

Leica GR25 User Manual

for average user, on a programmed GR25

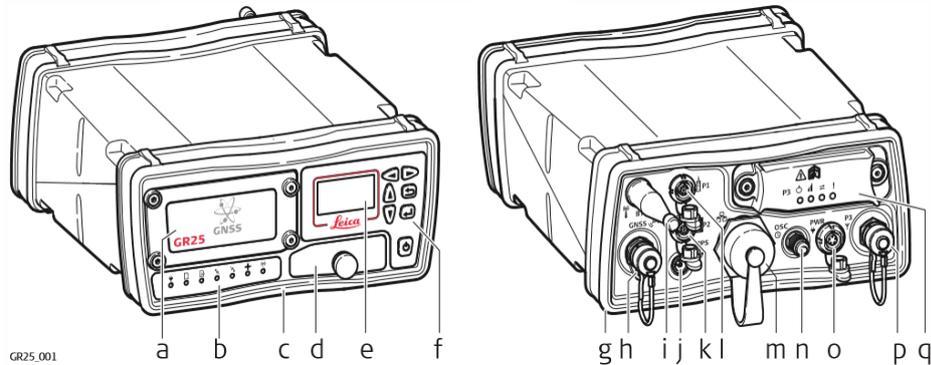
Done from LEICA GR10/GR25 user manual, found at this address in different languages:
[ftp://gps.rcjubail.gov.sa/DVD_NRS_Software_V43/Documentation/Leica GR10 GR25/User%20Manual](ftp://gps.rcjubail.gov.sa/DVD_NRS_Software_V43/Documentation/Leica_GR10_GR25/User%20Manual)

Table of contents

1.	Instrument Components	2
1.1.	GR25 components	2
1.2.	Power supply	2
2.	GR25 User Interface	3
2.1.	LED indicators on GR25	3
2.2.	Keyboard and Display	6
2.3.	SD card.....	7
3.	Equipment Setup	7
3.1.	Basic setup	7
3.2.	Change name of the site code	8
3.3.	ACTIVATING THE LOGGING SESSION	8

1. Instrument Components

1.1. GR25 components



- a) Battery cover
- b) LED's
- c) Front rubber bumper
- d) USB and SD card cover
- e) Display
- f) Buttons
- g) Back rubber bumper
- h) GNSS Antenna port
- i) Bluetooth Antenna
- j) PPS port
- k) Serial and Event in port (P2)
 - l) Serial port (P1)
- m) Ruggedised Ethernet port
- n) External oscillator port
- o) Power port
- p) Communication Slot-in port Antenna (P3)
- q) Communication Slot-in port (P3)

1.2. Power supply

Power options

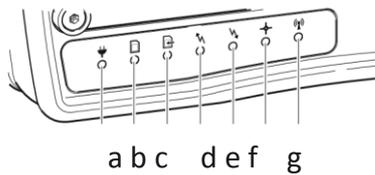
Power for the instrument can be supplied either by power supply or batteries. Up to two external power supplies can be connected using a Y-cable.

GR25 battery for internal supply : GEB241

2. GR25 User Interface

2.1. LED indicators on GR25

Diagram



- a Power LED
- b SD card LED
- c Raw data logging LED
- d RT out data stream LED
- e RT in data stream LED
- f Position LED
- g Bluetooth LED

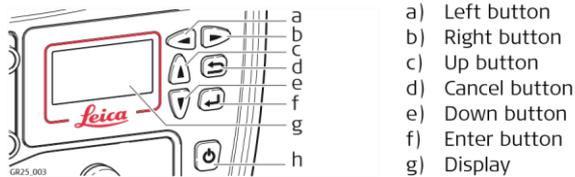
IF the	is	THEN
Power LED ⚡	off	The instrument is turned off.
	green	The instrument is turned on.
	flashing green	The instrument is on but has switched to a backup power source. If an internal battery is used, indicates that the remaining battery capacity is high.
	yellow	Only shown if using an internal battery. The remaining battery capacity is low. 📌 Recommended user action: Provide an alternative power source.
	red	Only shown if using an internal battery. The remaining battery capacity is critical. 📌 Recommended user action: Switch to a new power source immediately.
	flashing yellow	The internal battery is charging. 📌 Charging is only indicated by LEDs when the instrument is turned off. When the instrument is on, the LEDs indicate the current power level.
	flashing red	Charging of the internal battery is activated but there is an error in charging the battery. 📌 Recommended user action: Check and reattach the battery. If the problem does not disappear, please send the battery to Leica Geosystems Service. 📌 Charging is only indicated via LEDs when the instrument is turned off. When the instrument is on, the LEDs indicate the current power level.

IF the	is	THEN
SD card LED 	off	No SD card inserted or power is off.
	green	SD card is inserted. The free space on the SD card is greater than 20%.
	yellow	The free space on the SD card is below 20%.  Recommended user action: Activate the Smart clean-up or the automatic file delete for each logging session.
	flashing green	Use of external USB drive is configured but the device is not available. Data is written to the SD card. The free space on the SD card is greater than 20%.
	flashing yellow	Use of external USB drive is configured but the device is not available. Data is written to the SD card. The free space on the SD card is below 20%.
	red	SD card is full. Data logging has stopped.  Recommended user action: Immediately activate the Smart clean-up or the automatic file delete for each logging session.
Raw data logging LED 	off	No active logging sessions or power is off.
	green	Active logging sessions are configured on the instrument and data is being logged
	yellow	Active logging sessions are configured and Smart clean-up is deleting data from all or some of the configured logging sessions. OR Active logging sessions are configured but no position is available.  Recommended user action: Check the remaining space of the SD card and delete old data if necessary. Check the tracking and position status.
red	Active logging sessions are configured but the SD card is full or no satellites are tracked.  Recommended user action: Check the SD card and the tracking status.	

If the	is	THEN
RT out data stream LED 	off	No active data stream is configured or power is off.
	green	One or more data streams are configured and active. Data is being streamed.
	red	Data streams are active but no data is streamed.  Recommended user action: Check that data is tracked and a navigated position is available. Check that the correct reference position is entered.

IF the	is	THEN
RT in data stream LED 	off	No active real-time in data stream or power is off.
	green	A real-time in data stream is configured and active, data is received and a fixed position is available.
	flashing green	A real-time in data stream is configured and active, data is received, a DGPS position is available.
	flashing yellow	A real-time in data stream is configured and active, data is received but no fixed or DGPS position is available.
	red	Incoming data streams are active but no data is received. OR Incoming data stream is configured and active but the instrument is not tracking satellites and/or no position is available.  Recommended user action: Check that the incoming data connection is set up correctly. Check the tracking and position of the instrument.
Position LED 	off	The instrument is switched off.
	flashing green	The instrument is tracking satellites but no position is available.
	green	A navigated position is available.
	red	No satellites are tracked and no navigated position is available.
Bluetooth LED 	off	No wireless signal (not configured or no connection established).
	blue	Bluetooth connection configured and connected.

2.2. Keyboard and Display



The instrument can be turned on and off by holding down the ON/OFF button for 3 s. A green steady light at the power LED indicates that the instrument is turned on and ready.

- ON/OFF button

Button	Function
ON/OFF 	If GR25 is already off: Turns on GR25 when held for 3 s. If GR25 is already on: Turns off GR25 when held for 3 s.



Hold the ON/OFF button for 10 s, to force the instrument to turn off. Instrument settings and some data can be lost when using this method.

- Arrow buttons

Button	Function
Left/Right  Up/Down 	To scroll through menus and configuration options. For editable fields use the arrow buttons for scrolling and selecting alphanumeric fields.

- Cancel button

Button	Function
Cancel 	To exit pages without storing changes.

- Enter Button

Button	Function
Enter 	To select menu items, open new pages and select options.

2.3. SD card

Data is stored on a removable SD card. Maximum supported capacity : 32 Go.

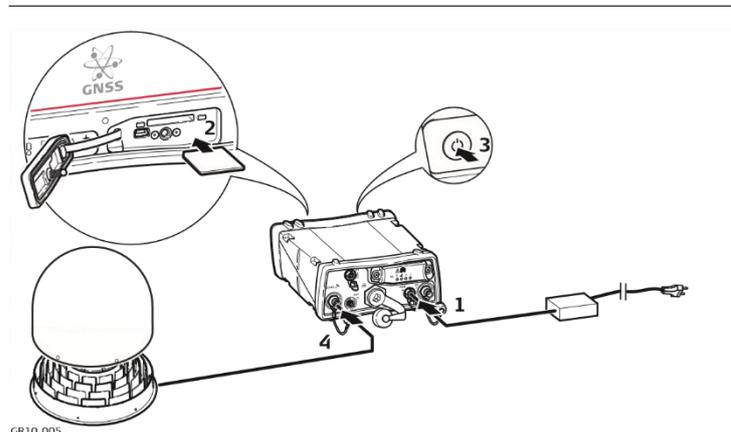
☞ If no SD card is inserted, data storage is not possible.

☞ Unplugging connection cables or removing the SD card during data logging or streaming can cause loss of data. Switch off the instrument before removing the SD card.

3. Equipment Setup

3.1. Basic setup

Description



Step	Description
1.	Plug the power cable/power supply into the GR10/GR25.
2.	Insert the SD card into the SD card slot.
3.	Turn on the GR25.
4.	Attach the antenna cable to the instrument's antenna port and to the connector on the antenna.
5.	The logging session has to be activated if the corresponding LED is RED
6.	Verify the following LED are green : <ul style="list-style-type: none">• Power supply (green/blinking green)• SD card• Raw data logging : be careful, you have to activate the logging session(3.3)• Position

3.2. Change name of the site code

Go into **CONFIGURATION** by the down arrow and validate with the green button

Go into **SITE CONFIG** by the down arrow and validate

Go into **SITE CODE** and validate so the cursor blinks. You can change now the name by arrows up, down, left, right. When it's done, you come back by pushing the grey button.

The new SITE CODE will appear in the names registered on the SD card.

3.3. Activating the logging session

- Go into **CONFIGURATION** by the down arrow and validate with the green button
- Go into **LOGGING SESSION** and validate=> you will see on the screen the site code (INSU or a new one, see 3.2)
- Push the left arrow button for activating the session and validate with the green button => **the data logging LED becomes green**