HDMI / Video Wall over IP

HDMI Network

- 1080P ultra high quality video transmitter
- Assigns video sources to any monitor of the video wall
- Up to 8 x 8 Screen Array supported
- Extend high definition video signal over Gigabit LAN and IGMP
- 16 selectible DIP switch for multi-casting group matching easily
- 1-to-1, 1-to-many & multi-casting broadcasting architecture allows to add more displays without adding LAN bandwidth loading

Make Advertising be Effective and Easy

PLANET delivers a great HD video distribution solution, IHD-200 series HDMI / Video Wall over IP for efficient and effective advertisement deployment. The IHD-200 series is the combination of the transmitter, IHD-200T, and the receiver, IHD-200R. They allow you to simultaneously send out a HDMI signal to one or more HDMI displays over a single cat5/5e or above cable Ethernet infrastructure.

The IHD-200 series delivers stunning ultra high quality 1080P HDMI Video broadcast over IP network. It not only offers smooth vivid 1080P full motion video with audio quality as CD, but also ensures the sharp images and text giving the viewers the maximum visual impact and easy for reading.

This breakthrough HDMI / Video Wall over IP product can distribute HD digital content from multiple sources to practically any number of remote displays on a LAN. It thus increases the flexibility, scope and scalability of Audio and Video distribution via the Ethernet Networks. The video sources can be rack centralized, decentralized or even a mixture of both. By cascading multiple Ethernet switches as the backbone of the IHD-200 series, it allows displays to be distributed far away from the source devices while sustaining consistent 1080P video and audio quality.

Video Output Characteristics

- HDCP compliant and Blu-ray read
- Supports HDMI with 2ch. audio (dts.)
- HDTV compatible, supporting 1080P, 1080i, 720P, 720i
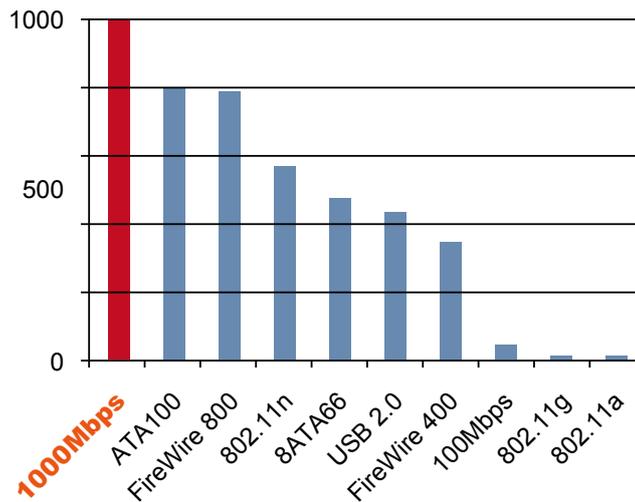- Compatible with common screen resolutions from XGA, SXGA, UXGA, WSXGA to the latest Full HD system

Easy Installation & Management

- Automatic EDID (Extended Display Identification Data) configuration
- Friendly Web UI and simple utility for ease of use
- Supports multi-casting group with Gigabit Ethernet Managed Switch (802.1q VLAN & IGMP function required)
- VESA mounting bracket supported

High-Speed Video Distribution via Gigabit LAN

The IHD-200 series is a perfect solution for audio and video signal extension via the existing LAN. Designed with Gigabit LAN interface, it supports super high speed transmission, which makes it ideal for live presentations, public broadcasting, education training, boardrooms, etc.
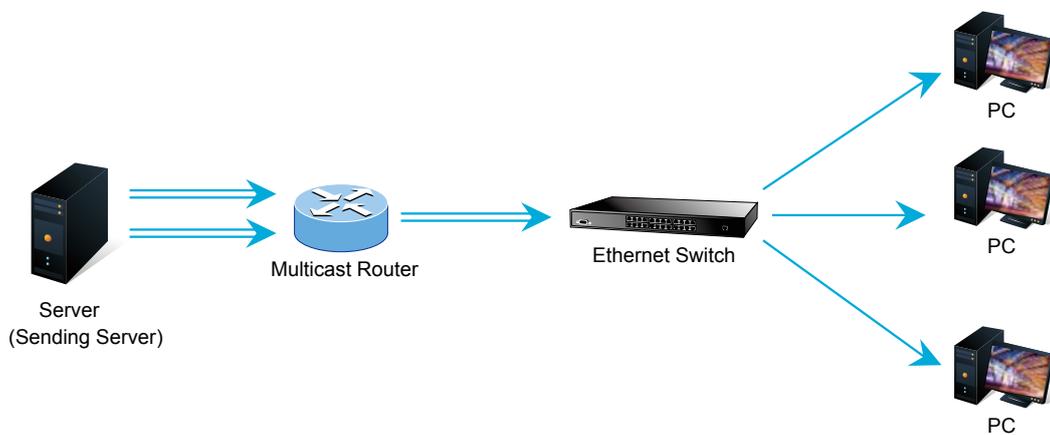
IHD-200 Series HDMI over IP Performance

Exclusive Video Transmission by IGMP Multicast Technology

One IHD-200T in local site can drive multiple IHD-200R in remote sites without consuming extra network loading. Integrating with Gigabit Switch built-in with IGMP multicast functions, there are 16 channels selectable via the IHD-200 series and up to 4 channels can be transmitted simultaneously.
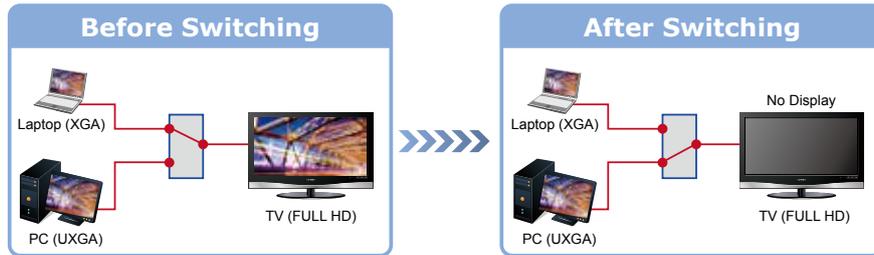
IGMP is an integral part of IP multicast and a communications protocol used by hosts and adjacent routers on IP networks to establish multicast group memberships. IGMP can be used for one-to-many networking applications such as online streaming video and gaming, and allows exclusive transmission and more efficient use of resources.
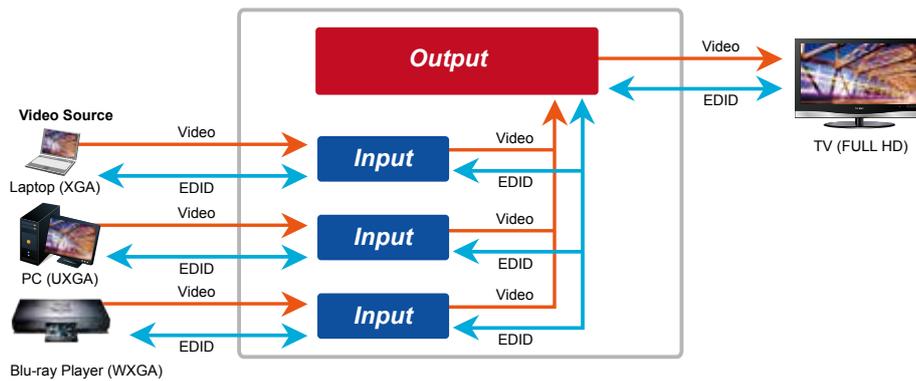
Extended Display Identification Data (EDID) Support

The IHD-200 series adopts EDID (Extended Display Identification Data) COPY function to make smooth video distribution over different types of display unit. EDID is greatly important as it contains information about resources' manufacturer name, serial number, product type, maximum image size, color characteristics, factory pre-set timings, frequency range limits, etc. In some cases, display problems may occur due to incorrect EDID communication between the display monitor and the transmitting unit or inappropriate EDID data programmed by display manufactures. Therefore, with EDID COPY function, the IHD-200 series allows the system to copy EDID information from EDID compliant displays and assures accurate display performance.

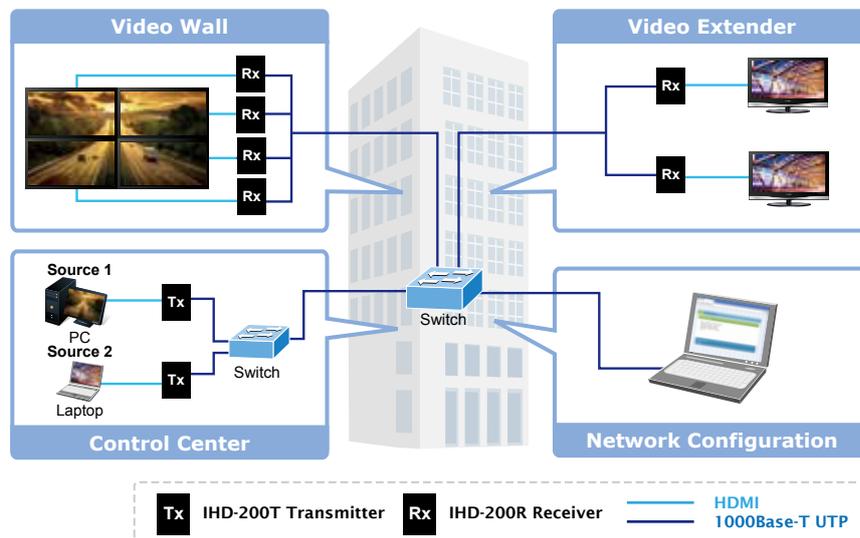## *Without Extended Display Identification Data*

Before Switching	After Switching
Laptop (XGA)	Laptop (XGA)
PC (UXGA)	No Display
TV (FULL HD)	PC (UXGA)
	TV (FULL HD)

Supports Extended Display Identification Data

Output

Video Source — Laptop (XGA) — Video / EDID → Input
PC (UXGA) — Video / EDID → Input
Blu-ray Player (WXGA) — Video / EDID → Input

Video / EDID → TV (FULL HD)

Easy Video Channel Matching through Network Configuration

The IHD-200 series network can be configured by a central computer over the same LAN within a certain distance. Fully leveraging the mature Gigabit Ethernet with 802.1Q VLAN function, multi-casting can be performed to allow more video source/senders in the network and be remotely managed. Just adjust and match video channel setting by the simple DIP switch in each IHD-200T and IHD-200R. The video distribution is easily deployed through Plug and Play.

Network Configuration

Video Wall — Rx, Rx, Rx, Rx

Video Extender — Rx, Rx

Source 1 — PC — Tx
Source 2 — Laptop — Tx — Switch

Switch

Network Configuration

Control Center

Tx	IHD-200T Transmitter	Rx	IHD-200R Receiver	HDMI
				1000Base-T UTP

High Quality Output and Performance

The IHD-200 series supports Full HD 1080P, HDCP and Blu-ray read, which have been common used in applications that require real-time high video resolution and transmission in long distance. It also contains security, noise immunity as well as HDMI with 2ch. audio (dts.) functions to bring the superior video distribution.
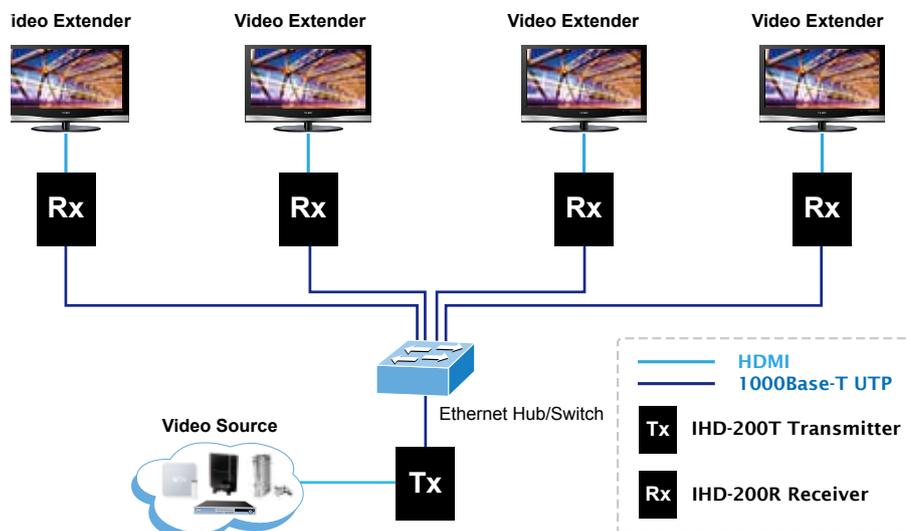

Application

PLANET IHD-200T and IHD-200R work as a pair to facilitate the management of video wall and HDMI display over IP Ethernet.
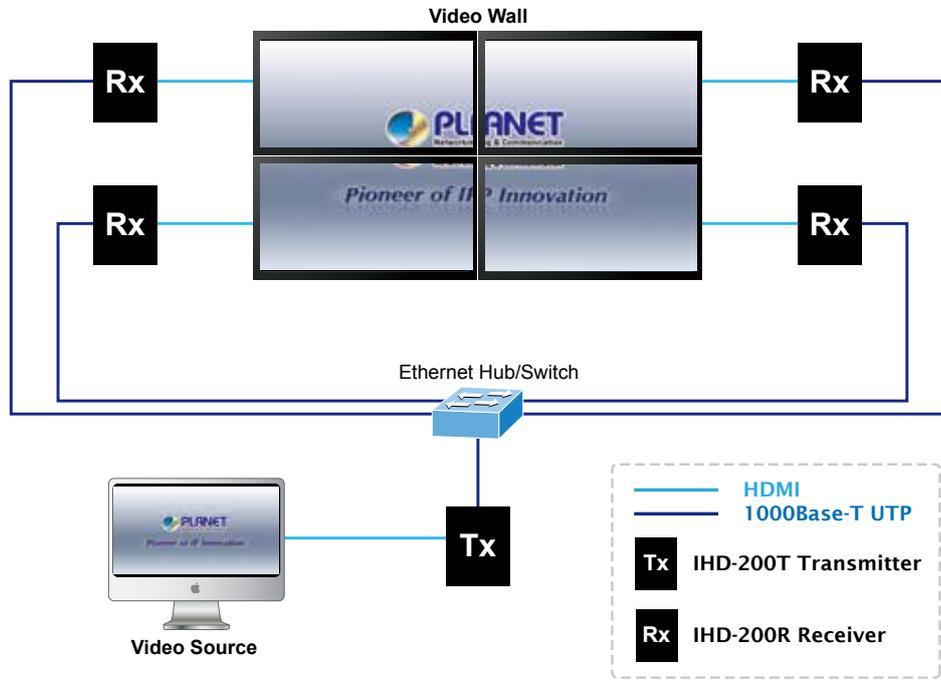
Video Extender

The IHD-200T and IHD-200R enables the same display to multi-monitors in different locations at the same time. It helps to fast extend the image and commercial to the public efficiently in expo, food court, boardrooms, and any public areas.
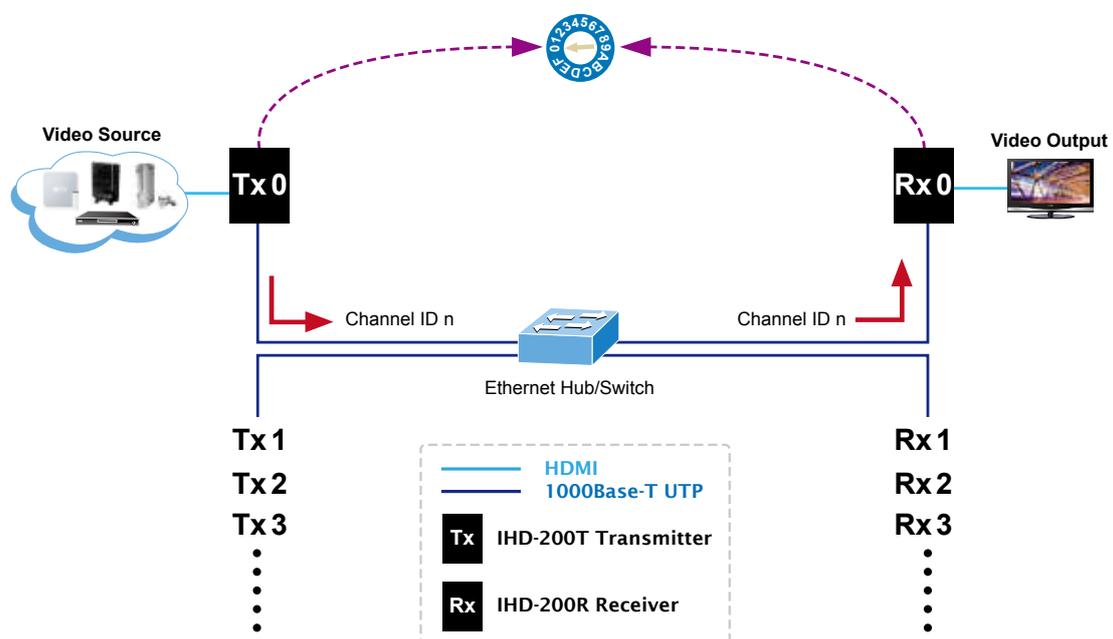
Video Wall

To bring the image and picture in larger size over video wall, the IHD-200T and IHD-200R is the ideal solution to split one specified image, picture, or video over multiple screens which are usually applied in sports games, department stores, movie theaters, etc.
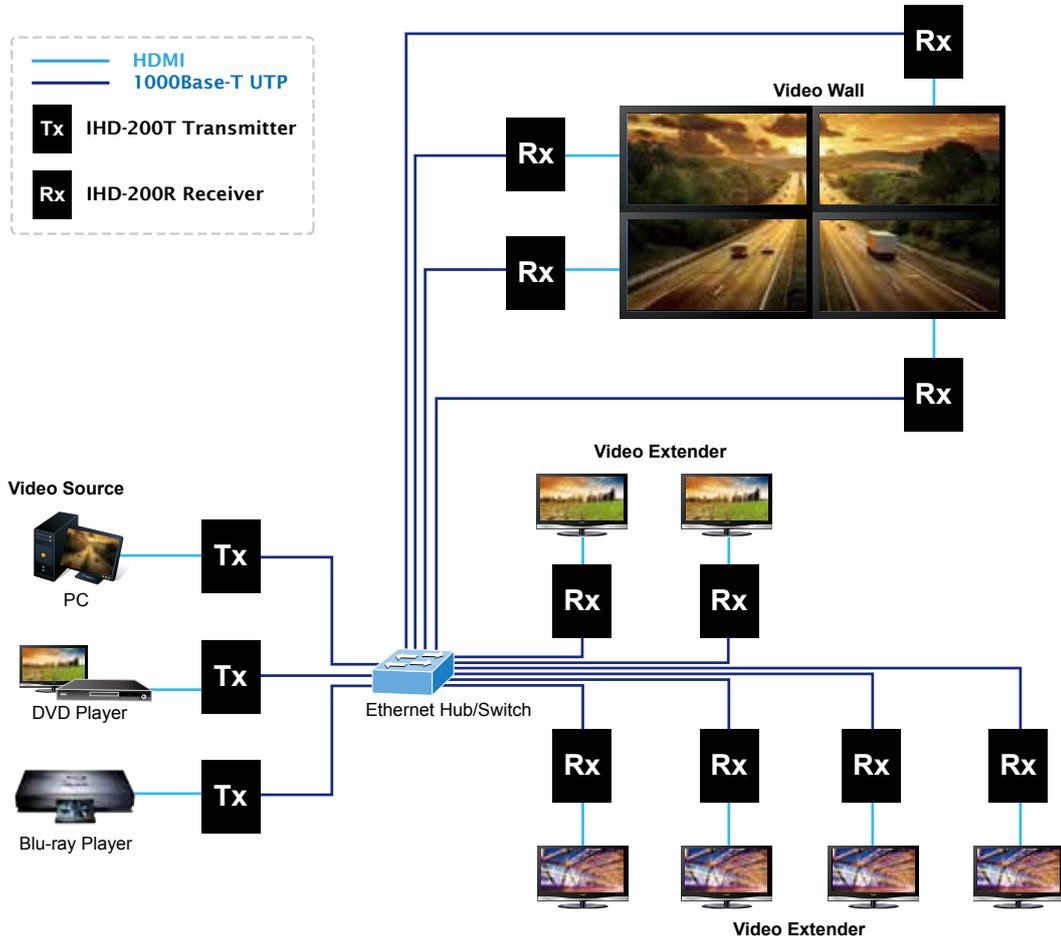

Efficient Control via 16 Channels Selectable DIP Switch

Where there is more than one transmitter in the video wall system, the rotary DIP switch in the IHD-200T and IHD-200R facilitates distinguishing the pair of the transmitter and receiver units in the same channel. It further enables the broadcasting system to perform multi functions include Video Extender and Video Wall simultaneously through matching of the IHD-200T and IHD-200R.

Combine the two functions

By using the 16 channels selectable (DIP) way to combine the two main functions as following diagram.

Specification

Model	IHD-200 Series
Hardware Specification	
Network Interface	RJ-45 port (10/100/1000Base-T Ethernet) x 1
Console	Control port x 1 AUX/EXT. port x 1
Cabling	Cat. 5/5e/6 UTP cable
LED	Power/Link：Solid / Blinking / Off Network Status：Blinking / Off
Buttons	Linking button x 1 Change mode button x 1 Reset button x 1
Source interface	HDMI A Type
Mounting Bracket	VESA mounting bracket
Channel Switching	DIP(16 channels)
Standards Conformance	
Standards Compliance	IEEE 802.3 10Base-T IEEE 802.3u 100Base-TX IEEE 802.3ab 1000Base-T
Video Resolution (max.)	Full HD (1920 x 1080) WUXGA (1920 x 1200) @ 60 Hz
Security	HDCP-compliant
Audio	HDMI with 2ch. audio (dts.)
Maximum Distance	Point-to-point: / multicast, 100 meters
Management Interfaces	Web (LAN), Serial
System Expandability (max.)	IHD-200T:16 IHD-200R:Broadcast:16000
Video Rx Array (max.)	8 x 8
Resolution Identification	EDID (Extended display identification data)
Environment Specifications	
Operating	Temperature: 0~50 Degree C Relative Humidity: 0~90% (non-condensing)
Storage	Temperature: -20~60 Degree C Relative Humidity: 0~90% (non-condensing)
Power Supply	9~12V DC, 1.5A
Dimension (W x D x H)	130 x 96 x 25 mm
Weight	450 g
Emission	FCC, CE

Ordering Information

IHD-200T	HDMI / Video Wall over IP Transmitter
IHD-200R	HDMI / Video Wall over IP Receiver

Related Products

ITB-3001	High Definition IP Set-Top Box
DMA-200	Digital Media Center

IHD-200 Series