

# e:cue



TRAXON | e:cue  
MEMBER OF PROSPERITY GROUP



AB444210035

## e:cue SYMPL e:bus 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.

All product names and trademarks mentioned in this manual are trademarks of their respective owners.

Except for internal use, relinquishment of the instructions to a third party, duplication in any type or form - also extracts - as well as exploitation and / or communication of the contents is not permitted.

Downloads and more information at:  
[www.ecue.com](http://www.ecue.com)

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# 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.



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).



- 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 e:bus Node is a single channel e:bus interface for use with e:cue's lighting control solution SYMPHOLIGHT. It provides an e:bus interface for up to eight e:bus devices like e:cue GLASS TOUCH terminals. The e:cue SYMPL e:bus 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. The e:cue SYMPL e:bus Node is a simple, reliable and easy to use interface solution for e:cue lighting control solutions with SYMPHOLIGHT.



- 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 e:bus Node are not hot-pluggable.

## 2.1 Delivery content

Delivery content for the e:cue SYMPL e:bus Node (AB444210035):

1. e:cue SYMPL e:bus 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 / 0.22 lb
Power supply	24 V DC (terminal plug) wire gauge: 0.25 ... 3.31 sqmm; or PoE IEEE 802.3af on RJ45
Power consumption	max. 6.5 W
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 (EN 60715), 3 units or with key hole on any stable vertical surface
Certification	CE, ETL, UKCA

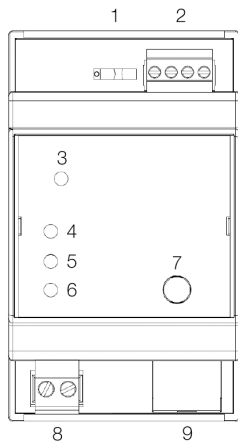
### Interface specification

Interfaces	1 x e:bus on 2-pin terminal plug
Interface specifications	$V_{Bus} = 19 \text{ V DC}$ max. bus load current: 240 mA fused screw terminal wire gauge: 0.081 ... 1.31 sqmm no hot-plug support max. 8 e:bus devices
Ethernet-Port	1 x e:net 10/100 Mbit/s, RJ45
User interfaces	LEDs for error, Ethernet activity, device status, e:bus status Identify button



### 2.3 Connectors and interfaces

View from top:



1	e:bus topology: left: free topology right: bus topology	„4.4 e:bus connection“ on page 08
2	e:bus interface (- - + +, left to right)	
3	e:bus status LED	„2.4 User interface: LEDs“ on page 05
4	Test / Error LED	
5	e:net LED (Ethernet, LAN activity)	
6	Status LED (Device status)	
7	Identify button	„2.5 Identify button: Identification & Reset“ on page 05
8	Power supply (Vcc+, Vcc- left to right)	„4.5 Power supply“ on page 08
9	e:net / Ethernet	„4.3 Ethernet connection“ on page 08

### 2.4 User interface: LEDs

The SYMPL e:bus Node has four LEDs on the front panel. The four LEDs show the basic states of the SYMPL e:bus 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.
Test / Error	Off: no error detected. 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 + Test / Error	The Status and Test / Error LED blink simultaneously to identify the SYMPL Node (enabled “Identify Interface Mode” in SYMPHOLIGHT).
e:bus status	Off: no e:bus activity. On: e:bus activity.

### 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 Test / 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 Test / 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 e:bus 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](http://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 e:bus Node consists of mounting the device, connections to e:bus devices, to e:net, and to power supply.

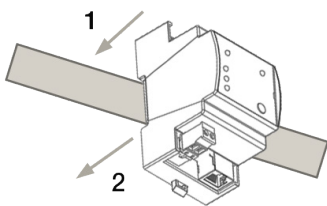
The sequence of cabling is not defined. Supply the SYMPL e:bus Node with power after all cabling is completed; it starts booting.

### 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 e:bus 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 e:bus Node has been mounted successfully.

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

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 For mechanical stability, mounting on a rail is recommended.

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### 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 e:bus Node at the designated Ethernet interface with a patch cable (RJ45, CAT5).

### 4.4 e:bus connection

The SYMPL e:bus Node can control up to eight e:bus devices with its e:bus interface. Connect e:bus devices to the SYMPL Node using 4-pin terminal plugs at the e:bus interface of the SYMPL Node.

The appropriate pin assignment is defined as follows:

From left to right: -, -, +, +



It is recommended to use twisted pair cabling

#### Bus configuration

The e:cue SYMPL e:bus Node has a switch to select if a straight bus or a free bus topology is used (see „10 Topologies“ on page 12):

left: free topology

right: bus topology.



- Do not add a second master to an e:bus network.
- Do not leave any wires open. Open wires will cause signal reflections and therefore disrupt communication.
- Do not create create short-circuits. The + and - cables must not be directly connected.



- Please refer to the e:bus short introduction manual, available at [www.ecue.com/download](http://www.ecue.com/download) for more details about e:bus.

### 4.5 Power supply

The e:cue SYMPL e:bus 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 e:bus 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 e:bus 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 e:bus Node. The device starts operating. The device is in operation when the LED Status is flashing.



The SYMPL e:bus 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 e:bus Node is completely done via e:cue SYMPHOLIGHT. See the SYMPHOLIGHT System Manual for details on configuration, available at [www.ecue.com](http://www.ecue.com).

The network properties of the SYMPL e:bus Node 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 SYMPL e:bus Node.

### 5.1 Default network properties

The SYMPL e:bus 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 e:bus Node:

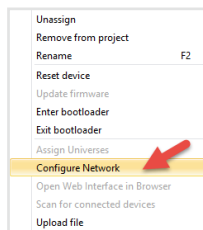
The default password is: **ecue**

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

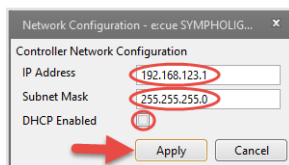
### 5.2 Network configuration with SYMPHOLIGHT

1. Open the context menu of the SYMPL e:bus 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 e:bus Node is completed.

### 5.3 Network configuration with the web interface

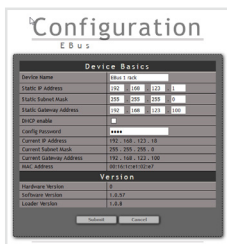
1. Open a common web browser on a connected PC. Enter the SYMPL e:bus Node's IP address into the address bar:

e.g. <http://192.168.123.1>

The web interface of the SYMPL e:bus 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 e:bus Node here.
4. Click “Submit” to apply the settings.

The network configuration of the SYMPL e:bus 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 e:bus Node's configuration page and the device name of the SYMPL e:bus Node at “Settings” page. Do not forget the new password.

## 6 Firmware Update

To update the SYMPL e:bus Node, a connection of the SYMPL e:bus 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 e:bus 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 e:bus Node from the rail by pulling the black DIN rail handle and unhitching the SYMPL e:bus Node. The dismounting is completed.

## 8 Certifications



Intertek  
4000805

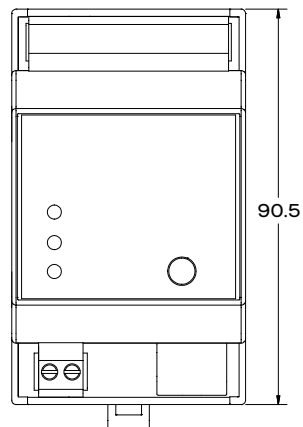
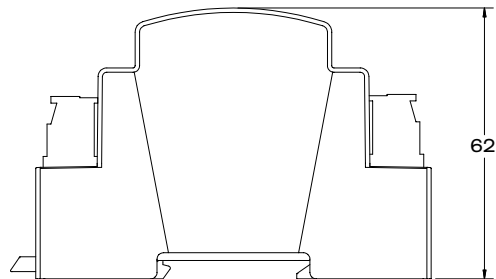
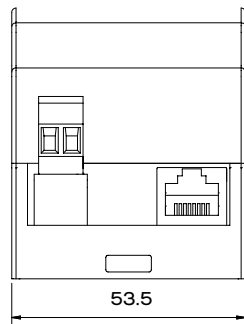
Conforms to UL Std. 62368-1

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



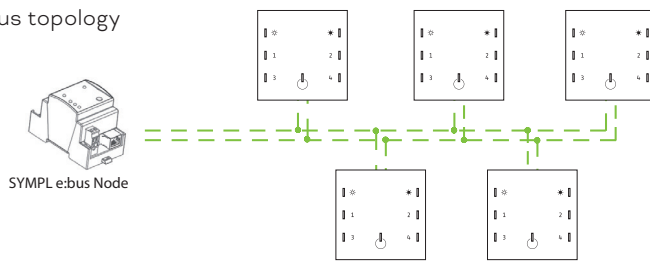
## 9 Dimensions

All dimensions in mm



# 10 Topologies

Bus topology



Free topology

