

USER MANUAL



AGEM

(Advanced GSM Enabled Modem)

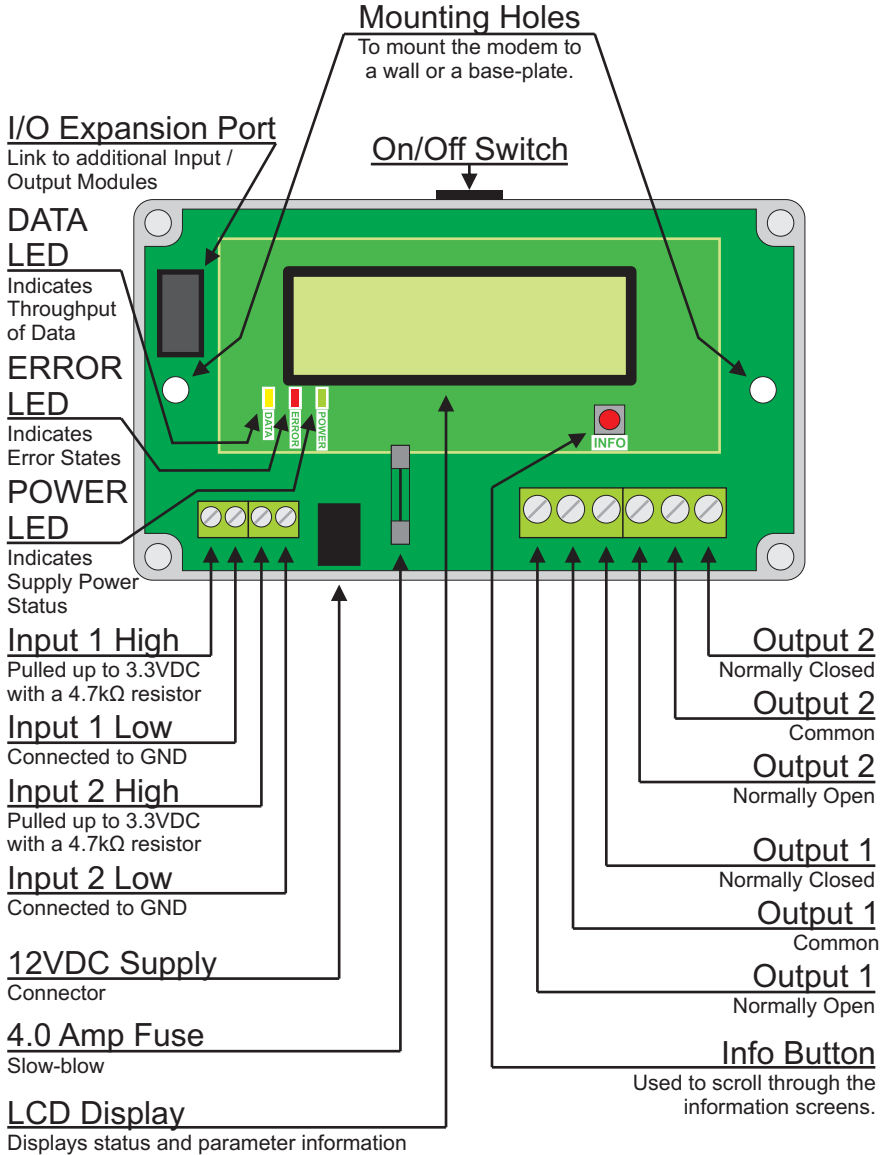
FOR CONNECTING A SINGLE
MOTORSCOPE OR LIQUID LEVEL CONTROLLER
TO THE WEB

A product of NIST Control Systems cc

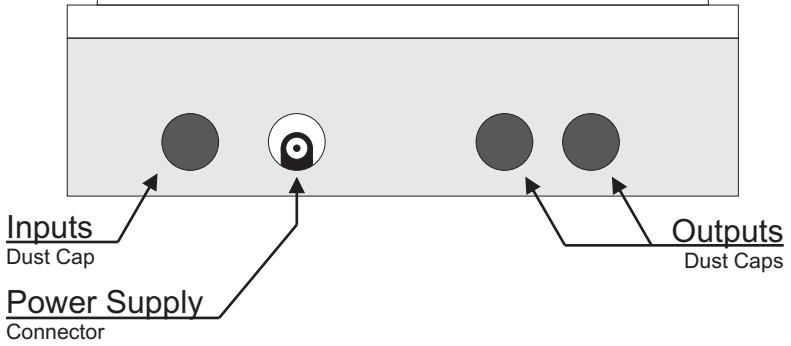
Package Contents

- 90 - 240VAC to 12VDC Power Supply
- AGEM (Modem)
- GSM Antenna
- Data Cable
- Cross-over Jack
- Mounting Accessories

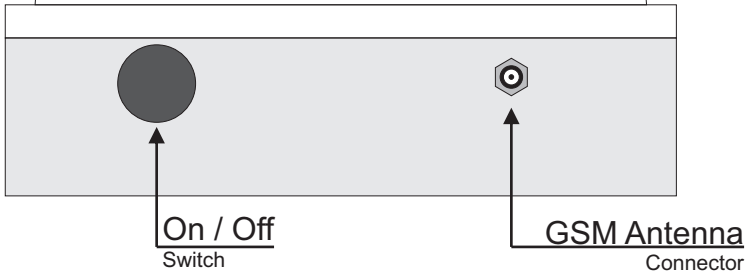
TOP VIEW (WITH LID REMOVED)



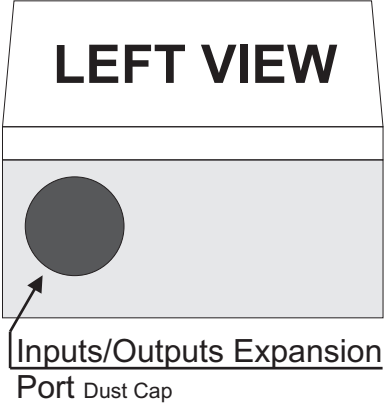
FRONT VIEW



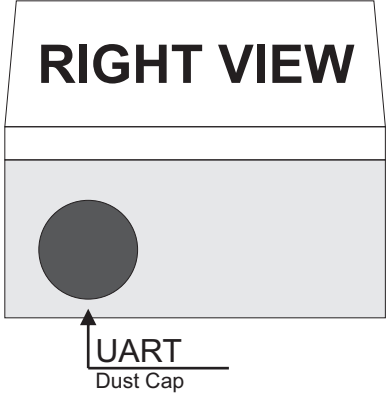
REAR VIEW



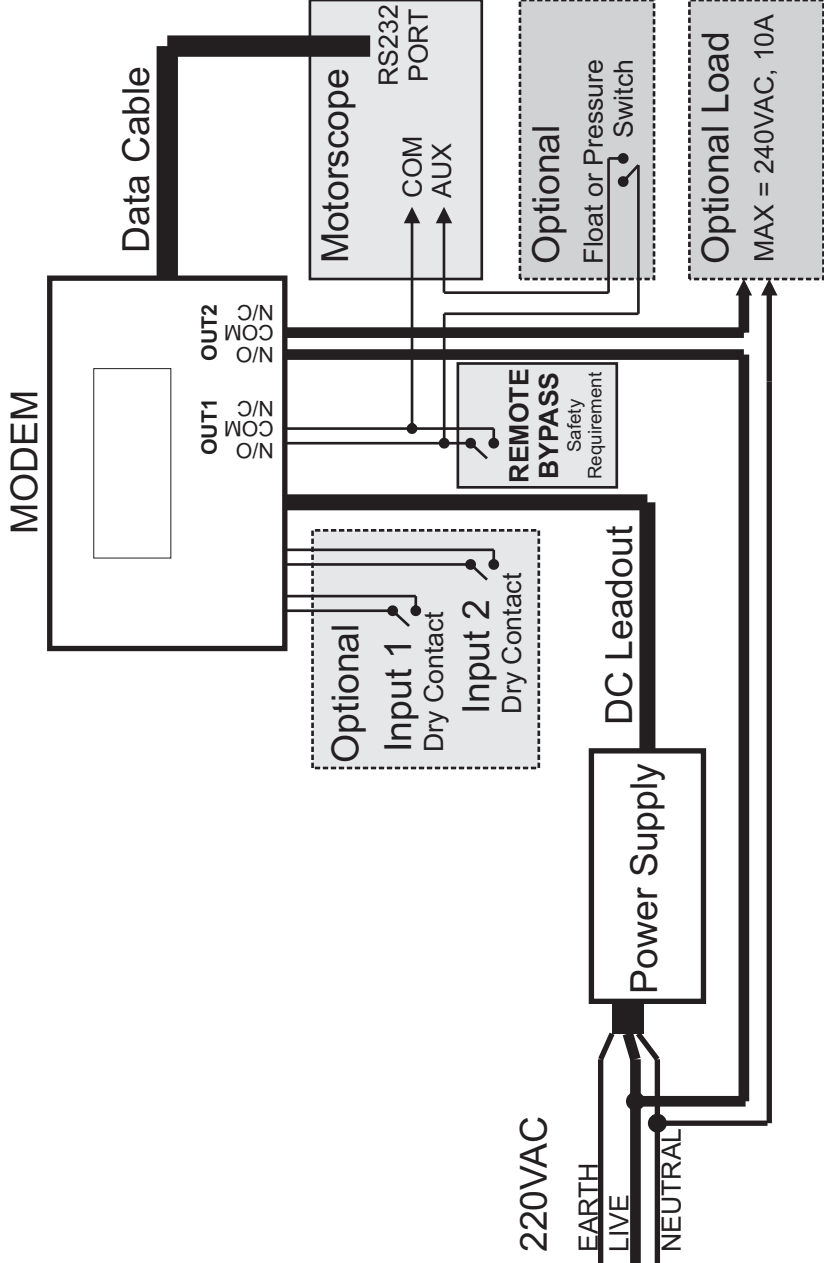
LEFT VIEW



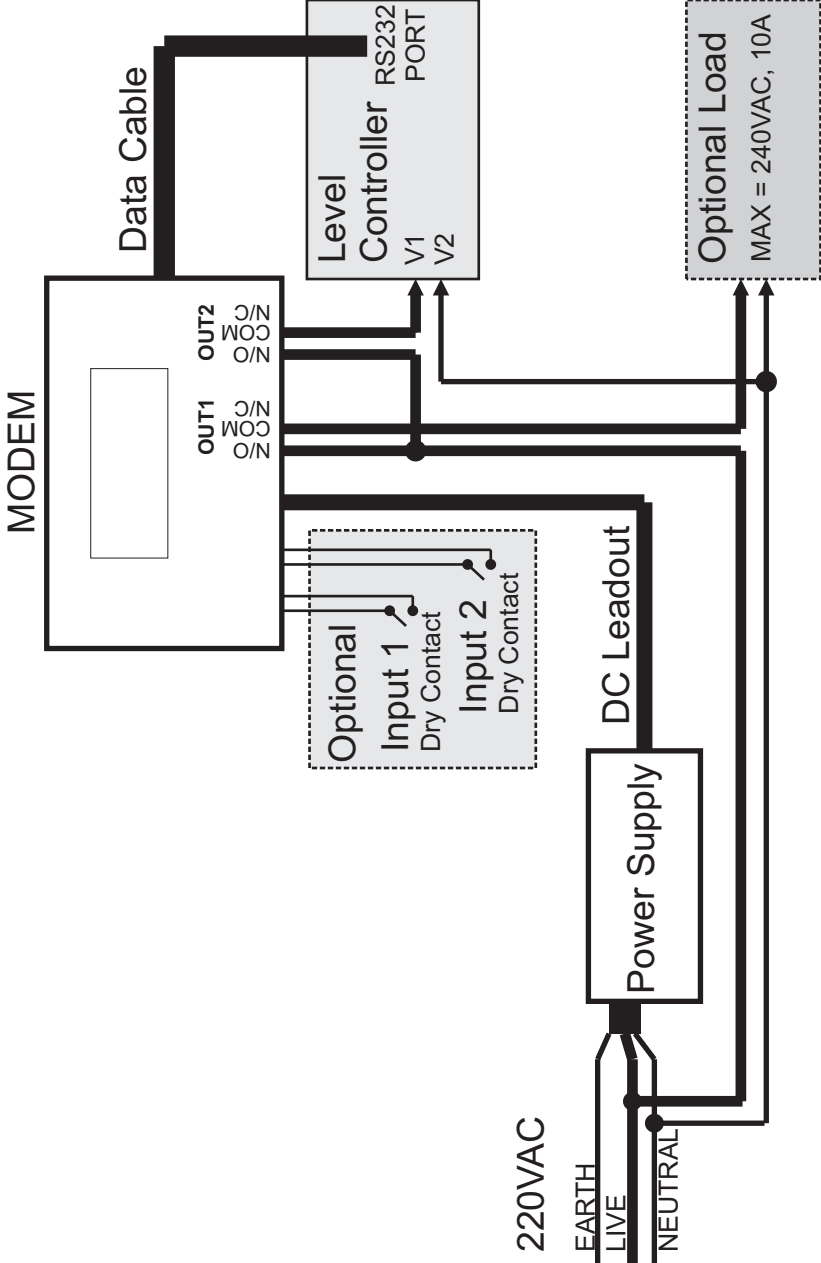
RIGHT VIEW



Suggested Motorscope Connection Diagram



Suggested Level Controller Connection Diagram



INSTALLATION INSTRUCTIONS

Mount the Modem and Power Supply

- Mount the Modem with the supplied M3 bolts and nuts.
- Mount the Power Supply with the supplied cable-ties.

Connect the cables

- Screw the GSM Antenna onto the GSM Antenna Connector.
- Connect up to two DRY CONTACTS to the two INPUT terminals. **WARNING: NO external voltage is allowed on these terminals!**
- OUTPUT 1 is reserved to switch a connected NIST Control Systems (**NCS** for short) Device (Motorscope / Level Controller / etc.).
- OUTPUT 2 may be used to remotely switch any other device (**MAX = 250VAC, 5 Amps**)
- Plug the Power Supply into the 12VDC Supply Connector.
- Plug the Power Supply into the wall outlet (230VAC). **DO NOT SWITCH IT ON YET.**

Connect the NIST Control Systems cc Device

- Remove the UART1 Dust Cover.
- Plug the Data Cable into the UART1 connector on the Modem and the other end into the UART connector on the NIST Control Systems Device.
NOTE: If the NIST Control Systems Device is the Liquid Level Controller, the *Cross-over Jack* should be inserted between the Liquid Level Controller's UART connector and the Data Cable.
- Output 1 shall always be used as the remote ON/OFF switch for the NIST Control Systems Device

USING THE MODEM

- Switch the Power Supply ON at the wall outlet.
- Switch the Modem ON at the On/Off Switch.

Start-up Sequence

Wait for the Modem to go through the start-up sequence (this may take up to 5 minutes if the GSM signal is good and all the required cables are connected properly).

The Start-up Sequence consists of the following tasks:

- System Startup (25 parameter initializations which are counted up as they are completed),
- Update Network Info (Could take up to 4 minutes)
- Update Real Date and Time
- Connect to Remote Server
- Send acquired data to the Remote Server.

USER INTERFACE LED INDICATIONS

There are three LEDs which serve as an indication of the status of the system. Each different flashing sequence indicates a different status.

The flashing sequences for each LED is indicated below:

POWER LED (GREEN)

MODEM INITIALIZATION IS IN PROGRESS



MODEM IS POWERED FROM MAINS SUPPLY



MODEM IS RUNNING ON BATTERY POWER



ERROR LED (RED)

MODEM INITIALIZATION IS IN PROGRESS



A MINOR ERROR IS BEING HANDLED (NOT LOGGED)



A SERIOUS ERROR IS BEING HANDLED (LOGGED)



DATA LED (AMBER)

NO DATA HANDLED (TRANSMITTED OR RECEIVED)



SMALL AMOUNTS OF DATA IS HANDLED



LARGE AMOUNTS OF DATA IS HANDLED
















Using the Info Button

The Info Button has two main functions:

1. Scroll through Info Screens
2. Enter and scroll through the Reset Options Menu

Using the Info Button to: Scroll through the Info Screens

Press (for less than 3 seconds) and release the Info Button to scroll through the following information screens:

-  I1: Application Status Indicators
-  I2: Local Power Supply Status
-  I3: Local Inputs & Outputs Status
-  I4: Log-memory Status
-  I5: Connected Device Info
-  I6: GSM Modem Network Registration Status
-  I7: GSM Signal Quality
-  I8: SIM Card Mobile Number
-  I9: Location Info
-  I10: Time-Stamp Info
-  I11: Control Socket Info
-  I12: Data Socket Info
-  I13: AGEM Version Info

Using the Info Button to: Enter and scroll through the Reset Menu

1. Press (for more than 30 seconds) and release the Info Button to enter the Reset Menu.
2. Press (for less than 3 seconds) and release the Info Button to scroll through the following Reset Menu Options.
 - Exit the Reset Menu (without Executing any Reset Action)
 - Restart the Processor(s) Only
 - Clear the Log-Memory and then Restart the Processor(s)
 - Restore all settings to Factory Defaults
3. To Activate the displayed Reset Option, press (for more than 3 seconds) and release the Info Button. The display shall indicate that the requested Reset Option shall be executed before it proceeds with the execution.

Web Interface

To see the stored online data and the real time data of this device, a service contract must be signed at your nearest dealer.

Before you can sign in at <http://rocs.nistcontrol.com> and start using the remote online control system, you have to sign up for a free account at http://www.nistcontrol.com/free_rocs_reg.html

Once all the admin is completed, you'll be able to use your email address and password to log in on the web interface and start using it to control your pump and see the running parameters or graphs of either your pump or your Liquid Level Controller.

DEALER CONTACT DETAILS