

GSM PLUS USER MANUAL

Front Panel Indicators, Buttons & Switch Functions | English Edition

GSM PLUS Front Panel Guide

Indicators, Buttons & Switch Functions



Numbered Front Panel Reference

Numbers 1 to 15 are explained in detail on the following pages.

1. Indicators

1

Healthy / Pump ON Indicator

This indicator remains continuously ON when the incoming supply is healthy and the motor is ready to run. When the motor is running, the Healthy / Pump ON indicator blinks.

2

Timer Indicator

The Timer indicator glows whenever a timer function is active. It is used during the Power-ON Timer, Star-Delta Timer and On-Demand Timer operation.

3

Input Fault Indicator

This indicator glows when an input-supply fault is detected. Typical input faults include phase absent, reverse phase, or a voltage difference of more than 60 V between phases.

4

Overload Indicator

The Overload indicator operates when the running motor current crosses the programmed overload-current limit.

5

Dry Run Indicator

The Dry Run indicator operates when motor current falls below the programmed lower-current limit. This generally occurs when the pump is running but is not lifting water.

6

Output Fault Indicator

Indicates an output-side fault condition.

7

Digital Display

Shows operating values and setting values during normal operation and programming.

8

Voltage Indicator

Indicates the voltage display / voltage parameter.

9

Net / Data Indicator

Indicates GSM network / data communication status.

10

Current Indicator

Indicates the motor-current display / current parameter.

2. Push Buttons

ON Button

Motor Start: Press and hold the ON button for approximately 2 seconds to start the motor.

11

Pump Current Auto-Set: Press and hold the ON button for approximately 10 seconds. The motor will start and the controller will measure the running pump current. It automatically sets the Overload limit approximately 40% above the measured current and the Dry Run limit approximately 25% below the measured current. Both values can be adjusted further from the settings menu.

12

OFF Button

Press the OFF button to stop the motor.

13

SETTING / ACCEPT Button

Press and hold the SETTING / ACCEPT button for approximately 3 seconds to enter the settings menu. From the front panel, you can manually set Star-Delta Time, Power-ON Timer, Overload Current, Dry Run Current, Trip Time, High Voltage and Low Voltage without using SMS. Use the button to accept / confirm settings where applicable.

3. Selector / Rocker Switches

14

Power ON / Bypass Switch

This switch is used for normal controller operation and bypass operation. In Bypass mode, you can start the motor directly from your existing motor starter.

15

Auto / Manual Switch

Manual Mode: The motor must be started manually every time.

Auto Mode: Once the motor has been started with an ON command, it will automatically restart when the power supply returns after a power failure. If the motor is intentionally switched OFF by call, SMS or the OFF switch/button, it will not auto-restart when power returns. A new start command is required.

4. Monitoring & Motor Protection

What the controller monitors and how it responds to pump or supply faults.

GSM PLUS continuously monitors important pump and supply conditions. Depending on the enabled notification settings, the unit can send status/event information to registered users.

Monitoring information

- Power resume / power restoration event
- Supply voltage
- Motor current (ampere)
- Power ON time and power OFF time
- Pump ON time, pump OFF time and run time
- Fault information and protection events

Input-side protection

- Phase absent
- Reverse phase / incorrect phase sequence
- Voltage unbalance

Motor / output-side protection

- Overload
- Dry run / under-current
- Motor-side phase absent
- Current unbalance
- Extreme high current

Protection reminder

Do not repeatedly restart a motor that is tripping on Overload, Dry Run, phase fault or extreme current. First identify and correct the electrical, motor, pump or water-supply cause.

5. Installation & First-Time Setup

Follow these steps in order. Electrical wiring should be completed only by a qualified technician.

1

Prepare the SIM card

Use a working GSM SIM with network coverage at the installation site. Ensure the SIM is active and has sufficient balance / SMS service as required by the operator.

2

Switch OFF power before inserting the SIM

Insert the SIM card into the SIM holder on the right side of the controller in the correct orientation. Do not insert or remove the SIM while the controller is powered.

3

Complete controller and starter wiring

Connect the GSM PLUS to the motor starter according to the wiring diagram for the supplied unit. Verify phase, sensing and starter-control connections before energizing.

4

Set the lower-left switch to normal Power ON mode

After wiring is checked, switch ON the controller using the lower-left Power ON / Bypass selector. Keep it in normal control mode for GSM operation.

5

Check the Healthy / Input Fault indication

If the Healthy indicator is ON, the input supply is acceptable. If Input Fault is indicated, isolate power and have the phase sequence / phase availability checked. Correct the phase wiring only with supply safely isolated.

6

Check GSM network

Confirm that the controller is connected to the GSM network. If signal is weak, place the antenna higher and away from metal obstructions where practical.

7

Register the user mobile number

Register at least one authorized mobile number using the SMS registration command in Section 6. Up to four user numbers can be stored.

Wiring diagram / installation photo

Insert the final GSM PLUS wiring diagram and installation photos here after they are approved for this model. Do not use a wiring diagram from a different firmware or hardware revision.

5A. Commissioning & Final Checks

Complete these checks before handing the GSM PLUS over to the customer.

8

Test status, ON and OFF operation

First request Pump Status. Then perform one controlled motor ON and OFF test and confirm starter operation and feedback.

9

Set pump current

After the pump is running normally and lifting water, use the 10-second front-panel current-set function or the SMS/calling current-set command. Confirm Overload and Dry Run thresholds after setting.

Commissioning checklist

- Healthy indicator is normal and no Input Fault is present.
- GSM network / data indication is available and the SIM can receive calls and SMS.
- At least one customer mobile number is registered and confirmation is received.
- Pump Status reply is received correctly.
- Motor ON and OFF commands work from front panel and remote control.
- Pump current is set while the pump is operating normally and lifting water.
- Overload and Dry Run limits are reviewed after current setting.
- Auto / Manual behavior is demonstrated to the customer.
- Bypass operation is explained as an emergency / direct-starter mode.

Handover rule

Do not leave the site until the customer has successfully performed one status check, one ON command and one OFF command from their own registered phone.

6. Registering User Mobile Numbers

Only registered users should normally be used for regular control and status operation.

Register a user number

Send the following SMS to the SIM number installed inside the GSM PLUS:

Registration command

`*1122A+91xxxxxxxxxx#`

Replace xxxxxxxxxxxx with the 10-digit mobile number that you want to register, keeping +91 in the command. Send this SMS to the SIM number installed in the GSM PLUS unit. The controller stores the number and sends a registration confirmation SMS. Up to 4 numbers can be registered.

Delete a registered number

Delete command

`*1122D+91xxxxxxxxxx#`

Replace xxxxxxxxxxxx with the 10-digit registered mobile number that you want to remove, keeping +91 in the command. Send this SMS to the GSM PLUS device number. The specified number will be deleted from the controller memory.

Check registered numbers

List command

`*1122L#`

The controller replies with the list of registered user numbers.

Mobile number format

Always use the +91 country code in the Add Number and Delete Number commands. Enter the customer's 10-digit mobile number in place of xxxxxxxxxxxx, for example: `*1122A+919812345678#`. Registration is successful only after the controller sends a confirmation SMS.

Registration tips

- Send registration SMS to the SIM number installed in the controller.
- Wait for the registration confirmation SMS before testing control commands.
- A maximum of four user numbers can be stored.
- Use `*1122L#` to verify the stored numbers after adding or deleting a user.

7. Calling / IVR Commands

Call the SIM number installed in the GSM PLUS. The controller answers, provides a voice welcome / pump status, and then accepts keypad commands.

Function	Key	Customer Use
Pump Current Set	1111	Use when the motor repeatedly trips due to Overload / Dry Run after confirming the pump is operating normally.
Password Enable	2222	Activates password protection for calls from unregistered numbers.
Password Disable	3333	Disables password protection for calls from unregistered numbers.
Motor ON	7	Starts the pump / motor.
Dry Run Protection Toggle	8888	Toggles the Dry Run protection facility. Protection is shown as activated by default in the reference manual.
Motor OFF	9	Stops the pump / motor.
Motor Status	0	Plays current pump status information.
Fault Reset	*	Press when the system specifically asks for a fault reset.
Disconnect Call	#	Ends the call.

Recommended calling sequence

1) Call the device. 2) Listen to the complete pump status. 3) Press the required key. 4) Listen for confirmation. 5) Press # to disconnect.

8. SMS Commands - Basic Control & Services

Type commands exactly as shown. Do not add spaces. Every command starts with *1122 and ends with #.

Function	SMS Command	What It Does
Add / Register Number	*1122A+91xxxxxxxxxx#	Registers a user number. Replace xxxxxxxxxxxx with the 10-digit mobile number; keep +91 in the command.
Delete Number	*1122D+91xxxxxxxxxx#	Deletes the specified registered number. Replace xxxxxxxxxxxx with the 10-digit mobile number; keep +91 in the command.
List Registered Numbers	*1122L#	Replies with the stored user-number list.
Motor ON	*1122ON#	Starts the pump.
Motor OFF	*1122OFF#	Stops the pump.
Pump Status	*1122RTS#	Replies with real-time pump status.
Protection Setting Detail	*1122PSD#	Replies with motor-protection setting details.
Ring Feedback ON	*1122CALLON#	Enables a call/ring feedback when an output fault occurs.
Ring Feedback OFF	*1122CALLOFF#	Disables the ring/call feedback facility.
Set Clock Time	*1122SCTxx:xx#	Sets controller clock time. Replace xx:xx with the required time.
Start SMS Service	*1122SMSA#	Activates SMS service / notifications.
Stop SMS Service	*1122SMSD#	Deactivates SMS service / notifications.
Start Password Service	*1122PPA#	Activates password protection for unregistered callers.
Stop Password Service	*1122PPD#	Deactivates password protection; unregistered numbers may then be able to operate the unit by call.

Clock format

Use the controller clock consistently with the timer format. Confirm the clock after setting it, especially after SIM replacement, service or prolonged power interruption.

9. SMS Commands - Pump Current & Protection

Use protection commands carefully. Incorrect limits can cause nuisance trips or reduce motor protection.

Function	SMS Command	Explanation
Set Pump Current	*1122SPC#	Starts the pump and sets pump current together with Overload / Dry Run reference settings.
Set Overload Trip %	*1122OLD40#	Example: sets Overload at 40% above the set pump current. Reference range: 10% to 50%.
Set Dry Run %	*1122DRY75#	Example: sets Dry Run threshold at 75% of the set pump current. Reference range: 60% to 95%.
Output Protection OFF	*1122POFF#	Deactivates output motor protection such as Overload and Dry Run.
Output Protection ON	*1122PON#	Activates output motor protection such as Overload and Dry Run.

Normal current-setting method

For the front panel, press and hold the ON button for about 10 seconds while the pump can run normally. The controller measures pump current and initially sets Overload approximately 40% above and Dry Run approximately 25% below the measured current. These values can then be fine-tuned.

Protection warning

Keep output protection ON during normal operation. Use POFF only for controlled testing / service when the motor and pump are being supervised.

10. Timer Programming by SMS

The controller supports four independent timer entries. Set the controller clock before programming timers.

Timer command pattern: *1122TnONhh:mmTTPhh:mm# (n = Timer 1 to 4; first hh:mm = start time; second hh:mm = run duration).

Timer Function	SMS Command	Result
Timer 1 ON	*1122T1ONxx:xxTTPxx:xx#	Sets Timer 1 start time and run duration.
Timer 1 OFF	*1122T1ON00:00TTP00:00#	Deactivates Timer 1.
Timer 2 ON	*1122T2ONxx:xxTTPxx:xx#	Sets Timer 2.
Timer 2 OFF	*1122T2ON00:00TTP00:00#	Deactivates Timer 2.
Timer 3 ON	*1122T3ONxx:xxTTPxx:xx#	Sets Timer 3.
Timer 3 OFF	*1122T3ON00:00TTP00:00#	Deactivates Timer 3.
Timer 4 ON	*1122T4ONxx:xxTTPxx:xx#	Sets Timer 4.
Timer 4 OFF	*1122T4ON00:00TTP00:00#	Deactivates Timer 4.
Timer Status	*1122STS#	Replies with the status of all timers.

Timer example

*1122T1ON14:00TTP03:00#

Timer 1 starts the pump at 14:00 (2:00 PM) and runs it for 03:00 hours. The supplied reference text labels 14:00 as 2 AM; this manual uses the correct 24-hour interpretation.

To cancel a timer

Set both its start time and duration to 00:00 using the corresponding Timer OFF command, then send *1122STS# to verify timer status.

11. Technical Specifications

Reference values taken from the supplied GSM controller manual. Final production values should match the shipped GSM PLUS hardware revision.

Parameter	Specification
Controller design	Microprocessor / Microcontroller technology
Supply voltage	180-500 V
Output relay contact	2 A
Starter interface	Coil-operated starters; verify wiring for the actual starter
Enclosure	ABS
Maximum operating temperature	70 °C
Current range	2 A to 99 A
Maximum registered SMS users	4
Network	GSM SIM card
IVR language	As per supported user requirement / firmware
Mounting	Wall mounting
Password protection	Yes
Current sensing	3-phase
Phase / SPP sensing	Voltage sensing and current sensing
Power-ON Timer	03-300 seconds
On-Demand Timer	001-720 minutes
Star-Delta Timer	03-30 seconds

12. Quick Troubleshooting

Use this table for common customer issues before contacting service support.

Symptom	Check / Action
Healthy indicator does not appear	Check incoming 3-phase supply, phase availability and phase sequence. If Input Fault is ON, isolate supply and have the wiring checked.
GSM / network is weak	Check SIM activation and network availability. Reposition the antenna higher or away from shielding metal surfaces.
Motor repeatedly trips on Overload	Check actual motor current, pump load and mechanical condition. Re-set pump current only after confirming normal pump operation.
Motor repeatedly trips on Dry Run	Confirm water availability and pump water lifting. Check the Dry Run current limit after verifying normal running current.
No SMS reply	Check SIM balance / SMS service, network signal and whether SMS service is enabled. Confirm that the command is typed exactly.
Call does not operate unit	Confirm device network, registered number / password settings and listen to the IVR status before entering a keypad command.
Timer does not run at expected time	Set the controller clock, verify timer status with *1122STS#, and confirm the 24-hour start time and duration.
Motor does not auto-restart after power returns	Auto restart occurs only in Auto mode when the previous state requires the motor to run. If motor was intentionally stopped by call, SMS or OFF control, give a new ON command.

13. Customer Support & Installation Handover

Keep this page with the installed controller for future service and troubleshooting.

Company	Kewintech Private Limited
Customer Support / Helpline / WhatsApp	9812275833
Website	www.kewintech.com
Product	GSM PLUS - GSM Mobile Motor Controller

Installation record

Item	Record
Customer Name	
Site / Village	
Motor HP	
Starter Type	
Device SIM Number	
Registered Mobile No. 1	
Registered Mobile No. 2	
Installation Date	
Technician Name / Mobile	
Pump Running Current	A
Overload Setting	
Dry Run Setting	

Before leaving the site

Technician should demonstrate: Motor ON/OFF from front panel, call and SMS; Pump Status; user registration; pump current setting; Auto/Manual behavior; Bypass mode; fault indicators; and customer-support contact.