

TWISTED PAIR DISTRIBUTOR **KE 0108CH-DW**

Instruction Manual

Thank you for your purchase of this product

Please be sure to read this manual completely prior to usage of this product.

For U.S.A -

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

For CANADA-

This Class A digital apparatus complies with Canadian ICES-003 Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Usage Cautions

Please be sure to read this manual prior to usage of product. After reading, keep it in a place near the equipment where it can be easily referred to.

Warning <u> </u>	• If this symbol is ignored death or serious injury may occur.
Caution	• If this symbol is ignored injury or property damage may occur.

Explanation of symbols

Shows caution (including warning)









Unplug the power cord

Shows an action that should not be done.

Keep hands clear













Do not touch with wet hands

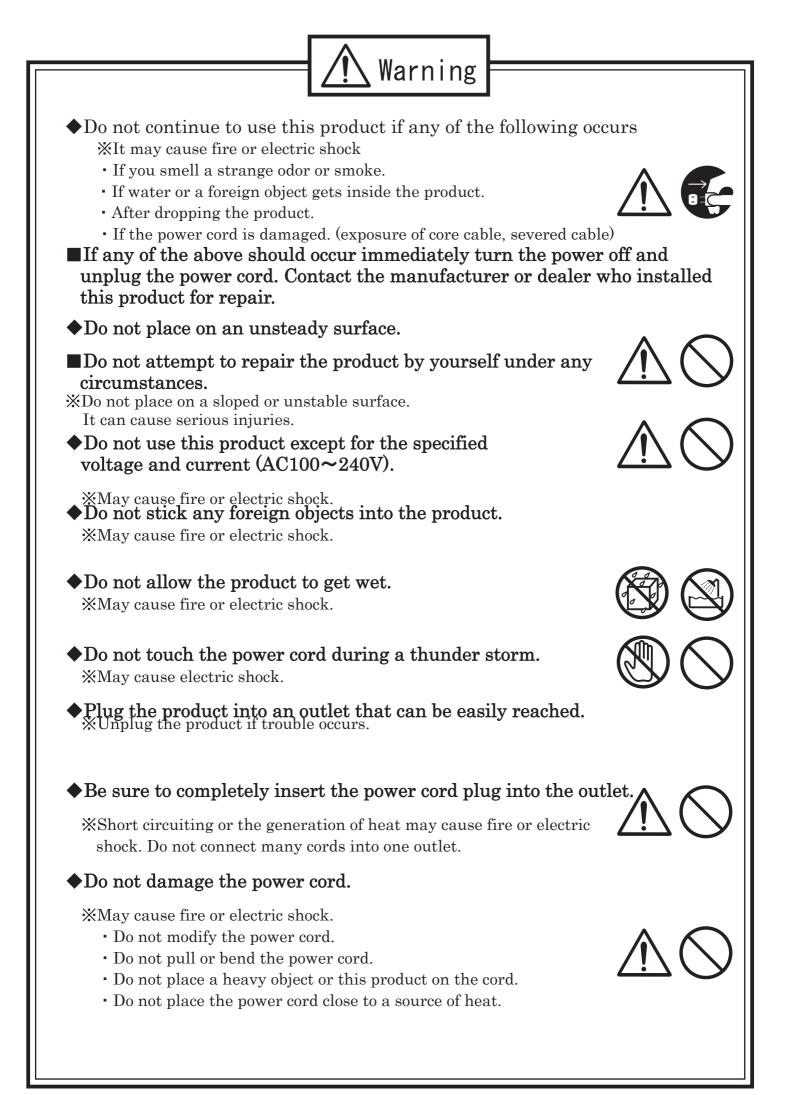
Prohibited Do not expose to water

Do not use in a wet place

Do not attempt Do not touch to take apart

Shows an action that should be done.

We are not responsible for damages to an image or sound transmitted by our product caused by the products malfunction or any other outside factor.





Do not put this product in the following places.

May cause fire or electric shock.

- Places where there is a lot of humidity or dust.
- Places where there is steam.
- Near places which generate heat.
- Places where water may come into contact with the product.

Turn off the power and follow all instructions, when connecting this product to other devices.

Failure to use the recommended cables may cause generation of heat or fire.

Do not cover the ventilation holes.

Doing so may cause the product to overheat, which can cause fire or damage to the product.

• Do not leave the product laying on its side or turn it upside down.

Do not cover the ventilation holes or stick foreign objects into this product as it will cause damage.

Disconnect all cables before moving this product.

The cables can be damaged and fire or electric shock may occur if not disconnected.

Do not place a heavy object on this product.

Placing a heavy or oversized object on the product may cause injury as a result of it falling.

Disconnect the power cord when the product will not be used for a long time.

Disconnect the power cord for safety purposes and to lower energy consumption.

Unplug the product when servicing.

Electric shock can occur even though the product is turned off as current is still flowing from the power cord.

Do not unplug the device by pulling on the power cord.

Pulling on the power cord may damage the cord or cause a fire or electric shock Please pull on the plug body.

Do not disconnect or connect the power plug with wet hands.

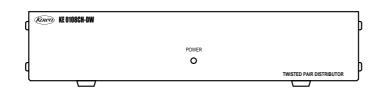
May cause electric shock.

Index

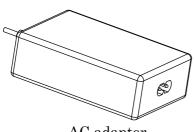
1. About this product 1
1-1. Product and accessories 1
1-2 General Information 2
1-3 Features of the Product 2
2. Denomination and function of each part 3
2-1. Front panel 3
2-2. Back panel
3. Connection
3-1. Caution and warnings 5
3-2. Preparation of cable 6
3-3. Cable mounting kit ———————————————————————————————————
3-4. Attaching to a rack 7
3-5. Connection — 8
4. Trouble Shooting g
The image can't be seen on the PDP
The image of PDP is flickering or there is noise
Other situation

1.About this product

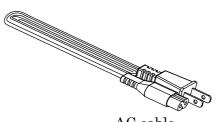
1-1. Product and accessories



Main unit of KE 0108CH-DW



AC adapter



AC cable



Cable mounting kit



Fixing band ${\color{black}{\textbf{x}}}\,8$



Instruction Manual (This booklet)



Rubber foot $\times 4$ (Installed on the main unit)

1-2. General Information

The product, KE 0108CH-DW is a distributor for Kowa's twisted pair extension system, which transmits image signals long distance through a twisted pair cable. (CAT5e standards) To use the KE 0108CH-DW, install it between the transmitter(KE 0202CT2W) and the receiver (KE 0101CR-BW).

Cautions

1. Use the recommended cable for this product for best results.

(Okano Electric wire Co.,LTD OKTP-E5-p-AWG 24x4P)

When a cable other than the recommended cable is used, make sure that the characteristics and functionality of the cable is fully understood before use.

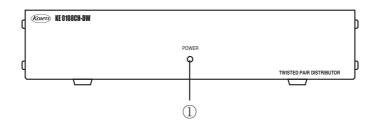
2. When the cable length is longer than the recommended distance, the quality of the image may deteriorate. Please note that use beyond the recommended distance will require outside support.

1-3.Feature of the product

• Compared to coaxial cables, CAT5e is thin, light-weight, easy to install, and lower in price.

 $\boldsymbol{\cdot}$ Use the cable mounting kits, when weight will be applied to the twisted pair connectors of the distributor.

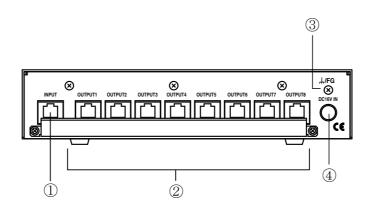
2. Denomination and function of each part



1) Power

After connecting the adapter cable, the power will turn on and the power indicator lamp will light up.

2-2.Back Panel



① IN (RJ-45) Input connector for twisted pair cable. This is connected with a CAT5e cable to the transmitter.

② OUT (RJ-45)
Output connector for twisted pair cable.
This is connected with CAT5e cable to the receiver.
Maximum of 8 outputs from the distributor.

③ Frame groundConnect a ground wire to the distributor.It can also be connected to the frame ground of the PC.

④ DC16V IN It could be plugged the 16V dedicated voltage adapter

◆WARNING Do not connect any unauthorized product to the distributor. It can cause damage to the products.

3. Connection

3-1. Cautions and Warnings.

♦Cautions

- Use the recommended cable for this product for best results.
 (Okano electric wire : OKTP-E5-P-AWG 24x4P)
 When a cable other than the recommended cable is used make sure that
- When a cable other than the recommended cable is used, make sure that the characterisitcs and functionability of the cable is fully understood before use.
- When the cable length is longer than our recommended distance, the quality of the image may deteriorate.Please note that use beyond the recommended distance will require outside support.
- If a twisted-pair cable is laid near a power supply line with a lot of noise, the image may flicker. In this case, run the twisted-pair cable away from the power supply line.
- If the product is connected to an AC power supply with noise, the image may flicker. In this case, use an AC wall socket type noise filter.
- Use the cable mounting kits, when weight will be applied to the twisted pair connectors of the distributor. (Please refer to "3-3". Cable mount kit.)

♦Warning

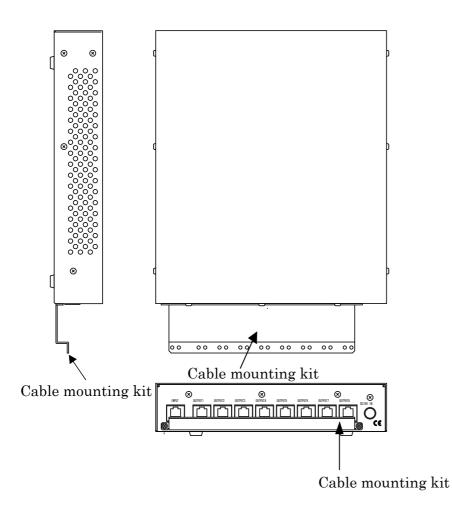
- Do not connect any unauthorized products to the extension input/output connectors of the twisted pair distributor. It can cause damage to the products. Kowa is not responsible for any damage or injury caused as a result of improper use.
- Turn off the distributor and any other product that is connected to the device when removing or installing twisted pair cables. Failure to do so can cause damage or failure of the products.

3-2. Preparation of a cable

CAT5e cable is used to connect the KE 0108CH-DW to the transmitter and receiver. Please connect the cable straight through. (Same as Ethernet)

3-3.Cable mounting kit

A mounting kit for the twisted pair cable is included as an accessory for this product. Use the following diagram to attach the mounting kit when necessary.



3-4. Attaching to a rack

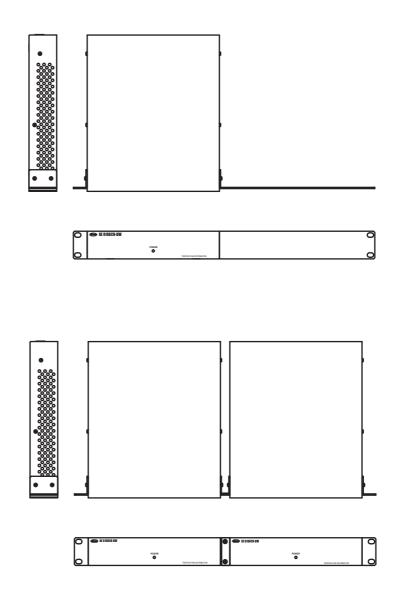
 $1U \ge 1$ rack mount set $1U \ge 2$ rack mount set

Using the above mount kits allow the distributor to be attached to a rack. The mount kits are the same color as the casing of the distributor giving the outside an aesthetically pleasing look.

The rack mounts are optional accessories. Contact us if you would like to place an order.

One unit rack mount

Two unit rack mount



Cautions:

The temperature inside the rack must not exceed 40° C.

Do not cover the ventilation holes of the distributor

Secure the mounting brackets to the distributor and the rack using the supplied machine screws.

Loads other than the distributor must not weigh on the mounting brackets.

The power cord and AC adapter must be used in the rating.

3-5. Connection

Please connect the devices as follows.

♦Caution

If a twisted pair cable is laid near a power supply line with a lot of noise, the image may flicker. In this case, run the twisted pair cable away from the power supply line.

♦ Caution

If the product is connected to an AC power supply with noise, the image may flicker. In this case, use an AC wall socket type noise filter.

♦Warning

Do not connect any unauthorized products to the extension input/output connectors of the distributor. It can cause damage to the products. Kowa is not responsible for any damage or injury causedas a result of improper use.

- ①. Check that all of the devices to connect are turned off.
- ②. Install the cable from the transmitter to the IN connector of the distributor.
- ③. Install the cable from OUT1 OUT8 of the distributor to the receiver.

Caution

Use the cable mounting kits, when weight will be applied to the twisted pair connectors of the distributor.(Please refer to"3-3 Cable mounting kit")

♦Warning

Turn off the distributor and any other products that are connected to the device when removing or installing twisted pair cables. Failure to do so can cause damage to the products.

④. Plug in the power cord to the distributor and transmitter and check that the indicator lamp is lit .(Power to the receiver is supplied by the PDP)

(5). Turn on the power of all devices that are connected to the transmitter and receiver. (Video, DVD, PC, Display....etc.)

(6). If the receiver is equipped with image adjustments , please refer to the instruction manual of the receiver.

4. Trouble shooting

Problem	Please check the following
The image can't be seen on the PDP	
	• Is the power of PDP turned on ?
	• Is the lamp of the twisted pair distributor lit-up? Is the power adapter cable properly connected to AC100-240V line or a twisted pair distributor?
	 Is there a source that causes noise near the cables? A noise filter should be used in case of noise.
	• Is the CAT5e cable properly connected to the Input and Output of the distributor? Is cables damaged?
	• Is the CAT5e cable properly connected to the RJ-45 ? If the twisted pair cable is carrying weight, please use the cable mounting kit.
	• Is the receiver working properly? Adjust the LEVEL /PEAKING of the twisted pair receiver referring to the instruction manual of the receiver.
	• Is the lamp of the twisted pair transmitter lit-up?
The image of PDP is flickering or there is noise	 Is the twisted pair cable near the AC line? It should be far from the line.
	• Is there a source causing noise close to AC adapter of the twisted pair distributor? A noise filter should be used in case of noise.
	• Is the CAT5e cable properly connected to RJ-45 connector ? If the twisted pair cable is carrying weight, please use the cable mounting kit.
	• Is the length of the cable within the recommended transmission range ? Please note that use beyond the recommended distance will require outside support.
Other situation	● Is the CAT5e cable properly connected to RJ-45 connector? If the twisted pair cables is carrying weight, please use the cable mounting kit.
	• Is the receiver working properly? Adjust the LEVEL/PEAKING of the twisted pair receiver referring to the instruction manual of the receiver.

5. Specification

Model name	KE 0108CH-DW
Number of input channels	Twisted pair Input : 1 system
Number of output channels	Twisted pair Output : 8 system
Input connector	Twisted pair Input : RJ-45 connector
Output Connector	Twisted pair Output : RJ-45 connector
Interface cable for extension	CAT5e cable
Image input and output signal	40 Hz \sim 100MHz \pm 3dB
Audio input and output signal	20 Hz \sim 20 KHz \pm 1dB
Temperature and humidity operating conditions	Temperature: 0~40° Humidity: 20~80%(no condensation)
Power source	AC adapter
Power Consumption	approximately 30W
Power (AC adapter)	Input:AC100-240V 1.2A 50-60Hz Output:DC16V 2.81A
Dimension	$W210 \times D250 \times H44(mm)$
Weight	approximately 1.5kg

Note: This equipment complies with the EMC standards listed below. $EN55022, EN61000\mbox{-}3\mbox{-}2, EN61000\mbox{-}3\mbox{-}3, EN55024$



http://www.kowa.co.jp /i-master/
Electronics and Optics Division

Kowa Europe GmbH

Immermannstrasse 65A 40210 Dusseldolf F.R. Germany Phone:+49(0)211-1793540 Facsimle:+49(0)211-161952

Kowa Optimed, Inc.

20001 So. Vermont Ave. Torrance, CA 90502, U.S.A Phone:+1(310)327-1913 Facsimle:+1(310)327-4177 E-mail: i-master@kowa.com

No.4-14, 3-chome, Nihonbashi-Honcho, Chuo-ku, Tokyo 103-8433, Japan Phone:+81(0)3-3279-7330 Facsimile:+81(0)3-3242-3170 E-mail: i-master@kowa.co.jp