TWIG personal alarm device Quick Guide

TWIG personal alarm is a lone worker safety device designed for multiple lone worker and personal safety needs.

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CE

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Twig Com Ltd. declares that this mobile device, type TLP50EU, is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU/.

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Some of the features described in this guide are optional and intended to be purchased separately. For more information, please contact your retailer. *Instructions are only guidelines. Please consult your system provider for detailed instructions.

For more information, details and descriptions, including device configuration and assortment of chargers and accessories, visit the web site: www.twigcom. com.

GETTING STARTED

Turning off the PIN request

Turn off the PIN request from the SIM card. If it is not possible, change the PIN code to 9999 or to same that was used in SIM card before switching it on the TWIG device. Please refer to TWIG Point Remote Configurator or TWIG Configurator PC program and TWIG Configuration Guide to change the PIN code to code the device automatically uses. Download PC Configuration software and instructions from ftp://support.twigcom.com or ask TWIG sales to create you a TWIG Point SP account for device configuration.

Inserting SIM card

Pull the SIM card tray completely out from the tray slot and turn it upside down for SIM card placement. Attach your SIM card to the tray with the sticker provided in the sales box. Verify the correct direction of the tray before pushing it back into slot! In correct direction the device back side and SIM card are towards you!

Charging

When you start using the device for the first time, you should charge the battery first. Please note that the battery will reach its full capacity only after two or three charging times.

TWIG device can be charged with in the sales package provided mains charger attached to the adapter or as accessory provided charging station. Device has an integrated lithium-lon polymer battery. The battery type and capacity may vary depending on the market area and model of your TWIG device.

The mains charger should only be used indoors. Make sure the voltage of the country corresponds to the voltage marked on the charger. When charging, connect the mini USB connector to the mini USB connector of the charging adapter. Set the small lump of the charging adapter to the hole at the device bottom and push the adapter forward until it clicks on its place on front cover.

The device controls the charging status, the battery temperature and power supply during the charging operation. The ideal temperature range for charging is $+10^{\circ}...+30^{\circ}$ C. Charging the battery above or below these temperatures may shorten the battery life. Also, the battery may not reach its full capacity. Charging is not allowed below $+0^{\circ}$ C or above $+45^{\circ}$ C.

When charging the Li-ion batteries with the USB charger, about 70% of the battery capacity will be charged quickly, but charging the remaining 30% takes relatively more time. Also note that humidity, temperature, age of the battery and currently used features (e.g. the GNSS*) affect the time spent on charging. Standard CE-approved USB car charger (5VDC, 500mA) may be used for charging.

Handsfree use

TWIG device can be used handsfree via its powerful loudspeaker. Therefore it is not allowed to put the device close to head and ear to avoid loud tones to cause pain or injure.

Environment's impact on usage

The device must have an unobstructed view to satellites at any time. In marginal conditions (e.g. when staying in surroundings with heavy tree cover or next to high-rise buildings) GNSS* positioning may not work properly.

The device can be used like a standard GSM phone with the limited feature set. In some cases, the device can be built in clothes or special vests. If the device is mounted somehow, it must be attached to the surface so that the back of the device is facing towards body and the top of the phone upwards. To ensure proper functioning of the GNSS* and GSM, the unit can be covered with thin low loss material such as plastic, fibre glass or clothes, but not with metal. This is regarding particularly to GSM and GNSS* antenna areas!

Temperature ranges

Device usage: -10° C to $+50^{\circ}$ C, at temperatures below -20° C, or above $+55^{\circ}$ C, the battery will not supply power and the device will shut down to prevent damage. Upon warming up/cooling down, the device will function properly again.

Battery care, maintenance and disposal

The continuous operating time is less when using an old battery than a new battery. When storing device for a long time, it should be kept cool and with fully charged battery in a dry place. Li-lon batteries do not contain heavy metals which can damage the environment. The Li-lon batteries, devices and device accessories should be disposed according to the country-specific regulations or returned to the manufacturer for recycling.

Handling and maintenance

• NOTE: The instructions below apply to the device, its accessories, batteries in use as well as batteries taken out of use.

• Dust and dirt may damage the moving parts of the device. Do not use or keep the device in dusty or dirty surroundings.

• Do not open the device by yourself or pierce holes in it.

• Rough handling may break the circuitry inside the device. Do not drop, knock, twist or shake the device.

• Keep the device dry. Liquids contain minerals which could corrode electronic circuits. If the device gets wet, turn it off and dry the device immediately. Put the device into an upright position and let it dry. It is recommended that a reseller or service personnel check that the device functions properly.

- Even though the device is waterproof, do not wet the device unnecessarily or immerse it in water.
- Protect the device from heat. High temperatures may shorten the life of the electronical devices, melt or warp plastics and damage batteries. Do not warm up the device or use it near fire.
- Do not short-circuit the battery or charging contacts. Exposing the metal strips of the battery to a close contact with a metallic object, such as a coin, a clip or a set of keys can cause accidental short-circuiting and damage the battery.

• Charge and recharge the device only with the charger specified in the Operating instructions/Quick Guide. Use the device only for the purpose it is intended.

• Clean the device with a soft cloth, dampened slightly with mild soapy water. Do not clean the device with harsh chemicals, solvents or other corrosive substances.

Only allow service personnel authorised by the reseller to repair the device.



USER INTERFACE AND DEVICE KEYS

TWIG device is equipped with configurable left and right function keys, menu key, SOS key and 4 numeric short cut keys (only TWIG One model). Refer to TWIG configuration software or your service provider for device key configuration.



Left Function key. Default functions: call, send messages, scroll up.



Right Function key. Default functions: turn on/off, drop/ end/ cancel call, scroll down



Menu key. Menu for device functions, accept function selections, display device menu



SOS key. Start SOS cycle.



Number 1 key. Configurable short cut key. Only available with TWIG 6-digit keypad of TWIG One model. Decrease volume.



Number 2 key. Configurable short cut key. Only available with TWIG 6-digit keypad of TWIG One model. Increase volume.



Number 3 key / dedicated Amber alert key. Also configurable for assistance call. Only available with TWIG 6-digit keypad of TWIG One model.



Number 4 key / dedicated ManDown key. Also configurable for assistance call. Only available with TWIG 6-digit keypad of TWIG One model.

• Depending on device configuration pressing device keys can be sounded and reinforced with vibration.

• Menu key and function keys can be configured for following functions: Assistance call / message, Power ON / OFF, GNSS ON / OFF, Amber alert ON / OFF, ManDown ON / OFF, Read NFC Tag, Push to fix and ManDown pause.

ICONS OF MENU FUNCTIONS AND CONFIGURED FUNCTION KEYS



Assistance call / message. 4 optional telephone numbers to call or send sms.

- Power ON / OFF. Turn power on and off.
- GNSS ON / OFF. Activate or deactivate GNSS satellite positioning.
- Amber alert ON / OFF. Activate or deactivate Amber alert function.
- Read NFC Tag. NFC tags can be read by selecting this function and bringing device close to NFC tag.
- ManDown ON / OFF. ManDown function is enabled or disabled. When enabled, device alerts when configured rules are met.
- Push to fix. Updating satellite connection by pressing the configured function key.
- ManDown pause. Setting enabled ManDown function to pause for the selected time.
- Return. Return to previous level.

LONE WORKER PROTECTION FUNCTIONALITIES

SOS cycle

SOS cycle is a series of emergency calls and/or messages launched automatically by preconfigured SOS settings. Depending on your device configuration, SOS cycle can be triggered either manually by pressing the SOS key or automatically by movement, non-movement or by other pre-configured alarm functionalities. SOS cycle events can include calls and messages in different formats.

ManDown alarm

ManDown alarm is an automatic alarm triggering SOS cycle when pre-configured ManDown criteria is fullfilled. Such triggers can be sufficient vertical or horizontal movement, non-movement, free fall or impact depending on the preconfiguration of your device. A pre-alarm informs device user of the coming SOS cycle launch and possibility to stop the alarm launch by moving the device. Depending on the device configuration and keypad, ManDown alarm function can be controlled also with the dedicated numeric ManDown key (available only with TWIG 6-digit keypad) or the preconfigured UI key. Refer to your service provider for ManDown configuration.

Amber alert

Amber alert is a timer based alert function for risky situations. The activated Amber alert launches SOS cycle automatically when device user is not capable to interrupt it by click of the device key. Before launch of SOS cycle, a pre-alarm time is displayed to inform user of the soon starting alarm launch.

Amber alert can be configured for interactive or local mode. Interactive mode activation requires acceptance from the ARC. Depending on device configuration and keypad, Amber alert function can be activated by the dedicated numeric Amber alert key (available only with TWIG One 6-digit keypad) or preconfigured UI key. Refer to your service provider for Amber alert configuration.

Two-way voice calls

Two-way voice calls can be made by pressing menu key, selecting assistance call function, scrolling configured assistance call numbers with SEND/F1 and END/F2 keys and selecting the pre-configured number by pressing the menu key. Refer to TWIG configuration guide or your service provider for device configuration. In addition to emergecy calls launched by pressing the SOS key, calls can be discreet, information and assistance calls. The device may be configured to answer some/all incoming calls automatically. It may even be, that all incoming calls are blocked and you cannot receive calls.

Sending / receiving messages

In addition to emergency messages defined for SOS cycle, device can send and receive MPTP messages concerning mostly either remote configuration/activation messages, some notifications, emergency reports or various types of position messages. The configured MPTP messages are sent autonomously.

TWIG Self-test

TWIG personal alarm self-test leans back to the German standards DIN 0825-1 and DIN 0825-11 requiring a device self-test for available alarm triggers and locating functions. TWIG Self-test ensures the device user always tests some of the main device functions before starting its use. When TWIG self-test is configured in device settings, the device cannot be used before executing the self-test successfully. Self-test can according to device configuration include testing of the following functions: Emergency alert by pressing the SOS key, ManDown function, TWIG Remote Button, TWIG Beacon, and reporting to Central Station.

DISPLAY ICONS

ICONS DISPLAYED ON THE UPPER BAR OF THE SCREEN



The water level indicates charge left in the battery. The higher the level, the more charge is left.



During charging, the battery icon is changed to indicate this event.

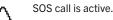
- GSM is on.
- GPRS is used for telematics.



GPRS is active for telematics.

GSM is roaming. Device is using other than home network. Position transmissions may have been blocked automatically. During the discreet SOS cycle, the small SOS cycle icon on the upper part of the screen is the only indicator of the ongoing SOS cycle. When the icon disappears or changes, cycle is over or moved to post emergency mode.

GSM network strength. The more bars and the taller the bars, the better the GSM network. Four bars signifies high network strength. No bars signifies there's no network available.





SOS call is in post emergency mode. Position requests are possible from emergency numbers.

Tracking is active to one or more destinations.



ManDown alarm is active / failed. Automated emergency cycles are possible.



SRD device connection is available / failed.



Amber alert is activated. Automatic emergency cycles are possible.



GNSS satellite positioning is active.

- GNSS satellite positioning is in sleep mode.
- GNSS satellite positioning is not available.
 - Accuracy of the last GNSS satellite position. The more bars and the taller the bars are, the better is the accuracy of the last GNSS position.



If the GNSS satellite position is older than 1 minute, the signal bars are displayed as wireframes.



lh.

GNSS satellite positioning function is sleeping due to poor satellite coverage.



Icon is displayed when green (SEND) and red (END) keys are pressed simultaneously. When END key is configured for another function than power off, the device can be shut down by pressing (SEND) and red (END) keys simultaneously



Icon is displayed when SOS key is pressed.



Icon is displayed when red END key is pressed.



Icon is displayed when green SEND key is pressed.

ICONS DISPLAYED IN THE MIDDLE OF THE SCREEN



Processing. An operation is in progress, please wait.

Generation Generation

General failure. Displayed when an operation fails. E.g. if you try to make a call when there is no number pre-configured in the device. Simultaneously, the failure tone is played.



SIM failure. Displayed when there is no SIM card inserted in the device, or if the PIN code was rejected. Simultaneously, the failure tone is played.



Retry or discard icon is displayed when e.g. SRD tag is read and the transmission of data fails. Pressing the SEND/F1 key retries and the END/F2 key discards.



Battery low. Displayed when there is a need to recharge the battery (or replace it with another
recharged battery). Simultaneously, the battery low tone is played.



The device is connected to a charger. Settings during battery loading take place. Simultaneously, the charging tone is played.



The device is disconnected from the charger. Settings during battery loading are ended, the device returns to normal operation.



The device is charging and the battery is still too empty to restart the device.



Battery is too low to charge. This symbol is displayed when initial charging of empty battery is ongoing and user tries to turn device on. Device will turn on after a while.

- Normal incoming call. If available, the name associated with the calling number/the phone number itself is displayed on the bottom. Displayed until the call is answered (to answer, press SEND/F1 key).
- **>>>** Initiating information call or position report. Press the SOS key and hold it down while this notification is displayed.
- Kan a position report. Simultaneously, the message sending tone is played.
- ««« Search an information call. Displayed until the call is answered.
 - A call is in progress. Displayed while the call is connected.



Starting SOS cycle (a long press): Emergency tone settings are switched on. Press the SOS key and hold it down until the wedges are all turned black.



Starting SOS cycle (two quick presses): Press the SOS key briefly. Emergency tone settings are switched on. Press the SOS key again when the second circle starts blinking.



SOS cycle cancellation period. A countdown timer is displayed. The timer counts the cancellation time left (in seconds). Simultaneously, the cancellation tone is played. To cancel the SOS cycle, do it while this notification is displayed (by pressing the END/F2 key).



Emergency cancellation. Displayed right after the SOS cycle was cancelled.



Emergency completion. Displayed when the SOS cycle ends normally, or when the emergency mode is ended manually.



Emergency call retry. Emergency numbers can be voice call numbers. The notification is displayed when the device makes another call attempt to a number.



Emergency mode/Working. The device is through with emergency calls, but sending messages, message confirmation or position refresh is still going on.



Emergency confirmation message received. After receiving confirmation, the device will end resending of an emergency message. Simultaneously, the message reception tone is played.

Post-emergency mode. The GSM operator's name is replaced by the emergency cycle icon. While this notification is displayed, the device can be tracked by emergency numbers, also emergency tone and display settings are kept on. This mode can be terminated manually, by pressing the END/ F2 key.



Network emergency call query. Displayed when the SOS key is pressed but making SOS cycle is NOT possible (e.g. SIM card is missing or roaming network is not available). You may still try to make network emergency call by pressing SEND/F1 key. You can also exit the query without making an emergency call by pressing END/F2 KEY.



Pre-alarm for ManDown alarm is not set. Displayed when "the cancel timer" is not configured, and SOS cycle starts right away. To mute the audible alert tone, press the END/F2 key



Pre-alarm for ManDown alarm is set. The countdown timer shows that you still have 27 seconds time left to cancel the sensor alert if you want. To cancel the SOS cycle, lift the device to vertical position. Do it while this notification is displayed. To let the SOS cycle take place: Do nothing. To mute the audible alert tone, press END/F2 key



Alert state ended. Displayed right after the emergency cycle is finished, or the sensor alert is cancelled.



Post-alarm state. Displayed when the emergency cycle is completed, and the device makes audible alarms at regular intervals. You can receive phone calls and answer them by pressing SEND/F1 key. In order to stop the post-alarm tone, the device must be lift up to vertical position.



Pre-alarm cancel. Displayed when pre-alarm cancel is enabled. When enabled, user can cancel ManDown pre-alarm, triggered by change of orientation or no movement, by pressing END/F2 key.

SAFETY AND PRECAUTIONS

TELEMATICS PROTOCOL

MPTP (Mobile Phone Telematic Protocol) allows, among other things, tracking of the device over SMS or data communication. Automatically sent telematics messages are only allowed to authorised numbers configured in the device. Such numbers can be, e.g. emergency and service center numbers. Position of the device is retrieved by the GNSS*, or by the network parameters or various radio beacons and networks, the latter is a network dependent service. The carrier for telematics messages is an SMS message or data connection. Deliveries of all messages is fully handled by and in the responsibility of the GSM network operator and services can vary substantially. The charge of a protocol message is determined on the contract by the service provider. GNSS/GPS*

The Global Navigation Satellite System (GNSS) is operated by the government of the United States and other third parties, that are solely responsible for its accuracy and maintenance. The system is subject to changes that could affect the accuracy and performance of all GNSS equipment.

EMERGENCY CALLS

The device is an aid and should never be relied upon as an only emergency device. Its functionality is dependent on GSM network and GNSS satellites which may not be available all the time. To make emergency calls, the device must be turned on and located in an area with adequate GSM network signal strength.

Making an emergency call can also require GNSS satellite coverage and a valid SIM card. Emergency calls may not be possible on all GSM phone networks or when certain network services or phone features are in use. In unclear cases, consult the network operator.

TWIG POINT NETLOC COSTS

The first year of TWIG Point Netloc is free of charge. Please note: TWIG Point Netloc is not working if the service renewal payment is not made after the first year free of charge. Twig Com Ltd. does not take any responsibility of any consequences due to a delay or non-payment of the TWIG Point Netloc service use after the first year free of charge.

GENERAL

• Traffic: Strictly adhere to all eventual European and national legislation and also honour other eventual safety recommendations when using the device while driving a vehicle. Place the device in its holder, do not leave it on the passenger seat or some other place where it can break loose in a collision or a sudden stop. When receiving a call in an awkward driving situation, you must always put safety before other priorities and courtesy. If you feel uncomfortable about using a device while driving, you should not use it.

• Vehicles with air bags: An air bag inflates with great force. Do not place objects, including either installed or portable wireless devices, in the area over the air bag or in the air bag deployment area.

• External alert: The use of the alert device to operate a vehicle's lights or horn on public roads is not permitted.

• Children: Keep the device and its accessories away from small children to avoid causing injury to themselves or others. Damage to the device or its accessories is also thus avoided.

• Power supply: This equipment is intended for use with the specified power supplies listed in the Quick Guide/Operating Instructions. Any other usage will invalidate any approval given to this apparatus and may be dangerous.

• Other accessories: Any other accessories used should also be approved by

the device manufacturer. Check the compatibility of new power supply units and other accessories at the reseller or manufacturer.

• Connections: All installations, connections and service regarding the device, its power supply and accessories should be approved by the device manufacturer. Use of any unauthorized accessories, modifications or attachments may be dangerous and voids the device warranty if said accessories cause damage or a defect to the device.

• Magnetic fields: The device contains small magnetic components. Even though the magnetic fields of the components are weak, they might damage magnetic cards, such as bank and credit cards. We recommend that you would keep the device away from magnetic cards.

* Storing positions: Position information is stored correctly in the device when the GPS* is turned off (from the GPS menu) or powered off (by pressing the F2 key). To prevent the memory from becoming corrupted, never power off the device by removing the battery.

 Neodymium magnets: Some models include strong magnets. Magnets could affect the functioning of pacemakers and implanted heart defibrillators. If you wear these devices keep sufficient distance to magnets. Warn others who wear these devices from getting close to magnets. Keep magnets away from devices and objects that could be damaged by magnetic fields.

 Real-time monitoring: A continuous real-time monitoring may lead to overheating of the device and shut it down.

• ManDown impact: Impact function doesn't work if the device is hitting the body when carried freely e.g. with carrying strap.

RADIO FREQUENCY (RF) ENERGY

Transmission frequencies and power for TLP50EU device types in EU are listed in the table below.

Transmitter	Max power / dBm
GSM 900	35
GSM 1800	32
WCDMA 1, 8	25
LTE 1, 3, 8, 20, 28	24
SRD*868,218 MHz	5
2.4 GHz WLAN*	20
Bluetooth*	10

* Note: different frequencies in Australia!

• Aircrafts: Turn your device off before boarding any aircraft and do not use the device while in the air. Besides being illegal, the use of a device in an aircraft may endanger the operation of the aircraft or disrupt the mobile network. Failure to comply with this instruction may lead to suspension or denial of mobile phone services, and possibly even legal action.

• Hospitals: Turn your device off before entering hospitals or other health care facilities where medical electronic equipment may be in use. Such devices can be extremely sensitive to radio frequency interference. Only use the device with permission and under the instruction of hospital staff.

• Medical devices: Remember that any personal medical devices (such as hearing aids or pacemakers) may be affected by RF energy if they are not adequately shielded. Consult the manufacturer or vendor of the equipment to determine the proper shielding.

 Posted facilities and country-specific regulations: Power off the device in any facility where posted notices require to turn off mobile phones. Also follow all the country-specific regulations applicable to where the device is used.

• Potentially explosive atmospheres: Turn off the device at refuelling points, e.g. gas stations. Also observe restrictions on the use of radio equipment in fuel depots, chemical plants or where blasting operations are in progress because remote control RF devices are often used to set off explosives. Do not store or carry flammable liquids, gases or explosive materials in the same compartment as the device, its parts or accessories.

• Other electronical equipment: Using the device may cause interference with a vehicle's electronic equipment if it is not adequately shielded. Consult the manufacturer or the vehicle seller to determine the proper shielding.

• Computers: Remember that using the device close to a computer may cause interference. When using your device near such equipment keep a distance of about one meter.

• Body parts: When the device is in operation do not touch the antenna with eyes, mouth or bare skin to guarantee proper function.

WARRANTY

Twig Com Ltd. warrants to the original purchaser ("Company") that this Twig Com device and all accessories originally provided by Twig Com in the sales package ("Product") are free from defects in materials, design and workmanship under normal use in accordance with the operating instructions and pursuant to the following terms and conditions. Warranty periods are determined with the purchase agreement

Individual warranty terms and conditions are available from Twig Com or from local distributor. The warranty is void if the device is opened or the warranty seal on the screws are tampered.

*Some product versions only.