Document Number: 9200396
Revision: 1v1

Kinesys Array IP8

Operating Manual
[ORIGINAL]

An 8-port Ethernet switch

TAIT accepts no liability for any consequences resulting from inappropriate, negligent, or incorrect use of the equipment.

The contents of this manual are believed to be correct at the time of printing. In a commitment to a policy of continuous development and improvement, TAIT reserves the right to change the specification of the product or its performance, or the contents of this manual, without notice.

Contact details

support@taittowers.com
www.taittowers.com/products
Tel: +44(0) 20 8481 9850

UK address

TAIT
Unit 2 Kempton Gate Business Centre
Oldfield Road
Hampton
Middlesex
TW12 2AF

US address

TAIT
401 W Lincoln Ave
Lititz
PA 17543

Contents

List of Figures

1. Introduction

1.1 Product description

The Array IP8 is a rugged eight-port Ethernet hub designed to link up to eight Kinesys devices that require data communications via Ethernet.

Connection to the Array IP8 is made via the eight EtherCON RJ45 ports on the rear of the unit.

The status indicators at the front of the unit indicate if power is present, provide an indication of channel activity and show the channel operating speed (either 10 or 100 BASE-T).

1.2 Scope and purpose

This manual explains the key features, functions and operation of the Array IP8 .

The equipment described in this manual may only be operated by personnel qualified to do so. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with this and associated equipment.

1.3 Support requests

For technical support on this product, please use the following contact details:

support@taittowers.com
Tel: +44(0) 20 8481 9850

To resolve your support request as quickly as possible, please provide the following information, if available, when contacting Kinesys:

- Site name, address, machine location details and your contact details.
- As much detail as possible on the behaviour observed, including any unusual changes in behaviour that are different from normal operation and any environmental conditions that may be a factor (e.g. fluctuations in temperature and water damage).
- Details on the behaviour that should have been expected.
- The exact steps required that produce the issue.
- Any solutions to fix the issue that you have already tried.
- Any workarounds that you have found.
- Equipment item numbers and serial numbers, such as those displayed on the identification plates/labels.
- Version numbers of any software being used.
- Any screen shots, photographs or videos of the issue.

2. Safety information

2.1 Safety regulations

The following regulations serve as the basis for assembly, installation, certification and maintenance of automation equipment within the area of the European community. For countries other than those mentioned, local legislation and directives may apply in addition to or in place of the European regulations as stated in this manual.

The manufacturer's guarantee depends on the consideration of these regulations and the operating instructions.

European directives

2014/30/EU	EC - EMC Directive
2014/35/EU	EC - Low Voltage Directive

Harmonized regulations

EN 62358-1	Audio/video, information and communication technology equipment. Safety requirements
EN 61000-6-1	Electromagnetic compatibility (EMC). Generic standards. Immunity for residential, commercial and light-industrial environments
EN 61000-6-3	Electromagnetic compatibility (EMC). Generic standards. Emission standard for residential, commercial and light-industrial environments

2.2 Safety warnings

IF IN DOUBT ABOUT ANY ASPECT OF MOVING OBJECTS, ALWAYS SEEK PROFESSIONAL ADVICE BEFORE OPERATION.

Make sure this Operating Manual is always kept in a complete and fully readable condition and that it is always accessible to all operators of the equipment.

Prohibitions of operation

- **Do not use the Array IP8 if it does not appear to be in 100% working order.**
- **Do not operate the equipment, cables or connectors when damaged or wet.**
- **Do not connect or disconnect cables while the system is powered on. Always switch off the power supply before making or breaking connections.**

Safety precautions before operation

- **Do a full risk assessment of the location where the Array IP8 and its connected devices are intended to be used.**
- **Do not start movement operations until a qualified person has inspected the Array IP8 and all other connected equipment, and confirmed that is in 100% working order.**
- **Software-independent means of stopping movement must be provided, including a hardware emergency stop system that is compliant with all local regulations.**
- **Make sure all machine stop buttons, emergency stop buttons and enabling switches in the system have been tested and are functioning correctly.**
- **Make sure all operators know the locations of the machine stop buttons, emergency stop buttons and enabling switches in the system.**
- **Make sure all attached loads are unobstructed and will not come into contact with other static or moving objects during movement.**
- **Make sure all attached loads are always visible to the operator where possible. If this is not possible, make sure the operator has reliable communication with a person who can clearly see the attached loads.**
- **Make sure all persons in the hazard zone underneath the lifting equipment are aware of the potential for movement.**

Safety instructions during operation

- **If you notice any unexpected or dangerous movement during operation, press the E-Stop button on the venue-wide safety controller to bring all movement to an immediate stop. Note that not all stop buttons in the system necessarily stop the movement an individual lifting device. Alternatively, if an enabling switch (hold to run) is being used in the system, then release the enabling switch.**
- **If an enabling switch is used in your system to initiate movement of the connected lifting device, be aware that releasing it may cause movement to stop unexpectedly.**
- **After a stop button has been pressed, the reason for its actuation must be found, and all possible failures in the system removed by trained personnel. The stop button must then be reset before continuing operation. Note that the stop button reset procedure may be different for different devices - refer to individual product manuals for more details.**

2.3 Visible damages

If any damage or breakages are detected during operation or during tests, do not operate the Kinesys Array IP8 until it has been repaired and a qualified person has checked and approved it.

2.4 Spare parts

Only original fixing components, spare parts, and accessories listed in manufacturer's spare parts catalogue are acceptable for use. The manufacturer's guarantee is given for those spare parts only. The manufacturer cannot be held responsible for any damages due to the use of non-original parts or accessories.

2.5 Operating environment

The Array IP8 is designed for indoor use only and to work at ambient temperatures between 0°C and 55°C (32°F and 131°F). The Array IP8 has an Ingress Protection (IP) rating of IP40.

2.6 Transport and storage

Condensation

The Array IP8 is designed for indoor use only. If the product has been exposed to temperature fluctuations, for example during transport, there may be risk of condensation which may result in damage. Do not connect the Kinesys Array IP8 to a power source immediately. Leave the unit disconnected until it has reached a safe temperature.

Shocks

Do not shake, knock or drop the Array IP8. Avoid excessive force when installing and operating the product.

Handling

Do not lift the Array IP8 by any of its cables or connectors as this may cause damage to the unit and/or cables.

Packaging

Where possible, use the original packaging to transport the Array IP8.

3. Product overview

3.1 Front panel

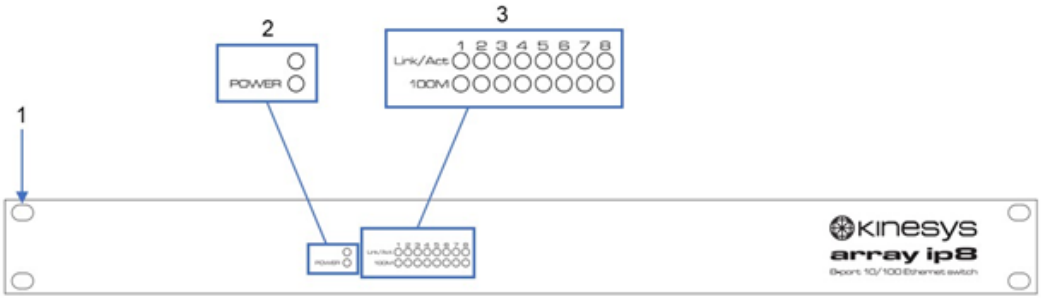

Figure 1. Front panel

Item	Description	Notes
1	Rack mount holes	For installation into a 19" rack
2	Power indicators	Bottom indicator turns green when power is received, top indicator currently has no function.
3	Channel indicators	See section 3.3 for details.

3.2 Rear panel

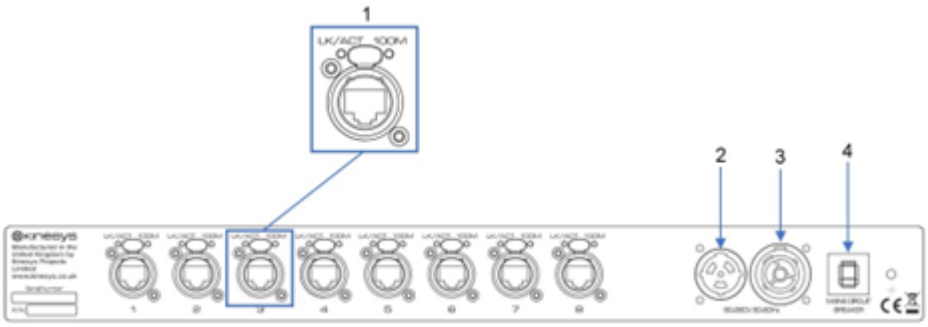

Figure 2. Rear panel

Item	Description	Notes
1	EtherCON ports 1 - 8	Data connections for up to eight Ethernet devices. There is also a Link/Activity and a 100M status indicator for each port. These behave in the same way as the front panel channel indicators. See section 3.3 for details.
2	Mains input	
3	Link output	For daisy chaining to a second unit.
4	Mains Circuit Breaker	

3.3 Channel indicators

Link/Act	• Solid green when a device is detected, flashes green when activity is detected. • Off when no devices connected
100M	• Indicates the data speed of the connected device. • Solid green for 100 mb/s (100 Base-T) • Off for 10 mb/s (10 Base-T)

4. Installation

4.1 Rack mount installation

The Array IP8 has rack mount holes on either side on the front panel to enable it to be installed into 1U of space in an industry standard 19” rack. To install the Array IP8 into a 19” rack, follow the procedure below.

1. Position the Array IP8 within the 19” rack and align the rack mount holes with those of the rack in the desired position on both sides.
2. Secure the Array IP8 to the frame of the rack on both sides using cage nuts and bolts (available separately).
3. Make sure there is enough space within the rack to allow for the installation of cables at the front and rear of the Array IP8.
4. Make sure there is adequate ventilation once the Array IP8 is installed in the rack.

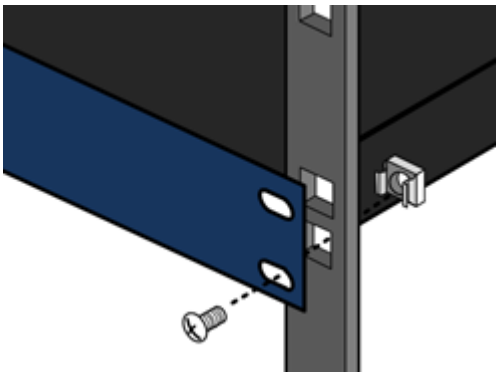

Figure 3. Rack mount installation

5. Product specifications

Feature	Specification
Power supply	• 3-phase + Neutral + Earth 50-60 Hz • 85 V to 264 V
Mains connection	PowerCON True1 mains plug
Rear panel connections	8 x EtherCON
Enclosure	Case - Aluminium, black anodised, 1.5 mm (1.8 mm at rear panel) Front panel - Aluminium, 2.8 mm, RAL5011 textured paint
Cooling	Natural air cooling
Temperature	• Operating: 0°C and 55°C (32°F and 131°F) • Storage: -20°C and 80°C (-4°F and 176°F)
Ingress Protection rating	IP40 (protected from solid objects larger than 1 mm; not protected from liquids)
Accessories supplied	Neutrik Powercon True1 2m power cable, socket to bare ends
Dimensions (L x W x H)	• 483 mm x 305 mm x 45 mm (19 in x 12 in x 1.8 in) • 1U 19" rack mountable
Weight	2.0 kg (4.4 lbs)

6. Service & End of Life

In the event of a product being considered beyond economic repair it should be disposed of with care and in line with local legislation on disposal of Waste Electrical and Electronic Equipment (WEEE).

In Europe WEEE shall be disposed of in accordance with European Union Directive 2012/19/EU.

In most regions of the world, similar legislation exists to ensure that WEEE is handled separately to maximise reuse of materials and avoidance of landfill.

7. Declaration of Conformity

ORIGINAL

EC Declaration of Conformity

Manufacturer:	Kinesys Projects Limited
of the address:	Unit 2 Kempton Gate, Oldfield Road, Hampton, Middlesex, TW12 2AF, UK
in accordance with the following EC directives:	**Low Voltage Directive 2014/35/EU** **EMC Directive 2014/30/EU**
declares that the product:	**Kinesys Array IP8 v3**
with part number:	**ELE-03-0084**

is in conformity with the applicable requirements of the following harmonised standards:

EN 62368-1	**Audio/video, information and communication technology equipment. Safety requirements**
EN 61000-6-1	**Electromagnetic compatibility (EMC). Generic standards. Immunity for residential, commercial and light-industrial environments.**
EN 61000-6-3	**Electromagnetic compatibility (EMC). Generic standards. Emission standard for residential, commercial and light-industrial environments.**

The manufacturer hereby declares that the products named above have been designed to comply with the relevant sections of the above referenced standards. The units comply with all applicable essential requirements of the directives.

In the EU the party authorised to compile the technical file is:
TAIT Netherlands B.V.
Weesperplein 4a, 1018 XA Amsterdam, The Netherlands
In the UK the party authorised to compile the technical file is:
Kinesys Projects Ltd.
Unit 2 Kempton Gate, Oldfield Road, Hampton, Middlesex, TW12 2AF, UK

Equipment referred to in this Declaration of Conformity was first manufactured in 2018.

D Weatherhead
Managing Director
Hampton, November 2024

The attention of the specifier, purchaser, installer, or user is drawn to special measures and limitations to use which must be observed when these products are taken into service to maintain compliance with the above directives. Details of these special measures and limitations to use are available on request and are also contained in the product manuals.

Kinesys Projects Ltd.
TAIT Technologies UK Ltd.
Unit 5 Langthwaite Road, Langthwaite Grange Ind Estate, South Kirkby, Pontefract, West Yorkshire, UK, WF9 3AP
Registered in England and Wales No. 02962782 +44 2082 086000 taittowers.com

[BLANK PAGE]