QUICK GUIDE: QUAKE SLEEK (ALL VARIANTS)

By reading this guide in full, you will acquire the necessary knowledge to perform the initial setup, the first start-up and the daily use of the Quake Sleek model product in all its variants.

Attention! First, it is essential to configure the data related to the WiFi network to which the device will connect, as well as to locate the device itself (Home position), otherwise, it may fail to start or provide unreliable data.

Topics covered in the guide:

- FEATURES LIST AND VARIANTS
- GENERAL OPERATING PRINCIPLE
- START-UP CONFIGURATION
- OPERATION
- VISUAL CHECKS

Features list and variants	 QUAKE SLEEK FIELD version	 QUAKE SLEEK DESKTOP version
MCU ESP32 dual core 240 Mhz, Wifi, BLE,USBc	■	■
COLOR Touch Screen TFT 3,5” DISPLAY	■	■
GPS module	■	
3,7v LiPo BATT & BMS	■	
SD SLOT	■	■
Manual & Dinamic parameters setting	■	■
Activity Trend indicator	■	■
Proximity Alarm with Sound	■	■
Fast Prompting, data decluttering	■	■
Customizable Service Providers (create variants)	■	■

General operating principle:

This device is responsible for periodically displaying data related to seismic events that have occurred in a specific geographic area, having downloaded them automatically from the relevant Service Provider via a Wifi connection.

It will act on this data to select the most significant informations by appropriately filtering them based on geographic location, intensity of magnitude, etc., using both configurable criteria and in an automatic mode that adapts to the current seismic scenario.

Subsequently, it will present the data on display in chronological order or organized by proximity alarm and descending magnitude (via a data mode change command).

Additionally, it has the task of effectively notifying the user through a combination of visual and sound communications (thanks to a seismic trend indicator, a general alarm, and classifying seismic events based on proximity alarm criteria).

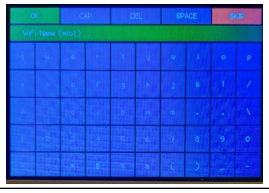
The **device alarm** condition is triggered by one of the following conditions:
- seismic event of a certain intensity and proximity to where the device is located
- increasing area seismic trend indicator

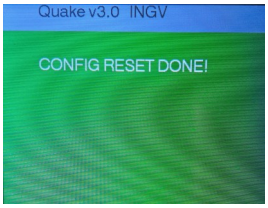
The single seismic **event proximity alarm** condition is triggered within a certain distance (settable) from where the event occurs relative to the device's location.

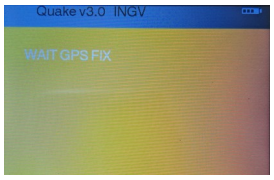
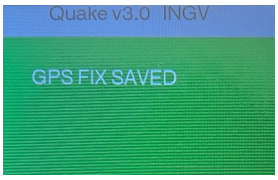
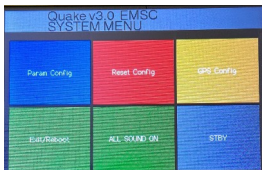
> **Disclaimer: this device does not replace the normal procedures for acquiring information on seismic events provided by institutional portals. In addition, its operation is strictly bound by the availability of online data provided by the relevant Service Provider.**

TIP: For a complete understanding of the features and for any remaining questions, please refer to the resources available in the repository (video tutorials, FAQs, etc.) and, as a last resort, send an email to the support address indicated in the repository itself.

QUAKE SLEEK: start-up configuration

	**SYSTEM MENU ACCESS**: connect the power supply via cable and proceed as follows: - start the reboot: CLICK the rear POWER-ON button - within the first 5 seconds press the touch screen, the SYSTEM MENU will be accessed
	**PARAMETERS CONFIGURATION BUTTON:** The parameters to configure will appear in sequence; in parentheses, the current value of each one is displayed. To enter the new value, type it on the keyboard, then: - OK to confirm - SKIP to not modify the current value and move to the next parameter.
	**WIFI Network parameter:** set the data for the Wifi network to which the device will connect: Wifi name: name of the Wifi network to connect to (case sensitive) Wifi password: password of the Wifi network to connect to (case sensit.) **TIP!** in case of error LED1 turns RED "1"
	**HOME position parameter (definition of user current position):** **Home Lat**: home point latitudine (! North referred): 0-90° N: the number alone is sufficient without any preceding signs (ie 40.12 = 40.12N) 0-90° S: insert the number preceded by the sign - (ie -20.17 = 20.17S) **Home Long**: home point longitude (! East referred): 0-180° E: the number alone is sufficient without any preceding signs (ie 14.12 = 14.12E) 0-180° W: insert the number preceded by the sign - (ie -40.17 = 40.17W) **TIP!** This data is mandatory and determines the correct functioning of the device, set your Home position. **TIP!** If the GPS module is installed, use the appropriate menu to start the automatic procedure for setting the Home position.
	**CYCLE PAUSE parameter:** indicates the duration (in minutes from 5 to 30) of the cycle pause, therefore the waiting time between each single automatic data download from the server.
	**ALARM DISTANCE parameter:** indicates the length (in Km from 0 to 999) of the alarm radius. All events that are within the alarm radius from the Home position are RED colored and considered **alarmed events**.
	**ALARM MAGNITUDE parameter:** indicates the intensity threshold of magnitude (Mag from 0.0 to 10.0) used for the **device alarm activation**. As soon as there is at least one alarmed event displayed with a magnitude equal to or greater than this threshold, the device's alarm status will be activated (RED LED 2 + acoustic siren if enabled in the Sound configuration menu)

	**PARAMETERS RESET BUTTON:**
	
	this procedure resets the parameters to factory settings:
	`Wifi: SSID “DEMO”, password “12345678”`
	`HOME LAT: 45.00 N, HOME LON: 12.00 E`
	`Cycle Pause: 15 minutes`
	`Alarm Distance: 200 Km, Alarm Magnitude: Mag 4.00`

 	**GPS CONFIGURATION BUTTON:** this procedure activates the GPS module (if present) and locates the device: - access the GPS menu with the device facing up (logo facing the sky) in an outdoor location without obstacles in the sky - YELLOW screen indicates waiting for positioning (wait a few minutes) - RED screen indicates absence of the GPS module - GREEN screen indicates successful positioning, the device saves the new position and restarts automatically **TIP!** in the second line of the Main Screen under Home, the new GPS coordinates will be indicated
	**EXIT/REBOOT BUTTON:** button to exit the SYSTEM MENU and force a reboot of the device **STBY BUTTON:** device POWER-OFF
	**SOUND BUTTON:** Here you enable sound functions: - ALL SOUND OFF: all sound effects disabled - ALL SOUND ON: all sound effects enabled - BEEP ONLY: only keyboard sound feedback enabled - ALARM ONLY: only the device alarm siren enabled

QUAKE SLEEK: operation

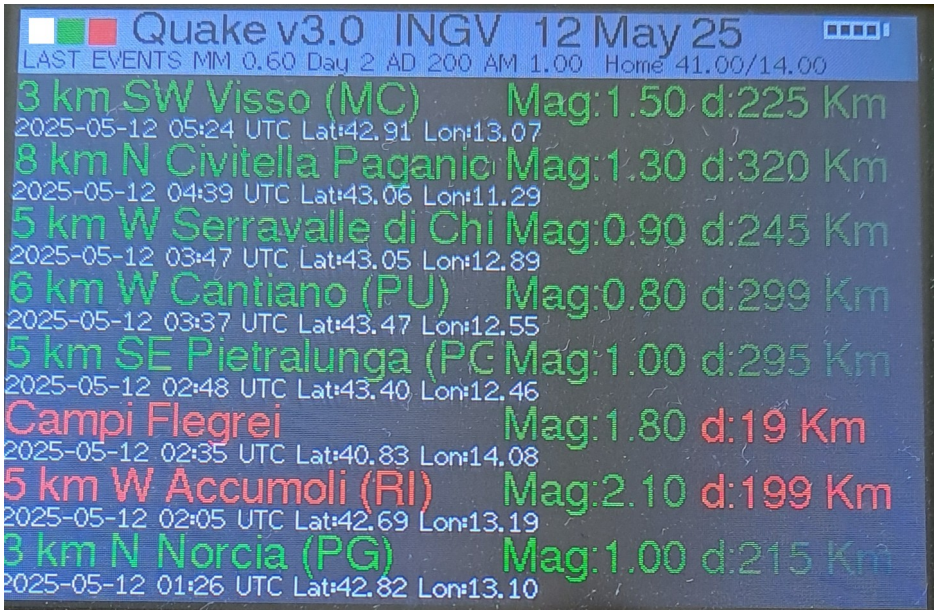
1st row:
LED1: connection status
LED2: seismic Trend
LED3: General Alarm/ data download in progress

SW release name, Service provider, date, battery status (even if absent)

2nd row: active data mode name:
- alarmed first (default)
- last events

MM: minimum Mag filter
Day: max observed days
AD: Alarm Distance (km)
AM: Alarm Magnitude
Home: Home coordinates
Seismic events area:
up to 8 events ordered by active data mode

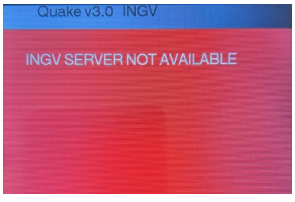
MAIN SCREEN: connect the power supply via cable and proceed as follows



CHANGE IN DATA PRESENTATION MODE :
quick access to functions via single screen TAP:
- 1: activation of Last Events data mode
- 2: activation of Alarmed First data mode (default on reboot)
- 3: activation of SYSTEM MENU

LAST EVENTS:
The events ordered chronologically will appear in sequence, with the most recent at the top, a maximum of 8 events, each with its own details:
- name of the epicenter location, magnitude (various colors), distance from Home (km)
- date and time (UTC) of the event, epicenter coordinates

ALARMED FIRST:
The alarmed events (RED) will appear first at the top and will be ordered by descending magnitude. Following are other events (GREEN) ordered by descending magnitude. Each with its own details:
- name of the epicenter locality, magnitude (various colors), distance from Home (km)
- date and time (UTC) of the event, epicenter coordinates



SERVER OFFLINE:
This screen indicates the temporary unavailability of the Service Provider and/or the related data service; the device will cyclically attempt to download the data until the service resumes.

QUAKE SLEEK: visual checks

LEDs:

1 - 2 - 3

LED 1: CONNECTION STATUS Wifi / Internet / Service Provider:
Red 1: error/ Wifi unavailability
Red 2,3: retry Internet connection
Red 4,5: retry Service Provider connection/ parameters tuning
White/Green: procedure is in progress

LED 2: SEISMIC TREND:
Green: stable trend
Orange: increasing trend
Blue: decreasing trend
TIP! Valid data from the second download cycle

LED 3: Red: DEVICE GENERAL ALARM ACTIVATED
Black: data download is in progress

COLOR MAGNITUDE FIELD:

Orange: Mag >= 7.0
Yellow: 5.0 =< Mag < 7.0
Blue: 3.5 =< Mag < 5.0
Green: Mag < 3.5

TYPES OF EVENTS:

Red: alarmed events, occurring within the alarm distance threshold from Home

Green: not alarmed events