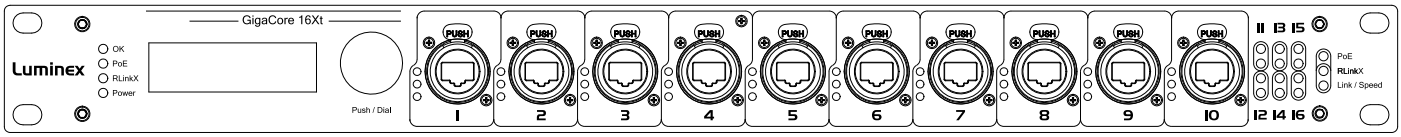
Luminex
Network Intelligence

# GigaCore 16Xt




## Gigabit Ethernet Switch for the entertainment industry

**Quick Start Guide**

V2.0.0

Rev4

**English**

# Table of Content




**GigaCore 16Xt Quick Start Guide**

**Document lu_01_00048_qsg_rev4**





**Issued by:**

**Publications Department,**

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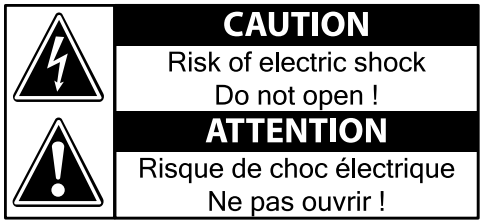
**Documentation last reviewed 29 August 2014 by Luminex LCE.**

**Printed in the EU.**

# Safety Instructions




**CAUTION**: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

**WARNING**: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

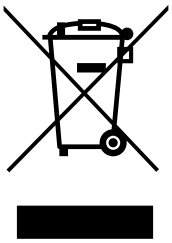
The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous
voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

- Read Instructions - All the safety and operating instructions should be read before the appliance is operated.
- Retain Instructions - The safety and operating instructions should be retained for future reference.
- Heed Warnings - All warnings on the appliance in the operating instructions should be adhered to.
- Follow Instructions - All operating and user instructions should be followed.
- Water and Moisture - The appliance should not be used near water; for example, near a fountain, or submitted to direct water exposure.
- The apparatus shall not be exposed to dripping or splashing liquids and no objects filled with liquids, such as bottles, shall be placed on the apparatus. Do not touch the appliance with wet hands. Do not handle the appliance or power cord with wet or damp hands. If water or any other liquid enters the appliance cabinet, take it to qualified service personnel for inspection.
- Cleaning - The appliance should be cleaned only as recommended by the manufacturer. From time to time you should wipe off the front and side panels and the enclosure with a soft cloth. Do not use rough material, thinners, alcohol or other chemical solvents or cloths since this may damage the finish or remove the panel lettering.
- Ventilation - The appliance should be situated so that its location or position does not interfere with its proper ventilation. Place the unit in a well-ventilated location, leaving at least 5 cm (2 inches) of clearance on front, side and rear of unit for air flow. If ventilation is blocked, the unit may overheat and malfunction.
- Heat - The appliance should be situated away from heat sources such as radiators or heating systems.
- Power Cord Protection - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, receptacles, and the point where they exit from the appliance.
- Power Sources - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
- Attachments / Options - Only use attachments/options specified by the manufacturer.
- Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through the openings.
- Servicing - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.
- Damage Requiring Service - The appliance should be serviced by qualified service personnel when: A. The power supply cord or the inlet has been damaged; B. Objects have fallen, liquid has been spilled into the appliance; C. The appliance has been exposed to rain; or D. The appliance does not appear to operate normally; or E. The appliance has been dropped or the enclosure is damaged.
- The equipment shall be used at a maximum ambient temperature of 50° C / 122° F.

# Compliance information

## Disposal of Waste Equipment by users in the European Union



This symbol on the product or its packaging indicates that this product must not be disposed of with other waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection
and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city recycling office or the dealer from whom you purchased the product.

## EMC (Electromagnetic Compliance)

This model GigaCore 16Xt complies with the following standards regulating interference and EMC:

- EN 55103-1, environment E2
- EN 55103-2, environment E2

# CE Compliance (EMC and Safety)

Luminex is authorized to apply the CE mark on this compliant equipment thereby declaring conformity to EMC Directive 2004/108/EC and Low Voltage Directive 2006/95/EC.

# Warranty information

## Limited warranty

Unless otherwise stated, your product is covered by a two (2) years parts and labor limited warranty. It is the owner's responsibility to furnish receipts or invoices for verification of purchase, date, and dealer or distributor. If purchase date cannot be provided, date of manufacture will be used to determine warranty period.

## Returning under warranty

Any Product unit or parts returned to Luminex LCE must be packaged in a suitable manner to ensure the protection of such product unit or parts, and such package shall be clearly and prominently marked to indicate that the package contains returned product units or parts. Accompany all returned product units or parts with a written explanation of the alleged problem or malfunction.

## Freight

All shipping will be paid by the purchaser. Items under warranty shall have return shipping paid by the manufacturer only in the European Union.
Under no circumstances will freight collect shipments be accepted. Prepaid shipping does not include rush expediting such as air freight. Air freight can be sent customer collect in the European Union.
Warranty is void if the product is misused, damaged, modified in any way, or for unauthorized repairs or parts.

# Registration

Use your favorite web browser, and visit http://www.luminex.be/support.php?show=registration to register your product online.
By registering, you become eligible to receive the following:

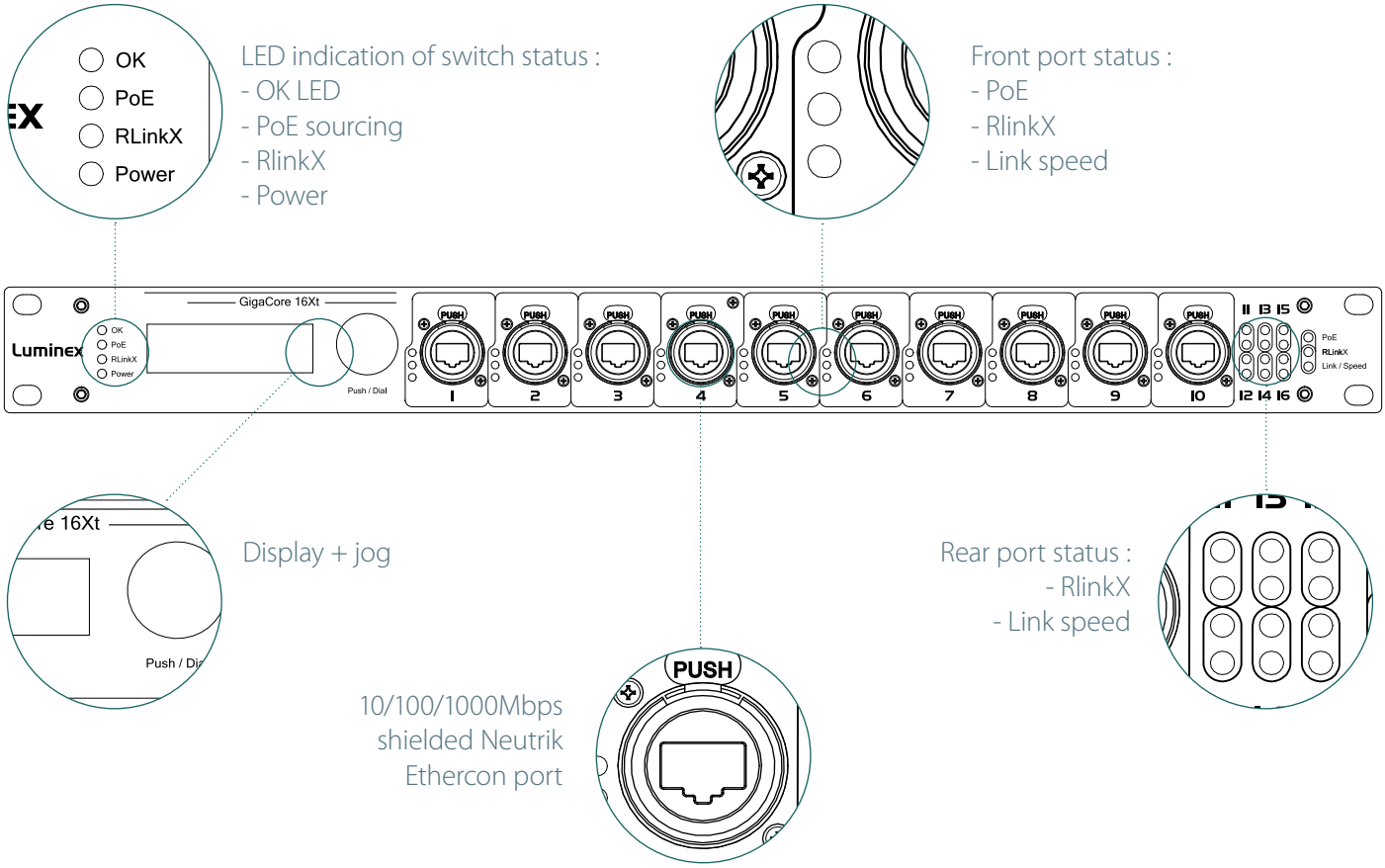
- Technical support information
- Software update and upgrade notices
- Hardware warranty information

# In the box

1 x GigaCore 16Xt
1 x Quick Start Guide ( including warranty information and safety instructions).

# Description

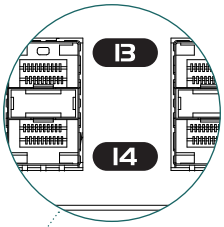
## Front panel

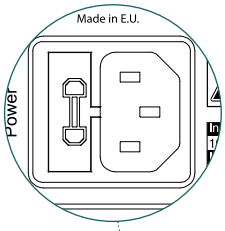



- 10 x 10/100/1000Mbps shielded Neutrik Ethercon connector
- 4 x LED for switch status
- 3 x LED per port for Ethercon front port status
- 2 x LED per port for  Ethercon and fiber rear port status
- 1 x display
- 1 x Jog

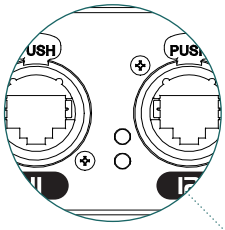
# Rear panel

SFP cages for
Mini-GBIC (SFP)
compliant transceiver

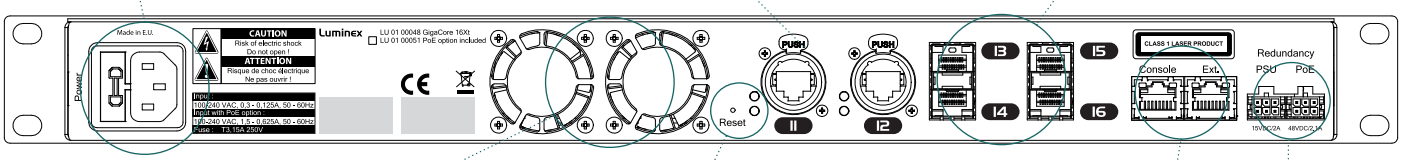


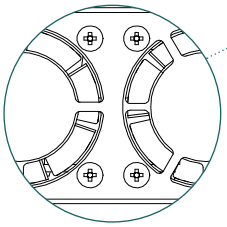




- IEC inlet
- Fuse holder

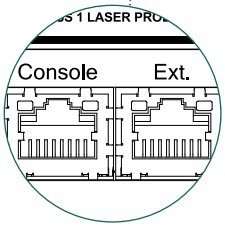



10/100/1000Mbps
shielded Neutrik
Ethercon port with
RLinkX and Link/Speed
LED.

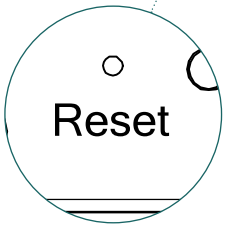


Redundant fans: In the unlikely of a fan failure, the other fan will switch to 100%, so one fan can manage the cooling of the unit. Fans run at a minimum of 30%

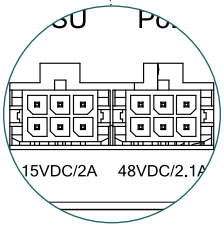



- Console port (serial)
- Extension port (I2C bus)




Reset button
(Clip hole)

Backup power inputs :
- Main Power
- PoE Supply




- 2 x 10/100/1000Mbps shielded Neutrik Ethercon connector
- 2 x LED per port for Ethercon port status
- 4 x SFP cage for Mini-Gbic compliant transceiver
- 1 x Serial console port on RJ45
- 1 x I2C Extension port on RJ45
- 1 x Mollex Micro-fit 6 pin connector for backup power supply input
- 1 x Mollex Micro-fit 6 pin connector for backup PoE supply input
- 2 x Redundant fan
- 1 x IEC inlet + Fuse holder
- 1 x Reset button (clip hole)

# Led indicators

The LED indicators of the GigaCore 16Xt include status, Poe, RlinkX, power, link/speed.
The following shows the LED indicators for the GigaCore 16Xt along with an explanation of each indicator.

| Switch LED | | Status | Meaning |
|---|---|---|---|
| OK (General status LED) | | Green | All OK |
| | | Red | Error occurred |
| | | Red blink | The unit is flashing new firmware |
| PoE LED | | Off | No PoE |
| | | Green | Internal and external PoE supply OK |
| | | Orange | Internal supply OK (no external supply available) |
| | | Red blink | Error |
| RlinkX LED | | | Available in a future release |
| Power LED | | Off | No Power |
| | | Green | Internal and external power supply OK |
| | | Orange | Internal power supply OK (no external supply available) |
| | | Red blink | Error |
| **Port LED** | | **Status** | **Meaning** |
| PoE LED | | On | Sourcing |
| | | Off | Not sourcing |
| | | Blink | Error |
| RlinkX LED | SFP | On | Redundant link |
| Link | SFP | Off | No link |
| | | Green | Gigabit connection |
| | | Orange | 10/100 Mbps connection |
| | | Blink | Activity |

# Display

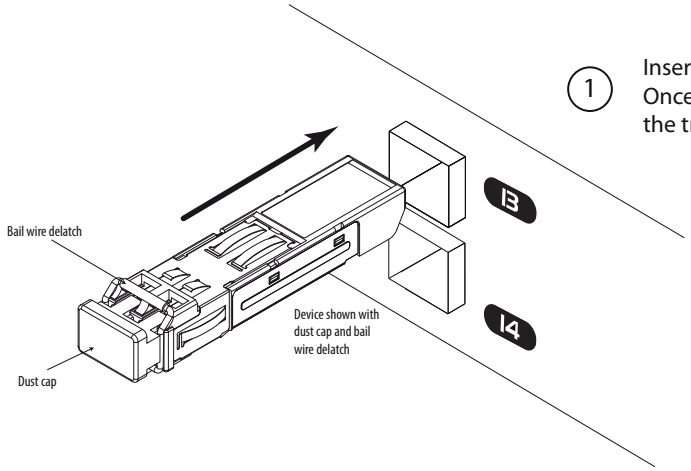
The front end display actually offers basic information about the switch configuration. A sequence of screens show the following information:

- Name
- Type of the device
- Ip address
- Netmask

The configuration of the switch from this front end display will be available in a future firmware upgrade.

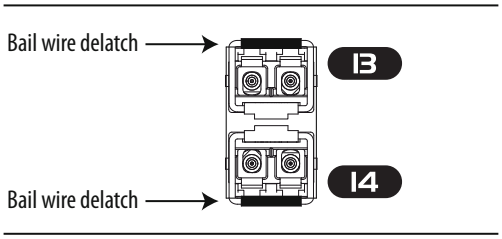
# Installing Mini GBIC (SFP) transceivers

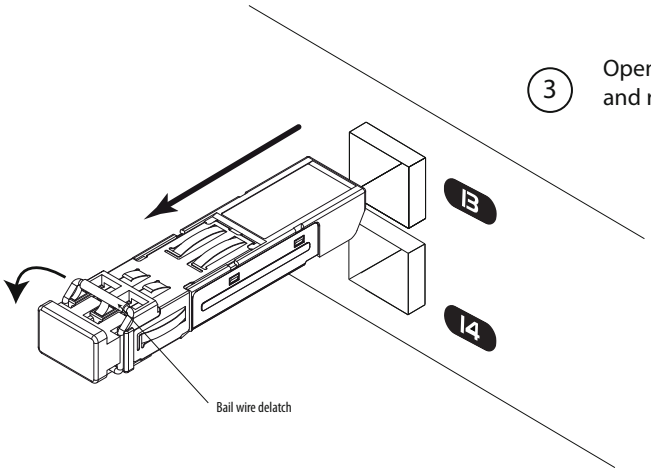
The GigaCore 16Xt comes with four SFP cages at the rear of the unit. These cages accept mini GBIC transceivers. Check our web site for more information about available transceivers.




1 Insert the transceiver into the SFP cage. Once properly engaged, the transceiver can't be removed

2 Be aware of the insertion direction:
- Port 13 & 15 must have the bail wire delatch on the top
- Port 14 & 16 must have the mini-GBIC transceiver upside-down




3 Open the bail wire delatch to disengage and remove the mini-GBIC transceiver.

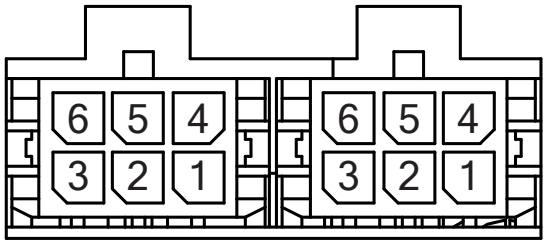
For any other model of mini-GBIC transceiver, please refer to the transceiver manual.

# Connecting the backup power supply

The GigaCore 16Xt comes with two backup power inlets at the rear. This inputs are meant to connect external power supply units for both mains and Power Over Ethernet. This providing redundancy on power level.

Each power supply requires specific output voltage and pinout. It is not recommended to use dual output power supply to feed the two backup power input, as both input requires a separate isolation.

Please respect the following pinout to connect external power supplies to the GigaCore 16Xt. Use the Luminex cable to connect the GigaCore 16Xt to external power supplies.




15VDC/2A 48VDC/2.1A

| Pin | 15VDC / 2A | 48VDC / 2.1A |
|---|---|---|
| 1 | Ground | Ground |
| 2 | N.C | +48VDC |
| 3 | +15VDC | N.C |
| 4 | Ground | Ground |
| 5 | N.C | +48VDC |
| 6 | +15VDC | N.C |

# Starting

The device operates with an AC voltage between 100V and 240VAC within a frequency range of 50Hz to 60Hz.
An IEC socket is located at the rear of the unit. Please use an IEC plug compliant cable to feed power to the unit.
Luminex recommends the use of a power cable, fitted with a locking mechanism to ensure a reliable connection to the device. Luminex also recommends to use power cable in accordance with the standards and the relevant authorities of your country.

## !!! WARNING: TO ENSURE A TOTAL PROTECTION, THIS EQUIPMENT MUST BE EARTHED !!!

Connect the power cable to the device, and connect the other side of the cable to the mains. It will take around 20 seconds for the switch to boot up. You'll then be able to use it.

# Specifications

| Power Input | | Physical | |
|---|---|---|---|
| Power Input | 100-240VAC - 50/60Hz<br>0.3A - 0.125A<br>1.8A - 0.75A with PoE Option | Enclosure | Metal Housing |
| Backup Power Input | 15VDC / 2A on Molex Micro-Fit 6 pin connector | Dimensions (W x D x H) | 482 x 204,3 x 44 mm<br>19" x 8.04" x 1.73" |
| Backup PoE Input | 48VDC / 2.1A on Molex Micro-Fit 6 pin connector | Packaging | 520 x 235 x 50 mm<br>20.47" x 9.25" x 1.96" |
| Power Consumption | Maximum 30W<br>Maximum 180W with PoE option | Weight | 2.5Kg |
| Fuse | 3.15A 250V Slow Blow | **Approvals** | |
| **Environmental** | | CE | ✓ |
| Operating Temperature | 0 to + 50°C | EN 55103-1 | ✓ |
| Storage temperature | -10 to +70°C | EN 55103-2 | ✓ |
| Humidity | 5 to 95 % RH | EN 60950-1 | ✓ |
| | | RoHS Compliance | ✓ |

Luminex LCE operates a policy of continuous development. Luminex LCE reserves the right to make changes and improvements to any of the products described in this document above without prior notice. Specifications are subject to change without notice.

## Connection to the web interface

- Connect a computer to the switch
- Set an IP address in the same range as the switch IP address.
- Default GigaCore IP address is displayed at the rear of the unit. Set your computer with a compliant IP address (do not use the same IP address ! )
- Launch your favorite web browser
- Type the IP address of the switch in the address field.
- Enter admin in the login field. Leave the password field blank.

## Additional documentation

All additional documenttion can be downloaded from our web pages in the support section :
http://www.luminex.be
--> Support