

EV-04 Personal Mobile Alarm System Reference Manual

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Table of contents

1	General description	3
1.1	Used warnings and symbols	3
1.2	Presentation of the whole system	3
1.3	EV-04 Personal Mobile Alarm System – Setup	4
1.4	Charging base DS3 – Setup	4
2	ParamEdit software	5
2.1	“System Info” tab	5
2.2	“Contact Number” tab	6
2.3	“Tracking Settings” tab	7
2.4	“Buttons/Phone Settings” tab	9
2.5	“Function Settings” tab	11
2.6	“Alert Settings” tab	13
2.7	“Alarm Clock” tab	15
2.8	“Voice Prompt Setting” tab	16
2.9	“Beacon Setting” tab	17
2.10	“WiFi Setting” tab	18
2.11	“Home WiFi” tab	19

1 General description

1.1 Used warnings and symbols

Depending on the hazard level, the warnings and notes used in this manual have the following meaning:



NOTICE

Means that damage to the equipment or an undesired condition may occur if the recommended precautions are not taken.



INFO

General notes and additional information.

1.2 Presentation of the whole system

The EV-04 is an advanced personal emergency location device, for the elderly, disabled, or lone worker, keeping families connected with tracking information and voice functionality.

It supports various 4G bands and falls back to 3G/2G when there is no 4G coverage. When pressing the SOS button, the EV-04 sends an SMS message to the first recipient with complete location details. Then, a hands-free call takes place. If the recipient does not answer the call, the device will proceed with the next recipient set in the call sequence.

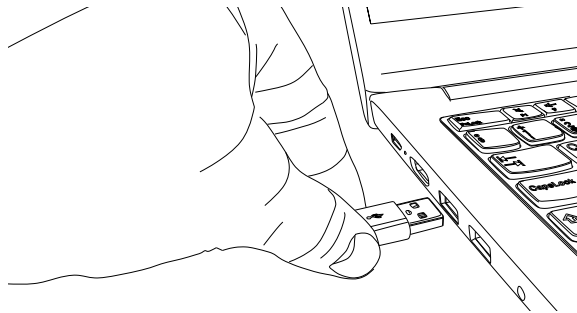
Up to 10 recipients can be defined.

A built-in 3D G-sensor can be used to trigger a “no movement alarm” or a “fall alarm”.

1.3 EV-04 Personal Mobile Alarm System – Setup

**Warning:**

Remove the SIM card password beforehand, using a mobile phone.



1. Insert the nano SIM card into the EV-04.
2. Connect the charging base DS3 to your computer by USB.
3. Place the EV-04 on the charging base DS3.
4. Open the ParamEdit software.
5. Click 'Open EVD'.
6. Click 'Read All'.
7. Set the parameters you want – see below 'ParamEdit software' information.
8. Click 'Save All'.
9. Click 'Close EVD'.

1.4 Charging base DS3 – Setup

(to use it as an indoor beacon for indoor location)

1. Connect the charging base DS3 to its power supply.
2. Place the set-up EV-04 on the charging base DS3.
3. Set geographical coordinates of the charging base DS3.
 - Define the exact location using a mobile phone GPS.
 - Send the following SMS to the EV-04: BL<Latitude>,<Longitude>
(e.g. BL47.105635,6.834498)
 - The EV-04 replies "Set BLE location ok".

2 ParamEdit software

2.1 “System Info” tab

GPS Tracker Parameter Editor

File Model Tool Profile Help

Usb EVD Close EVD Read All Save All Clear All

System Info

Model: EV04 Firmware Size: 0

Contact Number: Delivery date: 20210812 Hardware Version: v86.1.20.2

Tracking Settings: IMEI: 868832041008332 Password (For SMS Command): OFF 0

Buttons/Phone Settings: ICCID: 89410204577400125674 Time Zone: UTC +01:00

Function Settings: MAC Address: 28:B7:7C:00:2B:C7 No Disturb Time: OFF 00:00 00:00

Alert Settings: Date Time: 2021-11-12 11:08:44

Alarm Clock: Start Time: 2021-11-09 15:52:37 SMS Prefix: OFF 0-20 bytes

Voice Prompt Setting: Run Time: 242157 Locale: de

Beacon Setting: Version: v86.1.21.7

Wifi Setting: FW Version: V04b.8601.2107.1.0.4.4102.210

GSM Module: Save

Current Model: EV-04 Battery 99%

Password (for SMS Command)

Set this parameter to ON and define a password to protect the unit against unwanted modification.

Time Zone

Set the current local time. E.g. Central European Time (CET: UTC+01:00), Western European Time (WET: UTC00:00).

No Disturb Time

This function prevents the unit from making sounds during a specific period.

SMS Prefix

This function provides the option to add further info to the SMS head message.

Locale

Allow the user to select the synthetic voice language.

2.2 “Contact Number” tab

System Info		When there is an alarm		
A1	Phone number	<input type="checkbox"/> Receive SMS	<input type="checkbox"/> Receive Call	OFF
A2	Phone number	<input type="checkbox"/> Receive SMS	<input type="checkbox"/> Receive Call	OFF
A3	Phone number	<input type="checkbox"/> Receive SMS	<input type="checkbox"/> Receive Call	OFF
A4	Phone number	<input type="checkbox"/> Receive SMS	<input type="checkbox"/> Receive Call	OFF
A5	Phone number	<input type="checkbox"/> Receive SMS	<input type="checkbox"/> Receive Call	OFF
A6	Phone number	<input type="checkbox"/> Receive SMS	<input type="checkbox"/> Receive Call	OFF
A7	Phone number	<input type="checkbox"/> Receive SMS	<input type="checkbox"/> Receive Call	OFF
A8	Phone number	<input type="checkbox"/> Receive SMS	<input type="checkbox"/> Receive Call	OFF
A9	Phone number	<input type="checkbox"/> Receive SMS	<input type="checkbox"/> Receive Call	OFF
A10	Phone number	<input type="checkbox"/> Receive SMS	<input type="checkbox"/> Receive Call	OFF

Current Model: EV-04 Battery 99%

A1 to A10

Call up to 10 recipients.

Receive SMS

Select to receive SMS messages.

Receive Call

Select to receive phone calls.

Switch

Turn on to activate the recipient.

2.3 “Tracking Settings” tab

The screenshot shows the 'GPS Tracker Parameter Editor' window. The 'Tracking Settings' tab is selected in the left sidebar. The main area contains the following settings:

- Working Mode:** MODE 3, 600000
- Server Type:** OFF, TCP
- Server IP:** www.smart-locator.com
- Server Port:** 6060
- Heart-beat interval:** OFF, 900
- Continuous locate:**
 - Time interval: 10
 - Duration time: 600
- SMS URL:**
- GPS URL:** www.google.com/maps?q=%7f,%7f
- WIFI URL:** www.smart-locator.com/web/geolocat

A 'Save' button is located at the bottom of the settings area. The status bar at the bottom indicates 'Current Model: EV-04' and 'Battery 99%'.

The information “Unit: S/M/H” must be set in seconds.

Working Mode

To select tracking mode.

- ▶ **Mode 1 – Energy saving mode:** The device only sends data to the server and enables the GPS/WiFi/BLE when an event occurs (e.g. alarm). No need to set time interval.
- ▶ **Mode 2 – Standard tracking:** The device only sends data to the server according to the defined time interval and always stays online. The user needs to set the reporting time to the server for when the device is moving and not moving. GPS/WiFi/BLE are enabled when the device is moving and disabled when not moving. The GPS is woken up and the position is updated only when it needs to send data to the server, or when an alarm needs to be transmitted.
- ▶ **Mode 3 – Full tracking:** The device sends data to the server according to the defined time interval and always stays online. The user needs to set this interval. GPS is always enabled.

- ▶ **Mode 4 – Data savings:** The device connects the server only at a defined time interval. The user needs to set reporting time to the server. GPS/WiFi/BLE are only enabled when data are sent.
- ▶ **Mode 5 – Mobile off:** The device connects the server at a defined time interval and between each interval the mobile phone is offline. The user needs to set this interval. GPS is only enabled when data are sent. During offline periods, the device is unable to receive calls and text message. GPS/WiFi/BLE are only enabled when data are sent.
- ▶ **Mode 6 – Enhanced tracking:** Same as mode 2 with improved tracking performance. As soon as motion is detected, the GPS is woken up and its position is thereafter continuously updated. Which saves time when the position has to be transmitted.

Heartbeat interval

To check the server connection at regular interval (only applicable for modes 1, 2 and 3). Value range: 60 to 86,400 seconds. The heartbeat packet function is used to keep the Transmission Control Protocol (TCP) connection open when the interval of scheduled GPRS reporting is long.

Continuous locate

Continuous locate is only activated when an alarm is triggered, such as the SOS alarm or fall alarms. After the defined duration time is finished, the unit goes back to normal working mode. For example, if the time interval is set to 10 seconds, and the duration time is set to 300 seconds, then the device will keep sending reports every 10 seconds to the “server IP” defined on the same page, for a period of 300 seconds.

Server

If a specific server is used, it can be set here.

SMS URL

SMS message link format. No changes are necessary.

2.4 “Buttons/Phone Settings” tab

The screenshot displays the 'GPS Tracker Parameter Editor' window. The 'Buttons/Phone Settings' tab is active in the left sidebar. The main configuration area is divided into several sections:

- Buttons:** Contains settings for 'SOS' and 'CALL 1'. Each has an 'ON/OFF' toggle, a 'Long Press' dropdown, a 'vibrate and voice' dropdown, a numerical value field (set to 30), and a dropdown for 'SOS standard' or 'Auth 2'.
- After press SOS:** Includes 'Ring time' (60), 'Talking time' (600), and 'Call loops' (1).
- Volume Option:** Includes 'Ring volume when receive a call' (100), 'Speaker volume during talking' (100), 'Microphone volume during talking' (15), and 'Voice prompt Volume' (100).

A 'Save' button is located at the bottom of the settings area. The status bar at the bottom indicates 'Current Model: EV-04' and 'Battery 99%'.

The information “Press Unit: 0.1s” must be set in tenths of a second.

The information “Unit: S/M/H” must be set in seconds.

Buttons

Define “SOS” and “CALL 1” buttons behaviour.

1. Enable or disable.
2. Long press or double click.
3. Synthetic voice and/or vibration.
4. Long press time/double click time (e.g. 30 means long press 3 seconds or double click within a period of 3 seconds to activate).
5. Call sequence (SOS standard)/single recipient (Auth 1 ... Auth 10).

"After press SOS"

Ring time: The time that passes from the time an outgoing call is initiated until the called party answers the call. After this time, if the recipient did not answer, the device will call the next recipient.

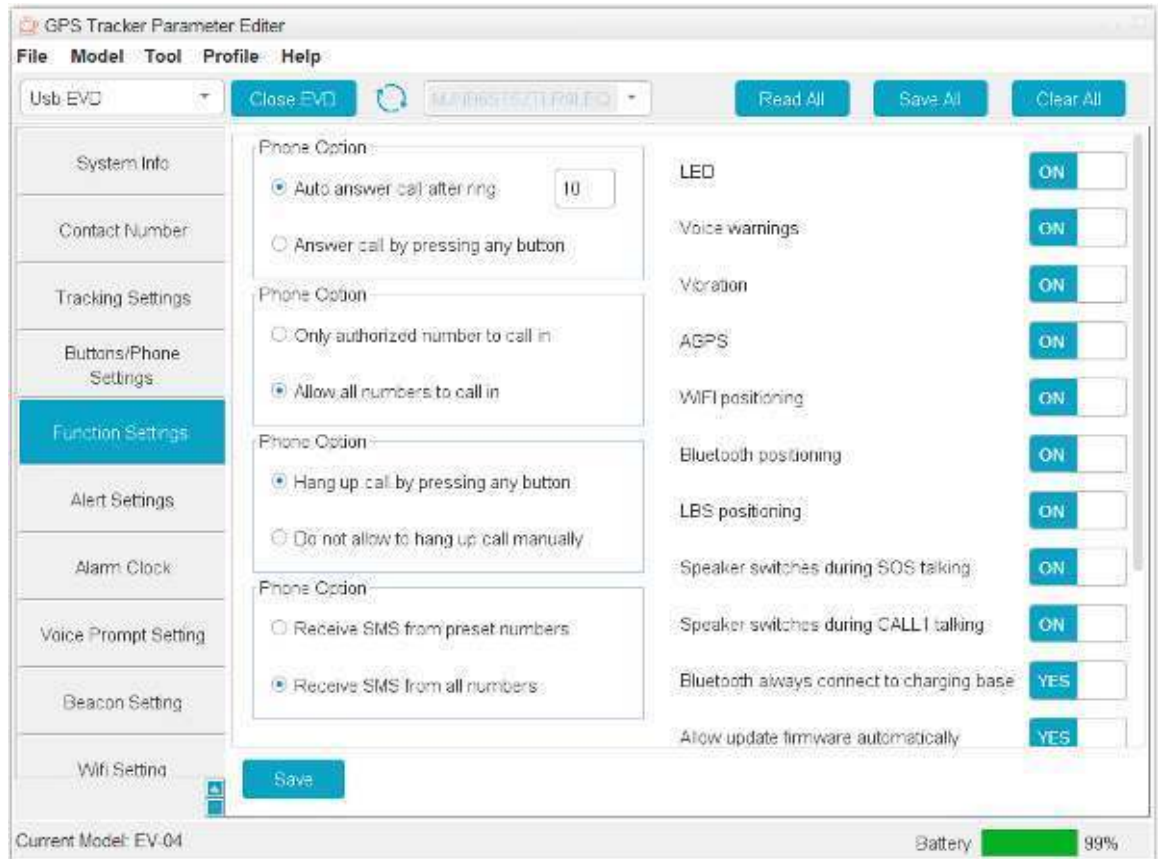
Talking time: The time that can be spent talking with the recipient. After this time, the device will call the next recipient.

Call loop: Number of call sequence repetition.

Volume option

Values higher than 150 are not recommended.

2.5 “Functions Settings” tab



Phone Option

Define the phone behaviour.

1. How to answer incoming calls.
2. Which numbers are allowed to call in (authorized numbers means the numbers defined in the “Contact Number” tab).
3. How to hang up.
4. SMS from which numbers are allowed to setup the device (preset numbers means the numbers defined in the “Contact Number” tab).

General options

1. **LED:** Switch the LED on/off.
2. **Voice warnings:** Enable/disable the synthetic voice.
3. **Vibration:** Enable/disable the vibrations.
4. **AGPS:** Allow usage of Assisted Global Positioning System, which takes assistance from mobile towers in order to reduce the time to fix position.
5. **WiFi positioning:** Allow usage of geolocation system that uses the characteristics of nearby WiFi hotspots and other wireless access points to discover where the device is located.
6. **Bluetooth positioning:** Allow usage of Bluetooth locator beacons, like the charging base DS3.
7. **LBS positioning:** Allow usage of Location-Based Service which is a tracking system that uses mobile phone signal.
8. **Speaker switches during SOS talking:** Allow the usage of the device speaker during an SOS alarm (SOS button). ON=two way calling, OFF=Speaker off.
9. **Speaker switches during CALL 1 talking:** Allow the usage of the device speaker during a phone call (CALL button). ON=two way calling, OFF=Speaker off.
10. **Bluetooth always connect to charging base:** When the Bluetooth disconnects for whatever reason, it automatically reconnects when the connection is available again.
11. **Allow update firmware automatically:** Self-explanatory.
12. **Beacon:** For indoor location via BLE connection between the device and the beacon. The beacon is a tiny wireless device broadcasting BLE signal 24/7. See "Beacon Setting" tab.
13. **Home WiFi positioning:** For location via WiFi connection. See "Home WiFi" tab.
14. **Long SMS:** When an SMS sent to the EV-04 is too long, some SIM cards do not support it, so the message is split into two SMS. In that case, please turn on "long SMS" to solve this issue.
15. **LT:** Deactivated in the TeleAlarm EV-04 to protect yourself from unethical or illegal spying.

2.6 “Alert Settings” tab

The screenshot shows the 'Alert Settings' tab in the 'GPS Tracker Parameter Editor' software. The interface includes a menu bar (File, Model, Tool, Profile, Help), a toolbar with buttons like 'Close EVD', 'Read All', 'Save All', and 'Clear All', and a sidebar with various settings categories. The main area displays settings for four GEO-fences (GEO NO.1 to GEO NO.4), Over Speed, Tilt Alert, Motion Alert, No-Motion Alert, Fall Down Alert, Low Power Alert, and Alert Notification. Each setting has a status toggle, a threshold value, and a dial option.

Setting	Status	Value	Dial
GEO NO.1	OFF	OUT	0
GEO NO.2	OFF	OUT	0
GEO NO.3	OFF	OUT	0
GEO NO.4	OFF	OUT	0
Over Speed	OFF	80	
Tilt Alert	OFF	45	30
Motion Alert	OFF	120	3
No-Motion Alert	OFF	60	
Fall Down Alert	OFF	1	
Low Power Alert	ON	20	
Alert Notification	OFF	0	0

Current Model: EV-04 Battery: 99%

Geo-fence (GEO NO.1 to GEO NO.4)

Define a virtual geographic boundary that enables the device to trigger an alarm when it enters or leaves a particular area.

Over Speed

Alert when the speed is higher than a certain value.

Tilt Alert

Alert when the device is tilted more than a defined tilt, at least for a defined time.

Motion Alert

Alert if no motion is detected over a defined period and that the device is moving again, at least for the defined time.

No-Motion Alert

Alert if no motion is detected over a defined period.

Fall Down Alert

Alert if a fall is detected. Sensibility from 1 to 9.

Low Power Alert

Alert when power is less than a defined percentage.

Power ON

Alert when power on.

Power OFF

Alert when power off.

2.7 “Alarm Clock” tab

The screenshot displays the 'GPS Tracker Parameter Editor' window. The 'Alarm Clock' tab is selected in the left sidebar. The main area contains four identical alarm configuration sections, each for 'Alarm No. 1' through 'Alarm No. 4'. Each section includes a status dropdown (set to 'OFF'), a time input field (set to '00:00'), a ringtone selection dropdown (set to '1'), and a duration input field (set to '30'). Below these are checkboxes for days of the week: MON, TUS, WED, THU, FRI, SAT, and SUN. A 'Save' button is located at the bottom of the main area. The status bar at the bottom shows 'Current Model: EV-04' and 'Battery 99%' with a green progress bar.

GPS Tracker Parameter Editor

File Model Tool Profile Help

Usb EVD Close EVD Refresh M1808182TLRQ1L5Q Read All Save All Clear All

System Info

Contact Number

Tracking Settings

Buttons/Phone Settings

Function Settings

Alert Settings

Alarm Clock

Voice Prompt Setting

Beacon Setting

Wifi Setting

Alarm Clock

Alarm No. 1 OFF 00:00 1 30

☐ MON ☐ TUS ☐ WED ☐ THU ☐ FRI ☐ SAT ☐ SUN

Alarm Clock

Alarm No. 2 OFF 00:00 1 30

☐ MON ☐ TUS ☐ WED ☐ THU ☐ FRI ☐ SAT ☐ SUN

Alarm Clock

Alarm No. 3 OFF 00:00 1 30

☐ MON ☐ TUS ☐ WED ☐ THU ☐ FRI ☐ SAT ☐ SUN

Alarm Clock

Alarm No. 4 OFF 00:00 1 30

☐ MON ☐ TUS ☐ WED ☐ THU ☐ FRI ☐ SAT ☐ SUN

Save

Current Model: EV-04 Battery 99%

This function can be used to set reminders (local alarms) at a certain time with a specific ring tone.

2.8 “Voice Prompt Setting” tab

GPS Tracker Parameter Editor

File Model Tool Profile Help

Usb EVD Close EVD MANIFEST/PROFILE Read All Save All Clear All

System Info SOS alarm activated ON

Contact Number SOS alarm canceled ON

Tracking Settings Your alarm is charging ON

Buttons/Phone Settings Calling contact number 1 ON

Function Settings Calling contact number 2 ON

Alert Settings Calling contact number 3 ON

Alarm Clock Calling contact number 4 ON

Voice Prompt Setting Calling contact number 5 ON

Beacon Setting Calling contact number 6 ON

Wifi Setting Calling contact number 7 ON

Calling contact number 8 ON

Save

Call down alarm ON

Beep ON

No motion alarm activated ON

Motion alarm activated ON

Tilt alarm activated ON

Tilt alarm canceled ON

Low battery alarm ON

Reminder ON

Findme ON

Alarm has been cancelled ON

Now time %S ON

Current Model: EV-04 Battery 99%

To enable/disable synthetic voice messages.

2.9 “Beacon Setting” tab

The screenshot displays the 'GPS Tracker Parameter Editor' window. The 'Beacon Setting' tab is selected in the left sidebar. The main area shows a table for configuring 10 beacons (B1 to B10). Each row includes fields for 'Beacon Mac', 'Latitude', 'Longitude', 'Description', and a status toggle (currently 'OFF'). A 'Scan' button is located at the top right of the table area. Above the table, there are fields for 'Latitude', 'Longitude', and 'Description' with a 'Scan' button. The bottom status bar shows 'Current Model: EV-04' and 'Battery 99%' with a green battery icon.

	Beacon Mac	Latitude	Longitude	Description	Status
B1					OFF
B2					OFF
B3					OFF
B4					OFF
B5					OFF
B6					OFF
B7					OFF
B8					OFF
B9					OFF
B10					OFF

This function can be used to define the location of the beacons. The "Scan" button helps to search for beacons.

2.10 “WiFi Setting” tab

GPS Tracker Parameter Editor

File Model Tool Profile Help

Usb EVD Close EVD MINI-START/STOP Read All Save All Clear All

Tracking Settings	W1	Wifi Name 1~32 bytes	Wifi Password 8~15 bytes	<input type="checkbox"/> Connected	OFF
Buttons/Phone Settings	W2	Wifi Name 1~32 bytes	Wifi Password 8~15 bytes	<input type="checkbox"/> Connected	OFF
Function Settings	W3	Wifi Name 1~32 bytes	Wifi Password 8~15 bytes	<input type="checkbox"/> Connected	OFF
Alert Settings	W4	Wifi Name 1~32 bytes	Wifi Password 8~15 bytes	<input type="checkbox"/> Connected	OFF
Alarm Clock	W5	Wifi Name 1~32 bytes	Wifi Password 8~15 bytes	<input type="checkbox"/> Connected	OFF
Voice Prompt Setting					
Beacon Setting					
WiFi Setting					
Home WiFi					

Save

Current Model: EV-04 Battery 99%

This function can be used to connect the EV-04 to home WiFi. When connected, the device automatically switches off its GPS, for energy-saving purposes.

2.11 “Home WiFi” tab

GPS Tracker Parameter Editor

File Model Tool Profile Help

Usb EVD Close EVD MINI/STANDARD Read All Save All Clear All

Tracking Settings Scan Latitude Longitude Description Scan Auto

Buttons/Phone Settings

Function Settings

Alert Settings

Alarm Clock

Voice Prompt Setting

Beacon Setting

Wifi Setting

Home WiFi

W1 WiFi Mac Latitude Longitude Description OFF

W2 WiFi Mac Latitude Longitude Description OFF

W3 WiFi Mac Latitude Longitude Description OFF

W4 WiFi Mac Latitude Longitude Description OFF

W5 WiFi Mac Latitude Longitude Description OFF

W6 WiFi Mac Latitude Longitude Description OFF

W7 WiFi Mac Latitude Longitude Description OFF

W8 WiFi Mac Latitude Longitude Description OFF

W9 WiFi Mac Latitude Longitude Description OFF

W10 WiFi Mac Latitude Longitude Description OFF

Save

Current Model: EV-04 Battery 99%

To use WiFi as a beacon.

- Use the Scan button (not “Scan auto” – if “Scan auto” has been used, clear the data, and save).
- Scan, select a WiFi and click Add.
- Enter the geographical coordinate definition (latitude and longitude) and save.

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