



User manual Tag-M50X

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The user manual will be available on the Sonitor® Partner Portal, sorted into various sections, where it will be kept updated online. <https://partnerportal.sonitor.com/>.

Model variants: TAG-M500, TAG-M501, TAG-M503.

1 SmartTag™ TAG-M500 User interface

The SmartTag TAG-M500 is equipped with two buttons and a LED indicator. Pressing button A or B, see Figure 1, offers a certain pressure resistance and results in a tactile feedback and an audible click.



Figure 1: Photo of Tag-M500 where the color button (A) is seen to the left and the black button (B) to the right. An LED indicator is seen to the right of the Sonitor logo.

1.1 Push button sequences

Operation	Button sequence
Turn tag on	Press and hold the black button for 5-10 seconds, until LED lights green.
Send button A message	Press and release the color button. LED lights red.
Send button B message	Press and release the black button. LED lights green.
Send button A + B message	Press and release the color and black button at the same time. LED lights amber.
Turn tag off	Press and hold the black button for 3-5 seconds until the green LED light turns off. Release button. Immediately (within one second) press and hold the color button for 3-5 seconds until the red LED light turns off. Immediately (within one second) press and release the black button. The LED will flash red to indicate that the tag is getting turned off.

1.2 Status LED

Status	LED behavior
Pressing color button	LED lights red while the color button is pressed. When holding the color button >3-5 seconds, the red LED light turns off.
Pressing black button	LED lights green while the black button is pressed. When holding the black button >3-5 seconds, the green LED light turns off.
Pressing both buttons	LED lights amber if both buttons are pressed at the same time. When holding both buttons >3-5 seconds, the amber LED light turns off.
When tag is turned off	No LED respond to buttons being pressed.

2 SmartSafe™ TAG-M501 User interface

The SmartSafe TAG-M501 has the same hardware as TAG-M500.

The tag can be activated into duress mode in case of emergency or if assistance is needed by pressing either of the buttons. The tag will then continuously transmit its status *in duress* and the LED on the tag will blink red continuously.

The duress mode can be deactivated, and the tag can thereafter be powered off using specific button sequences, as described in the following table.

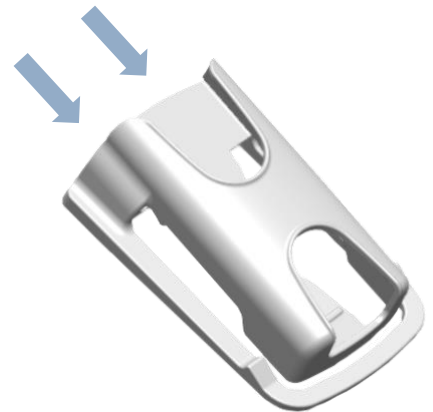
2.1 Push button sequences

Operation	Button sequence
Turn tag on	Press and hold the black button for 5-10 seconds, until LED lights green. The tag is in normal mode.
Activate duress mode	Press either of the two buttons. The tag enters duress mode. The LED blinks red continuously.
Deactivate duress mode: Default sequence (return to normal mode)	This operation can only be performed for a tag in duress mode. Press and hold both buttons down simultaneously for 3-5 seconds until the LED flashes green. While performing the deactivation sequence, the LED lights amber.

Deactivate duress mode: Advanced sequence* (return to normal mode) *The Advance sequence option must be specified when the order is placed	This operation can only be performed for a tag in duress mode. • Press and hold the black button for 3-5 seconds until the green LED light turns off. Release button. • Immediately (within one second) press and hold the color button for 3-5 seconds until the red LED light turns off. • Immediately (within one second) press and release the black button. The LED will flash green to indicate that location mode has been deactivated.
Turn tag off	This operation can only be performed for a tag in normal mode. • Press and hold the black button for 3-5 seconds until the green LED light turns off. Release button. • Immediately (within one second) press and hold the color button for 3-5 seconds until the red LED light turns off. • Immediately (within one second) press and release the black button. The LED will flash red to indicate that the tag is getting turned off.

2.2 Belt clip with alert activator

The Belt clip serves the dual purpose of holding the SmartSafe TAG-M501 and activating an alarm. When the tag is pushed down in the belt clip, the black tag button (B) will be mechanically depressed, and the tag will go into duress mode and continuously transmit the status *in duress*. The tag should only be inserted in the Belt clip with the black button (B) first. Conversion of button B messages from the tag to e.g. an audible duress alarm is done by the application software. To disable duress, the tag must be removed from the Belt clip and the Default or Advanced sequence for deactivation must be used.



3 SmartTag Tamper Resistant TAG-M503 User interface

The SmartTag Tamper Resistant TAG-M503 has mostly the same hardware as TAG-M500, but it has a mechanism for tamper alerting in addition. It comes with a bracket with a taped backside. A tamper tag goes into an emergency detached mode if the tag is removed from its bracket, or if the bracket and the tag are both removed.



To avoid false tamper alarms, a tamper tag should be powered on only after final mounting into its bracket, with the bracket assembled onto the asset. The tag will be in normal mode when turned on and button presses will result in normal button press messages.

A tamper tag in normal mode cannot be turned off. To turn the tag off, it must be detached – thereby go into emergency detached mode – and then be turned off.

3.1 Push button sequences

Operation	Button sequence
Turn tag on	- Mount the custom bracket (included with these tags) onto the asset. - Insert the tamper tag into the mounting bracket. - Press and hold the black button for 5-10 seconds, until LED lights green. The tag is in normal mode.
Activate emergency detached mode	Remove the tag from the bracket, or the bracket with the tag from the asset. The tag enters emergency detached mode. The LED blinks red every 2 seconds when in emergency detached mode.
Turn tag off	This operation can only be performed when the tag is in emergency detached mode. If attempted when the tag is in normal mode, the LED lights green in the end of the sequence to show that the tag is still on. - Press and hold the black button for 3-5 seconds until the green LED light turns off. Release button. - Immediately (within one second) press and hold the color button for 3-5 seconds until the red LED light turns off. - Immediately (within one second) press and release the black button. The LED will flash red to indicate that the tag is getting turned off.

4 Changing battery unit

4.1 Battery specification

The SmartTag, SmartSafe and SmartTag Tamper Resistant use a replaceable base unit containing battery supplied by Sonitor. The different variants have different base units, see the following table.

Tag	Base unit	
Tag-M500, SmartTag	TBA-A003	
Tag-M501, SmartSafe	TBA-A003	
Tag-M503, SmartTag Tamper Resistant	TBA-A004	

4.2 Low Battery

Bluetooth® LE messages transmitted by the tag to the server includes battery level status. This information can be viewed in the Sonitor Management Console (additional information can be found on the Partner Portal).

To ensure optimal performance of the tag, the power unit containing battery should be replaced within roughly two weeks of the first low battery indication.

4.3 Changing the base unit containing battery

The base unit containing battery shall be replaced by a skilled person only, according to specification.

Note that the base unit does not bear the UL marking, indicating that following battery replacement, the unit is no longer covered under the UL Listing program. However, the tag remains compliant with IEC 62368-1 and is considered safe for continued use.

CAUTION: RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE BATTERIES ACCORDING TO THE INSTRUCTIONS.

ATTENTION : L'UTILISATION DE PILES NON PRÉSCRITES ENTRAÎNE UN RISQUE D'EXPLOSION. SE DÉBARASSER DES PILES USAGÉES CONFORMÉMENT À LA RÉGLEMENTATION EN VIGUEUR.

Note: Note: Do not turn the tag off before replacing the base unit containing battery. If the tag is already turned off, leave it off.

To change the base unit containing battery, follow these directions:

- Unscrew the four screws in the base unit using a Torx T6 tool.
- Remove the base unit.



Important: Handle the tag with care during disassembly and re-assembly.

- Check that the sealing gasket is whole and undamaged. Remove anything obstructing the gasket or replace if damaged.
- Before attaching the base unit, press and hold any button for 5 seconds.
- Attach a new base unit containing battery to the tag and press the base unit and top together.
- Wait 10 seconds and press one of the buttons on the tag to verify that the tag is turned on and operates properly. If the tag does not respond (no LED light) remove the base unit and reinsert it. If no activity after more attempts, replace with a new base unit containing battery.
- Enter the four screws to secure the base unit. Make sure to turn the screws one round counterclockwise before entering clockwise to reengage the threads correctly. The operator will feel it when the screw enters the old threads. Use only original screws and fasten them with care using a manual torque screwdriver. Be careful to not to exert excessive force as screws could damage the plastic.

Torque specifications for the 4 screws:

Min (lb-inch)	Max (lb-inch)	Min (cNm)	Max (cNm)
1.68	1.86	19	21

5 Cleaning - All tags/badges

Please read the cleaning instructions and follow them carefully to ensure that the correct procedure is used. See [Sense Cleaning Manual](#).



CATION: Some cleaning substances maybe harmful to the badges. Please read and comply with the instructions for cleaning to ensure that your warrantee is not voided.

6 FCC

FCC ID: 2AD7T11124102301

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.

Part 15 Information to the User

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.
- Consult the dealer or an experienced radio/TV technician for help.

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

RF Exposure Warning

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

7 Innovation, Science and Economic Development Canada

IC: 20330-11124102301

HVIN: TAG-M500, TAG-M501, TAG-M503

PMN: SonitorONE™ SmartTag™

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

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device

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

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Le présent appareil contient des émetteurs/récepteurs exempts de licence qui sont conformes aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage;
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet appareil numérique de classe B est conforme à la norme canadienne NMB-003.

Cet équipement est conforme aux limites d'exposition aux radiations établies par ISED pour un environnement non contrôlé.

Cet émetteur ne doit pas être installé au même endroit ni utilisé en conjonction avec une autre antenne ou un autre émetteur.

8 Recycling - All tags/badges

Please dispose the electronic devices and, if applicable, batteries and packaging material, in line with local environmental requirements.

For EU/EEA countries, all Sonitor products are subject to the European Waste Electrical and Electronic equipment (WEEE) Directive 2012/19/EU, Regulation (EU) 2023/1542 on batteries and waste batteries, and the Packaging Directive 94/62/EC. The party responsible to comply with the disposal regulations of the Directive is the party specified as liable according to the legislation in the country where the end user is located.