

## MS-SW5 - User's manual



This symbol is intended to alert the user of important operating and maintenance (servicing) instructions in the literature provided with the equipment.



This symbol is intended to alert the user of the presence of uninsulated dangerous voltage within the product's enclosure that may present a risk of electric shock.

### 1 Caution

**Read Instruction:** Read and understand all of the safety and operating instructions before using this equipment.

**Retain Instructions:** The safety instructions should be kept for future reference.

**Follow Warnings:** Follow all warnings and instructions marked on the equipment or in the user manual.

**Avoid Attachments:** Do not use tools or attachments that are not recommended by **Alyseum** because they may be hazardous.



#### **Installation:**

- Choose the installation location of your unit carefully.
- Avoid placing it in direct sunlight or close to a source of heat.
- Also avoid locations subject to vibrations and excessive dust, heat, cold or moisture.



#### **Power Source:**

- This equipment should only be operated from the power source indicated on the product.



#### **Servicing:**

- Refer all servicing to qualified service personnel.
- There are no user-serviceable parts inside.
- To prevent the risk of shock, do not attempt to service this equipment yourself because opening or removing covers may expose you to dangerous voltage or other hazards.



**WARNING: TO PREVENT FIRE OR ELECTRIC SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.**

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## 3 What's the MS-SW5 ?

The **Alyseum** MS-SW5 is a 5 ports switch in Eurorack format.

The switch uses an industrial chipset assure hi pass-thru performance and reliable operations.

### 3.1 Features

- UnManaged 5 ports switch in Eurorack format.
- Plug and play, no configuration required.
- Build in Industrial Chipset for the better performance.
- 1.0Gbps high performance memory bandwidth.
- Direct Eurorack power supply interfacing without adapter.
- 100 Base-T Ethernet interface with shielded RJ-45.
- Auto-MDIX allows using straight-trough or cross-over UTP cable.
- Panel wide 5 HP.

### 3.2 Specifications

- Front Panel width: 25.4 mm (5 HP)
- Module Depth: 55 mm
- RJ-45 shielded
- Power requirement: +5 Volts, regulated @ +320 mA (with 5 active ports)

## 4 Hardware

### 4.1 Package content

- 1 MS-SW5 module with Eurorack compliant front panel and power supply connector
- 1 plastic bag containing:
  - 2 x M3 screws
  - 2 x M3 nylon washers
- Warranty & user's manual access card

### 4.2 Accessories

- CAT5e cable - 0,5 meter
- CAT5e cable - 1 meter
- CAT5e cable - 3 meters
- CAT5e cable - 10 meters

<http://www.alyseum.com/accessories>

### 4.3 Installing the MS-SW5 into the A-100 rack



The module MS-SW5 need solely a power supply of +5 Volts, make sure that your backplane provided well this voltage and with sufficient current.

If no, install a converter from +12 Volts to +5 Volts DC (no linear regulator, only switching converter)

To install MS-SW5 yourself, pay attention to the following notes:

- First of all, take the A-100 rack's mains plug out of the wall socket !
- Check very carefully that the red wire of the flat cable is connected to the minus 12Volts on the A-100 bus board.
- Failure to check this may result in the module's instant destruction as soon as the power is turned back on!
- The module has to be connected only to an A-100 bus board that is powered by a specified A-100 power supply with 5 Volts rail.
- For damaged modules that have been connected obviously in the wrong way to the bus board the warranty is void !
- Place the module carefully into the space in the rack, and fasten it firmly in place with the supplied screws and nylon washers. Put back any covers or blanking plates, and screw them in firmly.
- Now plug the system A-100 back into the main power supply, and switch it on.
- Test out the newly installed MS-SW5.
- If it doesn't seem to be working as expected, immediately disconnect the system from the power supply again. In this case, double-check the connections, making completely sure that the ribbon cable is the right way round where it connects to the module and the bus.

## 4.4 Front panel description

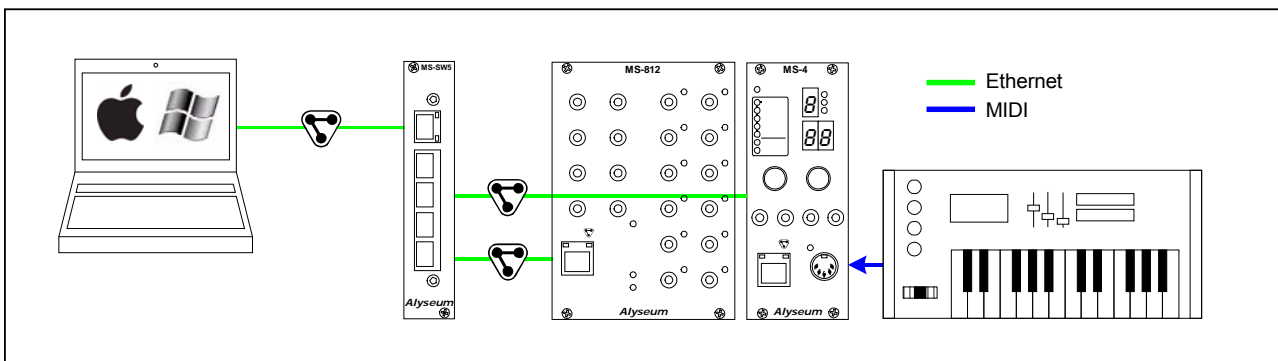
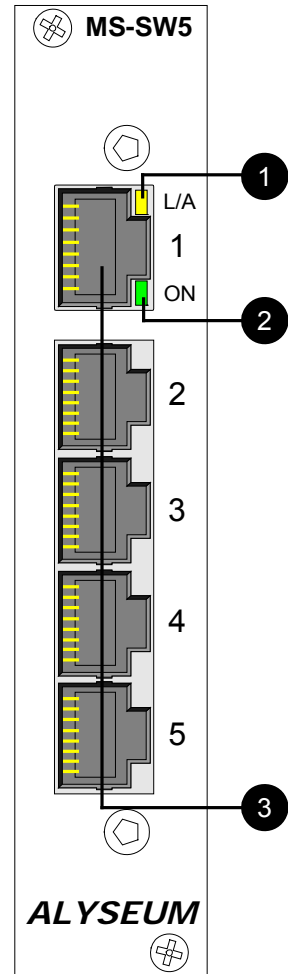
1. Green LED - Power
2. Yellow LED - Link/Activity

LK/ACT Mode	LED Pattern
No connection	OFF
LINK established	ON
Network activity	ON with OFF pulses

3. RJ-45 - 5 ports-100Mbps

### N. B.

- It's preferable to connect your computer on the port # 1, the LED L/A (Link/Activity) indicates the proper operation of the connection between the switch and your computer. Each Ethernet Alyseum product are équipé by its own indicators on the RJ45
- Connect your modules on ports # 2 to # 5.
- Connect a computer on port # 2 to # 5 is possible.



## 5 Miscellaneous

### 5.1 Disclaimer

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The information and specifications described in this manual are subject to change without prior notice

Throughout this manual, trademarked names might be used. We state herein that we are using the name to the benefit of the trademark owner, with no intention of infringement.

### 5.2 Maintenance

Switch Off the power before maintenance.

Do not attempt to clean the unit with chemical solvents (thinner, benzene or alcohol) as this might damage the finish. Use only a clean, dry cloth.

### 5.3 Static Electricity, ESD

Electrostatic discharge (ESD) can cause malfunction and/or damage to electronic devices if discharged into the device.

Despite **Alyseum** products having built-in protections against ESD, voltages might build up at levels that could harm your equipment.

#### 5.3.1 Some tips and precautions for ESD sensitive environment

- Make sure to discharge any built-up static electricity from yourself and your devices before touching or connecting one device to another
- Ground yourself by touching an earth grounded metal surface before handling your device and other equipments.
- For fixed installations, put the device in a grounded metallic rack.
- Ensure air relative humidity is minimum 60%.
- Install ESD specific prevention items, such as grounding mats.
- Reduce movement speed in handling or (dis)connecting devices
- Avoid carpet or other synthetic flooring.

#### 5.3.2 Standard symbols for ESD advertising

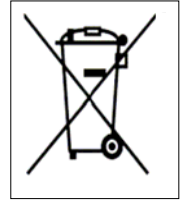


## 5.4 Statement and Agency Compliance

### 5.4.1 WEEE (for EU countries)

**Waste Electrical and Electronic Equipment** (Directive 2002/96/EC)  
(Applicable for E.U. Customers or others countries with separate collection systems)

1. This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life.
2. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.
3. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.



### 5.4.2 RoHS Compliance (for EU countries)

**Alyseum** products comply with the European Union restriction of the use of certain hazardous substances in electronics equipment, (RoHS directive 2002/95/EC)

The RoHS directive prohibits the sale of certain electronic equipment containing some hazardous substances such as Mercury, Lead, Cadmium, Hexavalent chromium and certain Flame-retardants (PBB & PBDE) in the European Union.

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32002L0095:EN:HTML>



### 5.4.3 CE (for EU countries)

**Alyseum** products comply with the requirements of European Directive 89/336/EC.



## 5.5 Warranty and repair

**Alyseum** warrants to you, the original purchaser, that each of its products will be free from defects in materials and workmanship for a period of two years from the date of purchase.

This warranty does not apply to any products which have been repaired or altered by other than repair personnel authorized by **Alyseum**, or which have been subject to ESD, moisture, abuse, accident or improper installation and use.

**Alyseum** assumes no liability as a consequence of such events under the terms of this Warranty. Please consult your shop for more details.