

Infinea™ DVI — Digital Video over UTP & Fiber

Revolutionary DVI Extension

- **Unlimited distance via daisy-chaining DVI receivers**
- **Stereo audio + duplex, addressable serial over a single UTP or fiber**



Magenta Research's Infinea™ is the ultimate solution for transporting DVI (Digital Visual Interface) signals over copper and/or fiber. Infinea extends the reach of DVI sources in two different ways. First, one strand of fiber provides DVI long haul distances of 10 km (6.2 miles) or more. Second, a single Cat6 cable provides DVI transportation for short to medium distances (183 meters/600 ft.).

A revolutionary feature of Infinea is its daisy-chain capability. Receivers can be daisy chained in fiber, copper or mixed domains. This delivers nearly boundless distance and cost effective local distribution of high resolution video, audio and serial signals. Infinea receivers are perfect digital signal repeaters, adding 500 ft. of UTP extension, ten kilometers of single mode fiber extension, or 1,640 feet (500m) of multimode fiber extension with each link. As a result, there's virtually no limit to the number of daisy-chain receivers or extension distance!

Magenta's Infinea system provides picture-perfect video reproduction at all specified distances, formats and resolution levels that span all VESA standards to UXGA (1600 x 1200) @ 60Hz and all HDTV progressive formats, including 1080P (single link). Unlike other less sophisticated technologies, Infinea handles all formats automatically and is not limited to a "menu" of formats.

The -SA option adds support for stereo audio and duplex RS-232 distribution, while the -SAP option provides stereo audio and addressable full-duplex RS-232, enabling communication and control of individual displays in a daisy-chain.

Single-Link UTP Distance: 1-600 ft. using a single Cat6 UTP or STP / 1-500 ft. using Cat5e
Subsequent daisy-chain links: 1-500 ft. on Cat6/Cat5e

Single-Link Fiber Distance: 1-10,000 meters using single-mode fiber, 1-1,640 feet using multimode fiber

Video Signal Support: Any VESA or equivalent format, covering VGA through UXGA (1600 x 1200 @ 60Hz)

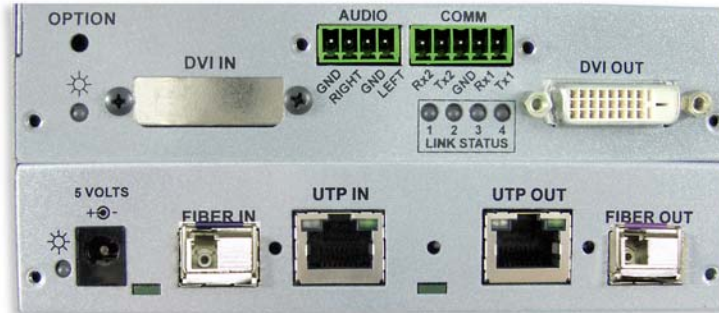
HD modes: 480p, 720p and 1080p (see specifications on back)

Optional Audio & Data Signal Support: CD quality line level (775 mV RMS) stereo
RS-232 serial data with fully addressable (pollable) destination control

Benefits of Infinea™ DVI

- Virtually unlimited extension capabilities in daisy-chain configuration
- Single fiber or UTP carries all signals
- Ideal source replication over any supported distance
- Format agile – ease of application & installation
- Use copper or fiber to suit requirements
- Flexible distribution capability – building-block approach fits any installation footprint
- Multimode fiber to 1,640 feet or single-mode fiber to 10km (greater distances obtainable, please contact Magenta)
- Local DVI output port at transmitter for monitoring and cascading
- Proprietary encoding algorithm provides high level of signal security in both copper and fiber domains
- -SA models add stereo audio and duplex EIA (RS)-232
- -SAP models add stereo audio and addressable full-duplex EIA (RS)-232
- Selectable signal algorithms (via switch) optimize DVI fidelity for various content types
- High-reliability design suitable for harsh environments
- Fiber versions include UTP functionality (not concurrently)

Infinea DVI-SA / -SAP Daisy-Chain Receiver (Fiber to Fiber) Front / Back Connectors



Infinea DVI Connector Chart:

Description		DVI	DVI	Fiber	Fiber	UTP	UTP	Audio Input	Serial Input	Audio Output	Serial Output
		Input	Output	Input	Output	Input	Output	(4 pin Phoenix)	(5 pin Phoenix)	(4 pin Phoenix)	(5 pin Phoenix)
UTP	Infinea DVI Tx UTP										
	Infinea DVI Rx UTP										
	Infinea DVI Rx Daisy-Chain, UTP to UTP										
	Infinea DVI-SA/-SAP Tx UTP										
	Infinea DVI-SA/-SAP Rx UTP										
	Infinea DVI-SA/-SAP Rx Daisy-Chain, UTP to UTP										
	Infinea DVI Rx Daisy-Chain, UTP to Fiber										
Fiber	Infinea DVI-SA/SAP Rx Daisy-Chain, UTP to Fiber										
	Infinea DVI Tx Fiber										
	Infinea DVI Rx Fiber										
	Infinea DVI Rx Daisy-Chain, Fiber to UTP										
	Infinea DVI Rx Daisy-Chain, Fiber to Fiber										
	Infinea DVI-SA/SAP Tx Fiber										
	Infinea DVI-SA/SAP Rx Fiber										
	Infinea DVI-SA/SAP Rx Daisy-Chain, Fiber to UTP										
Infinea DVI-SA/SAP Rx Daisy-Chain, Fiber to Fiber											

Specifications (subject to change without notice):

Video transport: DVI, single link (DVI-D)

Audio transport: Optional line-level CD quality via Phoenix connector

Serial data transport: Optional duplex EIA (RS)-232 via Phoenix connector

Data rate: 1.2k to 115.2k

Dimensions: 4.1" W x 1.2" H x 5.5" L (10.4 cm x 3.05 cm x 14.0 cm)

Weight: 1.0 lb (0.45 kg)

Fiber connector: LC

UTP connector: RJ45

DDC: Mock mode for standard formats. Non-standard format/display DDC info can be taken from display & stored by Infinea DVI Tx

Power consumption: 5VDC @ 1A max;

External power supplies sold separately (U.S., International or rack-mount)

Operating Temperature: 0 to 40° C

Humidity: 80% non-condensing

Storage Temperature: -20 to 60° C

MTBF: 100,000 hrs

Resolutions supported:

Virtually all formats supported; graphics card dependent

Standard formats @ 60Hz: 640x480, 800x600, 1024x768, 1152x864, 1280x768, 1280x960, 1280x1024, 1360x760, 1366x768, 1600x1200, 1680x1050

HD: 480p, 720p and 1080p [graphic card must support reduced clock rate for LCD panel (5% blank) for 1080p]

Rack Mounts: 3 units in 1U (#8310203); 6 units in 2U (#8310204)

Magenta Research is the industry-recognized leader in the adaptive distribution and switching of video/audio/serial signals over Cat5 cable, and more recently, DVI over fiber and/or Cat6. Over nine years, Magenta has developed the highest-performance, most flexible video-over-Cat5 product line, the MultiView Series. The company utilizes patent-pending RepliSync™ and complex, state-variable signal EQ technologies to enable UXGA video distribution at 1,500 feet (457m) and QXGA video at 1,000 ft. (305m). MultiView Series transmitters, receivers, switchers and distributive systems have been installed in a large variety of A/V applications, especially dynamic signage for airport, retail, fast food, museum, casino, theatre, courtroom and corporate applications. Based in New Milford, CT, Magenta utilizes a network of international distributors, manufacturers representatives and resellers to market its enabling technology worldwide.

