Wiser™ for C-Bus® Automation Controller

Quick Start Guide

Wiser for C-Bus® Automation Controller
5500SHAC

Getting to know the Controller

The Wiser for C-Bus® Automation Controller controls and manages C-Bus systems for residential buildings and integrates additional systems to achieve a customised solution and an environment of comfort, convenience, security, and energy efficiency. The Wiser for C-Bus® Automation Controller is referred to in the following as Controller.

From simple control to advanced installations, C-Bus provides control and automation of lighting, blinds and shutters and room occupancy.

The integrated visualisation allows local or remote control via PC, tablet, touch panel or smart phone. This includes scene functions, scheduling, trend logging and control.

Logic scripts can be programmed into the device to achieve complex control and advanced management functions.

The integration of IP cameras, web services and additional building management functions (e.g. BACnet and MODBUS) is possible via Ethernet.

Interaction with other equipment and systems is possible via I/O connections including RS-232, RS-485 (MODBUS RTU), digital input (optional monitored input), SELV relay output and LED driver output.

The communication with MODBUS allows the integration of energy metering and climate control with C-Bus.

The product can be accessed over Ethernet for configuration and visualisation via the web server function.

Local access for configuration with a laptop is provided by the USB Type B adaptor.

A USB Type A connector for USB host (USB 2.0 High Speed) provides connection to USB expansion devices.

8 LEDs on the front panel provide full status feedback.

2 Reset buttons permit software and hardware reset functionality.

The product needs an external power supply (24 V DC).

The Controller is designed for a maximum of:

- Objects (C-Bus and internal): *2000
- Users for visualisation: 8
- MODBUS devices: 6
- BACnet data points: 50

* Limits not physical but dependent on maximum CPU load.

For your Safety

CAUTION
EQUIPMENT DAMAGE HAZARD
Install the device according to instructions in this document.
Pay attention to the specifications and wiring diagrams related to the installation.
Do not use this product for any other purpose than specified in this instruction.
Failure to follow these instructions can result in minor injuries, or equipment damage.

Mounting/Removing the Controller

Mounting

Removing

Connections

![Diagram of Connections](image)

Pin 1 Remote ON
Pin 2 Remote OFF
Pin 3 C-Bus Neg (-)
Pin 4 C-Bus Pos (+)
Pin 5 C-Bus Neg (-)
Pin 6 C-Bus Pos (+)
Pin 7 Remote OFF
Pin 8 Remote OFF

* To use RJ 45 with C-Bus Cat-5 network cable
Meaning of the Status Feedback LEDs

<table>
<thead>
<tr>
<th>LEDs</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>Green, blinking Red: Controller is running with blink rate proportional to processor load</td>
</tr>
<tr>
<td></td>
<td>Green: Controller is powered but has been shut down</td>
</tr>
<tr>
<td></td>
<td>Red: Problem with processor board or power supply</td>
</tr>
<tr>
<td></td>
<td>Off: Controller has no power</td>
</tr>
<tr>
<td>Status</td>
<td>Green: Controller is running properly</td>
</tr>
<tr>
<td></td>
<td>Red flashing: During factory reset</td>
</tr>
<tr>
<td></td>
<td>Red: During software reset</td>
</tr>
<tr>
<td></td>
<td>Off: During boot up</td>
</tr>
<tr>
<td>Relay</td>
<td>Green: Relay is On</td>
</tr>
<tr>
<td></td>
<td>Off: Relay is Off</td>
</tr>
<tr>
<td>Digital</td>
<td>Input: Monitored input</td>
</tr>
<tr>
<td></td>
<td>Green: Input in high resistance (6.9 kΩ) - switch open state</td>
</tr>
<tr>
<td></td>
<td>Yellow: Open circuit (&gt; 12 kΩ)</td>
</tr>
<tr>
<td></td>
<td>Red: Short circuit (&lt; 1 kΩ)</td>
</tr>
<tr>
<td></td>
<td>Off: Input in low resistance (2.2 kΩ) - switch closed state</td>
</tr>
<tr>
<td></td>
<td>Potential free contact (switch/relay)</td>
</tr>
<tr>
<td></td>
<td>Green: Input is open circuit</td>
</tr>
<tr>
<td></td>
<td>Red: Input is closed circuit</td>
</tr>
<tr>
<td>C-Bus</td>
<td>Green: C-Bus powered and clock active</td>
</tr>
<tr>
<td></td>
<td>Flashing: C-Bus low voltage warning</td>
</tr>
<tr>
<td></td>
<td>Off: No C-Bus power or no active clock</td>
</tr>
</tbody>
</table>

How to Reset

**Software Reset**
- **Shutdown and Reset**
  - Forces running processes to stop and reboots after
- **Factory Reset**
  - Recover your system to its original factory condition

**Hardware Reset**
- **Processor Reboot**
  - Power turned off and back on again
  - Wake up signal for a unit that has been shut down

Configuration

Access to the web server of the Controller
- Default user name: admin
- Default password: admin

Access via Ethernet:
1. Connect Ethernet cable with PC.
2. Use on the PC e.g. address 192.168.0.9 and subnet mask 255.255.255.0.
3. Run Google Chrome™ or Firefox® and go to 192.168.0.10.

Access via USB-B:
- The controller may be powered by USB for configuration purposes.
- The IP address is 192.168.245.10.
- The USB drivers are included with the latest C-Bus Toolkit installation.
  1. Connect USB-B with a USB port of the PC. The PC is given a DHCP IP address in the range of 192.168.245.1 – 192.168.245.9.
  2. Run Google Chrome™ or Firefox® and go to 192.168.245.10.

With the C-Bus Toolkit you can configure, export and import a C-Bus project.
It is recommended to update the firmware to install the latest features, security updates and bug fixes. Scan the QR code using the Facility Hero App for information specific to your device.

Technical Data

- **Power Supply**: 24 V DC +/- 5 %
- **10 W max**
- **2 W typical**
- **C-Bus Power**: 15-36 V DC, 32 mA
- **Operating elements**: Software Reset button
- **Hardware Reset button**
- **QR code with information about this specific unit for use with the Facility Hero App (available from iTunes™ and Google Play™)**

Display elements: 8 Status Feedback LEDs
- Power, Status, Relay, Digital Input, RS232, RS485, Ethernet, C-Bus

**External Interfaces**
- **Power supply**: 24 V DC plus separate GND
- **LED Output Driver**: 40 mA current limited
- **Relay Output**: NO, NC, Common
- **48 V AC / 24 V DC 1 A max**
- **Digital Input**: Potential-free contact or Monitored input impedances of 2.2 kΩ closed, and 6.9 kΩ open.
- **USB-A**: Type A USB 2.0 high speed host
- **USB-B**: Type B USB 1.1 full speed device, for configuration

- **Ethernet**: RJ45 for 10/100 BASE-T UTP
- **RS-485, MODBUS**: 120 Ω Terminator, 1 nF Terminator, Common, A D1+, B D0-
- **RS-232**: Receive, Transmit, Common
- **C-Bus**: 2x RJ45
- **Terminals**: 18x screw terminals 1.5 mm² single-core and multi-core

**Dimensions**
- (WxHxD): 108 x 63 x 93 mm
- Mounting method: DIN Rail, clips

**External conditions**
- Ambient temperature during operation: -5 °C to +45 °C
- Ambient temperature during storage: -20 °C to +80 °C
- Rel. humidity (not condensing): 10 % to 93 %
- Type of protection: IP 20
- Radiated Emissions: EN 55022 / AS/NZS CISPR 22 Class A

**Warning**: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

**Product Compliance**

**Warranty**

Schneider Electric (Australia) Pty Ltd, (Clipsal by Schneider Electric), warrants this product to be free from defects in materials and workmanship for a period of two years from the date of installation. The benefits conferred herein are in addition to any other rights and remedies you may have at law in respect to this product.

Australian Consumer Law specifies that our goods come with guarantees that cannot be excluded. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

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