (Sensing Mode)

- Accountability Key removed, a series of escalating audio tones.
- Followed by an alternating display of front Green LEDs.

PRE-ALERT

- No motion sensed for 18 - 23 seconds.
- Alternating Green and Yellow LED display.
- Accompanied by progressively louder audio tones.

ALARM

- No motion sensed for 30 - 35 seconds.
- Rapid pulsing of four front Red LEDs.
- Accompanied by a loud (95+ dBA) audio alarm.
- Audio alarm signal is current NFPA sound signature.

EVACUATE

- Evacuate LED (running man) strobes Red.
- Four front Yellow LEDs strobe.
- Loud, stepped de-escalating tone ending in the higher start tone.

ABANDON

- Evacuate LED (running man) strobes Red.
- Four front Yellow LEDs strobe.
- Loud, multi-chirp two-step pulsed tone.

VOLUNTARY WITHDRAWAL

- Escalating chirp tone is heard when Withdrawal mode is activated.
- Periodic chirps while in Withdrawal mode.
- De-escalating chirp tones when Withdrawal mode is deactivated.

PAR CHECK

- P/R LED will strobe Green.
- Two front Yellow LEDs strobe. (Opposing corners).
- Unique audio alarm tone (“ba deetle deet” twice, with a pause before repeating).

ROLL-CALL

- P/R LED will strobe Red.
- Four front Yellow LEDs strobe.
- Unique audio alarm tone (“ba deetle deet” twice, with a pause before repeating).

LOSS of SIGNAL

- Antenna LED alternates Green and Red.

LOW BATTERY

- Alternating Green and Yellow pulsing display of front LEDs.
- Series of two audio beep tones enunciated every 23 seconds.

GPS

- **No Lock:** System has not received valid location data within the last 180 Seconds. Display LED’s Alternate corner to corner.
- **GPS Lock:** System has acquired a GPS signal lock, GPS data has been updated within the last 180 Seconds. Display LED’s Alternate side to side.

Mode Selection

AUTO-ON

- When TPASS®5 is removed from storage position, the Accountability Key detaches and **Sensing Mode** is activated.

ALARM

- **Alarm Mode** can be manually activated at any time (from **Sensing Mode** or **Off Mode**) by pressing the Emergency Distress Button on front of unit.

RESET

- When in **Alarm**, the TPASS®5 can be reset to **Sensing Mode** by simultaneously pressing both side buttons.

VOLUNTARY WITHDRAWAL

- Initiate WITHDRAWAL status by simultaneously pressing and holding both side buttons until audible, escalating chirp tone is heard.
- Deactivate WITHDRAWAL status by pressing and holding both side buttons until de-escalating chirp tones verify WITHDRAWAL mode has been exited.

OFF

- Turn OFF TPASS®5 by replacing the Accountability Key and then pressing both side buttons simultaneously.

TPASS®5 GPS Mounting & Attachment

TPASS®5 is equipped with a high-strength grip-clip designed for secure attachment to turnout-gear such as to an SCBA strap. For optimal performance, recommended mounting location is on the upper left or right shoulder and in the horizontal position with the sound port facing out to the side (see image below). **However, the ideal wearing position of TPASS5 is often best determined by the end user for ease of access and operation.**



Maintenance

TPASS®5 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 TPASS®5 from service if physical damage is observed.**
- Grip-clip requires yearly lubrication with PTFE lube (CRC 03044 or equivalent) as shown in side-view drawing.
- Store TPASS®5 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.
- Replace batteries approximately every 3 to 4 months or sooner if indicated by Low Battery Alarm.
- **DO NOT mark or apply paint to TPASS.**

Specifications

Dimensions: 2.75” wide, 5” high, 2” deep

Weight: 14 ounces with batteries (without key)

Alarm Audio Output: minimum 95+ dBA, typical 98dBA+ at 1 meter.

Case: Rugged, high temperature, impact resistant, engineered plastic with high temperature silicone over-mold.

Attachment: Large, stainless steel grip-clip and D-ring.

Antenna: Internal.

Batteries: Three approved AA (LR6), 1.5 volt, alkaline batteries.

Battery Life: Estimated at 24-30 hours in **Sensing Mode**; 4 hours in **Alarm Mode**.

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 determined unfit for use.**

Limitations

To reduce risk of serious injury or loss of life, ensure TPASS®5 is fully operational by testing and inspecting the unit prior to use. Use of a TPASS®5 maintenance and training program including replacement of exhausted or low batteries is required for safe and proper use.

If proper operation of TPASS®5 is questionable, remove unit from service and contact Grace Industries for assistance.

Temperature Sensing and Heat-Alarm

Certain models of Grace TPASS®5 are equipped with an internal temperature sensor that can warn the user of a potential heat-stress condition and to indicate the TPASS®5 is approaching an extended operational time of potentially-dangerously high temperatures. The TPASS®5 Heat-Alert and Heat-Alarm functions use this internal temperature sensor as an integrated, time-weighted average to provide the user with a three-stage heat alert/alarm visual and audible warning. The heat time-weighted average relates to the alert and alarm indications based on both inputs: time and temperature. TPASS®5 exposure to a higher temperature for a shorter time can be equivalent to a less-high temperature for a longer period of time. This Heat-Alert and Heat-Alarm feature has 3 stages to indicate the internal TPASS®5 temperature.

Stage 1 Heat-Alert: When the internal TPASS®5 temperature reaches **120°F**, the top Red LED (above the flame icon), begins to flash briefly. **Stage 2 Heat-Alert:** Begins when the internal TPASS®5 temperature reaches **130°F**, the top Red LED (above the flame icon), flashes brighter and longer and is accompanied by a 2-tone audio alert sound occurring once per minute.

Stage 3 Heat-Alarm: Occurs when the internal TPASS®5 temperature exceeds 140°F, the top Red (flame icon) LED stays ON and is

accompanied by a 2-tone audio alert occurring once every 10 seconds. The Heat-Alarm is recorded in the TPASS®5 internal data-log. A Stage 3 Heat-Alarm audio can be temporarily muted for 1 minute by simultaneously pressing both side buttons on the TPASS®5. A Stage 3 Heat-Alarm condition is also RF-transmitted and can be received and displayed by the In-Command® software PC monitoring system.

The Stage 3 Heat-Alarm is self-clearing as TPASS®5 cools and the internal temperature drops below the respective stage temperature levels. The flame icon LED will follow the respective stage temperature levels indicated.

WARNING! The TPASS®5 Heat-Alert and Heat-Alarm functions are relative internal monitoring functions and NOT intended to determine a safe-temperature environment and should NOT be relied on as the sole warning to the firefighter of dangerously high environmental temperatures or possible flash-over conditions.

Battery Installation and Replacement

To change batteries, remove the four screws securing the back cover. Remove the exhausted batteries and insert new batteries. Observe polarity for proper (+) and (-) placement. Dispose of used batteries in accordance with national or local regulations.

Always use approved AA (LR6) 1.5 volt alkaline batteries. Batteries may be any of the following brands but DO NOT MIX battery brands and/or part numbers:

Approved Alkaline Batteries:

**Rayovac, Rayovac-Fusion,
Energizer E91, Energizer-Industrial EN91,
Duracell MN1500, Duracell-Procell PC1500.**

Important: To preserve the internal real-time-clock date & time setting, batteries must be replaced within 30 minutes of removing the exhausted batteries.

Before replacing the back cover, inspect and remove any dust or dirt on the mating edges of the back cover and case.

Carefully replace back cover and gently tighten all four screws using a crisscross pattern for even gasket pressure, ensuring a good seal. DO NOT over tighten screws.

Replacing the batteries every 3 to 4 months is recommended unless indicated earlier by the **Low Battery Alarm**.

LOW BATTERY ALARM will sound when the batteries have been exhausted to 20% of capacity (indicating approximately 1 hour of Alarm operating time remains). Immediate replacement of the batteries is necessary when **Low Battery Alarm** sounds.

When TPASS®5 is in **Sensing Mode**, the **Low Battery Alarm** is easily recognized by an alternating Green and Yellow LED pulsing display, accompanied by a series of two audio beep tones enunciated every 23 seconds.

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

Internal Data Logger

The internal data logging function meets and exceeds NFPA requirements. The data logger timestamps, dates and stores over 2,000 of the most recent events.

Recorded TPASS®5 events include: Power On, Pre-Alert, Motion Alarm, Distress Alarm, Alarm Reset, Evacuate Commands, Evacuate Acknowledgments, Abandon Commands, Abandon Acknowledgments, PAR Checks, PAR Acknowledgments, Roll-Call, Roll-Call Acknowledgments, Power Off, Heat Alarm and Low Battery indications. Data-log information can be downloaded to a PC using the datalog-transfer software and USB cable available from Grace Industries, Inc.

Internal Clock Status

Clock is Set: After removing Accountability Key to activate unit - a series of loud escalating audio tones is followed by an alternating display of Green LEDs indicating PASS is operational and ready for use.

Clock NOT Set: After removing Accountability Key to activate unit - a series of four audio tones (– • – •) is followed by a steady ON display of upper left Amber LEDs. When the clock is not set, accurate time and date logging is not achieved.

Setting the Clock - TPASS 5 and RF activated SuperPASS 5X: RF PASS Clocks will be automatically reset/updated when used with In-Command Full-Crew and In-Command First-In Accountability systems. Once In-Command Full-Crew and In-Command First-In Accountability systems are activated, a refresh signal is sent to update the RF PASS internal clock.

* For information on how to reset the internal clock please visit our website at www.gracefirefighter.com