

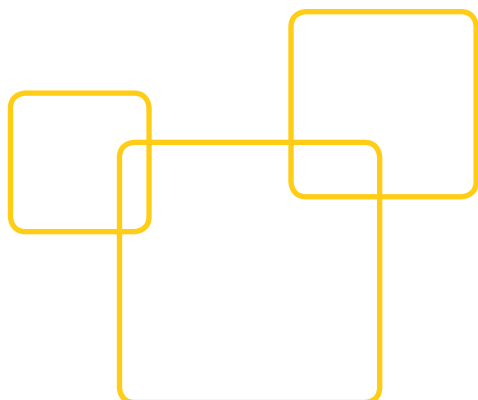


Operating Manual iMICO / iSITE

Intelligent MIDNIGHT Controller

iSITE Software

Operating Manual



iMICO, iSITE

INTELLIGENT MIDNIGHT CONTROLLER + SOFTWARE



Thank you for purchasing the LiCS system made by Vossloh-Schwabe. Please familiarise yourself with the product functions by carefully reading the manual. This will also help you to make the most effective use of the product. When not in use, please keep the manual in a safe place for easy future reference. Anybody who is involved with setting up, commissioning, operating, maintaining and repairing the system must

- be suitably qualified and
- strictly observe the instructions contained in this manual.

Use of symbols in the manual

The following symbols are used in the manual to highlight procedures, limitations, precautionary measures and instructions that must be observed for safety reasons.



This symbol alerts you to important information and any limitations that must be observed. Please read these points carefully to ensure the flawless operation of the system and the individual components.

LEGAL NOTES

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■ INTRODUCTION

The iMICO is a one way communication light controller based on GSM/GPRS/WCDMA communication. The units receive an encrypted SMS message and act accordingly. Please provide a suitable SIM card to be inserted in the unit.

Description



The unit has 1 output relay to signal the power line.

Unit LED operation

Description	Status
Fast flashing, then off for 20 seconds	Initialization after reset
Periodic flashing: 2 seconds on, 0.5 seconds off	Empty database
Periodic flashing: 0.5 seconds on, 2 seconds off	Operating status
Periodic flashing: 1 second on, 1 second off, 5 seconds fast flashing	Connected status with PC
Fast flashing	Sending SMS
Periodic flashing: 1 second on, 10 seconds fast flashing	Pipe/Gateway status – transferring data from the PLC device to a PC with cellular modem and vice versa

Table 1: PWR LED Indications

Specifications

Description	Specification
HW interfaces	
RS-232 / RS-485	One DB9 male (standard EIA)
Analogue inputs	
Digital inputs/outputs	
Digital output	1 (relay 1A at 12–24V)
Display	2 LEDs (red, yellow)
Physical Characteristics	
Dimensions	104 x 67 x 33 mm
Weight	200 gr
Assembly	2 screw handles
Power supply specifications	
Power supply	9–24VDC 1A
Active current	100mA
Stand-by current	30mA

Description	Specification
Protection	According to MIL-STD-704E
Environment	
Operating temperature	–20°C to 70°C
Storage temperature	–40°C to 85°C
Operating humidity	5% to 95%
Protocols	
PLC protocols	MODBUS, Unitronics, Microlog, Hostlink, Izumi and many more ...
Relay Output Specification	
Number of outputs	1
Output type	Relay 1A/30VDC 0.5A/125VAC
Max. switching voltage/current	220VDC/1A 250VAC/1A
Contact life-cycle	Min. 200,000 operations (contact rating)
Minimum load	0.01mA/10mV
Contact resistance or voltage drop	up to 50mΩ
Response time	3ms

■ HARDWARE INSTALLATION

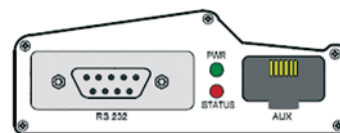
Unit

SIM card

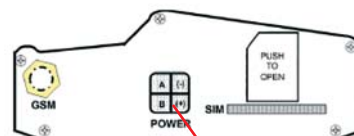
You need a valid SIM card to send and receive an SMS. Insert the SIM card into the SIM slot on the back panel, as shown in

Antenna

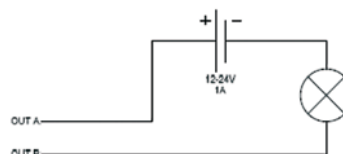
Plug in the GSM antenna by connecting the MMCX plug into the ANT socket.



Front panel interface



Back panel interface Power supply and relay output connector



Relay output cabling

Cabinet installation



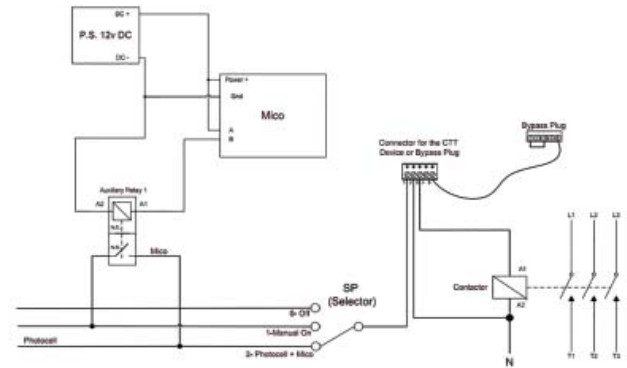
IMPORTANT

- The installation must be performed by trained and qualified personnel in accordance with local legislation (working in "low voltage- 400 VAC" installations).
- Extra care should be taken to ensure that the power to the supply cabinet remains switched off during the installation in order to avoid electric shock.

1) Disconnect the power from the cabinet and/or turn off the supply cabinet's main switch.

2) Please note that the iMICO is a floating device. It should not touch any other metal surface. Use the plastic accessories provided with the device for proper installation.

3) Assign the correct place to install the "MidNight® configurator" connector – near the lighting operation mode selector or the lighting supply contactors, allowing for external connection to the "MidNight® configurator".



Electrical connection of the iMICO



IMPORTANT

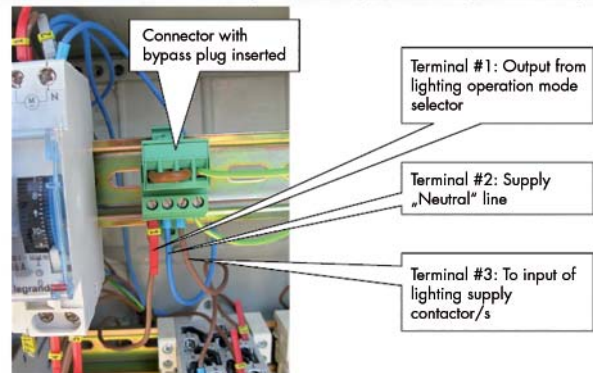
The cabinet must have an ON/OFF control with a timer or a photocell to ensure proper operation of MIDNIGHT.

4) After completing the installation, make sure that the bypass plug is inserted into the configuration connector. - See photo

After completion, verify that the lighting system works properly by performing the following steps:

- Reconnect the power supply to the cabinet.
- Switch the lighting operation mode selector to the "permanently on" position.
- Verify that the lighting supply contactor/s is/are switched on.
- Switch the lighting operation mode selector back to the normal mode

Make sure "Controlled" is the normal operating mode, i.e., the lamps can be turned ON using the timer or photocell when they are operating in this mode.



Wiring (12Volt supply, 1.6Amp)

iMICO power plug contains 4 wires:

Black , red, white and green.

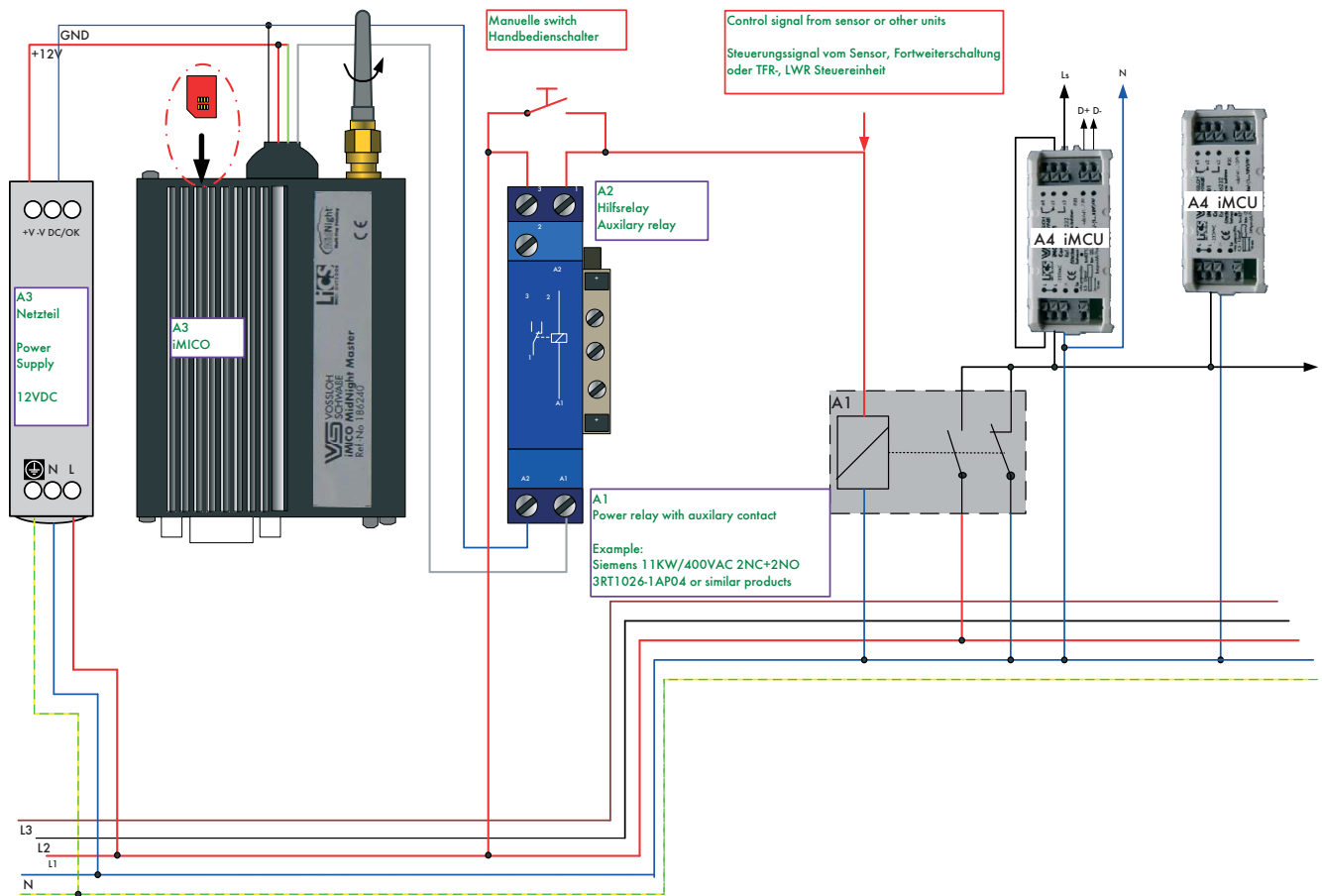
Black: V- , Red: V+ , White : B(relay) , Green : A(relay).

Make sure to connect A+B to Aux Relay correctly (including relay power supply).

After connecting the iMICO, perform the following steps to enable configuration:

- Make sure the lighting operation mode is in "Controlled" or "Normal" mode.
- Send the configuration using the iSITE
- The iMICO should start "Ticking" the power line after receiving the SMS.

The new Dimming Profile will take effect after the lights are turned ON by the timer or photocell.



iMICO cabinet installation

■ CONFIGURATION

Configuration with iSITE Street Light Control System.

Opening an account on the system

To open your own account, please send an email to isite@vsu.vossloh-schwabe.com

Logging-in to the web system

After obtaining your own customer ID, user name and password, you can log-in to the system via <http://vs.eltam-eh.com>

Make sure to enter your login details correctly (case sensitive). Your chosen language will be saved as the default language for the current user. It will also be the language used for the alert mails sent by the system.

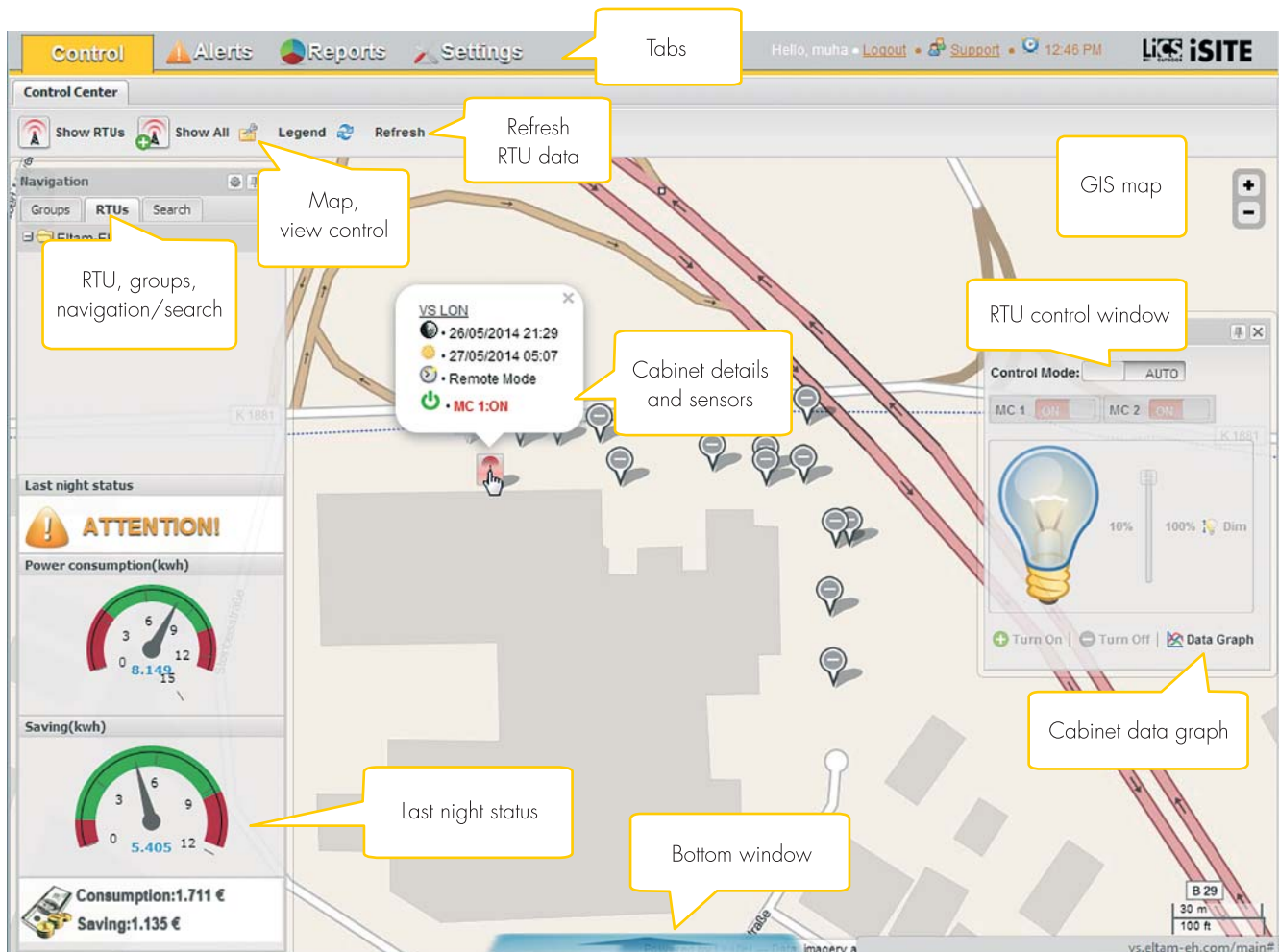


Possible login issues

- Three incorrect log-in attempts will block further log-in attempts for 30 minutes.
- Lost communication to the server.
The user can contact sales for more details or can fill in the support form to retrieve log-in details.

Main page - Control

After logging in, the user will be directed to the main page



Interactive map

The map is a GIS (based on GPS coordinates) map. After creating your site (LON, RF, DALI, Midnight) using the settings tab, you will see all the RTUs, ballasts and LED drivers on the map. After logging in, you will see all your RTU's on the map. Clicking on an RTU, will display all the related light points



Icon interaction

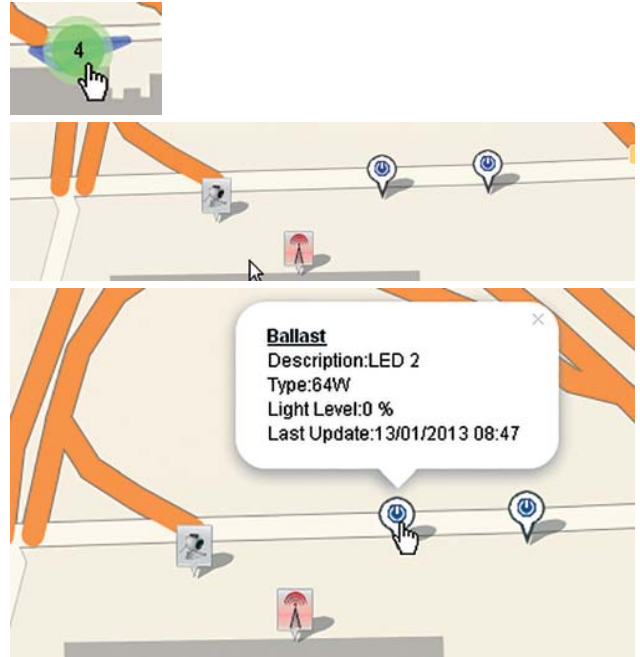
➤ Circles:

If a green circle is displayed, this represents a group of nearby (numbered) items.

- Placing the mouse over the green circle displays all items inside the group.
- Clicking the mouse zooms in on the displays and shows the items

➤ Light Point items:

- Placing the mouse over the items displays a pop-up bubble with brief information.
- Clicking the mouse displays a window with full information on the light point



Adding MIDNIGHT scenario

Settings->Scenarios: MIDNIGHT scenario: Specifically for MIDNIGHT RTU's

Choose Trigger Type = time, Action Type = Dim lamps.

Action Type	Trigger Type	Time	Offset	Power
Lamps ON	Time	17:00	0	100
Dim Lamps	Time	00:00	0	50
Lamps OFF	Time	05:00	0	0

To save click "OK"

To activate the dimming scenario you must assign it to an RTU. Go to "RTU Settings" and on the desired RTU row choose the scenario (by name) you want to activate:

Click "OK" to save the changes.

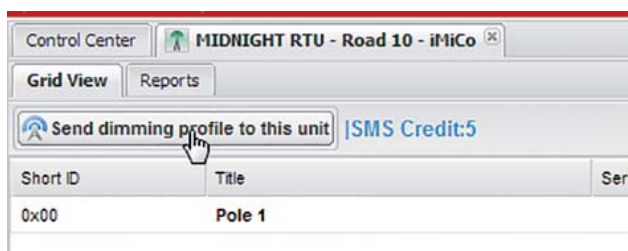


Sending Dimming Profile to the unit

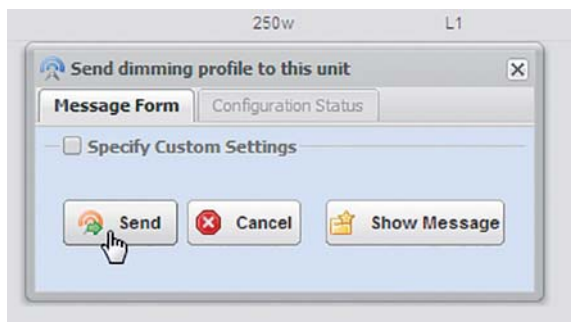
Main -> Navigation window -> double click on unit name.

A window tab is opened.

Click on "Send dimming profile to this unit"

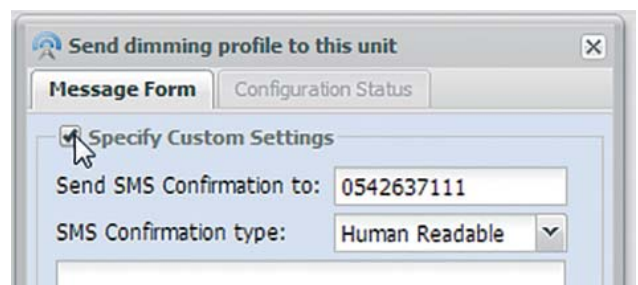


Clicking on the this item opens a window:



SMS confirmation

To receive confirmation from the iMICO that it has finished signaling the power line, select "Specify Customer Settings" and enter your phone number.



Configuration with iCTT

- Remove the bypass plug and connect the iCTT
- Connect the iCTT to your laptop PC.
- Switch the lighting operation mode selector to the "permanently on" position.
- Use the DAT software to create the dimming profile, and to execute the configuration.

Please make sure that the correct serial COM port has been selected.

When the unit finishes the configuration operation, return the selector to the automatic/normal mode.

The new Dimming Profile will take effect the next time the lights are ON.

Whenever an electric light goes on around the world, Vossloh-Schwabe is likely to have made a key contribution to ensuring that everything works at the flick of a switch.

Headquartered in Germany, Vossloh-Schwabe has been a member of the global Panasonic group since 2002 and counts as a technology leader within the lighting sector. Top-quality, high-performance products form the basis of the company's success.

Whether cost-effective standard components or tailor-made product developments are needed, Vossloh-Schwabe can satisfy even the most diverse market and customer requirements. Vossloh-Schwabe's extensive product portfolio covers all lighting components: LED systems with matching control gear units, state-of-the-art control systems (LiCS) as well as electronic and magnetic ballasts and lampholders.

A member of the Panasonic group **Panasonic**

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