

## exD konNET-k Audio Network Switch Owner's Manual

## konNET-k gigabit Audio Network Switch



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## Introduction

This manual describes all the features of the exD konNET-k gigabit Audio Network Switch and contains important warranty, safety and usage information.

### **SAFETY FIRST**

Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- The device does not contain any user-serviceable components. Do not attempt to open, dismantle or apply internal third-party devices to it. Doing so will void the warranty.

### Description

exD **konNET-k** is a carefully designed audio network switch which dedicated to cope with the strict requirement of today's high end audio network streaming. Unlike usual computer/IT network switches, they are only ensuring proper data integrity and transmission, we pay extra attention to the finest details in improving network audio reproduction.

The complete network switch is our own design from scratch and not "hot rodding" existing switch.

## Features

- Low Phase noise OCXO with its own low noise regulator ensures data and transmission stability (ppb, parts per billion stability)
- Integrated LPS (linear power supply) throughout the whole design eliminates the EMI noises from conventional SMPS (switch-mode power supply).
- Individual low-noise regulators to network chip helps improving crosstalk and other unwanted modulation among various power supply pins.
- Impedance-controlled PCB design further reduces noise and ensuring proper impedance matching.
- Modular RJ45 jack integrated with isolation magnetics shorten signal paths total length and again gives significant sonic improvement.
- Gigabit Ethernet (1000Mbps) network speed ensures not only the highest audio sample rate streaming but suitable for high quality video streaming as well.
- Sturdy all aluminum case construction provides great vibration isolation and screening from environmental EMI/RFI.

## Connectivity

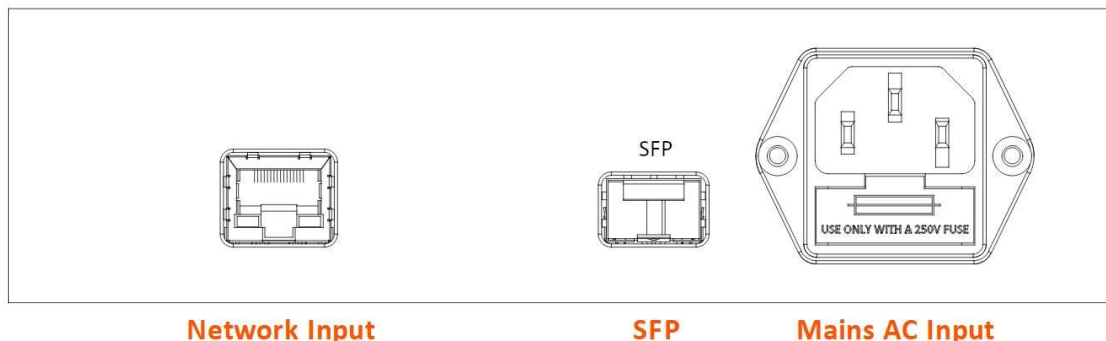
exD konNET-k provides 4x 1Gbps RJ45 network port and 1x SFP (small form-factor pluggable) port.

Please use Only good quality Cat5e (or above) cables from reputable supplier.

Poor cables not only degrade sound reproduction but may adversely affect network performance as well.

No power switch installed for the konNET-k, plugging in the power cable to the IEC socket will power on the audio switch immediately.

Since there is an OCXO (Oven Controlled Crystal Oscillator) installed inside, we do not recommend switching the audio OFF when not in use.

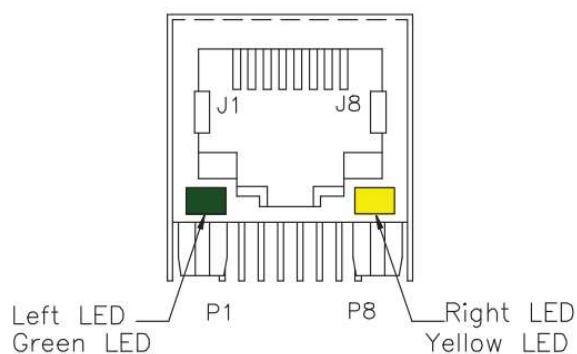


Back panel of the konNET-k switch.

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On the back panel, each RJ45 connector has two LEDs which will give you indications of the port status.

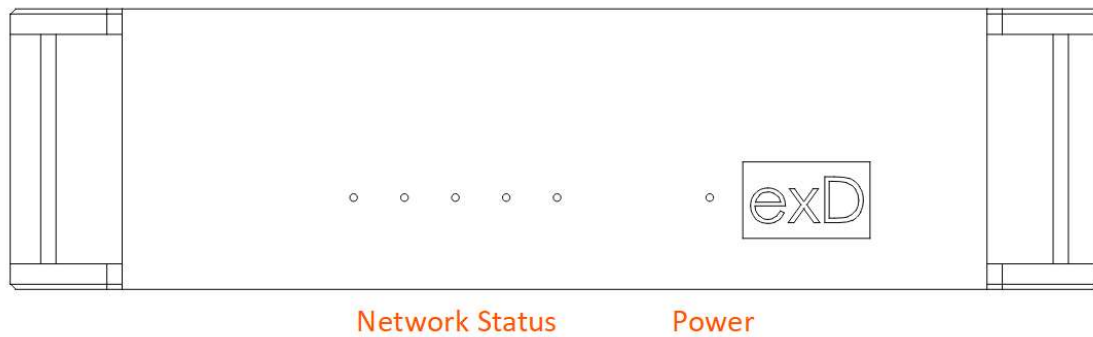
Refer to the following picture for LEDs information,



1. No cable – Both LEDs off
2. **Yellow LED**
  - On** – Link is 1000Mbps
  - Off** – Link is 10/100Mbps
3. **Green LED**
  - On** – Link established and normal
  - Blink** – Data/traffic active

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Front panel indicators:



- 1 – **Off** : No SFP module installed / No network cable or optical fiber or No link established
- 2 – **On** : Network Link established
- 3 – **Blink** : Data/traffic active

Notes about SFP module:

*Remove the SFP slot protective cover before inserting any module.*

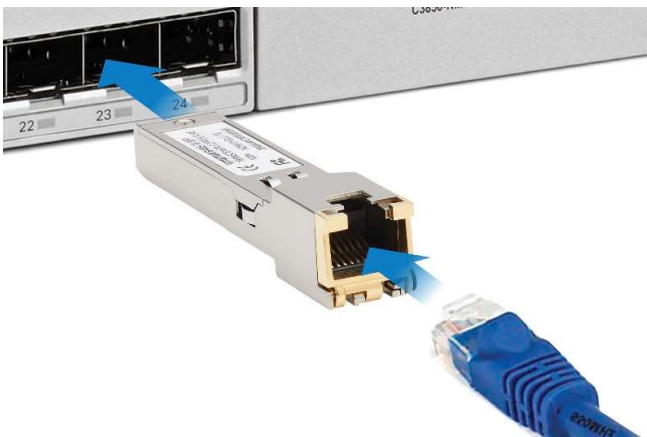
konNET-o will accept these SFP modules:

1. Copper RJ45 SFP module (Fig. 1)



Fig.1- Copper RJ45 SFP module

Fully insert the SFP module into the SFP slot, use RJ45 network cables just like ordinary RJ45 ports.



### 2. Optical fiber SFP module (Fig. 2)

konNET-o will support both Single-mode and Multi-mode optical fiber/module. However, please make sure you are using the same type of fiber on both ends.



Fig.2 – Optical fiber SFP module (Single-mode Dual LC type shown)

*Consult your dealer if you have questions about selecting optical fiber modules*

### 3. DAC (direct attach cable) SFP cable

konNET-o will also support DAC, here is how the DAC looks like,



The module and cable are in one single module on both ends. Simply plug the assembly into the SFP slot.

### Specification

- Ports: 4x RJ45, 1x SFP (1Gbps)
- Size: 214mm x 214mm x 55mm (W x D x H)
- Weight: 2.5kg (Net)
- Color: Silver or Black
- Mains: 220/230V or 100-110/115V AC 50/60Hz (10W max)

#### Mains AC fuse rating:

220/230V: 500ma(fast acting)

100-110/115V: 1000ma(fast acting)