

PANIO HD1000

Taiwan-Made HDMI Extender & Cascading AV Distributor

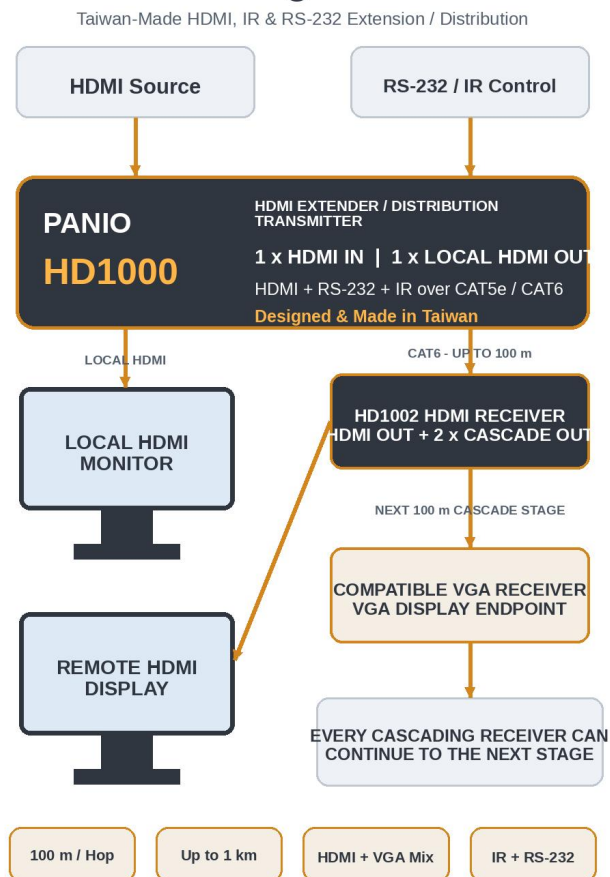
1080P60, HDMI + RS-232 + IR, 100 m per Hop, Up to 1 km Cascade, Mixed HDMI / VGA Receiver Support

Product Overview

PANIO HD1000 is a professional Taiwan-made HDMI extension and distribution transmitter for transporting 1080P60 HDMI video, RS-232, and IR over Cat5e or Cat6 cabling. A single link reaches up to 100 meters and can be expanded with compatible receivers for multi-display AV projects.

Designed and manufactured in Taiwan, the system supports receiver-to-receiver cascading up to 1,000 meters, one-to-many distribution through a Gigabit switch, and mixed HDMI or VGA receiver endpoints. Its dedicated hardware architecture provides reliable plug-and-play operation for control rooms, education, factories, exhibitions, and commercial signage.

Diagram



Product Features

- **Taiwan-Designed & Taiwan-Made:** Professional AV hardware engineered for stable long-term commercial deployment.
- **100 m HDMI Extension:** Carries 1080P60 HDMI video, IR, and RS-232 over Cat5e / Cat6 per hop.
- **Receiver-to-Receiver Cascading:** Every compatible receiver can continue the link to the next 100 m stage.
- **Up to 1 km Total Reach:** Multi-stage cascading supports large venues, campuses, and industrial routes.
- **Mixed HDMI / VGA Receivers:** Combine modern HDMI and legacy VGA display endpoints in one system.
- **One-to-Many Distribution:** Add a Gigabit switch and receivers for scalable synchronized display distribution.
- **Local HDMI Monitoring:** The transmitter provides a local HDMI output for near-end display confirmation.
- **Automatic EDID Management:** Reads display information to improve compatibility and stable handshaking.
- **Fiber Link Expansion:** Compatible media converters extend the network path over multi-kilometer fiber.
- **Pure Hardware Operation:** Plug-and-play architecture requires no driver or control software.
- **Professional Integration:** Rack deployment supports education, control rooms, signage, and factories.

Application Concept

HD1000 distributes one HDMI source across Cat5e / Cat6 infrastructure. Compatible HDMI and VGA receivers may be mixed in the same system, and every cascading receiver can pass the signal to additional 100 m stages. A Gigabit switch enables scalable one-to-many distribution, while direct receiver chaining extends a route up to 1,000 meters.

Specification

Parameter	Specification
Model Name	HD1000
Product Type	Taiwan-Made HDMI, RS-232 & IR Extender / Cascading Distribution Transmitter

Parameter	Specification
Design & Manufacturing	Designed and manufactured in Taiwan
Compatible Receiver	HD1002 cascading receiver; compatible HDMI / VGA receiver endpoints
Supported Resolution	Up to 1920 x 1080P @ 60Hz; 1080i is not supported
Extended Signals	HDMI video, RS-232, and IR over Cat5e / Cat6
Distance per Hop	Up to 100 m
Maximum Cascade Distance	Up to 1,000 m through multiple receiver stages
Distribution Architecture	Point-to-point, receiver cascade, or one-to-many via Gigabit switch
Mixed Receiver Support	HDMI and VGA receiver endpoints can be combined in one project
EDID Management	Automatic EDID reading and display compatibility management
Fiber Extension	Supported with compatible fiber media converters
Power Supply	DC 5V / 2A
Operation	Dedicated hardware, plug-and-play, no software required

Interface & Control

Connection Interface

Interface	Description
HDMI Input	1 x HDMI IN for source connection
Local Output	1 x HDMI OUT for near-end monitor
Control Extension	1 x IR and 1 x RS-232 interface
Network Output	1 x RJ45 signal output to receiver or Gigabit switch
Receiver Architecture	HD1002: RJ45 IN + 2 cascade OUT; HDMI / VGA receiver options

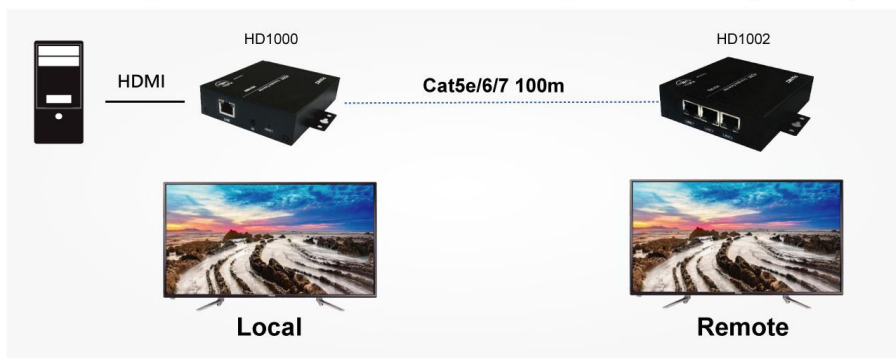
Extension & Distribution Functions

- **Receiver Cascading:** Each receiver can continue the signal chain to another 100 m stage, supporting routes up to 1 km.
- **Mixed Display Deployment:** Combine HDMI and VGA receiver endpoints within the same project.
- **Scalable System Design:** Use point-to-point links, Gigabit switch distribution, cascading, or fiber conversion.

Diagram

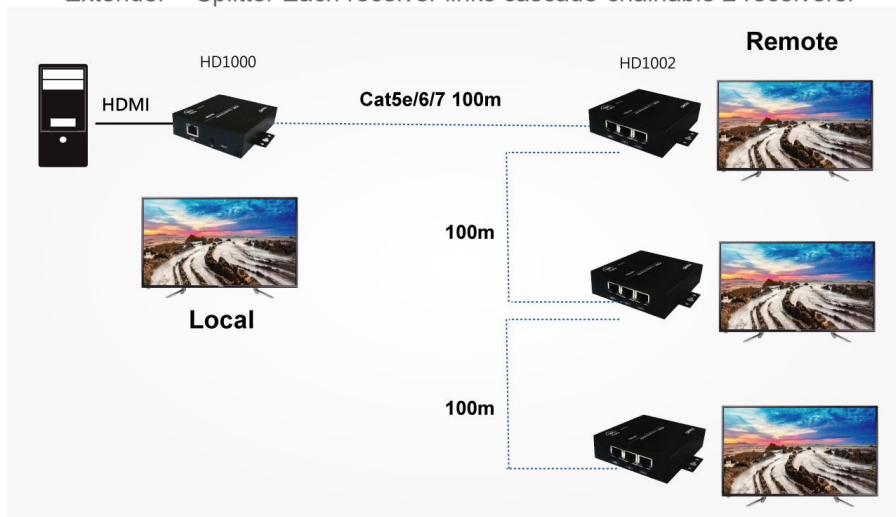
Mode1:

HDMI Digital Audio/Video extended distance up to 100 meters (330 feet)



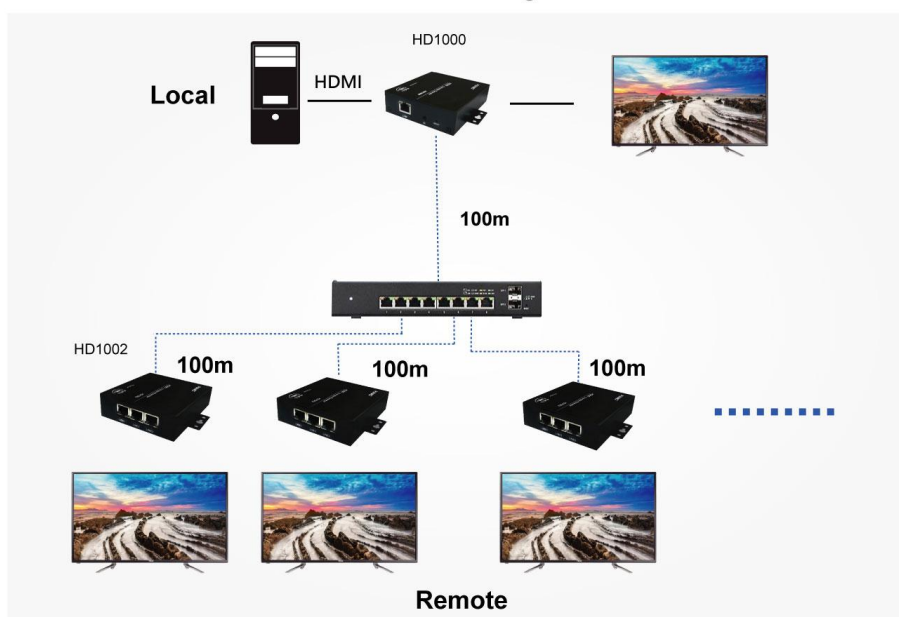
Mode2:

Extender + Splitter Each receiver links cascade-chainable 2 receivers.



Mode3:

Hub Extending



Mechanical & Environmental

Parameter	Specification
Housing	Metal enclosure, black
Dimensions	115 mm (W) x 91 mm (D) x 28 mm (H)
Net Weight	HD1000 transmitter: 340 g / HD1002 receiver: 380 g
Power Input	DC 5V / 2A
Network Cable	CAT5e / CAT6
Maximum Link	Up to 100 m per hop
Cascade Range	Up to 1,000 m total
Rack Installation	Compatible with professional 19-inch rack deployment
Operating Architecture	Dedicated hardware; no software required
Country of Origin	Designed and Made in Taiwan

Package Contents

- 1 x HD1000 HDMI Transmitter
- 1 x HD1002 Cascading HDMI Receiver
- 2 x DC 5V / 2A Power Adapters
- 1 x User Manual

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