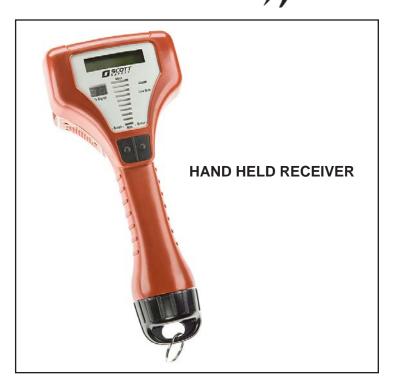


# SCOTT PAK-TRACKER LOCATOR SYSTEM Pak-Tracker )))





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# SCOTT PAK-TRACKER LOCATOR SYSTEM

Pak-Tracker

**User Instructions** 

WARNING

READ AND UNDERSTAND THIS ENTIRE MANUAL. TRAINING IS REQUIRED BEFORE USE OF THE PAK-TRACKER LOCATOR SYSTEM IN A HAZARDOUS SITUATION. THE TRAINING MUST INCLUDE AN UNDERSTANDING OF THE LIMITATIONS OF THE EQUIPMENT AND HOW TO INTERPRET LOCATING INFORMATION, ALONG WITH EXTENSIVE PRACTICE WITH THE SYSTEM IN A VARIETY OF ENVIRONMENTS. USE OF THIS EQUIPMENT MUST BE PART OF A COMPLETE PERSONNEL ACCOUNTABILITY SYSTEM. ALWAYS UPDATE TRAINING WITH EACH NEW PIECE OF EQUIPMENT. USE OF A PAK-TRACKER LOCATOR SYSTEM WITHOUT PROPER TRAINING MAY PLACE THE USERS AT HIGHER RISK IN DANGEROUS SITUATIONS, WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

# DESCRIPTION

The SCOTT PAK-TRACKER Locator System is a two-part electronic system consisting of the radio transmitter in specially-equipped PAK-ALERT distress alarms and the directional receiver (Hand Held Receiver) used to locate the signal coming from the transmitter.

The PAK-ALERT Personal Alert Safety System (PASS) equipped with the PAK-TRACKER Locator System is available as part of a Scott Safety self-contained breathing apparatus (SCBA) respirator. This line of electronic accessories is for use by fire fighters, first responders, domestic preparedness and law enforcement officers, as well as HAZ-MAT and industrial users. An SCBA equipped with the SCOTT PAK-TRACKER Locator System can be identified by the two red covers on the Sensor Module.

If a user of a Scott Safety SCBA with the PAK-TRACKER Locator System is incapacitated for any reason and does not move for a predetermined period of time, the PAK-ALERT detects the lack of motion from the wearer and goes into alarm mode. Upon activation, the unit produces both audible and visual alarms. A short time after activation of the alarms, the unit begins transmitting a signal with a unique ID number that can be received by the Hand Held Receiver. The user may also select the manual alarm to activate the transmitter.

When the Hand Held Receiver receives a transmitted signal from a transmitter, an audible alarm sounds to indicate that a transmitter has gone into alarm mode. It also includes an LCD Display to show the ID numbers of all activated transmitters. The Hand Held Receiver is then used as a directional receiver to lead the rescue crew to the downed, trapped, or lost user. A row of lights on the Hand Held Receiver display indicates the strength and therefore the relative direction of the signal from the transmitter. By pointing the Hand Held Receiver in the direction of the strongest signal, the rescue crew can follow the signal to the downed user.

Use of this equipment must be part of a complete personnel accountability system that includes procedures for monitoring the deployment and condition of all users. Do not rely on the PAK-TRACKER Locator System as the only technique for locating missing personnel. Failure to use this equipment properly may actually increase the time needed to locate and rescue personnel. Training and practice in realistic emergency simulations is required before use of this equipment. The users must become thoroughly familiar with the operation and

### WARNING

DO NOT OPERATE THIS EQUIPMENT WHILE UNDER THE INFLUENCE OF DRUGS, ALCOHOL, OR ANY MEDICATIONS OR SUBSTANCES WHICH MAY AFFECT VISION, DEXTERITY, OR JUDGMENT. USERS OF THIS EQUIPMENT MUST BE IN GOOD PHYSICAL AND MENTAL HEALTH IN ORDER TO OPERATE SAFELY. DO NOT USE THIS EQUIPMENT WHEN FATIGUE PREVENTS SAFE OPERATION. STAY ALERT WHEN OPERATING THIS EQUIPMENT. INATTENTION OR CARELESSNESS WHILE OPER-ATING THIS EQUIPMENT MAY RESULT IN SERIOUS INJURY OR DEATH.

### WARNING

ALWAYS UPDATE TRAINING WITH EACH NEW PIECE OF EQUIPMENT. EVEN IF YOU HAVE USED THE SCOTT PAK-TRACKER LOCATOR SYSTEM, NEW EQUIPMENT MAY HAVE DIFFERENT OPER-ATING CHARACTERISTICS. USE OF THIS DEVICE WITHOUT PROPER TRAINING AND UNDERSTAND-ING OF ITS OPERATION MAY CAUSE ERRORS IN JUDGEMENT BASED ON MISINTERPRETATION OF LOCATOR INFORMATION, WHICH MAY RESULT IN SERIOUS INJURY OR DEATH.

### WARNING

ALWAYS MAINTAIN AWARENESS OF LOCATION AND ESCAPE ROUTES WHEN USING THIS DEVICE. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR DEATH.

### WARNING

THE SCOTT PAK-TRACKER HAND HELD RECEIV-ER WORKS ONLY WITH THE SCOTT PAK-ALERT DISTRESS ALARM EQUIPPED WITH THE PAK-TRACKER LOCATOR SYSTEM. THE HAND HELD RECEIVER WILL NOT COMMUNICATE WITH RESPIRATORS THAT ARE NOT EQUIPPED WITH THE SCOTT PAK-TRACKER LOCATOR SYSTEM. FAILURE TO RECOGNIZE THE STATUS OF ALL PERSONNEL MAY RESULT IN SERIOUS INJURY OR DEATH. the limitations of the system before entering a potentially hazardous or life threatening situation.

These instructions are to be used as the basis of training for use of the whole system and include an overview of the system operation and limitations of the system, as well as any user level maintenance.

Always update training with each new piece of equipment. Even if users have trained with PAK-TRACKER Locator System before, new equipment may have different operating characteristics that users must become familiar with before entering an emergency or hazardous situation.

Complete instructions for the PAK-ALERT distress alarm equipped wih the PAK-TRACKER Locator System are provided separately.

Some versions of this equipment may not be available in all markets. Contact Scott Safety or your authorized Scott Safety distributor for details.

# ID UPDATERS FOR PAK-TRACKER LOCATOR SYSTEMS

The PAK-ALERT distress alarm installed on a Scott Safety SCBA respirator comes factory programmed with an identification number unique to that unit. This identification number can be reprogrammed to a combination of up to eight characters (letters and/or numbers) using the Scott Connect Configure Software on a personal computer and the PAK-LINK Programmer.

Instructions for reprogramming the PAK-ID are included in the Scott Connect Configure Instruction Guide, which is available within the Scott Connect Configure software application. Contact Scott Safety or your Scott Safety distributor for details.

# WARNING

READ AND UNDERSTAND THIS ENTIRE MANUAL. TRAINING IS REQUIRED BEFORE USE OF THE PAK-TRACKER LOCATOR SYSTEM IN A HAZARD-OUS SITUATION. THE TRAINING MUST INCLUDE AN UNDERSTANDING OF THE LIMITATIONS OF THE EQUIPMENT AND HOW TO INTERPRET LO-CATING INFORMATION, ALONG WITH EXTENSIVE PRACTICE WITH THE SYSTEM IN A VARIETY OF ENVIRONMENTS. USE OF THIS EQUIPMENT MUST BE PART OF A COMPLETE PERSONNEL ACCOUNT-ABILITY SYSTEM. ALWAYS UPDATE TRAINING WITH EACH NEW PIECE OF EQUIPMENT. USE OF A PAK-TRACKER LOCATOR SYSTEM WITHOUT PROPER TRAINING MAY PLACE THE USERS AT HIGHER RISK IN DANGEROUS SITUATIONS WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

# WARNING

USE OF THIS EQUIPMENT MUST BE PART OF A COMPLETE TRAINING PROGRAM. INTER-PRETATION OF THE INFORMATION FROM THIS EQUIPMENT REQUIRES TRAINING, EXPERIENCE, AND PRACTICE. DO NOT USE THE SYSTEM IF YOU HAVE NOT BEEN THOROUGHLY TRAINED IN ITS USE AND OPERATION. USE OF THIS DEVICE WITHOUT PROPER TRAINING AND UNDERSTAND-ING OF ITS OPERATION MAY CAUSE ERRORS IN JUDGMENT BASED ON MISINTERPRETATION OF THE INFORMATION, WHICH MAY RESULT IN SERI-OUS INJURY OR DEATH.

# USE OF THE PAK-TRACKER LOCATOR SYSTEM

# **USE AS PART OF AN ACCOUNTABILITY SYSTEM**

Use of this equipment must be part of a complete personnel accountability system that includes procedures for monitoring the deployment and condition of all users such as those outlined in NFPA 1561, *Standard on Emergency Services Incident Management Systems*. Do not rely on the PAK-TRACKER Locator System as the only technique for locating missing personnel. A Rescue Team or Rapid Intervention Crew using the Hand Held Receiver must have a minimum of two (2) people. For their own safety, the team members must pay attention to their surroundings at all times while using the PAK-TRACKER Locator System. The use of other equipment such as a thermal imaging camera in conjunction with the PAK-TRACKER Locator System is strongly recommended.

The accountability system must include procedures for alerting the incident commander and rescue teams when actuated transmitters or the missing personnel have been found or when they have moved from their previous location. It is the responsibility of the personnel accountability system to allow for such contingencies without exposing individuals and teams to unnecessary dangers.

# **RESTRICTED USE IN SOME LOCATIONS**

The Hand Held Receiver is not suitable for use in potentially flammable or explosive atmospheres. Always check for the presence of a flammable or explosive atmosphere before entering an unknown atmosphere with the Hand Held Receiver.

# PRINCIPLES OF OPERATION OF THE PAK-TRACKER LOCATOR SYSTEM

The Scott Safety PAK-TRACKER Locator System is a two part electronic system consisting of a Hand Held Receiver and a radio transmitter.

When a transmitter is activated, it sends out a radio signal in all directions that is received by the Hand Held Receiver. Understanding how the radio signal from a transmitter behaves and how the Hand Held Receiver receives and displays the strength of that signal are critical to understanding the operation of the SCOTT PAK-TRACKER Locator System.

Successful operation of the PAK-TRACKER Locator System depends heavily on the interpretation of the relative signal strength information displayed on the Hand Held Receiver along with all other available information about the possible location of the activated transmitter.

The Hand Held Receiver is very sensitive in responding to small differences in signal strength. The relative strength of the transmitter signal detected by the Hand Held Receiver will vary depending on the following:

- 1. The distance from the transmitter to the Hand Held Receiver
- 2. The path the transmitter signal has taken to get to the Hand Held Receiver
- 3. The materials between the transmitter and the Hand Held Receiver which may have affected the signal from the transmitter

The user of the Hand Held Receiver must interpret the readings on the Hand Held Receiver display along with other information, such as

- training and knowledge in systematic search and rescue techniques
- his/her sense of sight (watch where he/she is going)
- his/her sense of sound (listen for an activated PASS device)
- the deployment of the missing personnel
- knowledge of the building layout and building materials
- any other pertinent information available on the scene

### WARNING

READ AND UNDERSTAND THIS ENTIRE MANUAL. TRAINING IS REQUIRED BEFORE USE OF THE PAK-TRACKER LOCATOR SYSTEM IN A HAZARD-OUS SITUATION. THE TRAINING MUST INCLUDE AN UNDERSTANDING OF THE LIMITATIONS OF THE EQUIPMENT AND HOW TO INTERPRET LO-CATING INFORMATION, ALONG WITH EXTENSIVE PRACTICE WITH THE SYSTEM IN A VARIETY OF ENVIRONMENTS. USE OF THIS EQUIPMENT MUST BE PART OF A COMPLETE PERSONNEL ACCOUNT-ABILITY SYSTEM. ALWAYS UPDATE TRAINING WITH EACH NEW PIECE OF EQUIPMENT. USE OF A PAK-TRACKER LOCATOR SYSTEM WITHOUT PROPER TRAINING MAY PLACE THE USERS AT HIGHER RISK IN DANGEROUS SITUATIONS WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

### WARNING

CONTINUED TRAINING AND PRACTICE IN A VARIETY OF SITUATIONS IS ESSENTIAL TO DEVELOPING THE SKILLS TO PROPERLY IN-TERPRET THE INFORMATION PROVIDED BY THE PAK-TRACKER LOCATOR SYSTEM. USE OF THIS EQUIPMENT WITHOUT TRAINING AND PRACTICE MAY JEOPARDIZE ALL PERSONNEL INVOLVED, WHICH COULD LEAD TO SERIOUS INJURY OR DEATH.

# Do not rely solely on the readings from the Hand Held Receiver to locate the activated transmitter.

The LCD Display indicates the ID number of the activated transmitter and the Number Display indicates the relative strength of the signal with numbers from 1 to 99. A higher number indicates the stronger signal and, therefore, the approximate direction of the signal from the transmitter. Pointing the Hand Held Receiver in the direction of the strongest relative signal and moving in that direction should lead to the activated transmitter.

Use the signal strength numbers below 50 to establish a general direction to proceed. Practice is required to interpret these low signal strength numbers because they may arrive at the receiver from many different directions. Look for **broad** increases in signal strength; for example, look for an increase from 20 to 30 as significant. Do not try to interpret small changes, such as the difference between readings of 20 and 21. Larger increases are a more reliable indicator of the direction to the strongest signal.

When the signal strength number is 51 or higher, the PAK-TRACKER Receiver will produce a **variable pitch tone** once per second that corresponds to the signal strength: A stronger signal will produce a **higher** pitch tone and a weaker signal will produce a **lower** pitch tone.

The higher numbers indicate a stronger signal, but still require practice to interpret. Try to identify a path where the variable pitch tone is **<u>both</u>** active consistently and continues to get higher in pitch. Again, look for **broad** increases in signal strength to be significant.

Use a **Read-Interpret-Follow** process while watching the digital display for the highest number and listening for the highest pitch of the tone as an indication of the strongest radio signal.

Always update training with each new piece of equipment. Even if users have trained with PAK-TRACKER Hand Held Receiver before, new equipment may have different operating characteristics that users must become familiar with before entering an emergency or hazardous situation.

### WARNING

ALWAYS UPDATE TRAINING WITH EACH NEW PIECE OF EQUIPMENT. EVEN IF YOU HAVE USED THE SCOTT PAK-TRACKER LOCATOR SYSTEM, NEW EQUIPMENT MAY HAVE DIFFERENT OPER-ATING CHARACTERISTICS. USE OF THIS DEVICE WITHOUT PROPER TRAINING AND UNDERSTAND-ING OF ITS OPERATION MAY CAUSE ERRORS IN JUDGMENT BASED ON MISINTERPRETATION OF LOCATOR INFORMATION, WHICH MAY RESULT IN SERIOUS INJURY OR DEATH.

# BASIC OPERATION OF THE PAK-TRACKER LOCATOR

# <u>SYSTEM</u>

To turn on the Hand Held Receiver, press and hold both the ENTER and the SCROLL buttons at the same time (see FIGURE 1). All lights will go on briefly for a self test after which the LCD Display will show two dotted lines.



**FIGURE 1** 

To turn on the PAK-ALERT distress alarm equipped with the PAK-TRACKER Locator System, open the air cylinder fully. Refer to the complete instructions provided with the Scott Safety SCBA and the PAK-ALERT distress alarm.

If the respirator equipped with the PAK-ALERT distress alarm is motionless for thirty (30) seconds, an alarm activates and transmits a signal with the transmitter's unique identification number.

When the Hand Held Receiver receives the signal from a transmitter, it sounds an alarm. To track that ID number, make sure the ID number is on the top line of the LCD Display and press the ENTER button **once**. The LCD Display shows that you have entered the search mode.

If two or more transmitters are activated and transmitting, press and hold the SCROLL button for three (3) seconds and continue to hold until the ID number of the transmitter you want to track appears in the top line of the LCD Display. Arrows appear at each side of the display to indicate that three or more transmitters are activated and transmitting. Release the SCROLL button and then press the ENTER button **once** to select the top ID number to track. See FIGURE1.

To change the ID number you want to track, press and hold the SCROLL button for one (1) second and release to exit SEARCH mode. Press and hold the SCROLL button for three (3) seconds until the new ID number you want to track appears in the top row of the display. Release the SCROLL button and press the ENTER button **once** to select the new ID number to track.

# **BEGIN THE SEARCH**

To begin searching, hold the Hand Held Receiver horizontally at waist height in front of you. The row of LED's and the Number Display on the Hand Held Receiver indicate the relative strength and, therefore, the approximate direction of the signal from the transmitter. The Number Display shows numbers from 0 to 99, where the higher number indicates the stronger signal being received. Pointing the Hand Held Receiver in the direction of the strongest relative signal and moving in that direction should lead to the activated transmitter. When the signal strength rises above the number 50 level, the row of LED's will begin to light starting with red at the bottom, yellow in the middle, and green at the top.

The PAK-TRACKER Hand Held Receiver averages four readings per second. Use a Read-Interpret-Follow process while watching the digital display for the highest number as an indication of the strongest radio signal. If there are features such as doors, hallways, openings, or windows, take readings at each feature to determine a possible general direction for the signal. If you use a sweeping motion, sweep very slowly in a horizontal direction first. Sweep vertically if you suspect that the signal may be coming from a higher or lower floor in the building. Always pause for a reading. Sweeping too fast may average a high reading with a low reading, resulting in misleading information.

Always move toward the highest relative signal strength displayed. In general, the closer you get to the transmitter, the higher the relative signal strength. Multiple signal paths are possible. See FIGURE 2. The relative signal strength must be interpreted with all other available information. The transmitter signal will pass through some materials, reflect off some materials, and be absorbed by others.

# WARNING

CONTINUED TRAINING AND PRACTICE IN A VARIETY OF SITUATIONS IS ESSENTIAL TO DEVELOPING THE SKILLS TO PROPERLY IN-TERPRET THE INFORMATION PROVIDED BY THE PAK-TRACKER LOCATOR SYSTEM. USE OF THIS EQUIPMENT WITHOUT TRAINING AND PRACTICE MAY JEOPARDIZE ALL PERSONNEL INVOLVED, WHICH COULD LEAD TO SERIOUS INJURY OR DEATH.

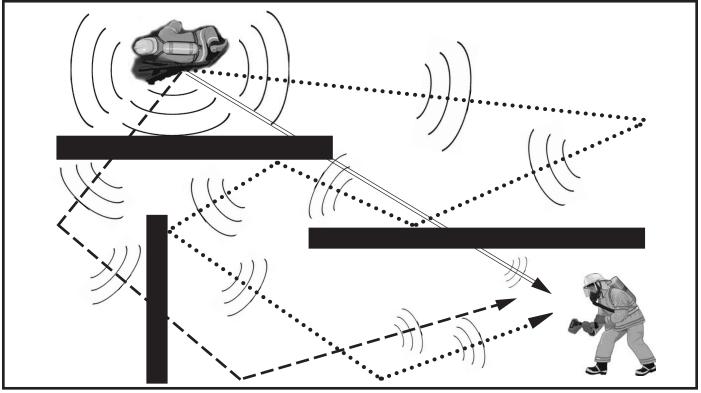


FIGURE 2 MULTIPLE SIGNAL PATHS ARE POSSIBLE

The transmitter signal will usually pass through

- openings such as gaps, holes, stairways, windows, or elevator shafts
- glass
- wood
- light building materials

The transmitter signal will reflect off

- metal, including structural framework
- large metal objects
- · concrete walls or floors
- brick or concrete block construction

The transmitter signal will be absorbed by the human body.

### NOTE

THE PERSON USING THE HAND HELD RECEIVER MUST ALWAYS BE AT THE FRONT OF THE RESCUE TEAM TO PREVENT MISLEADING SIGNALS CAUSED BY OTHER TEAM MEMBERS IN THE WAY. THE PRESENCE OF OTHER PEOPLE WALKING AROUND THE SEARCH AREA MAY ALSO PROVIDE MISLEADING SIGNALS.

### SUGGESTED USES OF THE PAK-TRACKER LOCATOR SYSTEM

At an incident, the Rescue Team must assess the situation and position themselves to monitor the locations of the active members of the incident crew. Turn on the Hand Held Receiver immediately and actively scan the incident scene for any signal from an activated transmitter. A signal from a transmitter may be evident at a greater distance than an audible PASS device. Periodically, use the Hand Held Receiver to check windows and doors for any sign of a signal. When a transmitter is transmitting a signal and the Hand Held Receiver responds, assess the situation first to determine the safest method to approach the search and rescue operation.

The member of the Rescue Team who is operating the Hand Held Receiver must be at the front of the team to prevent signal interference from the other members of the team. The other members of the team must ensure the safety of the member using the Hand Held Receiver by maintaining situational awareness and watching for potential hazards.

Follow this search and rescue process with the PAK-TRACKER Locator System: **READ**—Hold the Hand Held Receiver pointed at features such as doors, windows, or halls. Look for the highest relative signal strength as shown in the display on the Hand Held Receiver.

**INTERPRET**—Decide where the strongest signal appears to be coming from and how best to get there.

FOLLOW—Move toward the strongest signal while continuing to READ, IN-TERPRET, and FOLLOW.

To locate an activated transmitter in a building, point the Hand Held Receiver at the windows and doors to locate the maximum relative signal on the display. Include pointing at windows on upper floors of the building if the user could be on upper floors. Enter the building as close as possible to the area where the Hand Held Receiver indicated the transmitter could be and complete the search.

Successful operation of the PAK-TRACKER Locator System is highly dependent on the interpretation of the relative signal strength information displayed on the Hand Held Receiver along with all other available information about the possible location of the activated transmitter including procedures for monitoring the deployment and condition of all users.

Continued training and practice in a variety of situations is essential to developing the skills to properly interpret the information provided by the PAK-TRACKER Locator System.

### WARNING

CONTINUED TRAINING AND PRACTICE IN A VARIETY OF SITUATIONS IS ESSENTIAL TO DEVELOPING THE SKILLS TO PROPERLY IN-TERPRET THE INFORMATION PROVIDED BY THE PAK-TRACKER LOCATOR SYSTEM. USE OF THIS EQUIPMENT WITHOUT TRAINING AND PRACTICE MAY JEOPARDIZE ALL PERSONNEL INVOLVED, WHICH COULD LEAD TO SERIOUS INJURY OR DEATH.

# **REGULAR OPERATIONAL INSPECTION**

Inspect and test the Scott Safety PAK-TRACKER Locator System before each use. If any malfunction of the PAK-TRACKER Locator System is noted during the inspection, remove the equipment from service and tag for return to the manufacturer for repair or replacement.

### NOTE

IF THIS INSPECTION IS DONE IN DIRECT SUNLIGHT, IT MAY BE HELPFUL TO SHADE THE DISPLAY ON THE HAND HELD RECEIVER WITH YOUR HAND TO BE SURE THE LIGHTS ARE FLASHING AS DESCRIBED.

# HAND HELD RECEIVER INSPECTION

If any damage is found, remove the unit from service and tag for repair by qualified personnel.

- 1. Visually inspect all Hand Held Receiver enclosure, battery compartment cover, and display for cracks or other damage.
- 2. Check the optional Hand Held Receiver strap handle for weakness.
- 3. Verify that all fasteners and mounting hardware are present and tight.
- 4. Check all battery contacts. The contacts must be clean and straight.
- 5. Verify that a fully charged battery is properly installed. Refer to the BATTERY CHARGING, INSTALLATION, AND REPLACEMENT section of this instruction.
- 6. Turn on the Hand Held Receiver by pressing both the SELECT and SCROLL buttons simultaneously. Verify that the unit powers up and all lights and displays operate properly.
- 7. Battery Life When the battery in the Hand Held Receiver has approximately twenty percent (20%) of its life remaining, the "Low Batt" indicator light will glow yellow. If the "Low Batt" indicator lights at any time during the regular operational inspection, replace the battery pack with a fully charged battery pack before proceeding with the inspection. See the BATTERY CHARGING, INSTALLATION, AND REPLACEMENT section of this instruction.

After the "Low Batt" indicator light appears, the Hand Held Receiver will operate for approximately forty-five (45) minutes. If the battery is not changed in that time, the Hand Held Receiver will shut down and will not operate until a fully charged battery is installed.

# PAK-ALERT DISTRESS ALARM INSPECTION

Refer to the user instructions provided with the SCOTT PAK-ALERT distress alarm equipped with the PAK-TRACKER Locator System for details about the regular operational inspection.

### WARNING

FOLLOW THE REGULAR OPERATIONAL IN-SPECTION PROCEDURE EXACTLY. IF THE PAK-TRACKER LOCATOR SYSTEM DOES NOT AC-TUATE, OR DOES NOT OPERATE AS DESCRIBED OR IF ANY OTHER OPERATIONAL MALFUNCTION IS NOTED, DO NOT USE THE EQUIPMENT. FAILURE TO PROPERLY IDENTIFY MALFUNCTIONS AND TAKE APPROPRIATE CORRECTIVE ACTIONS MAY RESULT IN SERIOUS INJURY OR DEATH.

### WARNING

THE PROPER OPERATION OF THE LOCATOR SYS-TEM CANNOT BE CHECKED WITHOUT CHECKING ALL COMPONENTS OF THE SYSTEM TOGETHER. THE REGULAR OPERATIONAL INSPECTION MUST INCLUDE THE HAND HELD RECEIVER AND THE TRANSMITTER WORKING WITH EACH OTHER TO CONFIRM PROPER OPERATION. FAILURE TO PROPERLY INSPECT THE COMPLETE SYSTEM MAY RESULT IN FAILURE OF ONE COMPONENT, WHICH COULD LEAD TO SERIOUS INJURY OR DEATH.

### WARNING

IF THE LOW BATTERY INDICATION OCCURS AT ANY TIME DURING REGULAR OPERATIONAL INSPECTION, DO NOT USE THE EQUIPMENT. CHANGE THE BATTERIES AS REQUIRED IMMEDI-ATELY AND REPEAT THE REGULAR OPERATIONAL TEST OR TAKE THE EQUIPMENT OUT OF SERVICE UNTIL THE BATTERIES ARE CHANGED AND THE REGULAR OPERATIONAL TEST IS SUCCESS-FULLY PERFORMED.

### WARNING

THE SENSITIVITY RANGE OF THE HAND HELD RECEIVER MAY DIMINISH WITH DECLINING BAT-TERY LIFE. ALWAYS USE A FRESHLY CHARGED BATTERY WHEN INITIATING A SEARCH TO EN-SURE MAXIMUM BATTERY DURATION. USE OF A HAND HELD RECEIVER WITH REDUCED BATTERY LIFE MAY JEOPARDIZE THE SUCCESS OF THE SEARCH, WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

# SYSTEM OPERATION INSPECTION

Inspect and test the SCOTT PAK-TRACKER Locator System along with the inspection and testing of the Scott Safety SCBA respirator before each use. Include the following inspection procedures with the regular operational inspection procedures defined in your respirator instructions. If any malfunction of the respirator, the PAK-ALERT distress alarm, or the PAK-TRACKER Hand Held Receiver is noted during the inspection, remove the respirator from service and tag it for repair by authorized personnel.

To test the PAK-TRACKER locator transmitter, you must have an operating SCOTT PAK-TRACKER Hand Held Receiver.

### NOTE

IF THIS INSPECTION IS DONE IN DIRECT SUNLIGHT, IT MAY BE HELPFUL TO SHADE THE LENS ON THE CONTROL CONSOLE WITH YOUR HAND TO BE SURE THE LIGHTS ARE FLASHING AS DESCRIBED.

- 1. While performing the visual inspection of the respirator, visually inspect all distress alarm enclosures, lenses, and wire conduits for cracks, wear or other damage. If any damage is found, remove the respirator from service and tag for repair by qualified personnel.
- 2. Turn on the SCOTT PAK-TRACKER Hand Held Receiver according to the operating instructions provided with the unit. Position the Hand Held Receiver nearby.
- 3. With the cylinder valve closed, press the manual alarm button, located on the front of the distress alarm control console.
  - a) The manual alarm sounds a loud, almost continuous, 3-tone chirp accompanied by flashing of the red signal light on the control console.
  - b) The PAK-TRACKER Hand Held Receiver sounds an alarm and displays the identification number of the PAK-ALERT distress alarm, which appears on the label on the Sensor Module or the Control Console. Use the SCROLL button on the Hand Held Receiver to highlight the active ID number and press the ENTER button on the Hand Held Receiver to select the displayed ID number. Point the unit directly at and in close proximity to the respirator. The signal strength displayed will be at its highest value.
- 4. Reset the manual alarm by pressing the reset button **twice** (fully depress the reset button on the side of the control console, release, and press again).
  - a) The unit will sound three chirps, and the green light flashes.
- b) The PAK-TRACKER Hand Held Receiver resets to its non-alarm state.5. Turn the PAK-ALERT distress alarm off by again pressing the reset button
- twice. The unit will sound a two-tone chirp, and the green light will go out.
  Open the cylinder valve to pressurize the respirator system. The distress alarm sounds 3 quick chirps, and the light on the control console flashes green about once per second. The 3 chirps sound at approximately the same time the VIBRALERT in the mask-mounted regulator actuates briefly. Make sure the air flow is stopped by pressing the air saver/donning switch.
- 7. To check the pre-alarm, leave the respirator motionless for twenty (20) seconds. The green flashing light is replaced by a red flashing light. An ascending/descending tone sounds, increasing in volume. Leave the respirator motionless.
- After the pre-alarm condition occurs, check the pre-alarm reset. Within twelve (12) seconds of the pre-alarm, move the respirator to activate the motion sensor. The PAK-ALERT distress alarm resets to the automatic mode. The red flashing light is replaced by a green flashing light and the ascending/descending tone stops.

Continue with regular operational inspection of respirator as directed by respirator instructions or your approved respiratory protection plan procedure. During the inspection the respirator must be moved or turned every thirty (30) seconds or less to prevent sounding of the full alarm.

# WARNING

FOLLOW THE REGULAR OPERATIONAL IN-SPECTION PROCEDURE EXACTLY. IF THE PAK-TRACKER LOCATOR SYSTEM DOES NOT AC-TUATE, OR DOES NOT OPERATE AS DESCRIBED OR IF ANY OTHER OPERATIONAL MALFUNCTION IS NOTED, DO NOT USE THE RESPIRATOR.

### WARNING

THE PROPER OPERATION OF THE LOCATOR SYS-TEM CANNOT BE CHECKED WITHOUT CHECKING ALL COMPONENTS OF THE SYSTEM TOGETHER. THE REGULAR OPERATIONAL INSPECTION MUST INCLUDE THE HAND HELD RECEIVER AND THE TRANSMITTER WORKING WITH EACH OTHER TO CONFIRM PROPER OPERATION. FAILURE TO PROPERLY INSPECT THE COMPLETE SYSTEM MAY RESULT IN FAILURE OF ONE COMPONENT, WHICH COULD LEAD TO SERIOUS INJURY OR DEATH.

### CAUTION

THE PERFORMANCE PROPERTIES OF THE PAK-ALERT DISTRESS ALARM CANNOT BE PROPERLY TESTED IN THE FIELD.

### WARNING

IN SEVERAL OF THE INSPECTION PROCEDURES DESCRIBED, A FULL ALARM WILL BE OBSERVED. THE FULL ALARM CONDITION INCLUDES AN AUDIBLE TONE THAT CAN EXCEED 95 DBA AT 3 METERS (9.9 FT.). TO PREVENT POSSIBLE HEAR-ING DAMAGE DURING TEST, THE ALARM SHOULD BE RESET IMMEDIATELY ON VERIFICATION THAT IT IS FUNCTIONING PROPERLY. HEARING PRO-TECTION SHOULD BE WORN IF PROLONGED EXPOSURE TO A FULL ALARM CONDITION IS ANTICIPATED.

# After completion of all respirator checks and before closing the cylinder valve:

- Check the manual reset of the pre-alarm. Leave the respirator motionless until pre-alarm condition occurs. Within twelve (12) seconds press and hold the reset button. Three (3) chirps sound. Release the reset button. The distress alarm resets to the automatic mode and the flashing red light is replaced by a flashing green light.
- 2. To check the full alarm, leave the respirator motionless until the pre-alarm condition occurs. Do not reset.
  - a) The full alarm sounds a loud, almost continuous, 3-tone chirp accompanied by flashing of the red signal light on the control console.
  - b) The PAK-TRACKER Hand Held Receiver sounds an alarm and displays the identification number of the PAK-ALERT distress alarm, which appears on the label on the Sensor Module or the Control Console. Use the SCROLL button on the Hand Held Receiver to highlight the active ID number and press the ENTER button on the Hand Held Receiver to select the displayed ID number. Point the unit directly at and in close proximity to the respirator. The signal strength displayed will be at its highest value.
- 3. Reset the manual alarm by pressing the reset button **twice**: Fully depress the reset button on the side of the control console, release, and press again.
  - a) The loud alarm stops. The unit sounds three chirps, and the green light flashes. The unit resets to the automatic mode.
  - b) The PAK-TRACKER Hand Held Receiver resets to its non-alarm state.
- 4. Finish all respirator checks involving air flow and close the cylinder valve. Use the purge valve to release all residual air pressure in the system.

# With the cylinder valve closed (off):

- 1. Check the continuing operation of the distress alarm. The distress alarm remains active with the green light flashing. Do not move the respirator; pre-alarm starts within twenty (20) seconds. Move the respirator slightly; pre-alarm resets, and the green light starts flashing again.
- 2. To turn the distress alarm off, press the reset button **twice** (press, release and press again). The green flashing light goes out and a fifteen (15) second beep sequence sounds from the sensor module. When this sequence is complete, the unit sounds a two-tone chirp. The distress alarm is now in the "OFF" condition.

### WARNING

IF THE LOW BATTERY INDICATION (ONE STEADY CHIRP EVERY 2 SECONDS WITH NO FLASHING LIGHTS) OCCURS AT ANY TIME DURING THE **REGULAR OPERATIONAL INSPECTION, DO NOT** USE THE RESPIRATOR. CHANGE THE BATTER-IES IN THE SENSOR MODULE IMMEDIATELY AND REPEAT THE REGULAR OPERATIONAL TEST OR TAKE THE RESPIRATOR OUT OF SERVICE UNTIL THE BATTERIES ARE CHANGED AND THE REGU-LAR OPERATIONAL TEST IS SUCCESSFULLY PERFORMED. FAILURE TO REPLACE THE BAT-TERIES AND/OR CONTINUING WITH MULTIPLE USES OF THE RESPIRATOR AFTER THE LOW BATTERY CONDITION HAS BEEN INDICATED BY THE PAK-ALERT DISTRESS ALARM MAY RESULT IN FAILURE OF THE PAK-ALERT DISTRESS ALARM DURING USE AND POSSIBLE INJURY OR DEATH OF THE USER.

# DETECTING AND AVOIDING RADIO FREQUENCY INTERFERENCE

When any electronic device is adversely affected by radio waves, radio frequency interference (RFI) is said to have occurred. All electronic devices like the Hand Held Receiver or a PAK-TRACKER transmitter may be subject to the effects of RFI. Radio transmissions from the antennas of radios including those used by fire fighters, police, and other public safety related personnel may produce RFI that can affect the Hand Held Receiver or a PAK-TRACKER transmitter. RFI may occur if a Hand Held Receiver or a PAK-TRACKER transmitter is in close proximity to a transmitting base station or high-powered vehicle mounted radio, or if the antenna of a personal portable hand held radio is touching or within six (6) inches of the Hand Held Receiver or the PAK-TRACKER transmitter. See FIGURES 3 AND 4.

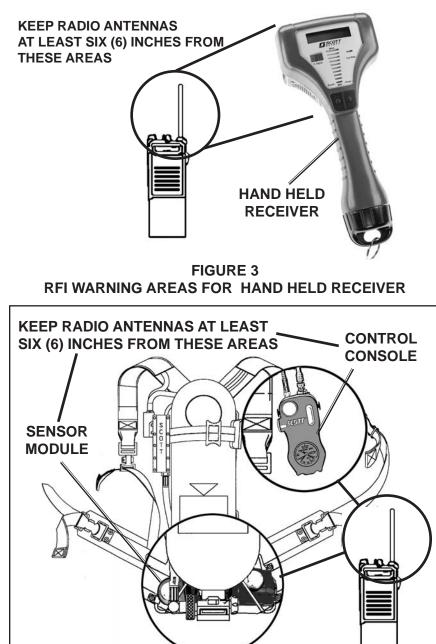


FIGURE 4 RFI WARNING AREAS FOR THE PAK-TRACKER LOCATOR SYSTEM

### WARNING

KEEP THE ANTENNAS OF HAND HELD RADIOS AND BASE STATIONS AT LEAST SIX (6) INCHES AWAY FROM THE HAND HELD RECEIVER WHEN TRANSMITTING. CLOSE PROXIMITY OF RADIO EQUIPMENT TO THE HAND HELD RECEIVER DUR-ING RADIO TRANSMISSION MAY CAUSE THE UNIT TO MALFUNCTION. FAILURE TO RECOGNIZE A MALFUNCTION OF THE HAND HELD RECEIVER AND TAKE THE PROPER CORRECTIVE ACTION MAY RESULT IN A NONWORKING HAND HELD RECEIVER, WHICH COULD HAMPER RESCUE EFFORTS AND MAY RESULT IN SERIOUS INJURY OR DEATH. If the PAK-TRACKER Locator System exhibits any of the symptoms of RFI, identify the source of the RFI and do the following:

- If the symptoms of RFI occur when standing near a base station transmitting antenna or a truck mounted radio antenna, move away from the antenna until the symptoms stop.
- If the symptoms of RFI occur while transmitting on a hand-held radio, move the radio away from the Hand Held Receiver or PAK-TRACKER transmitter.

Be aware of the symptoms of RFI. A Hand Held Receiver affected by RFI may temporarily stop operation. When the source of the RFI is removed, the Hand Held Receiver will immediately return to normal operation

In some circumstances after experiencing RFI, it may be necessary to remove the Hand Held Receiver from service. In a known safe, non-hazardous area, remove and reinstall the batteries to reset the unit (see the BATTERY CHARGING, INSTALLATION, AND REPLACEMENT section of this instruction). Then inspect and return the unit to service.

IF THE SYMPTOMS OF RFI OCCUR, THE USER MUST CHECK THE HAND HELD RECEIVER TO VERIFY THAT IT IS FUNCTIONING PROPERLY. IF THE HAND HELD RECEIVER DOES NOT RESUME OPERATING NORMALLY AFTER EXPERIENCING THE SYMPTOMS OF RFI, OR IF THE UNIT CONTINUES TO MALFUNCTION IN ANY OTHER WAY, REMOVE THE HAND HELD RECEIVER FROM SERVICE AND TAG IT FOR RETURN TO SCOTT SAFETY OR YOUR AUTHORIZED SCOTT SAFETY DEALER OR DISTRIBUTOR FOR REPAIR OR REPLACEMENT.

Although the PAK-TRACKER transmitter's operation will not likely be affected by RFI, the radio signal from a PAK-TRACKER transmitter may be temporarily blocked by the more powerful radio signal from an active hand-held radio held in close proximity.

Minimize or eliminate the effects of RFI by protecting the Hand Held Receiver with the following steps:

- Maintain a safe distance from a base station transmitting antenna or a truck mounted radio antenna.
- Keep the antennas of hand held radios at least six (6) inches away from the Hand Held Receiver and the PAK-TRACKER transmitters. See FIGURES 3 and 4.

Refer to the DETECTING AND AVOIDING RADIO INTERFERENCE section of the user instructions provided with the PAK-ALERT distress alarm equipped with the PAK-TRACKER Locator System for details of the effect of RFI on that equipment.

# **GUIDELINES FOR PAK-TRACKER TRANSMITTERS**

When they are not in use, the transmitters should be turned off to prevent them from interfering with sensitive equipment such as in hospital or health care facilities.

The PAK-TRACKER transmitters should be kept a minimum of six (6) inches away from pacemakers. Turn the transmitter off immediately if there is any reason to suspect that interference is taking place.

If there are any other medical devices present when using a transmitter, consult with the manufacturer of the device to determine it is adequately shielded from RFI.

### WARNING

IF THE HAND HELD RECEIVER DOES NOT RESUME OPERATING NORMALLY AFTER EXPERIENCING THE SYMPTOMS OF RFI, OR IF THE UNIT CON-TINUES TO MALFUNCTION IN ANY OTHER WAY, REMOVE THE HAND HELD RECEIVER FROM SERVICE AND TAG IT FOR RETURN TO THE MANU-FACTURER FOR REPAIR OR REPLACEMENT. USE OF A MALFUNCTIONING HAND HELD RECEIVER IN AN EMERGENCY SITUATION MAY RESULT IN SERIOUS INJURY OR DEATH.

# BATTERY CHARGING, INSTALLATION, AND REPLACEMENT

# BATTERY CHARGING FOR THE HAND HELD RECEIVER

Power for the Hand Held Receiver is provided by a rechargeable Nickel-Metal Hydride (Ni-MH) battery pack P/N 200402-02. The battery pack must be fully charged before placing the Hand Held Receiver in service.

DO NOT REMOVE, RE-CHARGE, OR REPLACE THE BATTERY PACK WHILE THE DEVICE IS IN A HAZARDOUS LOCATION.

CONSULT FEDERAL, STATE, AND LOCAL REGULATIONS REGARDING DISPOSAL OF RECHARGEABLE NI-MH BATTERIES. The Desk Top Battery Charger, (P/N 200434-01) requires 90-240 VAC.

If the Battery Charger does not operate as described in these instructions, remove it from service and tag it for repair or replacement.

- 1. Plug the battery charger power supply into 90-240 VAC current.
- Plug the charger power supply cord into the charger base. See FIGURE
   5. When the charger is connected to power, the charging light LED will flash once in RED, ORANGE and GREEN in that order. The charging light indicator LED will then go off.

# CHARGING LIGHT

**FIGURE 5** 

# WARNING

REPLACE THE HAND HELD RECEIVER BATTERY PACK ONLY WITH SCOTT BATTERY PACK, PART NO. 200402-02. DO NOT REMOVE, RE-CHARGE, OR REPLACE THE BATTERY PACK WHILE THE DEVICE IS IN A HAZARDOUS LOCATION. REMOVING, RE-CHARGING, OR REPLACING THE BATTERY PACK WHILE THE DEVICE IS IN A HAZARDOUS LOCA-TION MAY LEAD TO A FIRE OR AN EXPLOSION, WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

### WARNING

THE DESK TOP BATTERY CHARGER IS DESIGNED TO CHARGE ONLY THE RECHARGEABLE NICKEL-METAL HYDRIDE (NI-MH) BATTERY PACK, SCOTT SAFETY P/N 200402-02. USING THE CHARGER TO CHARGE ANY OTHER BATTERY CONFIGURATION WILL RESULT IN DAMAGE TO THE CHARGER AND POSSIBLE EXPLOSION OR FIRE, WHICH COULD CAUSE SERIOUS INJURY OR DEATH.

### WARNING

THE BATTERY PACK MAY EXPLODE, LEAK, OR CATCH ON FIRE IF DIRECTLY EXPOSED TO HIGH TEMPERATURE, WATER, OR FIRE, OF IF OPENED, DISASSEMBLED, OR TAMPERED WITH. FAILURE TO HANDLE THE BATTERY PROPERLY MAY RE-SULT IN SERIOUS INJURY.

 Identify the location of the three battery contacts on the end of the Battery Pack. Verify that they are clean and not damaged. If there is any evidence of damage, do not use the battery pack. Refer to the MAINTENANCE section of this instruction.



**FIGURE 6** 

- 4. The Battery pack only fits in the charger one way. Orient the battery with the ridge side up and the triangular side of the Battery Pack down with the pull tab out. See FIGURE 6.
- 5. Slide the Battery Pack into the charger until the pull tab end seats in the bracket on the front of the charger.

The light on the right *flashes green* while the battery is charging.

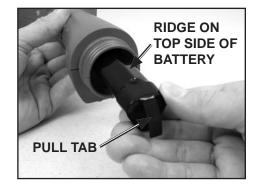
- 6. When the battery is fully charged, the light changes to **solid green**. The battery will require approximately 2 hours charging prior to initial use. After each use of the Hand Held Receiver, recharge the battery until the light turns **solid green**.
- 7. To remove the battery from the charger, press the battery catch and slide the battery out.
- 8. Recharge batteries on a regular basis (such as once per week) to maintain a full charge ready for use.
- 9. If the light in the charger base glows yellow, the charger is in STANDBY mode.
- 10. If the light on the charger base flashes red as soon as a battery is placed in the charger, there is a defect in the battery. Remove the battery from service and dispose of according to federal, state, and local regulations.

An optional Truck-mount Charging System (TCS) is also available to charge the Hand Held Receiver battery while installed in the unit. Contact Scott Safety or your authorized Scott Safety dealer or distributor for details, or refer to the instructions provided with the TRUCK-MOUNT CHARGING SYSTEM.

# BATTERY INSTALLATION FOR THE HAND HELD RECEIVER

The PAK-TRACKER Hand Held Receiver uses a single specially designed Rechargeable Battery Pack (Scott Safety P/N 200402-02). Changed the battery pack only in an area known to be nonflammable. Install the battery as follows:

- 1. Verify that Rechargeable Battery Pack is fully charged. See BATTERY CHARGING FOR THE HAND HELD RECEIVER in this instruction.
- 2. Inspect the Battery Pack before installing. Verify that there is no damage to the outer plastic cover and that the contacts are clean and not damaged. If there is any evidence of damage, do not use the Battery Pack. See the MAINTENANCE section of this instruction.
- 3. Remove the threaded cover from the bottom of the Hand Held Receiver handle by turning it counterclockwise.
- 4. The Rechargeable Battery Pack is triangular with a ridge on one side and will fit into the handle only one way. Hold the Battery Pack by the end with the pull tab and slide the contact end into the handle. There is an arrow under the pull tab indicating the top side of the battery. If properly oriented, the Battery Pack slides easily into the handle. See FIGURE 7. If oriented incorrectly, the pack will not fit into the handle. DO NOT FORCE.



### WARNING

DISPOSE OF DAMAGED BATTERIES IN ACCOR-DANCE WITH FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS. DO NOT THROW AWAY DAMAGED BATTERIES AS ORDINARY TRASH. FAILURE TO HANDLE BATTERY PROP-ERLY MAY RESULT IN SERIOUS INJURY.

# WARNING

DO NOT USE THE HAND HELD RECEIVER IN A POTENTIALLY EXPLOSIVE OR FLAMMABLE AT-MOSPHERE. ALWAYS CHECK FOR THE PRESENCE OF A FLAMMABLE OR EXPLOSIVE ATMOSPHERE BEFORE ENTERING AN UNKNOWN ATMOSPHERE WITH THE HAND HELD RECEIVER. USE OF THE HAND HELD RECEIVER IN A FLAMMABLE OR EX-PLOSIVE ATMOSPHERE MAY RESULT IN IGNITION OF THE ATMOSPHERE, RESULTING IN SERIOUS INJURY OR DEATH.

### NOTE

**FIGURE 7** 

BE CAREFUL TO NOT PRESS ANY BUTTONS ON THE HAND HELD RE-CEIVER WHILE INSERTING THE BATTERY. IF YOU DO, REMOVE THE BATTERY AND REINSERT IT. 5. Thread the cover clockwise onto the end of the handle. Turn the cover until it stops. The sides of the cover will align with the sides of the handle. See FIGURE 8.



- FIGURE 8
- 6. Test the operation of the Hand Held Receiver according to the REGULAR OPERATIONAL INSPECTION section of this instruction.

#### NOTE

THE HAND HELD RECEIVER WILL NOT OPERATE IF THE BATTERY IS NOT PROPERLY INSTALLED. IF THE HAND HELD RECEIVER WILL NOT OPER-ATE OR IF THE BATTERY COVER WILL NOT FIT AS DESCRIBED, VERIFY THAT THE BATTERY IS PROPERLY ORIENTED.

# BATTERY REPLACEMENT FOR THE PAK-ALERT DISTRESS ALARM

Refer to the BATTERY REPLACEMENT section of the user instructions provided with the PAK-ALERT distress alarm equipped with the PAK-TRACKER Locator System for details of battery replacement.

### WARNING

FAILURE TO REGULARLY INSPECT THE COMPO-NENTS AS DESCRIBED IN THIS INSTRUCTION OR FAILURE TO CORRECT DAMAGE TO THE ELEC-TRONIC COMPONENTS MAY IMPAIR THE SAFETY OF THE UNIT. THE INSTALLATION OF INCORRECT BATTERIES OR SUBSTITUTION OF ANY OTHER COMPONENTS MAY IMPAIR THE SAFETY OF THE UNIT. ANYTHING WHICH IMPAIRS THE SAFETY OF THE UNIT MAY CAUSE A MALFUNCTION, WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

### WARNING

IF THE BATTERY DOES NOT FIT OR OPERATE AS DESCRIBED IN THESE INSTRUCTIONS, DO NOT USE THE BATTERY. USE OF A DEFECTIVE BATTERY MAY RESULT IN A MALFUNCTIONING HAND HELD RECEIVER, WHICH COULD LEAD TO SERIOUS INJURY OR DEATH.

### WARNING

USE ONLY BATTERIES OF THE TYPE LISTED. DO NOT MIX OLD AND NEW BATTERIES OR BATTERIES FROM DIFFERENT MANUFACTUR-ERS. USE OF BATTERIES OTHER THAN THOSE SPECIFICALLY LISTED WILL VOID THE INTRINSIC SAFETY APPROVAL AND MAY LEAD TO A FIRE OR EXPLOSION, WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

### WARNING

BATTERIES MUST ONLY BE CHANGED IN AN AREA KNOWN TO BE NONFLAMMABLE. CHANGING THE BATTERIES IN A FLAMMABLE ATMOSPHERE MAY CAUSE AN IGNITION, WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

# MAINTENANCE

NOTE

THE HAND HELD RECEIVER HAS NO USER SERVICEABLE PARTS EXCEPT AS INSTRUCTED IN THIS MANUAL. ANY OPERATIONAL PROBLEMS SHOULD BE REFERRED TO AN AUTHORIZED SCOTT SAFETY SERVICE CENTER FOR REPAIR.

Periodically, the Scott Safety PAK-TRACKER Locator System should be inspected by a Scott Safety Authorized Service Center to verify the operation and performance of the equipment. Contact Scott Safety or your authorized Scott Safety dealer or distributor for details.

# **CLEANING**

The components of the PAK-TRACKER Locator System are factory sealed to protect the electronics from dirt and moisture. The units should be cleaned when necessary using a cloth dampened with a solution of mild detergent and water. Wash the hand strap of the Hand Held Receiver in a solution of mild detergent and water and water and dry thoroughly before reinstalling.

DO NOT IMMERSE, SPRAY, OR DOUSE the Hand Held Receiver.

Follow the cleaning instructions provided with the SCBA and the PAK-ALERT distress alarm.

# **INSPECTION**

After cleaning, perform a REGULAR OPERATIONAL INSPECTION of the equipment, including the Hand Held Receiver and the SCBA equipped with the PAK-ALERT distress alarm. Also inspect the desk top charger and the optional Truck-mount Charging System according to the instructions provided with the chargers. If any damage is found, remove the equipment from service and tag it for repair or replacement.

Regularly verify that the batteries are fresh and/or fully charged so that the equipment is ready for use.

# <u>STORAGE</u>

All components of the PAK-TRACKER Locator System must be completely dry before storage.

Store the Hand Held Receiver in its carrying case or in the truck-mount charger when not in use.

When storing the Hand Held Receiver for an extended period of time, remove the battery pack to prevent damage to the battery terminals.

Store the components of the PAK-TRACKER Locator System at temperatures from -40°F to +185°F (-40°C to +85°C).

# CAUTION

DO NOT IMMERSE, SPRAY, OR DOUSE THE HAND HELD RECEIVER TO CLEAN. THE HOUSINGS ARE MOISTURE RESISTANT BUT ARE NOT SUBMERS-IBLE. USE A DAMP CLOTH AS DESCRIBED ABOVE TO CLEAN THE OUTSIDE OF THE EQUIPMENT. IMMERSION MAY AFFECT THE OPERATION OF THE EQUIPMENT.

### WARNING

DISPOSE OF DAMAGED BATTERIES IN ACCOR-DANCE WITH FEDERAL, STATE, AND LOCAL ENVIRONMENTAL REGULATIONS. DO NOT THROW AWAY DAMAGED BATTERIES AS ORDINARY TRASH. FAILURE TO HANDLE BATTERY PROP-ERLY MAY RESULT IN SERIOUS INJURY.

# **PERFORMANCE PARAMETERS**

# SENSITIVITY DISTANCE

The maximum of the transmitter to the Hand Held Receiver is approximately 1100 feet / 335 meters line of sight (LOS). The range is always dependent on the environmental conditions and anything that might cause interference or reflection of the transmitter signal.

# BATTERY LIFE – HAND HELD RECEIVER

When the battery in the Hand Held Receiver has approximately twenty percent (20%) of its life remaining, the "Low Batt" indicator light on the display panel will glow yellow. The Hand Held Receiver will continue to operate for approximately forty-five (45) minutes in the low battery condition. If the battery is not changed in that time, the Hand Held Receiver will shut down and will not operate until a fully charged battery is installed. The rechargeable battery can be recharged up to 500 times.

# REGULATORY APPROVALS AND SAFETY LISTINGS <u>SYSTEM LEVEL APPROVALS</u>

The PAK-TRACKER Locator System has been found to comply with the following requirements:

# FCC COMPLIANCE

### FCC Compliance Statement (Part 15.19)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including interference that may cause undesired operation.

# FCC Warning (Part 15.21)

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

This portable transmitter with its antenna complies with FCC's RF exposure limits for general population / uncontrolled exposure.

### **CLASS B DIGITAL DEVICE**

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

# INDUSTRY CANADA COMPLIANCE

### Industry Canada Statement

The term "IC" before the certification / registration number only signifies that the Industry Canada technical specifications were met.

The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population. Consult Safety Code 6, obtainable from Health Canada's web site: https://www.canada.ca/en/health-canada.html

This device complies with Industry Canada's license-exempt RSSs. 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.

# La Déclaration de Canada d'industrie

L' « IC » de terme avant que la certification/le nombre d'enregistrement signifie seulement que le Canada d'Industrie spécifications techniques ont été rencontrées.

Le programme d'installation de cet équipement de radio doit garantir que l'antenne est localisée ou tel est indiqué qu'il n'émet pas le champ de RF dépassant les limites de Canada de Santé pour la population générale. Consulter le Code de Sécurité 6, procurable du site Web de Canada de Santé : https://www.canada. ca/en/health-canada.html

Cet appareil est conforme aux normes Industry Canada exemptes de licence RSS standard(s). L'opération est assujetti au suivre deux conditions:

- 1) cet appareil ne peut pas causer l'intervention, et
- 2) cet appareil doit accepter de l'intervention, y compris l'intervention qui peut causer l'opération non désirée de l'appareil.

### **RFI INTERFERENCE**

The SCOTT PAK-TRACKER Locator System transmitter or receiver may be susceptible to Radio Frequency Interference (RFI) from a two-way radio. If the Hand Held Receiver performs erratically, it may be caused by a two-way radio in close proximity. Hold your radio transmitter away from the Hand Held Receiver when transmitting.

# HAND HELD RECEIVER

The PAK-TRACKER Hand Held Receiver has been found to comply with the following requirements:

### HAND HELD RECEIVER - NON-INCENDIVE LISTING

The Scott Safety PAK-TRACKER LOCATOR SYSTEM Hand Held Receiver P/N 200397-04 is listed by SGS U. S. TESTING COMPANY, Inc. as Non-Incendive per ISA Std. 12.12.01 and UL 1604 for use in Class I Division 2 Groups A, B, C, and D hazardous locations. Tamb =  $-25^{\circ}$  C to  $85^{\circ}$  C. To maintain the Non-Incendive Listing, the equipment must be inspected regularly per the following Regular Operational Inspection procedures. Do not tamper with or substitute components in any manner. Use only Scott Safety Battery Pack P/N 200402-02. Open the battery compartment <u>only</u> in an area known to be free of flammable or explosive hazards.

**WARNING** – Substitution of Components May Impair the Non-Incendive Listing. To reduce the risk of ignition of a flammable atmosphere, battery must only be changed in an area known to be nonflammable. Do not substitute any other battery or power source.

### HAND HELD RECEIVER - EUROPEAN ATEX APPROVAL

The Scott Safety PAK-TRACKER LOCATOR SYSTEM Hand Held Receiver, MODEL NUMBER 200397-04, is approved to Ex ic nA IIC T4 Gc Tamb= -25° C to 85° C as Non-Incendive in hazardous locations. To maintain the approval listing, the equipment must be inspected regularly per the following Regular Operational Inspection procedures. Do not tamper with or substitute components in any manner. Use only battery SCOTT P/N 200402-02 as indicated in the Battery Replacement instructions. Open the battery compartment <u>only</u> in an area known to be free of flammable or explosive hazards.

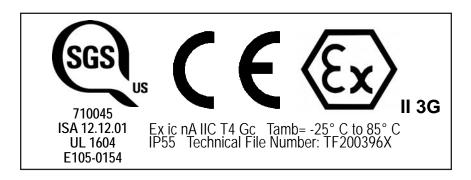
**WARNING** – Substitution of Components May Impair Non-Incendive Approval. Use only battery SCOTT P/N 200402-02. To reduce the risk of ignition of a flammable atmosphere, battery must only be changed in an area known to be nonflammable.

#### WARNING TO REGULARLY INSP

FAILURE TO REGULARLY INSPECT THE HAND HELD RECEIVER AS DESCRIBED IN THIS IN-STRUCTION OR FAILURE TO CORRECT ANY DAMAGE FOUND, MAY IMPAIR THE SAFETY OF THE EQUIPMENT. THE INSTALLATION OF IN-CORRECT BATTERY OR SUBSTITUTION OF ANY OTHER COMPONENTS MAY IMPAIR THE SAFETY OF THE EQUIPMENT. IF THE EQUIPMENT IS USED IN AN EXPLOSIVE OR FLAMMABLE ATMOSPHERE, IMPAIRING THE SAFETY OF THE UNIT MAY LEAD TO A FIRE OR AN EXPLOSION, WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.

### WARNING

REPLACE BATTERY PACK ONLY WITH SCOTT SAFETY BATTERY PACK, PART NO. 200402-02. DO NOT REMOVE, RE-CHARGE, OR REPLACE BATTERY PACK WHILE THE DEVICE IS IN A HAZ-ARDOUS LOCATION. REMOVING, RE-CHARGING, OR REPLACING THE BATTERY PACK WHILE THE DEVICE IS IN A HAZARDOUS LOCATION MAY LEAD TO A FIRE OR AN EXPLOSION, WHICH COULD RESULT IN SERIOUS INJURY OR DEATH.



# PAK-ALERT DISTRESS ALARM

The PAK-ALERT distress alarm equipped with the PAK-TRACKER Locator System and the associated SCOTT SCBA does not comply with any ATEX approvals.

The PAK-ALERT distress alarm equipped with the PAK-TRACKER Locator System has been found to comply with the NFPA 1982 Standard on Personal Alert Safety Systems (PASS) 1998 edition as an approved PASS device when properly installed on an approved Scott Safety SCBA.

Refer to the SAFETY LISTINGS section of the user instructions provided with the PAK-ALERT distress alarm equipped with the PAK-TRACKER Locator System for details.

# **QUESTIONS OR CONCERNS**

If you have any questions or concerns regarding use of this equipment, contact your authorized Scott Safety distributor, or contact Scott Safety at 1-800-247-7257 (or 704-291-8300 outside the continental United States) or visit our web site at www.scottsafety.com.

# **EXPORT AND IMPORT**

The international transport of this equipment and portions thereof is regulated under United States export regulations and may be regulated by the import regulations of other countries.

If you have any questions or concerns regarding these regulations, contact Scott Safety at 1-800-247-7257 (or 704-291-8300 outside the continental United States).

# SCOTT SAFETY LIMITED WARRANTY ON THE SCOTT PAK-TRACKER LOCATOR SYSTEM

SCOTT Safety (SCOTT) warrants the **SCOTT PAK-TRACKER LOCATOR SYSTEM** to be free from defects in workmanship and material for a period of one (1) year from the date of shipment by SCOTT. SCOTT's obligation under this warranty is limited to replacing or repairing (at SCOTT's option) THE PRODUCT or components shown to be defective in either workmanship or materials. Only SCOTT or, when directed by SCOTT, authorized SCOTT agents are authorized to perform warranty obligations. This Warranty does not apply to defects or damage caused by any repairs of or alterations to THE PRODUCT made by the owner or any third party unless expressly permitted by SCOTT product manuals or by written authorization from SCOTT. To obtain performance under this warranty, and as a condition precedent to any duty of SCOTT, the purchaser must return such products to SCOTT, a SCOTT authorized distributor, or a SCOTT authorized service center. Any product returned to SCOTT shall be sent to:

> SCOTT Safety (Attn: Warranty Claim Dept.) 4320 Goldmine Road Monroe, NC 28110

This warranty does not apply to any malfunction of or damage to THE PRODUCT resulting from accident, alteration, misuse, or abuse. THIS WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN ADDITION, SCOTT EXPRESSLY DISCLAIMS ANY LIABILITY FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES IN ANY WAY CONNECTED WITH THE SALE OR USE OF SCOTT PRODUCTS, AND NO OTHER FIRM OR PERSONS IS AUTHORIZED TO ASSUME ANY SUCH LIABILITY.



Scott Safety Monroe Corporate Center 4320 Goldmine Road Monroe, NC 28110 Telephone 1-800-247-7257 Fax (704) 291-8330 www.scottsafety.com