



3M™ Connected Safety Hub and Docking Station

User Instructions

IMPORTANT: Read all instructions and warnings before using. Keep these *User Instructions* for reference. If you have questions regarding these products, contact 3M Technical Service.

For technical help, contact 1 (800) 243-4630 and select Connected Safety

Personal Safety Division
3M Center, Building 235-2W-70
St. Paul, MN 55144-1000

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34-8724-4510-0

!!! IMPORTANT READ FIRST !!!

- Read and understand the contents of these *User Instructions* prior to use, including all warnings and advisories.
- This system is for professional occupational use only.
- The 3M™ Connected Safety Hub is not designed or approved to meet intrinsic safety standards.
- Follow all 3M Personal Protective Equipment (PPE) *User Instructions* for devices that may be used with this system.

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Foreword

List of Warnings within these User Instructions

⚠ WARNING

1. The 3M™ Connected Safety components used in this system are not intrinsically safe. **Do not use in flammable or explosive atmospheres. Doing so may result in serious injury or death.**
2. Worker alerts generated by the connected system should not to be used in place of existing safety program policies, practices and procedures. They are designed to be supplemental to an established safety program. To reduce the risks associated with exposure to workplace hazards which, if not avoided, could result in serious injury or death, users should follow all Safety Supervisor direction on how to respond to alerts that may be experienced. The user's situational awareness should remain as one of the primary safety aspects in determining if there is a condition that requires attention or to immediately leave an exposure area. Always follow integrated TR-600 alarms when present.
3. Always correctly use and maintain the Lithium-ion battery packs. **Failure to do so may cause fire or explosion, and could result in injury, sickness, or death.**
 - a. Do not charge batteries with unapproved power sources, in enclosed cabinets without ventilation, in hazardous locations, or near sources of high heat.
 - b. Do not expose to water without the battery cover installed.
 - c. Do not use or charge the device without the battery cover installed.
 - d. Do not use, charge, or store batteries outside the recommended temperature limits.
 - e. Charge in an area free of combustible material, readily monitored, and outside of classified intrinsically safe area.
 - f. Do not open, crush, incinerate, or use the device above 55°C (131°F). Follow Manufacturer's Instructions.
 - g. Do not charge the battery in temperatures above 35°C (95°F).
 - h. **Do not use in flammable or explosive atmospheres. This battery pack is not intrinsically safe.**
4. Dispose of lithium-ion battery packs according to local environmental regulations. Do not dispose of in standard waste bins, in a fire or send for incineration. **Failure to properly dispose of battery packs may lead to environmental contamination, fire or explosion and may result in serious injury or death.**
5. To reduce the risks associated with hazardous voltage and fire which, if not avoided, could result in serious injury or death:
 - a. Always inspect the Safety Hub and Safety Hub Docking Station for damage before each use.
 - b. Immediately discontinue use and contact 3M if there is a deformity of the enclosure or if the Safety Hub does not easily seat in the Docking Station.
 - c. Only charge Safety Hubs using the provided Safety Hub Docking Station and power supply.
6. Do not disassemble, modify or service this device. The Safety Hub contains no user serviceable parts, except for replacing the battery and battery cover as needed. System components requiring any necessary repairs or service would need to be sent into an authorized 3M service center.
 - a. Do not disassemble, modify or service this device. The Docking Station contains no user serviceable parts except for the wall mount hardware. System components requiring any necessary repairs or service would need to be sent into an authorized 3M service center.

Limitations of Use

WARNING

The 3M™ Connected Safety components used in this system are not intrinsically safe. Do not use in flammable or explosive atmospheres. Doing so may result in serious injury or death.

The 3M™ Connected Safety Hub can only be used with approved 3M™ Connected PPE devices. Refer to and follow the *User Instructions* provided with PPE that may be used with this system for all appropriate use, operation, care, inspection and maintenance guidance of those devices.

NOTE: This device is not hardened against Ionizing Radiation, which could cause device firmware to become corrupt. For users with Implanted Medical Devices, ask your medical device manufacturer or your authorized medical authority whether your implanted device can be used in close proximity to Bluetooth® and Wi-Fi devices.

System Description

3M™ Connected Safety is an Internet-of-Things (IoT) platform designed to connect workers, places, and equipment to promote worker health and safety, compliance workflow, and process automation. A network of connected PPE creates an ecosystem that may help organizations drive worker health and safety, as well as compliance in occupational environments where hazards exist. A connected variation of PPE allows for rules to be configured in a given workplace based on employer-specified conditions. As personal health and safety is critical, a system that can provide users with proactive alerts of potential risks is a tool which may be used to complement or enhance existing health and safety program policies, practices and procedures. The 3M™ Connected Safety Hub is a central system component as an IoT device in the 3M™ Connected Safety ecosystem.

Installation

Unpacking

Inspect the package contents for shipping damage and ensure all components are present. The product should be inspected before each use following the procedures in the *Inspection* section of these *User Instructions*.

Battery

Please read, understand, and follow all safety information contained in these instructions prior to the use of the Safety Hub battery pack. Retain these instructions for future reference.

WARNING

1. Always correctly use and maintain the Lithium-ion battery packs. **Failure to do so may cause fire or explosion, and could result in injury, sickness, or death.**
 - a. Do not charge batteries with unapproved power sources, in enclosed cabinets without ventilation, in hazardous locations, or near sources of high heat.
 - b. Do not expose to water without the battery cover installed.
 - c. Do not use or charge the device without the battery cover installed.
 - d. Do not use, charge, or store batteries outside the recommended temperature limits.
 - e. Charge in an area free of combustible material, readily monitored, and outside of classified intrinsically safe area.
 - f. Do not open, crush, incinerate, or use the device above 55°C (131°F). Follow Manufacturer's Instructions.
 - g. Do not charge the battery in temperatures above 35°C (95°F).
 - h. **Do not use in flammable or explosive atmospheres. This battery pack is not intrinsically safe.**
2. Dispose of lithium-ion battery packs according to local environmental regulations. Do not dispose of in standard waste bins, in a fire or send for incineration. **Failure to properly dispose of battery packs may lead to environmental contamination, fire or explosion and may result in serious injury or death.**
3. Do not disassemble, modify or service this device. The Safety Hub contains no user serviceable parts, except for replacing the battery and battery cover as needed. System components requiring any necessary repairs or service would need to be sent into an authorized 3M service center.

The Safety Hub uses a rechargeable Lithium-Ion battery pack that is field replaceable. It is recommended to immediately charge batteries upon receipt and after each use. Batteries going into storage should be kept in a location within the following environmental conditions:

Storage temperature range: 0°C (32°F) to 35°C (95°F)

Relative Humidity: Less than 90%

NOTE: This battery pack can only be charged while installed in the 3M™ Connected Safety Hub. Refer to the Charging section in these *User Instructions* regarding appropriate charging instructions.

1. Inspect the battery pack. If cracks or damage are noted, do not charge the battery pack. Properly recycle the battery pack per local regulations and replace.

2. Remove Safety Hub battery cover.
3. Place the hub face down on a flat surface with the battery compartment opening upward-facing.
4. Insert the battery with the label facing up to properly seat the pack (Figure 1).

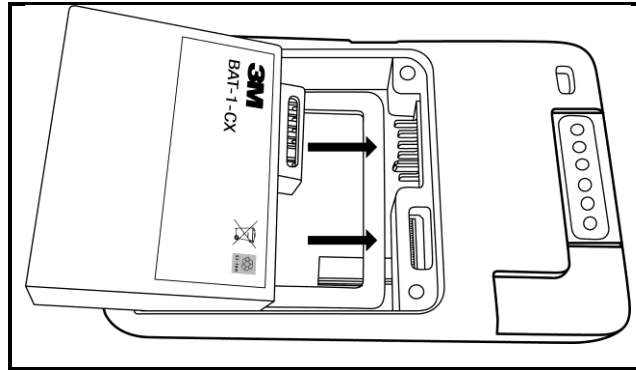


Figure 1

5. Replace the battery cover and tighten screws to secure in place. A size #1 Phillips head screwdriver will be necessary to secure the battery cover. To avoid over-tightening that may damage the battery cover, screw heads should be flush with the battery cover surface when fully tightened.

Disposal:

In the United States and Canada, 3M participates in the Call2Recycle program which provides for 3M™ Rechargeable Batteries to be dropped off (free of charge) at participating recycling collection sites. Please dispose of batteries according to federal, state, provincial and local regulations. Contact the Call2Recycle Hotline at 1-877-273-2925 or go to their website, www.call2recycle.org, for drop off site locations.

Docking Station

WARNING

Do not disassemble, modify or service this device. The Docking Station contains no user serviceable parts except for the wall mount hardware. System components requiring any necessary repairs or service would need to be sent into an authorized 3M service center.

The 3M™ Connected Safety Hub Docking Station provides a power source for Safety Hubs to charge and an Ethernet port to upload data that may not have already been sent to the Connected Safety cloud application via Wi-Fi. It is recommended to be placed and used in clean environments that are a cool, well-ventilated location free of particulates, combustible material, other airborne contaminants, and outside of classified intrinsically safe areas.

1. Insert DC power supply cord from the 3M™ Power Supply TR-941N into the dock (Figure 2). Plug the power cord into an AC power source (100-240V), such as a wall outlet.
2. Insert Ethernet patch cable into the RJ-45 network port (Figure 2.1). Do not connect to an Ethernet network that goes directly outside of the building.

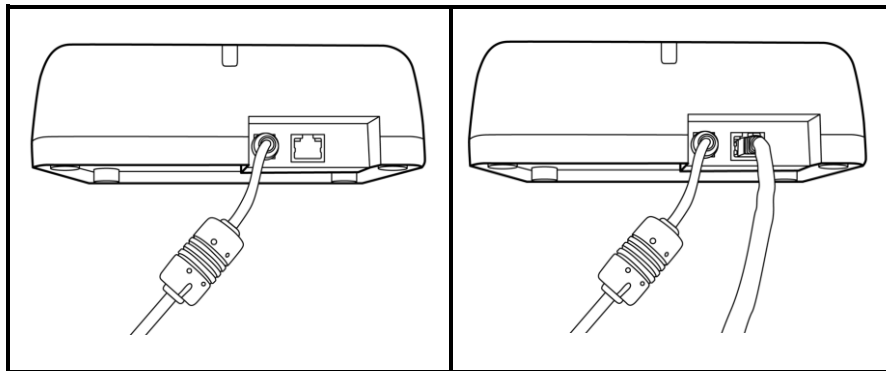


Figure 2

Figure 2.1

Docking Stations can be placed for use on flat surfaces, or wall mounted with the included hardware. If using the wall mount option, the included lugs and screws will need to be attached to the bottom of the dock. Securing the wall mount plate to a vertical surface will require additional hardware that is not included with the kit. The type of screws and / or anchors needed will depend on the surface material intended to be mounted on. The wall mount plate holes can use screws up to 4.74mm in diameter.

Operating temperature range:

5°C (41°F) to 50°C (122°F)

Storage temperature range:

-20°C (-4°F) to 60°C (140°F)

Charging

Safety Hub housings should be cleaned or decontaminated as necessary to remove any dirt or debris that may be present before placing in the Docking Station. Up to four hubs can be placed in a single dock. A full charge cycle for the hub batteries can take up to 4 hours. Charge only using approved 3M equipment. Do not charge outside of the operating temperature range.

NOTICE: Always disconnect Safety Hub Docking Station from power prior to cleaning contacts. Use caution when cleaning near contacts so as not to bend the contacts. Do not insert foreign objects into charging wells to prevent damage to the charging contacts.

Temperature ranges for battery charging:

Overall	5°C (41°F) to 30°C (86°F)
Optimal	20°C (68°F) to 25°C (77°F)

1. Safety Hubs can be inserted by aligning the contacts on the back of a hub with the Docking Station receptacle contacts (Figures 3 & 3.1).
2. A clicking feedback upon inserting the hub will indicate it has been fully seated in the bay.

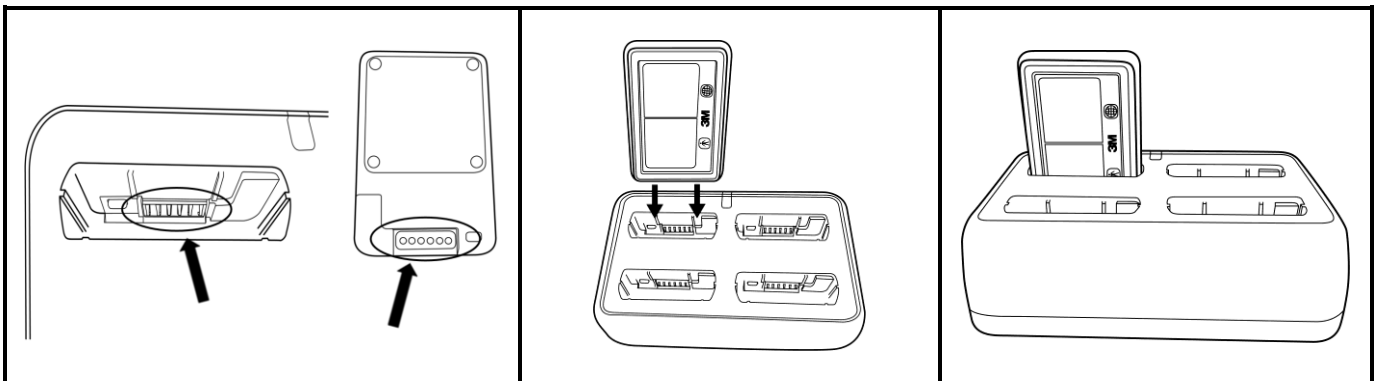


Figure 3

Figure 3.1

Figure 3.2

Operation

WARNING

1. Worker alerts generated by the connected system should not be used in place of existing safety program policies, practices and procedures. They are designed to be supplemental to an established safety program. To reduce the risks associated with exposure to workplace hazards which, if not avoided, could result in serious injury or death, users should follow all Safety Supervisor direction on how to respond to alerts that may be experienced. The user's situational awareness should remain as one of the primary safety aspects in determining if there is a condition that requires attention or to immediately leave an exposure area. Always follow integrated TR-600 alarms when present.
2. To reduce the risks associated with hazardous voltage and fire which, if not avoided, could result in serious injury or death:
 - a. Always inspect the Safety Hub and Safety Hub Docking Station for damage before each use.
 - b. Immediately discontinue use and contact 3M if there is a deformity of the enclosure or if the Safety Hub does not easily seat in the Docking Station.
 - c. Only charge Safety Hubs using the provided Safety Hub Docking Station and power supply.

Connecting Your System

Your 3M™ Connected Safety Hub uses Bluetooth Low Energy (BLE) to connect and communicate with system components in the connected PPE network. The devices a Safety Hub can pair with are the 3M™ Versaflo™ Connected Powered Air Purifying Respirator (PAPR) and 3M™ Connected Sensor. Devices in a BLE network will take on a role as either a “central” or “peripheral” device. Peripheral devices in the network have data that are transmitted to the central device, which is then responsible for processing and using these data. The Safety Hub assumes a central role in this local BLE network, and other 3M™ Connected Equipment assume the peripheral role.

When a hub is removed from its Docking Station before going into use, it will initiate the pairing process with nearby connected system components it is associated with if they are powered on. As the pairing process begins, an alternating pattern of green and red LED's flashing on the Safety Hub will be observed until the devices have been paired with one another. Both devices will attempt to pair with an undocked hub they are associated with upon start-up. If the Connected Sensor module is already installed in an M-Series helmet, the pairing process will automatically begin with the appropriate hub when removed from its dock. As a hub is put back into its dock at the end of use, all BLE links between those system components will be disconnected.

Safety Hub LED's

LED's are present on the Safety Hub to provide visual indication to users of various operational states both when a hub is docked and undocked.

While the device is in use (undocked):

Color	Pattern	System Function
Amber/Blue	Repeating	Connectivity to a Wi-Fi network, but does not have a communications link to the 3M™ Connected Safety cloud platform
Blue	Momentary	System reboot is in process
Green	Flashing	Normal operation with Wi-Fi connectivity and a communications link to the 3M™ Connected Safety cloud platform
Magenta	Momentary	Checked-out to a worker
Red	Solid	Safe mode (internal error or other non-operational state)
Red/Green	Alternating	An alternating pattern of green and red flashing will be observed during device pairing <ul style="list-style-type: none">Ending on red indicates pairing failed; device pairing will reattempt.Ending on green indicates pairing was successful
White	Momentary	Checked-in to a location

While the device is docked:

Color	Pattern	System Function
Amber	Flashing	Charging
Green	Solid	Fully charged
Green/ Yellow/ Red	Alternating	Maintenance mode (uploading data, downloading and applying software updates)
Red	Flashing	Charge fault

Worker Alerts

WARNING

1. Worker alerts generated by the connected system should not be used in place of existing safety program policies, practices and procedures. They are designed to be supplemental to an established safety program. To reduce the risks associated with exposure to workplace hazards which, if not avoided, could result in serious injury or death, users should follow all Safety Supervisor direction on how to respond to alerts that may be experienced. The user's situational awareness should remain as one of the primary safety aspects in determining if there is a condition that requires attention or to immediately leave an exposure area. Always follow integrated TR-600 alarms when present.

3M™ Connected Proximity Beacons are installed in the environment for area identification and rule assignment to those areas. As a 3M™ Connected Safety Hub walks within range of a beacon signal, it detects the area change and puts into effect any rules associated with the area being approached.

When the Connected Sensor is paired with an associated Connected Safety Hub, the system will alert a user of potential risks based on detected exceptions to pre-determined rules defined by Employer's authorized Safety Professional. When the system generates an alert, it will provide vibratory feedback and visual LED indicators for the user to know when there is an active alert. There are two alert levels that can be experienced:

Attention

- A condition has occurred that may require the user's attention.
- Amber colored LED's in the sensor module while it's vibrating will indicate an attention alert is currently active.

Critical

- A condition has occurred that may require the user to leave the exposure area to resolve the condition.
- Red colored LED's in the sensor module while it's vibrating will indicate a critical alert is currently active.

Alerts will remain active until the condition is resolved or a designated safe area has been entered by the user, such as a donning / doffing room. Critical alerts will always take precedence over attention-level alerts and override any attention alerts that may be active.

Donning Instructions

3M™ Safety Hub Holster HUB-1-HLST-CX holds the hub when it goes into use. The holster's metal clip allows it to be attached to a PAPR belt or backpack mounting option. Always don the Safety Hub where the device can be easily seen, and the user can feel the vibratory feedback when there is an active alert. Perform a pre-use visual inspection to ensure there are no visibly damaged external components of the connected system.

NOTE: Safety Hubs are intended to be used with the carrying holster that is included with the device. Other methods of securing the unit have not been evaluated and are not recommended. Ensure the Safety Hub is securely latched in the Safety Hub Holster before use.

1. Safety Hubs must be inserted front facing forward and icon side first (Figures 4 & 4.1).
2. Fully seating a hub in its holster will lock the unit in place. The latch located on the holster top can be used to release the locked position and remove a hub from its holster (Figure 4.2).

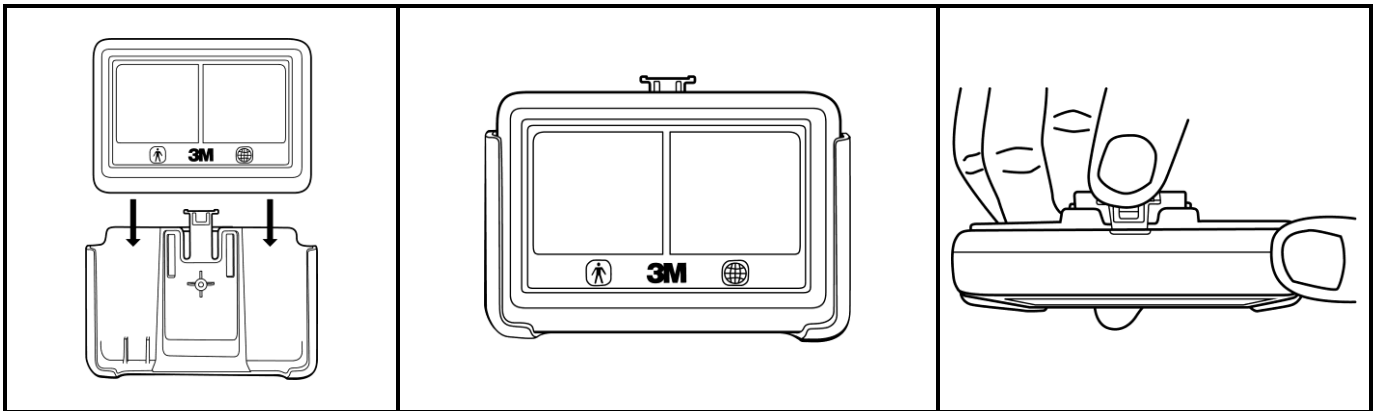


Figure 4

Figure 4.1

Figure 4.2

Network Connectivity

Safety Hubs can be configured for Wi-Fi connectivity to send alert events and system data to the Connected Equipment Manager cloud application as they occur. If a connected system user walks out of range of Wi-Fi, the system will still generate alerts to the user regardless of having internet connectivity. When the system goes back within range of Wi-Fi, it will send up data that was stored while wireless coverage was not present.

Inspection and Maintenance

Refer to the 3M PPE *User Instructions* for proper use, operation, care, inspection and maintenance of those devices used with this system. Always inspect the Connected Sensor before and after each use for signs of damage or wear including dents, cracks, color changes, chalking, fading, flaking and penetration. If any signs of wear and/or damage are observed, remove the sensor module from use and replace as appropriate. Cleaning the Safety Hub can be done as needed by wiping exposed surfaces with a dampened cloth.

⚠ WARNING

Do not disassemble, modify or service this device. The Safety Hub contains no user serviceable parts, except for replacing the battery and battery cover as needed. System components requiring any necessary repairs or service would need to be sent into an authorized 3M service center.

Replacement Parts and Accessories

Part Number	3M ID	Description
TR-602N-CX	70-0717-3272-4	3M™ Versaflo™ Connected Powered Air Purifying Respirator TR-602N-CX, 1 EA/ Case
BEACON-1-CX	70-0717-3336-7	3M™ Connected Proximity Beacons BC100-CX, 5 EA/ Case
HUB-1-KIT	70-0717-3322-7	3M™ Connected Safety Hub Kit SH-KIT100-CX, 4 EA/ Case
HUB-1-CX	70-0717-3312-8	3M™ Connected Safety Hub Replacement SH100-CX, 1 EA/ Case
HUB-1-HLST-CX	70-0717-3315-1	3M™ Connected Safety Hub Holster Replacement SHH100-CX, 1 EA/ Case
BAT-1-CX	70-0717-3318-5	3M™ Connected Safety Hub Battery Replacement Part #-CX, 1 EA/ Case
DS-1-CX	70-0717-3317-7	3M™ Connected Safety Hub Docking Station Replacement SHDS100-CX, 1 EA/ Case
HTP-1-KIT-CX	70-0717-3320-1	3M™ Versaflo™ Connected Sensor Kit M-HT-KIT-CX, for M-Series, 1 EA/ Case
HTP-1-CX	70-0717-3332-6	3M™ Connected Sensor Replacement HS-100-CX, for Headtops, 1 EA/ Case
HTP-1-BAT-CX	70-0717-3333-4	3M™ Connected Sensor Battery Replacement HB-100-CX, for Headtops, 1 EA/ Case
HTP-1-HC-CX	70-0717-3334-2	3M™ Versaflo™ Connected Sensor Carrier Replacement M-HC-100-CX, for M-Series, 1 EA/ Case

Regulatory

FCC ID: DGFPDHDHUB1CX

IC: 458A-PSDHUB1CX

FCC/ISED Compliance

This device complies with Part 15 of the FCC Rules and with ISED's license-exempt RSS's. 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.

The following is required for Innovation, Science, and Economic Development Canada.

(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.

CAN ICES-3 (A)/NMB-3(A)

WARNING: Operation of this equipment in a residential environment could cause radio interference.

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 the user's own expense.

Modifications to this device shall not be made without the written consent of 3M Company. Unauthorized modifications may void the authority granted under Federal Communication Rules permitting the operation of this device

Marking

Description



This symbol is a mark depicting the "Conformité Européenne" which literally means "European Conformity." This mark is a manufacturer's declaration that the product complies with the essential requirements of the relevant European health, safety, and environmental protection legislation.



This product has been tested and certified as conforming to UL Standard 62368-1 and is certified to CSA Standard C22.2 # 62368



This product has been tested and certified as a Recognized Component for use as a component with approved 3M Products to UL 2054.



This system is subject to European WEEE Directive 2002/96/EC.

This product contains electrical and electronic components and must not be disposed of using standard refuse collection. Please consult local directives for disposal of electrical and electronic equipment.



Consult instructions for use



Attention; see instructions for use

Warranty

3M warrants the Connected Safety system component parts will be free from defective materials and workmanship at the time of purchase and will cover the parts listed below for the time period of 1 year, provided they are maintained and used in accordance with the product's User Instructions and/or recommendations. 3M's only obligation under this Warranty will be, at 3M's option, to repair or replace without charge any defective parts of the Connected Safety system returned to 3M in accordance with the instructions below and found by 3M to have been defective at the time of purchase or during the warranty period as applicable. This Warranty does not apply to any parts that have been misused, altered or had repair attempted, or have been subjected to abuse, accidental or otherwise.

EXCLUSIONS TO WARRANTY: THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHER WARRANTY OF QUALITY, EXCEPT OF TITLE AND AGAINST PATENT INFRINGEMENT.

LIMITATION OF LIABILITY

Except as provided above, 3M shall not be liable or responsible for any loss or damage, whether direct, indirect, incidental, special or consequential, arising out of sale, use or misuse of Connected devices or 3M Versaflo products, or the user's inability to use such products. THE REMEDIES SET FORTH HEREIN ARE EXCLUSIVE.

Terms of Service and License

Terms of Service and License for 3M™ Versaflo™ Connected Powered Air Purifying Respirator, 3M™ Connected Safety Hub, and 3M™ Versaflo™ Connected Sensor Software

This Agreement is 3M's Terms of Service and License that governs its relationship among you, the principal on whose behalf you are authorized to act (the "Principal," with you and the Principal collectively being the "User"), and "3M" (through 3M Company or its Affiliate(s) in the local country in which Software is provisioned or sold to the User) for the 3M™ Versaflo™ Connected Powered Air Purifying Respirator, 3M™ Connected Safety Hub, and 3M™ Versaflo™ Connected Sensor Software.

By installing, copying, accessing, or otherwise using any part of the Software, you agree to and contract with 3M under the terms and conditions of this Agreement. If you do not agree to the terms and conditions of this Agreement, you are prohibited from any use of the Software.

Use of the Software constitutes acceptance of this Agreement.

1. Definitions

1.1. "Software" includes (a) any of the following that accompanies this Agreement including designs, text, graphics, images, logos, video, audio files, information, documentation, instructions, computer code (in any form including source or object form), program files, hardware or software keys; (b) data or content that are provided, accessed, utilized, or generated by the Software; (c) all revisions, updates, and upgrades to the Software; and (d) any embodiment of (a)-(c) that is resident in a Licensor-supplied system (including 3M personal protective equipment) that (i) communicates with the Software or (ii) is provided, transferred, or otherwise sold by 3M, where Licensor-supplied shall mean supplied by 3M or its suppliers.

1.2. "Affiliate" means any: (a) individual who or "Entity" (i.e., any corporation, firm, partnership, proprietorship, or other form of business organization) that, in whatever country organized or resident, directly or indirectly, is controlled by, or is under common control with, or controls a party; or (b) Entity in which a party or any Entity in which any individual or Entity recited in subparagraph (a) directly or indirectly has at least a fifty percent ownership or voting rights interest (whether through stock ownership, stock power, voting proxy, or otherwise), or has the maximum ownership interest it is permitted to have in the country where such Entity exists.

1.3. "Authorized User" means an employee, contractor, or authorized agent of User or its Affiliates who is authorized to access or use the Software in connection with the conduct of User's use as permitted hereunder.

2. Termination.

2.1 The Effective Date of this Agreement is the earlier date of User's installation or first use of the Software and the term of this Agreement shall continue until it is terminated. User may terminate this Agreement at any time by (a) ceasing use of any Licensor-supplied system on which the Software is resident, or (b) destroying all copies of the Software in User's possession or under User's control. In addition to its other remedies at law and in equity, 3M may terminate this Agreement and the license grants set forth herein at any time if: (i) 3M provides thirty (30) days written notice to the User (ii) User is in material breach of any term or condition hereof or any other agreement with 3M; or (iii) if User fails to make timely payment of any service, license, or support fees due to 3M and such default is not cured within thirty (30) business days of User's receipt of written notice of such default. Upon termination of this Agreement, all license rights granted to User shall immediately terminate and User must cease all use of the Software.

2.2 In the event of expiration or termination, User shall immediately cease all use of the Software and, within thirty (30) days of such termination or expiration, return, delete, or destroy any of the Software in User's possession. User is solely responsible for downloading all appropriate data (including User Data) included in the Software prior to the expiration or termination date. On or after the expiration or termination date, 3M may delete all data it holds on behalf of the User without liability of any kind to User.

3. Permitted Use and License

3.1. 3M hereby grants to User a worldwide, limited, non-exclusive, and non-transferable license to access and use the Software in accordance with this Agreement. The Software is only licensed for use with specified Licensor-supplied systems for the Software and, if applicable, in accordance with any authentication credentials provided by 3M to the User. User agrees not to use, or permit others to use the Software for any purposes beyond the scope of this Agreement. Without limiting the foregoing, User shall not, nor permit others to: (a) resell, sublicense, lease, time-share or otherwise make the Software available to any third party, including but not limited to for third-party training, commercial time-sharing, application service provider or service bureau use; (b) transfer or copy the Software or any component (i.e., functional software) thereof; (c) modify, adapt or make derivative works of the Software, or reverse engineer the Software (provided that the foregoing shall not be construed to prohibit User from configuring the Software to the extent permitted by the Software's standard user interface); (d) remove, obscure, or alter 3M's proprietary notices, trademarks, or other proprietary rights notices embodied on or contained in the Software or the documentation; (e) use the Software in contravention of any federal, state, local, foreign or other applicable law, or rules or regulations of regulatory or administrative organizations; (f) introduce into the Software any virus or other code or routine intended to disrupt or damage the Software or its content, or collect information about the Software; (g) use the Software to send or store infringing or unlawful material; (h) access the Software for the purpose of building, or assisting others to build, a competitive product or service or copying its features, content or user interface, including without limitation by screen scraping; (i) access or use the Software by means of any interfacing program, script, automated program, electronic agent or "bot" or; (j) use the Software with any article of personal protective equipment that is not approved or otherwise authorized for use with the Software by 3M.

3.2. Unless expressly provided herein, 3M retains all rights to all intellectual property embodied in or related to the products and services hereunder, including the Software, except that User Data is owned by User and User grants 3M certain rights to use User Data as described in Section 9 and as otherwise specified in this Agreement. No ownership rights in any intellectual property are transferred to User under this Agreement. User disclaims and waives all right, title, and interest in the Software other than the license rights expressly set forth herein. To the extent that User is ever deemed to have any right, title, or interest in the Software, or in any modification or derivative work thereof, User agrees to assign, and hereby assigns the same to 3M in accordance with their respective ownership interests, as determined by 3M. User shall not sublicense, rent, copy, modify, create derivative works of, reverse engineer, decompile, disassemble or otherwise attempt to gain access to the source code for the Software, or work with any individual or company that seeks to do any such activity.

3.3. Portions of the Software may incorporate open source software. By using the Software, User agrees to be bound to the terms of any third-party licenses for open source software that is included in the Software.

4. Credentials

4.1. 3M may issue unique User IDs and Passwords to enable Authorized Users to use the Software. Each User ID and Password combination is unique, confidential, and intended for use only by a single Authorized User to whom it is assigned. User may modify the Authorized Users from time to time to substitute or delete Authorized Users by using the functionality built into the Software if available. Authorized Users shall safeguard User ID and Password information relating to the Software, and User bears all risk from improper access due to failures of such safeguarding. User is responsible for all activities conducted under the accounts of its Authorized Users and for its Authorized Users' compliance with this Agreement. User shall be responsible for any and all use of the Software that is made through use of such User IDs and Passwords.

4.2. If User has Administrator Privileges and creates additional Authorized Users, then User assumes all responsibilities and liabilities for activities performed for the Software by those additional Authorized Users. Administrator Privileges for purposes of this section are (i) granted by 3M to User through a unique combination of User ID and Password and (ii) enable User to generate additional unique User IDs and Passwords for Authorized Users to access and use the Software.

5. Support

5.1. 3M may, at its sole discretion, use commercially reasonable efforts to provide support services for the Software to User; however, unless specifically provided for in a separate agreement between 3M and User, in no event, shall 3M be obligated to provide support services to the User. User expressly acknowledges that 3M does not guarantee a specific response time to requests for support services.

6. Warranty

6.1. USE OF THE SOFTWARE IS AT USER'S SOLE RISK. THE SOFTWARE IS PROVIDED ON AN "AS IS" AND "AS AVAILABLE" BASIS. 3M, ITS SUPPLIERS, LICENSORS, AND SUBCONTRACTORS DISCLAIM AND USER WAIVES ALL WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE SOFTWARE, DOCUMENTATION, OR OTHER RELATED INFORMATION, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY, SATISFACTORY QUALITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT, WARRANTIES OF FREEDOM FROM ERRORS OR DEFECTS, OR ANY WARRANTIES OF SECURITY AGAINST DATA BREACHES OR INTRUSIONS. 3M, ITS SUPPLIERS, LICENSORS, AND SUBCONTRACTORS DO NOT WARRANT THAT THE SOFTWARE OR DATA WILL MEET USER'S REQUIREMENTS, THAT OPERATION OF THE SOFTWARE OR AVAILABILITY OF DATA WILL BE UNINTERRUPTED, OR THAT THE SOFTWARE OR DATA IS WITHOUT ERROR. NEITHER 3M NOR ITS SUPPLIERS, LICENSORS, AND SUBCONTRACTORS WILL BE RESPONSIBLE FOR THE ACCURACY OR USE OF DATA ACCESSED BY THE SOFTWARE. THE ABOVE-STATED LIMITED WARRANTY IS VOID WITH RESPECT TO ANY UNAUTHORIZED USE OF THE SOFTWARE, USE OF THE SOFTWARE OTHER THAN IN ACCORDANCE WITH 3M, ITS SUPPLIERS, LICENSORS, AND SUBCONTRACTORS'S WRITTEN INSTRUCTIONS AND DOCUMENTATION, USE OF SOFTWARE WITH PRODUCTS AND SERVICES NOT PROVIDED BY 3M, ITS SUPPLIERS, LICENSORS, AND SUBCONTRACTORS, AND AS TO SOFTWARE THAT HAS BEEN DAMAGED OR MODIFIED OTHER THAN BY 3M, ITS SUPPLIERS, LICENSORS, AND SUBCONTRACTORS.

7. Limitation of Liability

7.1. TO THE EXTENT PERMITTED BY LAW, IN NO EVENT WILL 3M, ITS SUPPLIERS, LICENSORS, AND SUBCONTRACTORS BE LIABLE (I) FOR ANY SPECIAL, INCIDENTAL, INDIRECT, CONSEQUENTIAL OR EXEMPLARY DAMAGES OF ANY KIND, INCLUDING BUT NOT LIMITED TO ANY LOST PROFITS OR LOST SAVINGS, HOWEVER CAUSED, WHETHER FOR BREACH OR REPUDIATION OF CONTRACT, TORT, BREACH OF WARRANTY, NEGLIGENCE, OR OTHERWISE, WHETHER OR NOT 3M, ITS SUPPLIERS, LICENSORS, AND SUBCONTRACTORS WERE ADVISED OF THE POSSIBILITY OF SUCH LOSS OR DAMAGES; (II) FOR LOSS OF, DAMAGE TO, OR BREACH OF SOFTWARE, RECORDS OR DATA; (III) FOR THE COST OF PROCUREMENT OF SUBSTITUTE GOODS AND SERVICES; (IV) FOR THIRD-PARTY CLAIMS AGAINST USER FOR LOSSES OR DAMAGES (V) BUSINESS INTERRUPTION; OR (VI) ANY CLAIMS ARISING FROM USER'S USE OF THIRD PARTY SUPPLIES OR EQUIPMENT. NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT, 3M, ITS SUPPLIERS, LICENSORS, AND SUBCONTRACTORS'S TOTAL LIABILITY TO USER IS LIMITED TO USER PAYMENTS PROVIDED UNDER THIS AGREEMENT.

8. User Responsibilities

Although 3M makes the Software available for User's use, User understands and acknowledges that it is solely responsible for the use it makes of the Software including, but not limited to, complying with all user instructions, safe workplaces practices, and the monitoring and verifying the input to and output from the Software. THE SOFTWARE IS INTENDED TO SUPPLEMENT, NOT REPLACE, APPROPRIATE WORKPLACE, PRIVACY, HEALTH, SAFETY AND ENVIRONMENTAL POLICIES AND PRACTICES. USER IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL WORKPLACE, PRIVACY, HEALTH, SAFETY, ENVIRONMENTAL AND OTHER APPLICABLE LAWS AND REGULATIONS. USER AGREES TO INDEMNIFY, HOLD HARMLESS, AND DEFEND 3M, ITS OFFICERS, DIRECTORS, AGENTS AND EMPLOYEES FROM AND AGAINST ALL CLAIMS, LOSSES, DAMAGES, PENALTIES, FINES, LIABILITIES, COSTS AND EXPENSES, INCLUDING ATTORNEY'S FEES, THAT ARISE OR RESULT FROM USER'S USE OF THE SOFTWARE OR USER'S FAILURE TO COMPLY WITH SUCH LAWS AND REGULATIONS.

9. *User Data and 3M's Use of User Data*

9.1. User acknowledges, agrees and understands that, in connection with 3M providing User with access to and use of the Software, information resulting from User's use of the Software may be transmitted to 3M. User further acknowledges, agrees, and understands that such information will relate to User, Authorized Users and the devices utilized by User and Authorized Users, and that such information will be stored and maintained by 3M, its Affiliates, subcontractors and/or its agents (such information is collectively "User Data"). User is solely responsible for the timeliness and accuracy of all User Data submitted by the Software and represents that it has all necessary authority for the disclosure of User Data to 3M. 3M will undertake commercially reasonable measures to maintain the security and confidentiality of User Data.

9.2. 3M and its Affiliates, subcontractors and agents may monitor, access, collect, and use, but only as permitted by law, User Data in order to (a) operate, support, and enhance the Software for the User, (b) monitor compliance with this Agreement, (c) inform the User of products and services and (d) as required by applicable laws.

9.3. 3M may de-identify User Data using standard industry practices. Information that has been de-identified such that it does not identify User or Authorized Users shall not be User Data, and 3M may use or disclose it for any purpose, including to improve the Software, create new features, to conduct research, sell personal protective equipment or services, and develop new products or services, including reports based on analytics associated with the Software. 3M may also aggregate User Data with other data and may use that aggregated User Data to perform services for or provide products to third parties, provided that no such data would enable those third parties to identify Authorized Users or User, absent the consent of User. 3M's use and retention of de-identified User Data for uses and purposes set forth herein may extend beyond the term of this Agreement.

9.4. User acknowledges, agrees and understands that 3M may store User Data on servers provided by third parties in the US and countries other than the US. User is responsible for complying with all applicable laws, including local and other regulations, pertaining to personal information, such as data from or relating to its workers. User is responsible for providing individuals with any privacy notices and obtaining any consents required by applicable laws for the collection, use, disclosure, and processing of personal information in connection with User's use of the Software.

9.5. Upon 3M's confirmation of an incident in which there is unauthorized access to User Data ("Security Incident"), 3M will (i) notify User promptly after 3M becomes aware of the confirmed Security Incident and (ii) take reasonable steps to mitigate the effects and minimize any damage resulting from the Security Incident.

9.6. User Data may be stored in personal protective equipment and/or mobile applications installed on mobile devices authorized for accessing the Software. User is solely responsible for safeguarding the personal protective equipment, the mobile device, and their appropriate use. User is solely responsible to notify 3M in case of lost or missing mobile device authorized for use with the Software.

9.7. 3M's use of reputable cloud service provider means that customer data may be stored on cloud service provider servers in the European Union. User is – as far as permitted by law - solely responsible for complying with all local and other regulations pertaining to personal data and information, such as data from or relating to its Authorized Users, employees, subcontractors, affiliates and/or agents. Without limiting the generality of the foregoing or any part of this Agreement, User, not 3M, is solely responsible for: (a) ensuring it has obtained necessary consent from its Authorized Users, employees, subcontractors, affiliates and/or its agents prior to the disclosure and/or transmission of their personal data and information; (b) implementing and maintaining data privacy protections and security measures for components that User provides or controls; (c) determining whether the Software and services are appropriate for storage and processing of information subject to any specific law or regulation; (d) responding to any request from an Authorized User or third party regarding data processed by, and User's use of the Software, equipment and services; and (e) providing individuals with any privacy notices required by applicable law. User shall indemnify, defend (with counsel approved in writing in advance by 3M) and hold 3M harmless against any claims for cost, damage, expense or liability arising out of or in connection with any violation of the User obligations in this clause.

9.8. 3M is legally required to ensure that all personal information disclosed to or received from third parties is

appropriately used, disclosed and protected according to the 3M Connected Safety System Data Processing Agreement, which can be requested from 3M or accessed at:

<https://login.connectedsafety.3m.com/TermsAndConditions/DataProcessingAgreement>.

9.9 User shall – as far as permitted by law - indemnify 3M and its directors, officers, agents and employees from and against any direct damages which may incur in connection with a breach for which User is responsible or a breach of other related legislation concerning the protection of personal information by User, its officers, employees, agents and subcontractors.

10. Feedback Automatically Becomes 3M's Property

Any feedback or suggestions provided by User to 3M regarding the products or services including Software, herein, ("Suggestions"), shall be the property of 3M and User hereby assigns to 3M all right, title and interest worldwide in and to such Suggestions and the related intellectual property rights. User acknowledges and understands that, in connection with certain products and services, certain information regarding User's use of the Software is transmitted to 3M. Such information may be collected and used by 3M to provide support services to User, and for research and marketing purposes. For the avoidance of doubt, 3M may use any feedback, suggestions, product experiences, and product outcomes provided or realized by User to improve or market the product or service, create new features, to conduct research, and develop new products or services, including reports based on analytics associated with the Software usage.

11. General

11.1. Governing Law, Limitation on Action and Attorneys' Fees. Unless otherwise mandated by law, this Agreement is governed by the laws of the State of Minnesota, USA, excluding its conflict of laws rules, and specifically excluding the United Nations Convention on Contracts for the International Sale of Goods. The parties consent to personal jurisdiction and venue in the state and federal courts sitting in Ramsey County in the State of Minnesota, USA, and agree that all disputes arising from this Agreement shall be venued in such courts. The parties also agree that, regardless of any statute or law to the contrary, any claim or cause of action arising out of or related to this Agreement must be brought within one (1) year after such claim or cause of action arose or be forever barred.

11.2. Export Restrictions. User agrees that it will not export or re-export (directly or indirectly) any products or documentation or other technical data therefore, in whole or in part, without complying with the U.S. Export Administration Act of 1979 and the regulations thereunder. User shall indemnify, defend (with counsel approved in writing in advance by 3M) and hold 3M harmless against any claims for cost, damage, expense or liability arising out of or in connection with these restrictions by User.

11.3. Assignment. User may not assign, voluntarily, by operation or law, in connection with a change in control, merger, or otherwise, this Agreement or any licenses granted or obligations set forth in these Terms and Conditions to any third party without prior written consent of 3M.

11.4. Severability. If any provision of this Agreement is held invalid, illegal, unenforceable, or in conflict with any law having jurisdiction over this Agreement, the validity, legality, and enforceability of the remaining portions or provisions hereof will not be affected or impaired.

11.5. Force Majeure. Neither Party will be responsible for any failure to perform due to causes beyond its reasonable control (each a "Force Majeure"), including, but not limited to, acts of God, war, riot, criminal acts, embargoes, acts of civil or military authorities, denial of or delays in processing of export license applications, fire, floods, earthquakes, accidents, strikes, or fuel crises, terrorist actions, or widespread internet or electrical outages, provided that such Party gives prompt written notice thereof to the other Party.

11.6. Waiver. No waiver will be implied from conduct or failure to enforce rights, and no waiver will be effective unless in writing signed on behalf of the party against whom the waiver is asserted. The exercise of any right or remedy provided in this Agreement will be without prejudice to the right to exercise any other right or remedy provided by law or equity, except as expressly limited by this Agreement.

11.7. Compliance with Laws. User is solely responsible for determining whether its use of the Software complies

with applicable laws and regulations, including but not limited to those governing the collection, storage and use of personal information. User is solely responsible for establishing and maintaining policies, procedures, and third-party agreements relating to such information (including relating to collection, storage and use) as required by law.

11.8. Prior Agreement. This Agreement supersedes and replaces any and all prior agreements for the Software previously executed by the User.

11.9. Amendments. 3M will notify User before 3M makes any material changes to terms of this Agreement. User's continued use of the Software, following changes to terms of this Agreement or notice of the material changes to terms of this Agreement constitutes User's acceptance of any changed terms.

11.10. Notices. Any notice required or permitted by this Agreement shall be in writing to (1) sales-connectedsafety@3m.com for 3M or (2) a mailing address or email address of User or Principal.

Region-Specific Terms of Service for 3M™ Versaflo™ Connected Powered Air Purifying Respirator, 3M™ Connected Safety Hub, and 3M™ Versaflo™ Connected Sensor Software

In addition to the Terms of Service and License for 3M™ Versaflo™ Connected Powered Air Purifying Respirator, 3M™ Connected Safety Hub, and 3M™ Versaflo™ Connected Sensor Software set forth above, User further agrees to and contracts with 3M under the following Region-Specific Terms of Service for the Software for any country or region designated below from which the User accesses or uses the Software.

Europe

User Data and 3M's Use of User Data

To the extent that User Data comprises Personal Information (as defined in the 3M Connected Safety System Data Processing Agreement), 3M will process that data in accordance with the 3M Connected Safety System Data Processing Agreement, which can be accessed at:

<https://login.connectedsafety.3m.com/TermsAndConditions/DataProcessingAgreement>

Canada

User Data and 3M's Use of User Data

User and 3M hereby acknowledge and agree:

(a) that User has obtained the relevant consent necessary for the collection, use, disclosure, and transmission of personal information (defined as any piece of information, either factual or subjective, about an identifiable individual) for storage outside of Canada in connection with User's use of the Software, in accordance with PIPEDA (Personal Information Protection and Electronic Documents Act) and any other applicable provincial legislation concerning the protection of personal information;

(b) that all personal information exchanged between User and 3M will be used solely for the purposes described in this Agreement and for no other purpose;

(c) not to disclose any personal information other than what is necessary to fulfill the purpose of the Agreement or as required by law;

(d) to use appropriate security measures to protect all personal information exchanged between User and 3M;

(e) to return or securely dispose of the transferred information once it is no longer needed for the purpose specified herein or after the termination of the Agreement; and

(f) to cooperate with one another by notifying each other of all access requests, rectification requests or consent revocations received relative to personal information held by User or 3M as a result of the exchange of information between the parties.

(g) User shall indemnify 3M and its directors, officers, agents and employees from and against any direct damages

which may incur in connection with a breach of the clauses (a) to (f) or a breach of PIPEDA or other related provincial legislation concerning the protection of personal information by 3M, its officers, employees, agents and subcontractors.

Open Source Notices

Open Source Notices for the 3M™ Versaflo™ Connected Powered Air Purifying Respirator, 3M™ Connected Safety Hub, and 3M™ Versaflo™ Connected Sensor Software can be found here:

<https://login.connectedsafety.3m.com/SPA#/About>

Contact Information

FOR MORE INFORMATION

In United States, contact:

Website: www.3m.com/workersafety
Technical Assistance: 1-800-243-4630

For other 3M products:
1-800-3M-HELPS or 1-651-737-6501



For technical help, contact 1 (800) 243-4630 and select Connected Safety

Personal Safety Division
3M Center, Building
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