



GrayTile

GT001-N

Security Alarm System

Protect what matters the most

Setup guide

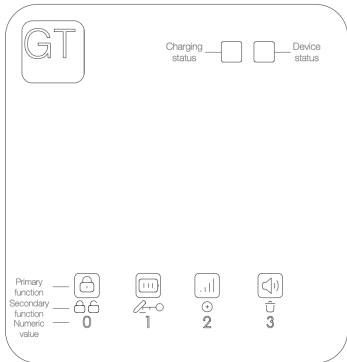
Operating Modes

GT001-N has 2 operating modes, LOCK and UNLOCK. When the device powers on, it is in UNLOCK mode. When in LOCK mode, your GT001-N would be actively listening for any signals from the paired sensors/remotes and monitoring the built-in tamper switch (top lid opening detection). The device status indicator will blink Red 2 times in a row, every 2 minutes to indicate that LOCK mode is currently active. If, when in LOCK mode, GT001-N detects any intrusions or tampering, it will consider it as an alert event and will start a sequence of actions based on the settings active at that time to alert the users.

User Interface

Your GT001-N comes equipped with 4 touch sensitive buttons for user inputs

and 2 status indicators for showing charging and general device status information.



Status Indicators

Charging status

The charging indicator will continuously glow solid Red if a charger is connected and the battery is currently charging. After charging is completed, the charging indicator will glow Blue. It will remain off if your battery is not charging.

Device status

The device status indicator will glow in one of the following colours: Red, Yellow, Green. All of these colours will have a different meaning based on the situation and the beep sound that accompanies it. In general it could be one of the following:

- | | |
|-------------------------------------|---------------------------------------|
| Solid Red glow with 4 short beeps | - Error |
| Solid Green glow with 1 long beep | - Success |
| Solid Green glow with 2 short beeps | - User action required |
| Solid Yellow | - Busy (The device is currently busy) |
| 2 Red blinks with no sound | - LOCK mode is active |
| 1 Green blink with short beep | - Known sensor/remote |
| 1 Green blink without any beep | - Unknown sensor/remote |

Other indications will be explained further wherever required.

Busy state

When your GT001-N is busy (device status indicator glows Yellow), it will not respond to any touch button presses for that duration. However, if any SMS or RF signal (remote/sensor data) is received, it would be processed after the current event is complete. The busy state usually only lasts a few seconds at most.

Setting Up Your GT001-N

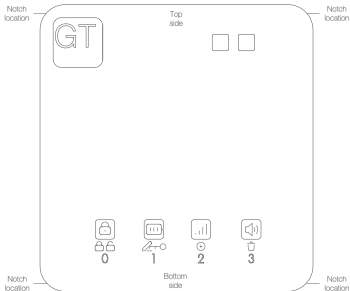
Inside the box, you will find several items: the GT001-N, a door sensor, a remote, and a charging cable.

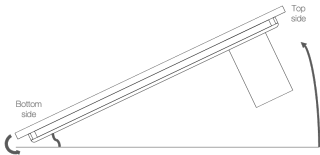
GSM network capabilities

Your GT001-N is capable of receiving commands and sending alerts and notifications over 2G GSM network via SMS/calls. To enable these GSM network capabilities a 2G network compatible SIM card with an active SMS/call plan needs to be inserted into the SIM card slot of the device. It is recommended to use a new SIM card for this purpose as some of the older SIM cards might not be compatible with the latest generation technology used inside your GT001-N.

Inserting a SIM card

To insert a sim card, you need to open the top lid of the device by carefully prying it open from the 4 notches placed under the 4 corners of the device's top lid. After the lid is loose, gently lift it from the top side rotating it along the bottom side.



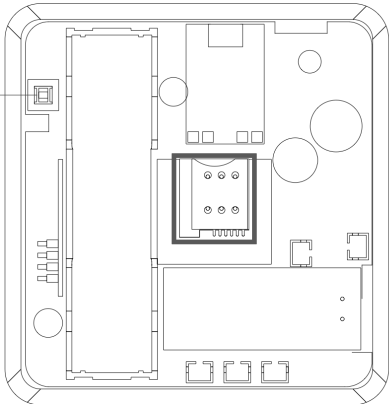


On the inside, you will find the micro-SIM card slot to insert your SIM card. Insert it as directed in the image on the next page and push to lock it in place. You will hear a click sound which confirms that the SIM card was inserted completely. To remove the SIM card, push again and release.

Powering On and Off

To power on your GT001-N, locate the power button as shown on the next page and push down until you hear a click sound. Release it afterwards. The device status indicator will glow Yellow to indicate that the device has been powered on and is currently booting up. Repeat this step to power off the device when required.

Power
button



After inserting the SIM card and powering on your GT001-N, put the top lid back to its original position and push it down to close.

Boot-Up



After your GT001-N powers up it tries to connect to the network provider's 2G GSM network. Depending on the network conditions and signal strength it might take up to a minute for your GT001-N to complete the boot-up process. If the boot-up completes successfully, the device status indicator will indicate 'success', that is, a solid Green glow with a long beep. In the case where your GT001-N is unable to connect to the network, it will indicate 'error' that is solid Red glow with 4 short beeps. In this scenario, please check the network coverage of your SIM card by inserting it in a mobile phone and making and receiving calls and SMS to confirm network stability.

The Installation location should have good signal strength and should be as far away from metal objects or surfaces as possible. To check if signal strength is good, press the  button and release after you hear a beep. After 1-2 seconds, the device status indicator will blink Red, Yellow or Green based on the GSM signal strength percentage. Red (0-30%, Poor), Yellow (31-60%, OK), Green (61-100%, Good). Signal strength of more than 60% is recommended.

Using the supplied door sensor and remote

The supplied door sensor and remote are pre-paired. Install 2 AAA batteries into the sensor and 1 CR2032 battery into the remote If not already present. To test that the sensor and remote are operating correctly, follow the steps given below.

Testing the supplied remote

1. Assuming that your GT001-N is in UNLOCK mode, press the LOCK button on your remote to put your device in LOCK mode. The device will blink Green once with a short beep indicating that a known remote's data was received. It will then indicate 'success', i.e., a solid Green glow with 1 long beep. This would be followed by 2 Red blinks with no sound indicating that the LOCK mode is now active.
2. Verify the mode by pressing the  button and releasing after the beep. The device status indicator should blink Red once.
3. Now press the UNLOCK button on your remote to put your device in UNLOCK mode. The device will indicate 'success'.
4. Verify the mode with the  button, as done in step 2. The device status indicator should blink Green once.

Testing the supplied sensor

1. Assuming that your GT001-N is in UNLOCK mode, hold both pieces of the door sensor such that the front sides, with the ▷ arrow symbols, are facing you. Bring both pieces of the sensor together such that the sides with the arrows are touching each other.
2. Hold them together for 3 seconds and then take them apart to trigger the sensor. A Red light should be briefly visible on the sensor.
3. At the same time, your GT001-N's device status indicator should blink Green once with a short beep indicating that a known sensor's data was received.


Installing Sensors

Before installing any sensor on a door/window or any other spot of your choice, first pair it with your GT001-N, if not already paired. Then make sure the sensor's signal is able to reach your GT001-N. To test this, trigger the sensor from the desired installation spot. Verifying that your GT001-N's device status indicator blinks Green once with a short beep after the sensor is triggered. If this test fails, try moving your GT001-N to another location in your premises where it might have a better reception of the sensor's data as well as good GSM network strength.

Please note:

1. Transmission range of the sensors might get effected due to walls or other objects placed between it and your GT001-N.
2. Sensors should be placed away from metals to maximise the range. Installing them on or close to metal doors/frames might significantly reduce this distance.
3. The sensors/remotes don't report their remaining battery percentage. It is advised to replace the batteries of the sensors every 6-8 months for continuous protection.
4. When replacing batteries, always replace them with the recommended ones to ensure proper operation. The recommended batteries for each type of compatible sensor/remote can be found on GrayTile's website.

Authentication Key

Your GT001-N is access protected with a 4 digit authentication key. Each digit of this key can have a value between 0 and 3. The default authentication key is '0000'. This can be changed by long pressing the  button. If you factory reset your GT001-N, the authentication key will revert to '0000'.

Touch Buttons

Each button has a primary and a secondary function activated by a short or a long press respectively. Secondary functions are accessed by pressing and holding the button for more than 3 seconds. A button press, when found, is acknowledged with a short beep. The functions of each button are explained.



Primary function: Query LOCK/UNLOCK status

Device status indicator blinks Red -> LOCK mode is active

Device status indicator blinks Green -> UNLOCK mode is active

Secondary function: Toggle LOCK/UNLOCK mode

If the device is currently in UNLOCK mode, LOCK mode will be activated. If it is currently in LOCK mode, UNLOCK mode will be activated after authentication.

When unlocking, a 'user action required' indication will be provided to authenticate the unlock. Enter the authentication key using the numeric values of the buttons. If authentication fails, 'error' will be indicated and the unlocking will terminate. For successful lock/unlock 'success' will be indicated and the first available stored phone number will be notified. In case of lock operation a Red indicator blink with no sound will indicate 'LOCK mode is active'.



Primary function: Query remaining battery status

This function is only available if the device is not currently charging.

Device status indicator blinks:

Red -> 0-30% (Low), Yellow -> 31-60% (Medium), Green -> 61-100% (High)

Secondary function: Change your GT001-N's authentication key

This function is only available if the device is in UNLOCK mode. The user will be provided with a 'user action required' indication to authenticate the operation. Enter the existing authentication key using the numeric values of the buttons. If no/incomplete/invalid input is received the device status indicator will indicate 'error' and the operation will be terminated.

Upon successfully entering the existing authentication key, the device will ask for the new authentication key with a 'user action required' indication. Enter the new 4 digit authentication key. If no/incomplete/invalid input is received the device status will indicate 'error' and the operation will be terminated, else 'success' will be indicated. First available stored phone number will be notified.



Primary function: Query GSM signal status

Device status indicator blinks:

Red -> 0-30% (Poor), Yellow -> 0-30% (OK), Green -> 61-100% (Good)

Secondary function: Pair a new sensor or remote

This function is only available if the device is in UNLOCK mode. Please visit the GrayTile website for information on how to pair your specific sensor/remote.



Primary function: Query siren enable/disable status

If the siren is disabled due to any device settings, the device status indicator will glow Red, else it will glow Green for a short while.

Secondary function: Factory reset your GT001-N (erases all data)

This function is only available if the device is in UNLOCK mode. User will be provided with a 'user action required' indication to authenticate the operation. Enter the authentication key using the numeric functions of the buttons. The default authentication key is '0000'. If no/incomplete/invalid input is received the

device status will indicate 'error' and the operation will be terminated. Else, the first available stored phone number will be notified, the device will be factory reset, it might indicate 'busy' status for a while before eventually indicating 'success'. Please note, that factory resetting will also un-pair all the sensors and remotes including the ones supplied pre-paired with your GT001-N.

Authorised Phone Numbers

Your GT001-N is capable of storing up to 3 phone numbers which would be authorised to send a command to it. Phone numbers can be authorised/de-authorised only using the GrayTile app. Only Indian phone numbers are supported. You can find the authorised phone numbers by sending the 'Get Device Status' command from the GrayTile app.

Interacting via SMS commands

You can interact with your GT001-N via SMS commands using the GrayTile app. On first boot-up, or after a factory reset, there would be no authorised phone numbers stored in your device's memory. In this condition your device will be able to receive and execute SMS commands from any phone number. It is, therefore, advised to add at least 1 authorised phone number as soon as possible to secure your device from any un-authorised access.

Every SMS command, except the 'Restart' command, sent from an authorised number gets an acknowledgement reply. Always verify this acknowledgment. It can take up to 30 seconds owing to various network conditions which are beyond GrayTile's control.

Default sequence of actions on an alert event

1. GT001-N will wait for 30 seconds for the user to unlock it.
2. If it is unlocked within this time, no further actions will be performed.
3. If device is still locked, the siren will be turned on and will remain on until the device is unlocked or the device runs out of power or is powered off.
4. An alert SMS will be sent out to all of the stored phone numbers.
5. A call will be dialed to all of the stored phone numbers one after the other. For each of these calls, your GT001-N will attempt to connect the call for 30 seconds. If the call doesn't succeed, the next phone number will be dialed.
6. The device will not handle any further alert events until it is locked again.
7. At any time, during this sequence of actions, If your GT001-N is unlocked the siren will be turned off and no further SMS/calls will be sent out.

The explanation of various settings that can effect the above default sequence of actions can be found on GrayTile's website www.gravtile.com.