PLANET Networking & Communication

Pioneer of IP Innovation

HDMI / Video Wall over IP Transmitter & Receiver

IHD-200T / IHD-200R

Presentation Outline

◆ **Product Overview**

◆ **Product Benefits**

◆ **Product Features**

◆ **Applications**

◆ **Comparison**

Product Overview

Reset Button

HDMI Port

Ethernet Port

DC Jack

Network Status LED

Link / Power LED

HDMI / Video Wall over IP

IHD-200T Transmitter

AUX/EXT Port

16 DIP Channel Switch

Control Port

Product Benefits

Low Cost

Gigabit Ethernet

Blu-ray & dts.

Full HD

Plug and Play

Video Source Extend

No Distance Limitations

Multi-resolution Compatible
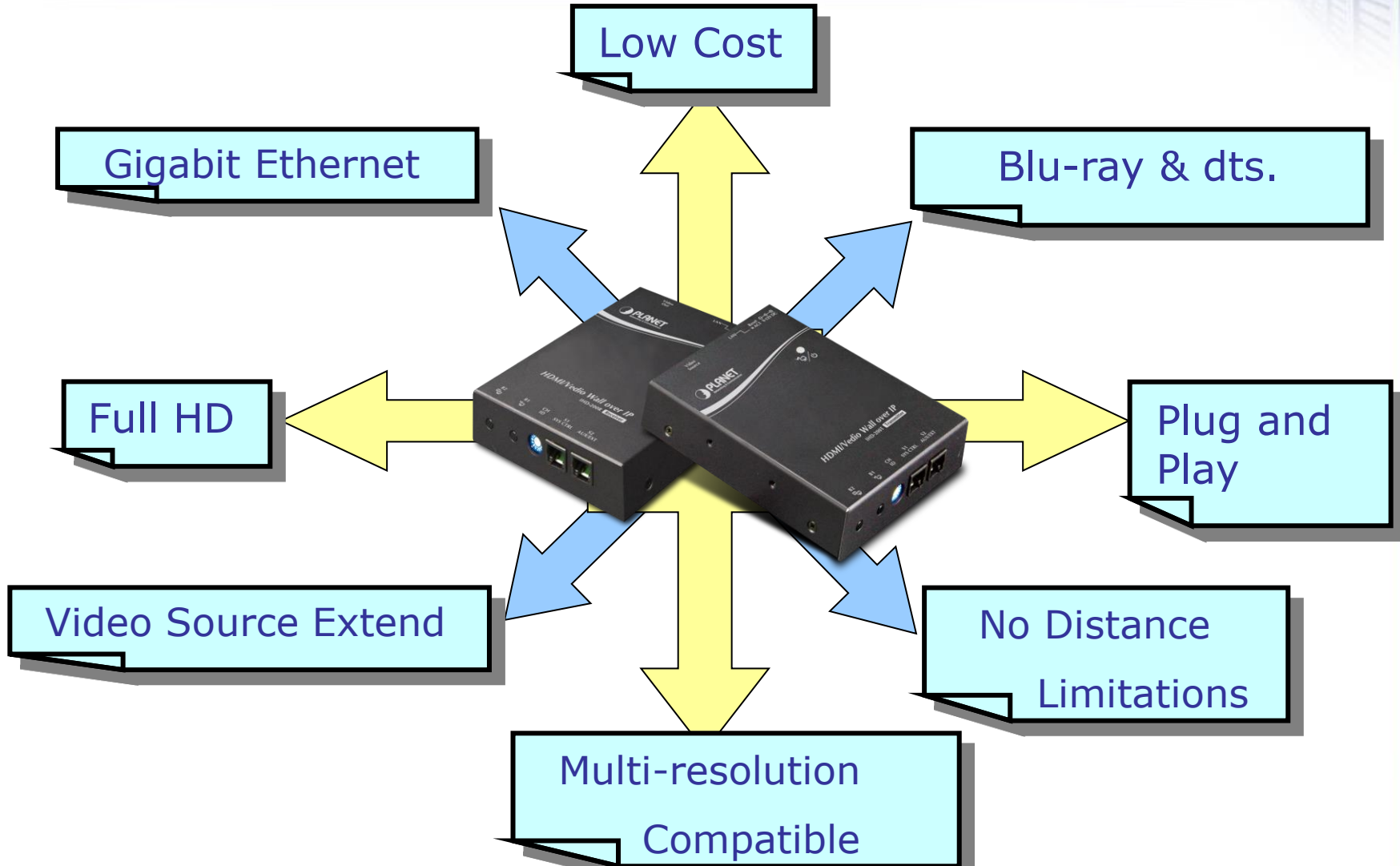
Product Features

◆ **HDMI Network**

✓ **1080P Ultra High Quality** Video transmitter

✓ Extend high definition video signal over **Gigabit LAN** and **IGMP**

✓ Assign video sources to **any monitors** of the video wall

✓ Up to **8x8 screen array** supported

✓ **16 selectable DIP switch for multi-casting group matching easily**

✓ **Point-to-Point, Point-to-Many & Many-to-Many** broadcasting architecture, adding more displays without adding LAN bandwidth loading

Product Features

◆ **Video Output Characteristics**

 ✓ **HDCP**-compliant and **Blu-ray** read

 ✓ Support HDMI with dts (2ch. audio)

 ✓ HDTV compatible; support 1080P, 1080i, 720P, 720i

 ✓ Compatible with many screen resolution to 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 really easy to use

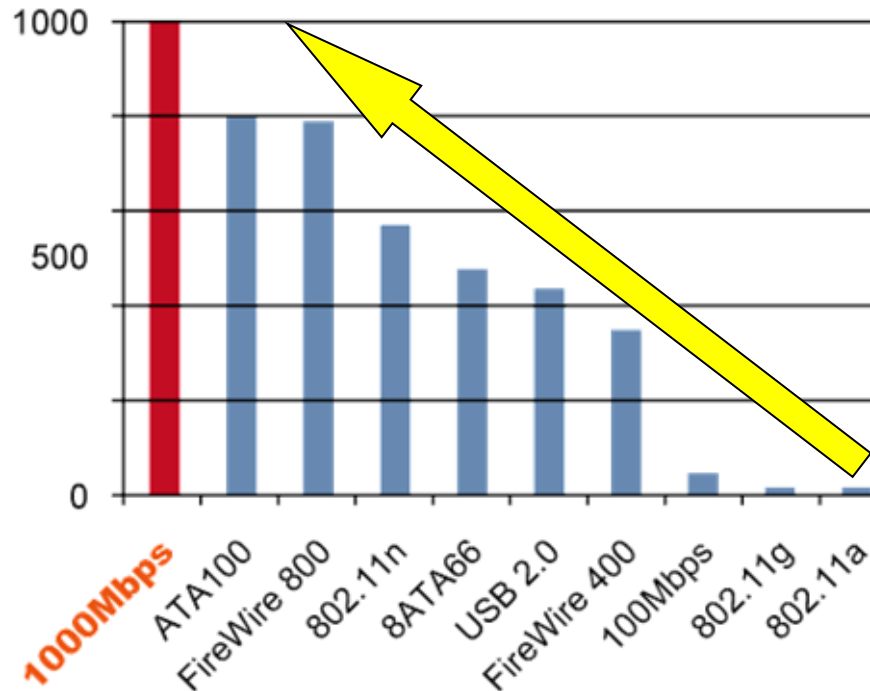 ✓ Multi-Casting group with Gigabit Ethernet managed switch (required 802.1q VLAN & IGMP function) supported

Product Features

High-Speed Ethernet Connection via Gigabit LAN

◆ Based on Gigabit LAN structure, it supports super-high speed transmission, via existing LAN system
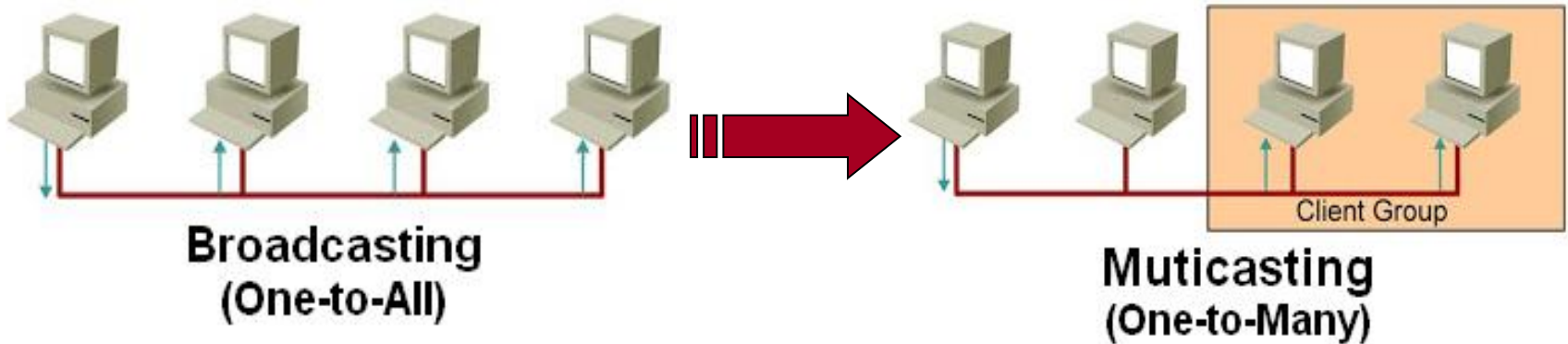
IHD-200 Series HDMI over IP Performance

Product Features

IGMP Multicast Technology

◆ Via IGMP Gigabit Switch, for each source device a local unit is required, and a remote unit is needed for each display device

Broadcasting (One-to-All)

Muticasting (One-to-Many)

Client Group

Bandwidth consumption ↑   **Bandwidth consumption** ↓

| Application	Recommended Ethernet Hub
Video Wall Application	Gigabit Ethernet Switch with **IGMP & Snooping** function
Multiple Video Wall Application	Gigabit Ethernet Switch with **IGMP, Snooping** function & **VLAN** function

Product Features

Network Configuration

◆ By using computer to do network configuration, as long as over the same LAN (high quality switch recommended). Multi-casting can be done by Managed Gigabit Switch which provide control remotely and more video source / senders allowed
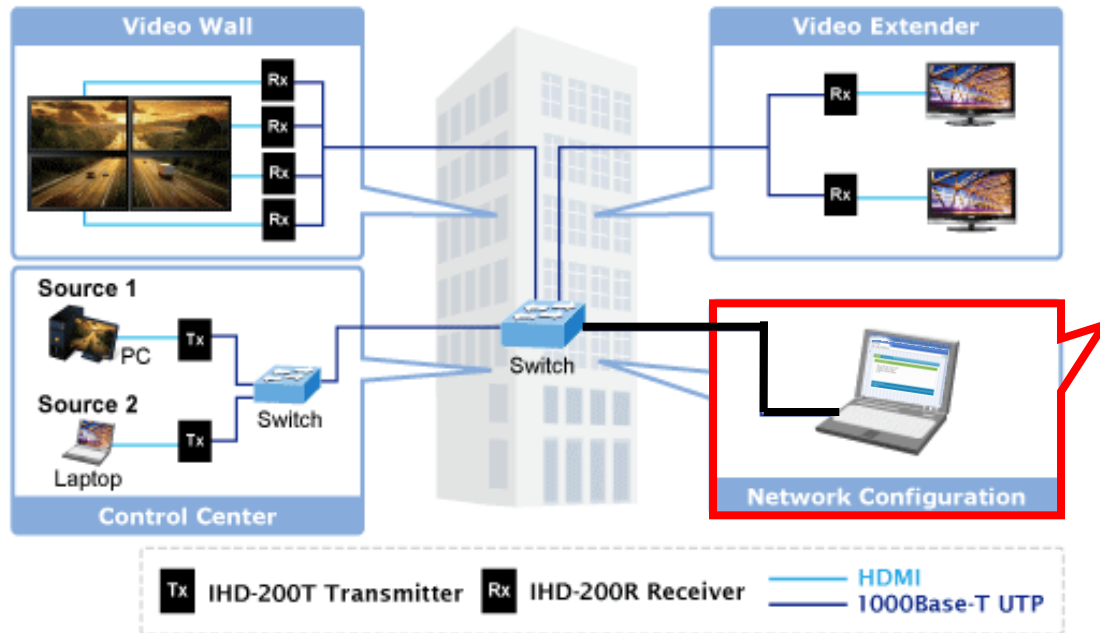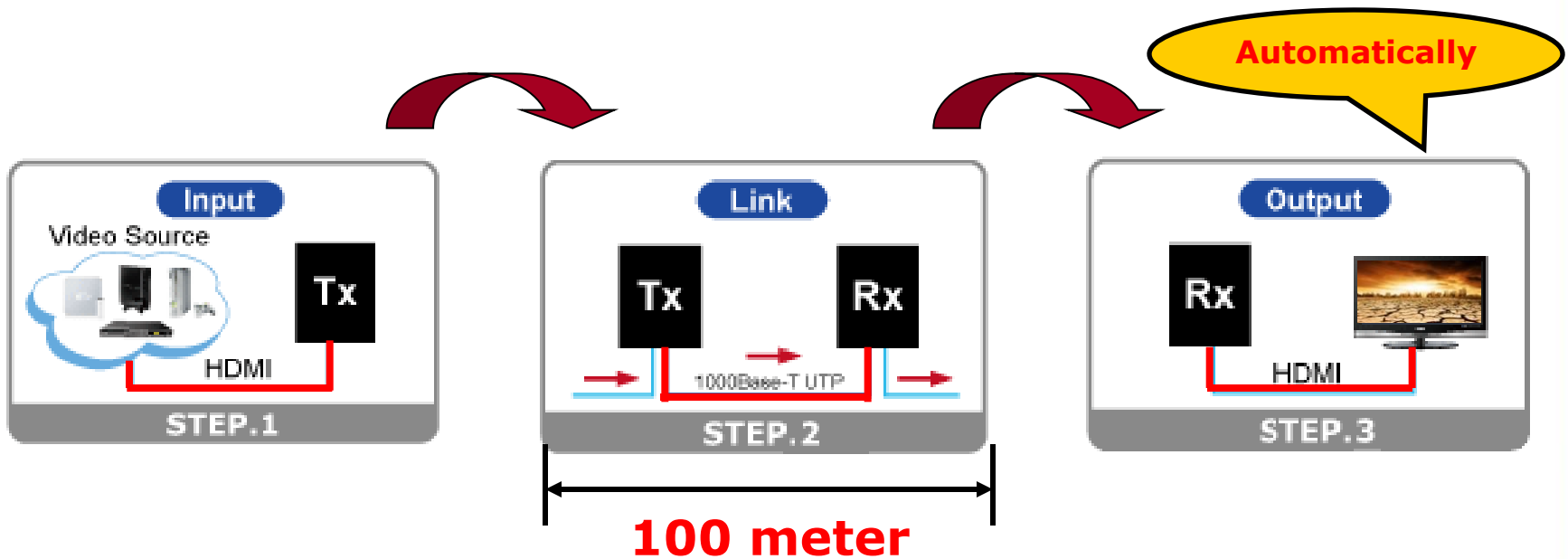

Web UI Configuration
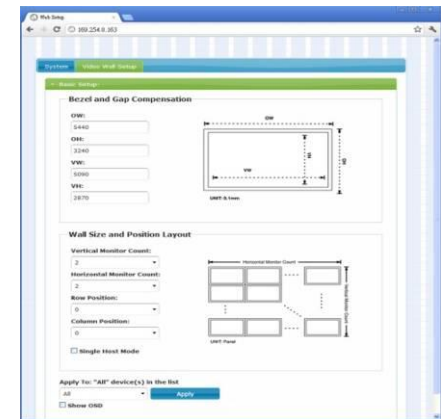
Product Features

Plug and Play

◆IHD-200 Series support PnP (Plug and Play), if the installation is correct, the device will connect other devices and search for source automatically. Unless the Tx unit or Rx unit is disconnected
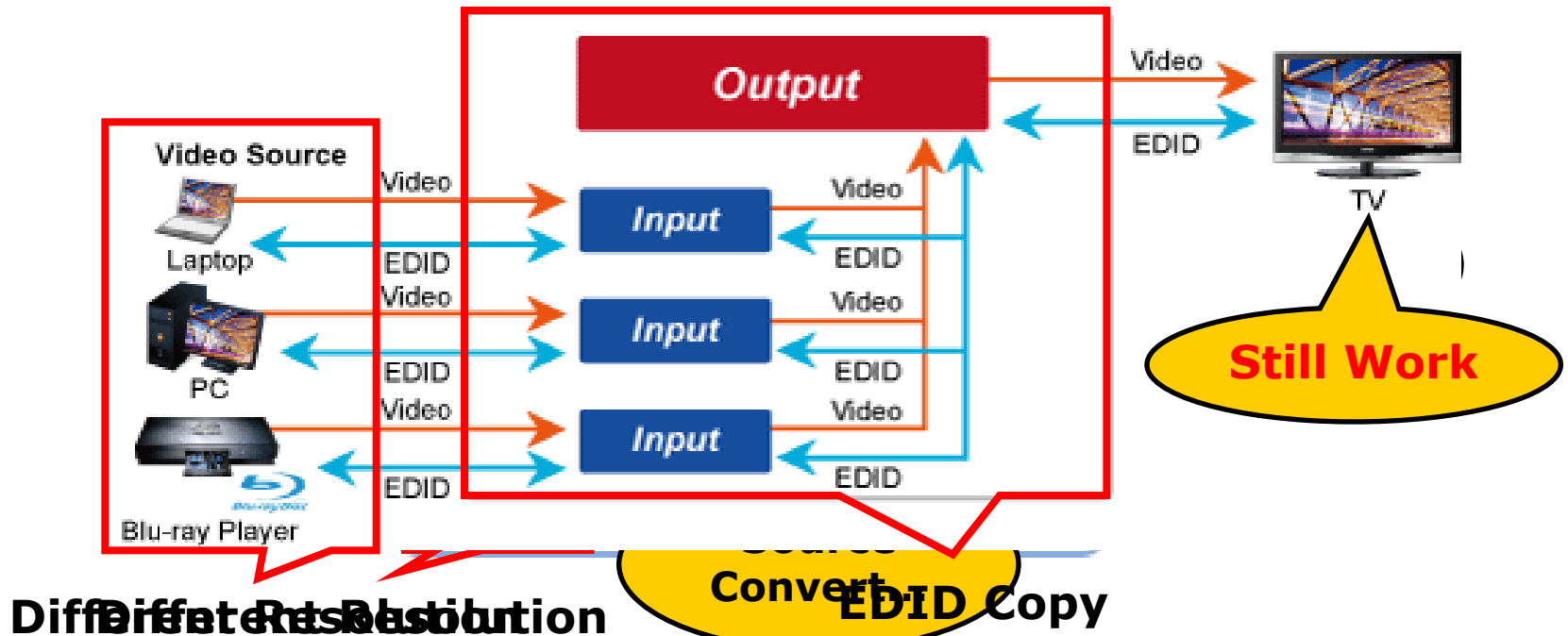
Product Features

Supports EDID (Extended Display Identification Data)

◆By adopting "EDID COPY" function, it will allow the system to copy EDID information from EDID compliant displays in order to assure accurate display performance

Supports Extended Display Identification Data

Different Resolution **Different Distribution** **Source Convert** **EDID Copy** **Still Work**

Product Features

Compatible with many screen resolution to XGA, SXGA, UXGA, WSXGA....Full HD system
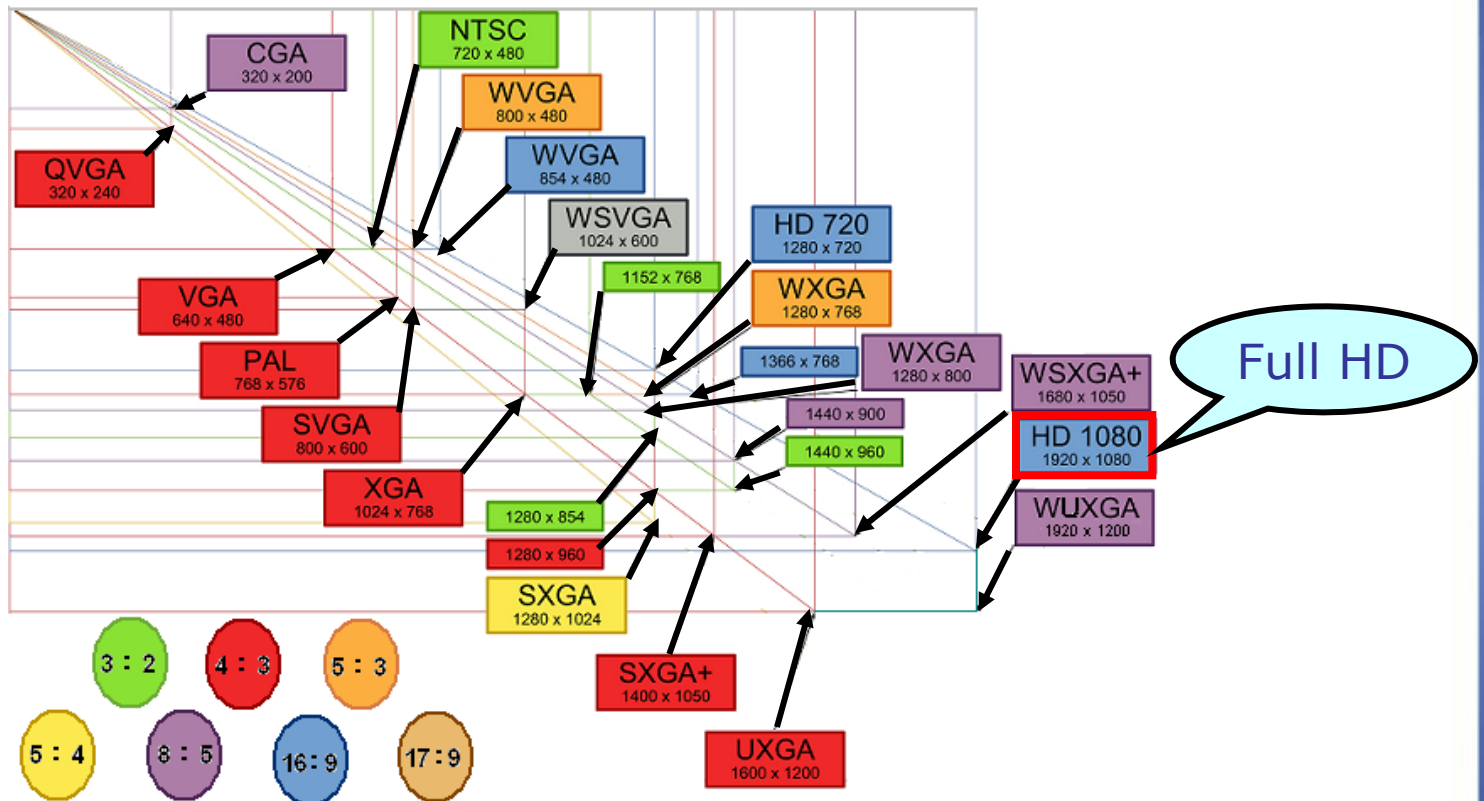
Product Features

High Quality Output and Performance

◆ Stunning Ultra High Quality 1080P HDMI Video broadcast over IP network, and CD quality level audio (2ch. Audio dts.). Moreover, HDCP (High-Bandwidth Digital Contents Protection) and Blu-ray compliant. The high speed transmission, real-time high video resolution, security, and noise immunity must give the viewer the maximum visual presenting impact and easy clear reading

Product Features

Tearing Delay Improve

◆ Setting up Tearing Delay value via GUI control.

Applications

Anti–Dither

◆It's probably cause "Motion Blur" or "Broken Map" when user play the high quality video, but after "Anti–Dither" adjustment can be improved.

There are three levels: off>1>2

**Anti-Dither 2
(Not enough)**

Product Features

Anti-Dither 1 (Better)

Anti-Dither off (Best)

Product Features

Graphic Mode & Video Mode

◆Graphic Mode：It's usually for the static state video, pictures are the main display contents, and the pixel update processing is not so fast. The CPU consumption is lower than video mode.

◆Video Mode：It's usually for the dynamic state video, video are the main display contents, and the pixel update processing is fast. The CPU consumption is higher than graphic mode.

After change modes and Anti-Dither adjustment, we can improve the display quality.
Here is the performance from the worst to the best.

| Graphic Mode	Graphic Mode	Graphic Mode	Video Mode	Video Mode	Video Mode
Anti-Dither 2	Anti-Dither 1	Anti-Dither off	Anti-Dither 2	Anti-Dither 1	Anti-Dither off
WORST					BEST

Applications

Video Extender

◆ According to the topology to duplicating the same source to multi-monitors as following picture. Witch can be used in expo, food court, boardrooms, and any public area. (The maximum of Rx can up to 1000 via one Tx.)
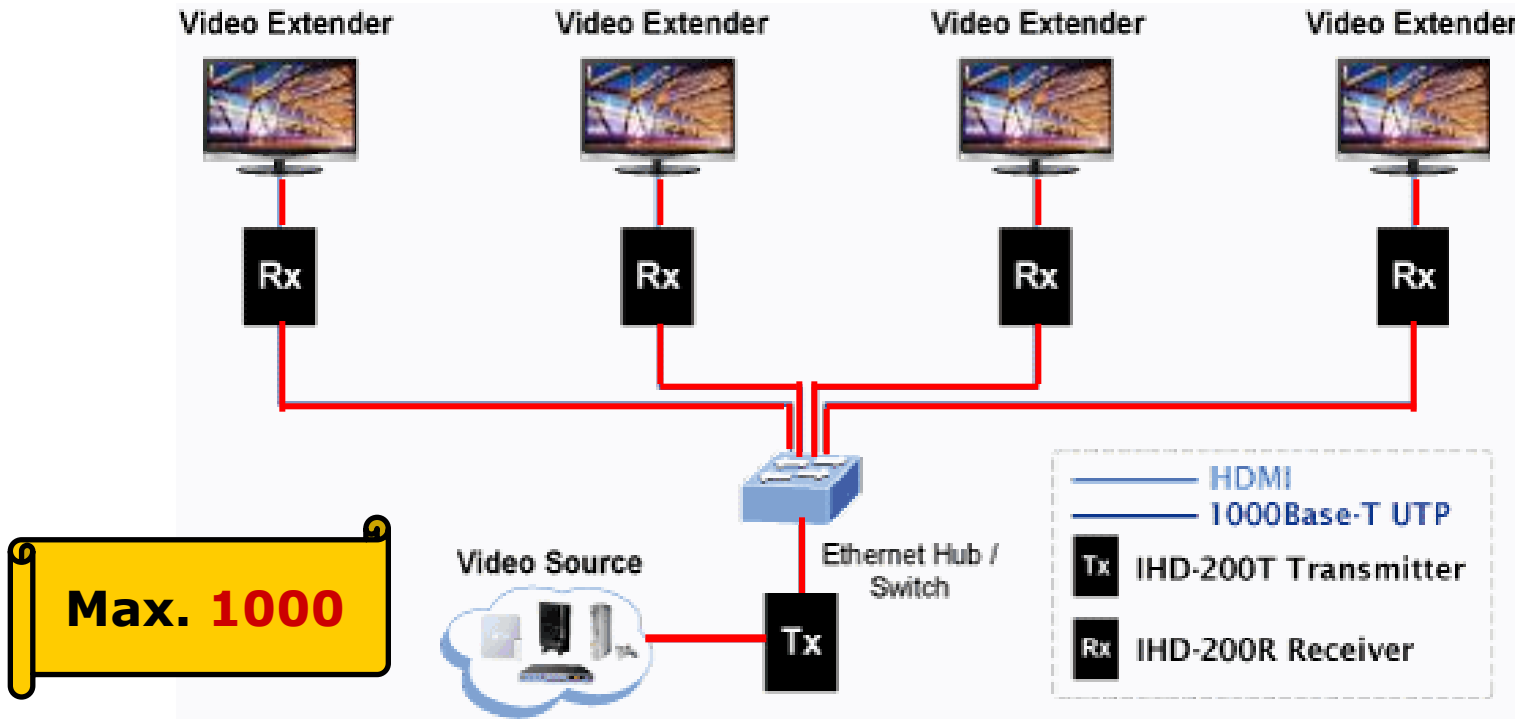
Applications

Video Wall

◆ According to the topology to splitting one screen to do the video wall as following picture. Witch can be used in department store, movie theater, etc. (The maximum of Rx can up to 8x8 via one Tx.)
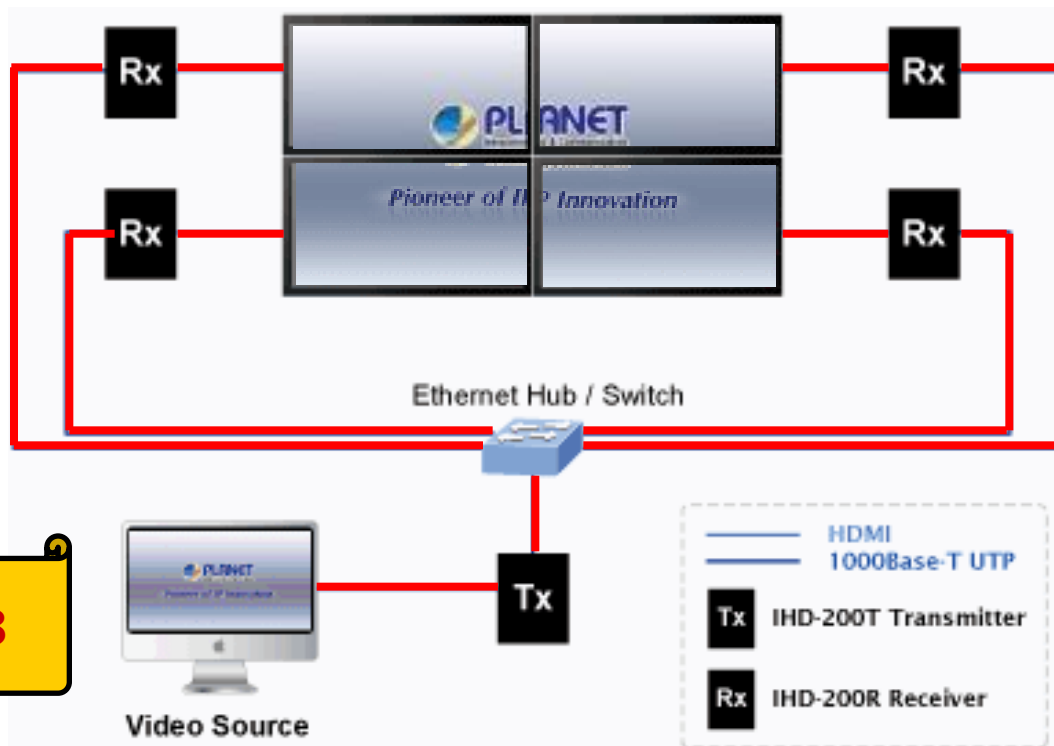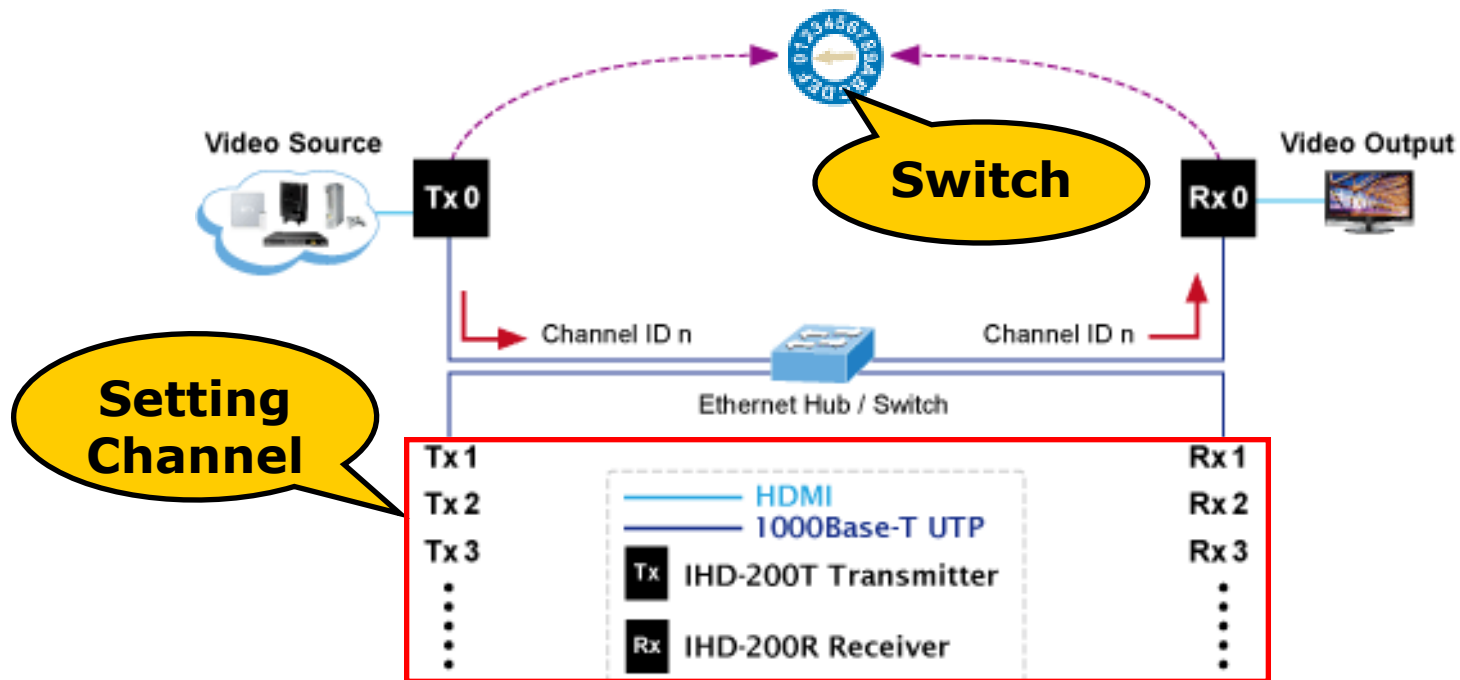

Max. 8x8

Applications
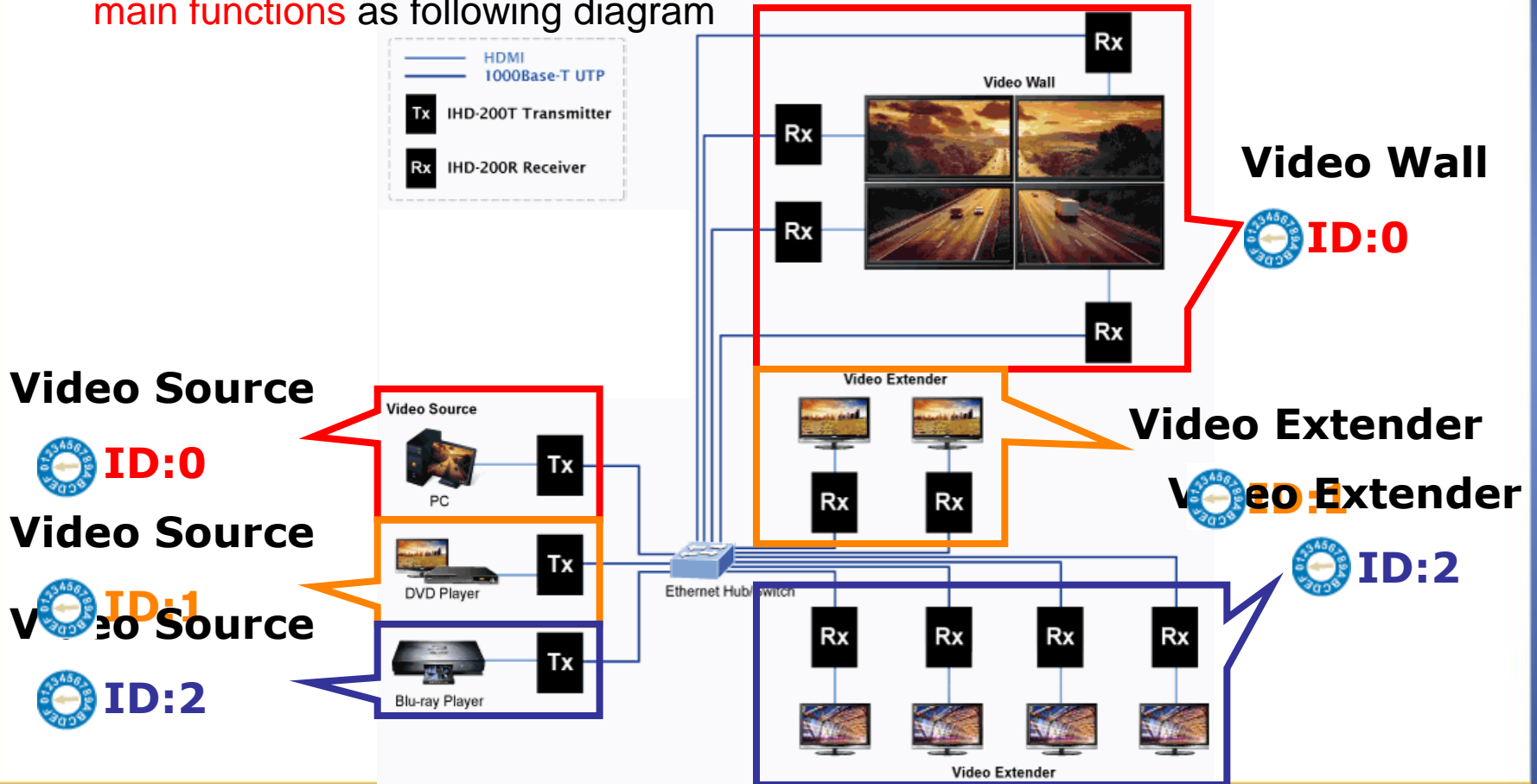
Provide 16 Channels Selectable (DIP)

◆ By sliding the Rotary DIP Switch to the correct number, you can distinguish the transmitter and receiver units into the same group of pairs in the same channel, when there is more than one transmitter

Applications

Combine the Two Functions

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

Video Source
ID:0
Video Source
ID:1
Video Source
ID:2

Video Wall
ID:0

Video Extender
Video Extender
ID:2
ID:2

Appendix - Sales Target

Hospital / Bank
Deliver medical / commercial information to patients and visitors

Public Transportation / Escalator
Display arrival/departure info and provide advertising

Appendix - Sales Target

Restaurant / Book store
Digital menu board and advertise

Retail store
Highlight discount and promotional items

Appendix

◆ **Ordering Information**

Model Name	Description
IHD-200T	HDMI/VIDEO Wall over IP Transmitter
IHD-200R	HDMI/VIDEO Wall over IP Receiver

Activating IP Power