USER'S MANUAL

DVI Optical
Dual link Extension System

DQL

Table of Contents

1. Introduction 2

2. Features 2

3. Model name 2

4. Panel Descriptions 3

5. Package contents 3

6. Installation 4

7. Function Switch 5

8. Specification 6

9. Precaution 7

10. Warranty 8

11. Troubleshooting.....9,10

12. Contact us.....11

DQL with fiber optical system let your dual link flat panel display extend up to 100M(330ft) away from the host. Maximum resolution is WQXGA.

Features

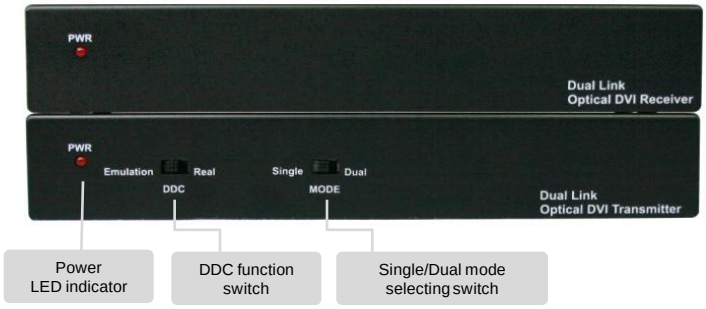
- High Speed and long distance transmission by LC type 7ch multi-mode fiber optic cable
- Extends up to 100M(330ft)
- Self detecting function for EDID information
- Supports Single link and Dual link by selectable function switch
- Supports up to WQXGA (2560x1600) resolution for Dual link, WUXGA(1920x1200) resolution for Single link
- Supports two mode for DDC
  - Real : Uses one UTP cable for EDID information
  - Emulation : Pseudo-DDC detection function for EDID information

Model Name

DQL

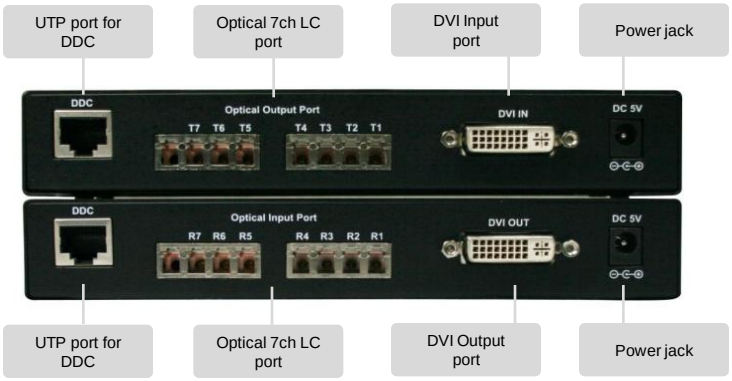
Receiver Front

Transmitter Front



Transmitter Rear

Receiver Rear



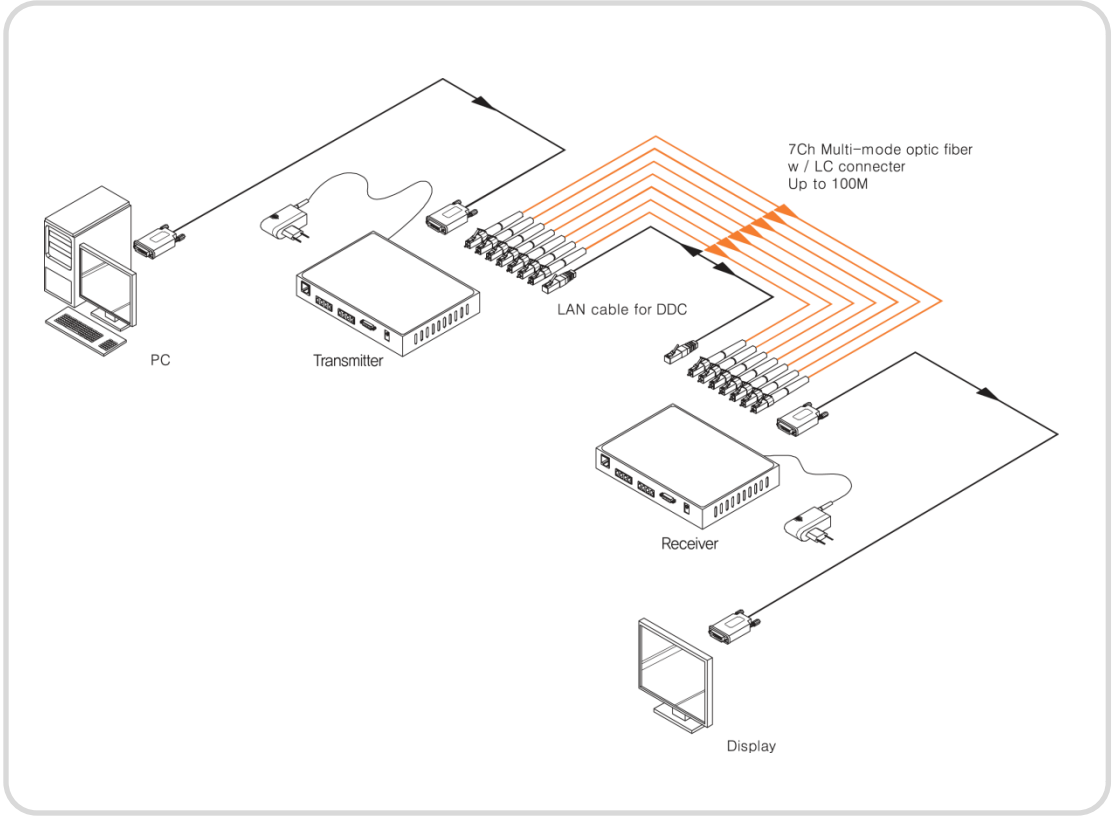
Package contents

Before you start installing DQL, please check the package contents.

- DSL Transmitter & Receiver
- User's Manual
- 2 x Power adapter(5V,2A)

Installation

1. Connect a source device to DVI input port on DQL-TX.
2. Connect a display device to DVI output port on DQL-RX.
3. Connect 7ch of LC type optic fiber cables between optical port on TX and RX.
4. Connect UTP cable between TX and RX for DDC transmission in real time.
   If you want to use emulation mode, you don't need to connect UTP cable.
   To get more information about Real/Emulation mode, please go to page 5.
5. Plug the power adapter to RX. TX will get it's power from the source device.
   In some cases if source device cannot provide enough power to TX, extra power adapter may be required to TX.



Function Switch

EDID Switch in front of Transmitter

-REAL : EDID data of connected display device is transmitted between TX and RX in real time through UTP cable.
In REAL mode, it supports the HDCP.
-Emulation : Certain EDID data pre-set in the TX is used in signal transmission.
You don’t need to connect UTP cable for DDC transmission.
In EMULATION mode, it doesn't support HDCP.

MODE Switch in front of Transmitter

- Single : When you use Single link display, select ‘Single’ switch.
- Dual : When you use Dual link display, select ‘Dual’ switch.

Write EDID information into the TX

1) Power on your display.
2) Connect TX to the display using DVI cable.
3) DDC function switch on TX set to ‘Emulation’.
4) Plug DC +5[V] adapter in to the TX.
5) Check if LED blinks rapidly for a few seconds. EDID is well acknowledged once the blinking stops.
6) Restart the system according to installation guide.

Specifications

- Connector
  - Using connector : DVI 24pin(female) & LC type
  - Link : RJ-45 Jack

- Video Bandwidth : 1.65Gbps(Single link)

- Maximum Supporting Resolution
  - Single Link : WUXGA (1920 x 1200)
  - Dual Link : WQXGA (2560 x 1600)

- Power Consumption : Tx – 1.4W(Single link), 1.0W(Dual link)
  Rx – 2.5W(Single link, Dual link)

- Power Supply : 100~240V with DC 5V 2A adaptor

- Dimension : 180W x 90D x 30H (mm)

- Environment
  - Operating Temperature Range : 0 to 50°C
  - Storage Temperature Range : -20 to 70°C

Precaution

WARNING

- **Do not dismantle the housing or modify the product.**
  Dismantling the housing or modifying the product may result in electrical shock or burn.

- **Refer all servicing to qualified service personnel.**
  Do not attempt to service this product yourself as opening or removing housing may expose you to dangerous voltage or other hazards.

- **Keep the product away from liquids.**
  Spilling into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls/spills into the housing, unplug the product immediately.
  Have the product checked by a qualified service engineer before using it again.

- **Do not touch the Product with wet hands.**
  Touching the housing and plug with wet hands is dangerous and can cause electrical shock.

- We, OPHIT hereby warrant the final purchase of our product as follows.
- In the case of troubles on our products, please contact the shop purchased.

One(1) year limited warranty

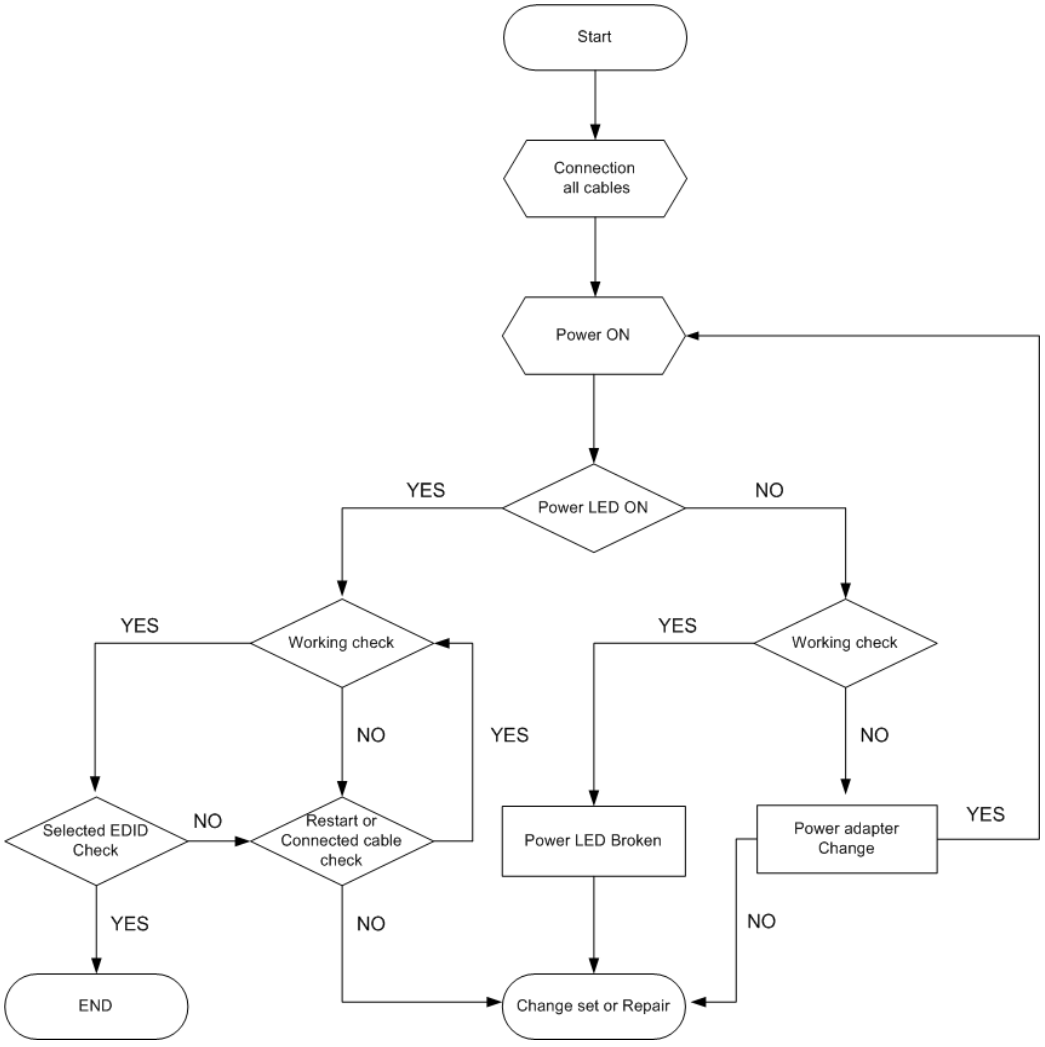
Our customers have right to be served with free charge when there is trouble in this product during one(1) year from the day purchased.

Out of warranty services

When you request services (in the case of non manufacturing defect but the troubles by misusage), may served with charge of follows.

- Defects of products caused by accident , disaster.
- Damages of products caused by the customer's carelessness or mistaken application.
- Damages of products caused by the application of parts or products not supplied or sold by our company.
- Damages of products and related defects caused by not our staff or the man or group not nominated by us for services.

1.Troubleshooting Flow



2. Troubleshooting Check List

State.	Solution.	Note.
Power ON, Power LED does not work	▪ Please check out voltage an adapter. (DC +5[V]) ▪ Please check and turned on the source power. (The used source depend on requires an adapter.)	
Cannot read selected EDID	▪ Select switch the emulation mode - Retry self EDID read - Check the monitor to read EDID ▪ Select switch the real mode. - Please check and connected the UTP cable. (Only the direct type) - Please check if the DVI cable is connected.	
Resolution trouble	▪ Select single mode switch - Max resolution 1920x1200@60Hz - Some monitor will not support this mode. ▪ Select dual mode switch - Max resolution 2560x1600@60Hz - Please check and connect DVI cable type (Should use DVI-Dual cable) ▪ Noise or no display - Please check the DVI and optical fiber cable is connected. (Recommend optical fiber cable(same length)) *** The max resolution is different on to connected monitor.	

OPHIT CO., LTD.

www.ophit.com

Head office
908~911/103 Digital Empire Ⅱ, 486 Sin-Dong, Youngtong-Gu,
Suwon-City, Kyunggi-Do 443-734, KOREA

TEL : +82-31-695-5543 FAX : +82-31-695-5545
E-mail : support@ophit.com

Factory
3F/5F, Suntechnovil, 5-27, Mangpo-Dong, Youngtong-Gu,
Suwon-City, Kyunggi-Do 443-440, KOREA

TEL : +82-31-205-4191 FAX : +82-31-205-4197

Copyright ⓒ 2011 OPHIT All right reserved