e:cue

TRAXON | e:cue
MEMBER OF PROSPERITY GROUP

AB444220035

e:cue
SYMPL serial Node

Information for Use

Read the Information for Use and the Safety Instructions carefully. Subject to modification without prior notice. Typographical and other errors do not justify any claim for damages. Modification of the product is prohibited.
This manual is designed for electricians, system administrators, and product users.
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Downloads and more information at:
www.ecue.com

Table of Contents

1   Safety instructions

Please read the safety instructions, provided in a separate manual, carefully. Make sure that the environmental, mounting, and installation prerequisites are met. This manual should be kept at a safe place and in reach of the device.

1.1   Symbols

⚠ The exclamation mark warns about possible damage of the device itself, to connected devices, and to the user.

ℹ The information symbol gives general hints and informs about handling and procedures for use of the device.

1.2   General instructions

⚠
— Connect cables and data only when the device is powered down.

— The maximum length of each connected cable is 30 m.

— When using a power supply unit, the device must be supplied by a separate power supply that is certified according to the local regulations (e.g. SELV, Class 2).

ℹ
— If safety instructions are missing, please contact Traxon e:cue to receive a new copy.

2   General device description

e:cue SYMPL Nodes are a system of interfaces for e:cue SYMPHOLIGHT only. They provide various connection types like DMX512, DALI, digital inputs and outputs etc. SYMPL Nodes always operate in online mode, as a device interface for SYMPHOLIGHT. All interactions are initiated and controlled by SYMPHOLIGHT. Connections between servers, Cores and Nodes are always made with e:net via Ethernet.

The e:cue SYMPL serial Node is a two-channel serial interface for use with e:cue's lighting control solution SYMPHOLIGHT. It provides two independent serial interfaces, one RS-232 and one RS-485 channel. The e:cue SYMPL serial Node is powered by an external power supply or via Ethernet PoE. It is easily mounted on standard 35 mm DIN rails, or with a key hole in the housing base on walls or on any stable vertical surface. e:cue SYMPL serial Node is a simple, reliable and easy to use interface solution for e:cue lighting control solutions with SYMPHOLIGHT.

ℹ
— To operate SYMPL Nodes a SYMPHOLIGHT version 2.0 or higher is mandatory. Earlier versions do not support the SYMPL Nodes. SYMPL Nodes are not supported by the e:cue Lighting Application Suite.

— Connections to the SYMPL serial Node are not hot-pluggable.

↑
content

2.1   Delivery content

Delivery content for the e:cue SYMPL serial Node (AB444220035):

1. e:cue SYMPL serial Node
2. Safety instructions
3. Welcome note

2.2   Product specifications

Dimensions (W x H x D)	53.5 x 90.5 x 62 mm/ 2.1 x 3.6 x 2.4 in (excl. fastening clip)
Weight	100 g
Power supply	24 V DC (terminal plug) wire gauge: 0.21 ... 3.31 sqmm; or PoE IEEE 802.3af on RJ45
Power consumption	2 W (incl. DMX termination)
Operating temperature	-20 ... 50 °C / -4 ... 122 °F
Storage temperature	-20 ... 70 °C / -4 ... 158 °F
Electrical safety	SELV
Op./storage humidity	0 ... 80% non-condensing
Protection Class	IP20
Housing material	Self extinguishing blend PC/ABS UL document E140692
Mounting	on 35 mm DIN rail (DIN 43880), 3 units or with key hole on any stable vertical surface
Certification	CE, ETL, UKCA

Interface specifications

Interfaces	2 x serial: 1 x RS-232, 1 x RS-485 on 3-pin terminal plug wire gauge: 0.08 ... 1.31 sqmm
Interface specifications	RS-485 short circuit protected I_{SCmax} = 112 mA thermal shutdown both interfaces isolated (1 kV)
Ethernet-Port	1 x e:net 10/100 Mbit/s, RJ-45
User interface	LEDs for error, Ethernet activity, device status, RS-232 status, RS-485 status Identify button

2.3   Connectors and interfaces

View from top:
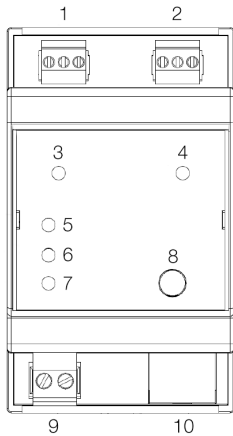
1	RS-485 interface (GND, –, + left to right)	„4.4 Serial connection" on page 08
2	RS-232 interface (GND, Rx, Tx left to right)	
3	RS-485 status LED	„2.4 User interface: LEDs" on page 05
4	RS-232 status LED	
5	Error LED	
6	e:net LED (Ethernet, LAN activity)	
7	Status LED (Device status)	
8	Identify button	„2.5 Identify button: Identification & Reset" on page 05
9	Power supply (Vcc+, Vcc– left to right)	„4.5 Power supply" on page 08
10	e:net / Ethernet	„4.3 Ethernet connection" on page 08

2.4   User interface: LEDs

The SYMPL serial Node has five LEDs on the front panel. The four LEDs show the basic states of the SYMPL serial Node.

LEDs

Status	On: If constantly on, the device is online. Server application is in operation. Blinking: If blinking in one second intervals, the device is offline, no connection to a SYMPHOLIGHT server or Core is available. If blinking more rapidly, the device is in bootloader mode.
e:net	Off: no link available. On: link established. Blinking: e:net traffic.
Error	Off: no error detected. Short-short-long sequence: Test mode active. On: If constantly lights in red, an error occurred. This can be an internal error or malfunction of the device, or an external error, e.g. a shortcut of interface connections or alien power supply. Switch the device off and on. If the error persists, check the wiring or contact Traxon e:cue Service.
Status + Error	The Status and Error LED blink simultaneously to identify the SYMPL Node (enabled "Identify Interface Mode" in SYMPHOLIGHT).
RS-232 status	Blue: receiving data.
RS-485 status	Yellow: sending data.

2.5   Identify button: Identification & Reset

The Identify button has two functions: to send an Identify message (A) and to reset the Node (B).

(A) A short press during operation in online mode sends an Identify message to the server. This allows the Node of the installation to be associated with the indicated Node in SYMPHOLIGHT.

(B) The Identify button can also be used to reset the device to factory state or to stay in bootloader mode. With a reset you restore the password and other properties by using the Identify button. Please note that

the device name and the offline content are not reset:

- Keep the Identify button pressed while powering up, Status and Error LEDs light up at first. Bootloader mode is signaled by a fast blinking Status LED. Release the button now. The device stays in bootloader mode to download a new firmware.
To exit the bootloader mode, short press the Identify button again.

- Press the Identify button until Status and Error LEDs blink alternating, then blink together. Releasing the button now resets the device to its factory settings. The password and other settings are reset to their default values. Please note that the Offline Content cannot be reset. To employ a reset Startup behavior, a restart of the device is required.

- Keeping the button pressed further on, the device proceeds to normal operation. No changes apply.

3   General remarks

3.1   Transport

Only transport the device in its original packaging. This protects the device from damage.

3.2   Unpacking

Only unpack the e:cue SYMPL serial Node at its installation location. To protect the device against condensation water, unpack it and wait until all moisture remaining in the device has evaporated. Condensation can occur when the device is moved from a cold to a warm location. Keep the packaging for use in case of further transport. Inspect all parts for completeness regarding chapter „2.1 Delivery content" on page 04. If there is apparent damage to the device or parts are missing from the delivery scope, please contact the Traxon e:cue support service.

3.3   Warranty regulations

Depending on the product, warranty regulations are of different duration. The warranty time is usually noted in the quote and in the order confirmation. See www.traxon-ecue.com/terms-and-conditions for details. Legal warranty regulations apply in any case.

3.4   Maintenance and Repair

This device requires no maintenance.

> ⚠ — Before dismounting, appropriate measures must be taken to protect the respective components against damage caused by electrostatic discharge (ESD protection).
>
> — Do not try to repair the device. Return it to your Traxon e:cue distributor for replacement or repair.

To update the firmware see „6 Firmware Update" on page 10.

3.5   Disposal

> 🗑 Batteries and technical appliances must not be disposed of with domestic waste, but should be handed in at the appropriate collection and disposal points.

The proper disposal of packing materials and of the device is the responsibility of the respective user and for his account; in all other matters, the retrieval obligation for packing materials and the device is subject to the

statutory regulations.

3.6   Support

In case of technical problems or questions regarding installation and repair please contact:

Traxon Technologies Europe GmbH

Customer Service

Karl-Schurz-Str. 38

33100 Paderborn, Germany

+49 (5251) 54648-0

support@ecue.com

4   Installation

— Connect cables and data only when the device is powered down.

— Each cable should not exceed a length of 30 m.

The installation of the SYMPL serial Node consists of mounting the device, connections to DMX devices, to e:net, and to power supply.
The sequence of cabling is not defined. Supply the SYMPL serial Node with power after all cabling is completed; it starts booting.

4.1   Installation conditions

Installation position	Terminals on top and bottom
Horizontal spacing	No spacing necessary
Minimum vertical rail grid spacing	115 mm (90 + 25 mm) (excluding conduit)
Recommended vertical rail grid spacing	160 mm (with 40 mm conduit)
Installation location	Indoor

4.2   Mounting process

The e:cue SYMPL serial Node is designed to mount onto a 35 mm DIN rail (EN 60715) in a vertical position.
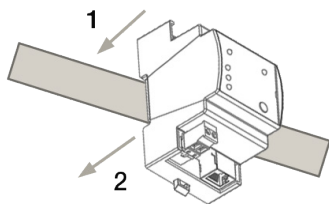
1. Clip the device to the rail from top.

2. Gentle pressure is then applied to the top front to snap it in place. The SYMPL serial Node has been mounted successfully.

You can also mount the e:cue SYMPL serial Node on any flat vertical surface. Use 3 to 3.5 mm screws for the hanger hole.

For mechanical stability, mounting on a rail is recommended.

4.3 Ethernet connection

⚠️
— Never connect more than one SYMPL Node in factory state to a network. The identical IP addresses will conflict and disturb proper communication.

— The Ethernet port of the SYMPL Node is not designed for inter-building connections with power and lighting transients. Use only intra-building networks to connect the SYMPL Nodes and Cores.

The pin-assignment of the Ethernet port corresponds to RJ45 standards. You can use every common Ethernet component, like cable. Connect the SYMPL serial Node at the designated Ethernet interface with a patch cable (RJ45, CAT5).

4.4 Serial connection

The SYMPL serial Node provides two independent serial interfaces, one RS-232 and one RS-485 channel. Connect devices to the SYMPL Node using 3-pin terminal plugs at the serial interface of the SYMPL Node.

The appropriate pin assignment is defined as follows:

RS-232: from left to right: GND, Rx, Tx
RS-485: from left to right: GND, —, +

ℹ️ It is recommended to use twisted pair cabling

4.5 Power supply

The e:cue SYMPL serial Node can be powered via Power-over-Ethernet (PoE) or by an external power supply (PSU).

PoE:
Connect an Ethernet connection from a power sourcing device.

External power supply:
Connect the SYMPL serial Node to a 24 V DC power supply unit that complies with the local regulations. Present power supply equates to the status "On" or running of the SYMPL serial Node.

To connect the device to a power supply unit, use the provided 2-pole terminal and lay the wires as stated on the front label. The voltage assignment is left V+ and right V-.

Turn the power on when all cables are connected to the SYMPL serial Node. The device starts operating. The device is in operation when the LED Status is flashing.

⚠️ The SYMPL serial Node is not suited for powering over a DC power supply network. The device must be supplied by a separate power supply that is certified according to the local regulations (e.g. SELV, Class 2).

5 Network configuration

The configuration of the e:cue SYMPL serial Node is completely done via e:cue SYMPHOLIGHT. See the SYMPHOLIGHT System Manual for details on configuration, available at www.ecue.com.

The network properties of the device are preconfigured. The successful installation of the power supply is required for changing the network configuration. You can either adjust the network settings with SYMPHOLIGHT or using the web interface of the device.

5.1 Default network properties

The SYMPL serial Node has as factory setting the default IP address 192.168.123.1.
Subnet mask: 255.255.255.0.
DHCP is enabled by default.

**Login credentials for the web interface of the SYMPL serial Node:**
The default password is: **ecue**

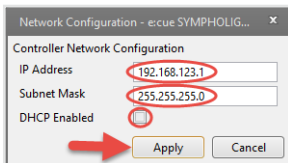To change the network configuration use either SYMPHOLIGHT or the web interface of the SYMPL serial Node:

5.2 Network configuration with SYMPHOLIGHT

1. Open the context menu of the SYMPL serial Node in the Setup tab of SYMPHOLIGHT by a right-click on the device.

2. Select "Configure Network":
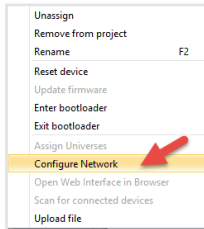
3. Define the IP address, the subnet mask and the DHCP settings to your needs:

4. Click "Apply" to submit the changes.

The network configuration of the SYMPL serial Node is completed.

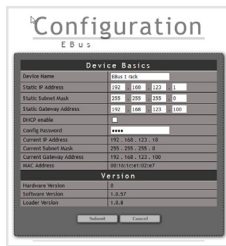## 5.3 Network configuration with the web interface

1. Open a common web browser on a connected PC. Enter the SYMPL serial Node's IP address into the address bar:
e.g. http://192.168.123.1

The web interface of the SYMPL serial Node is displayed:

2. Click "Configure" to access the network configuration page:

3. Define the network settings at "Device Basics" to your needs. You can also change the password for entry to the web interfaces of the SYMPL serial Node here.

4. Click "Submit" to apply the settings.

The network configuration of the SYMPL serial Node is completed.

— The employment of a discrete network is recommended.

— Note down all employed and, if applicable, reserved IP addresses. Keep the information for future network configurations.

— You can change the login password to the SYMPL serial Node's configuration page and the device name of the SYMPL serial Node at "Settings" page. Do not forget the new password.

6   Firmware Update

To update the SYMPL serial Node, a connection of the SYMPL serial Node to SYMPHOLIGHT is required.

Updating with SYMPHOLIGHT

Use the usual update options in the Device Tree of the Setup tab in SYMPHOLIGHT: select "Update firmware" in the context menu of the SYMPL serial Node or click the Update button ⟳ in the head toolbar.

7   Dismounting

⚠ Before dismounting, appropriate measures must be taken to protect the respective components against damage caused by electrostatic discharge (ESD protection).

Disconnect all attached cables. Dismount the e:cue SYMPL serial Node from the rail by pulling the black DIN rail handle and unhitching the SYMPL serial Node. The dismounting is completed.

8   Certifications

CE

ETL
c   US
Intertek
4000805

UK
CA

Conforms to UL Std. 62368-1

Certified to CSA Std. C22.2 NO. 62368-1

9   Dimensions

All dimensions in mm

53.5

62

90.5

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Please check for the latest updates and changes on the Traxon website.

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