

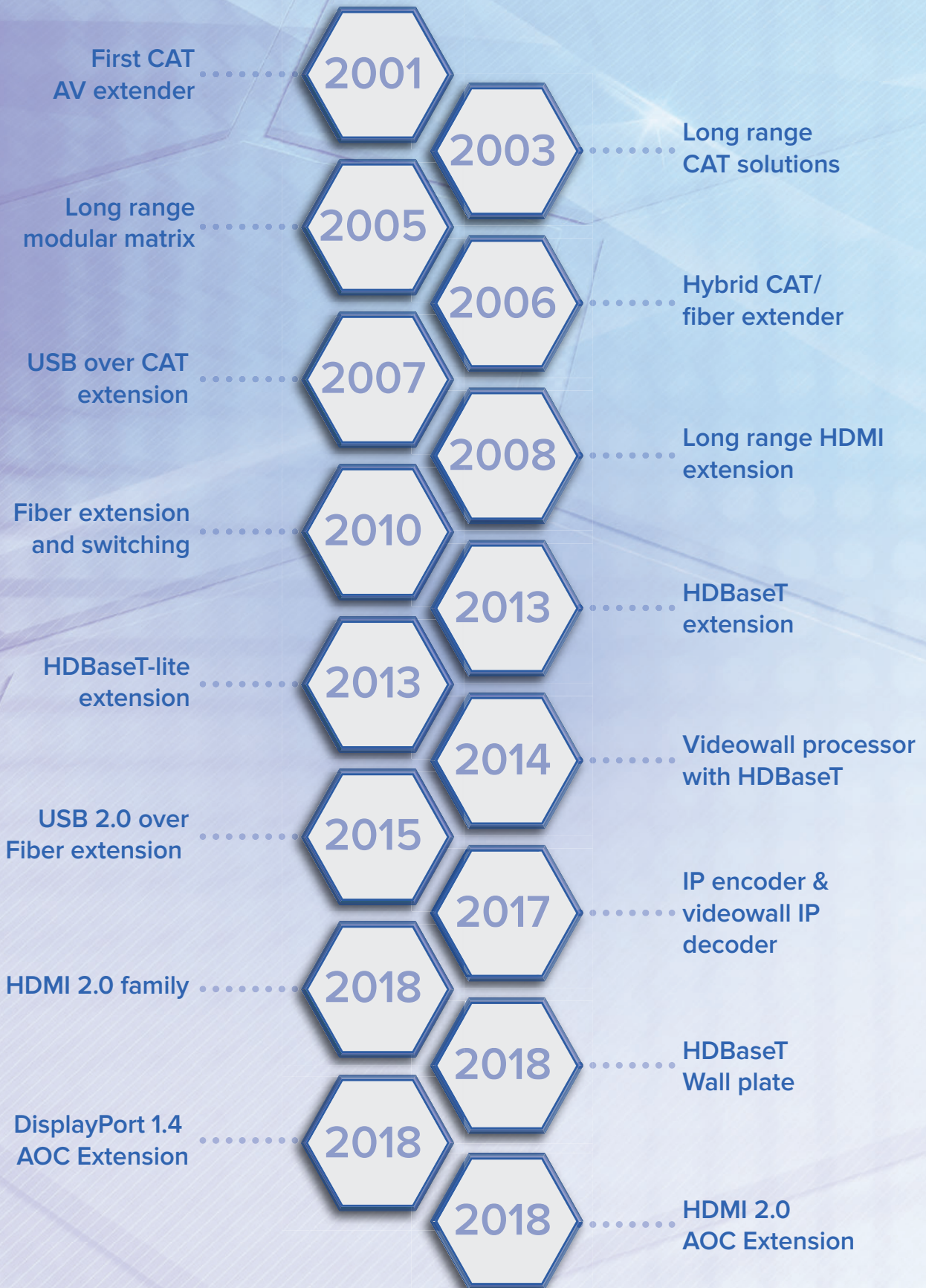
# EXTEND

Extension solutions for all AV signals

Supporting mission-critical AV installations world-wide.  
We Engineer Confidence.



## tvONE extender product development timeline



## The tvONE difference:

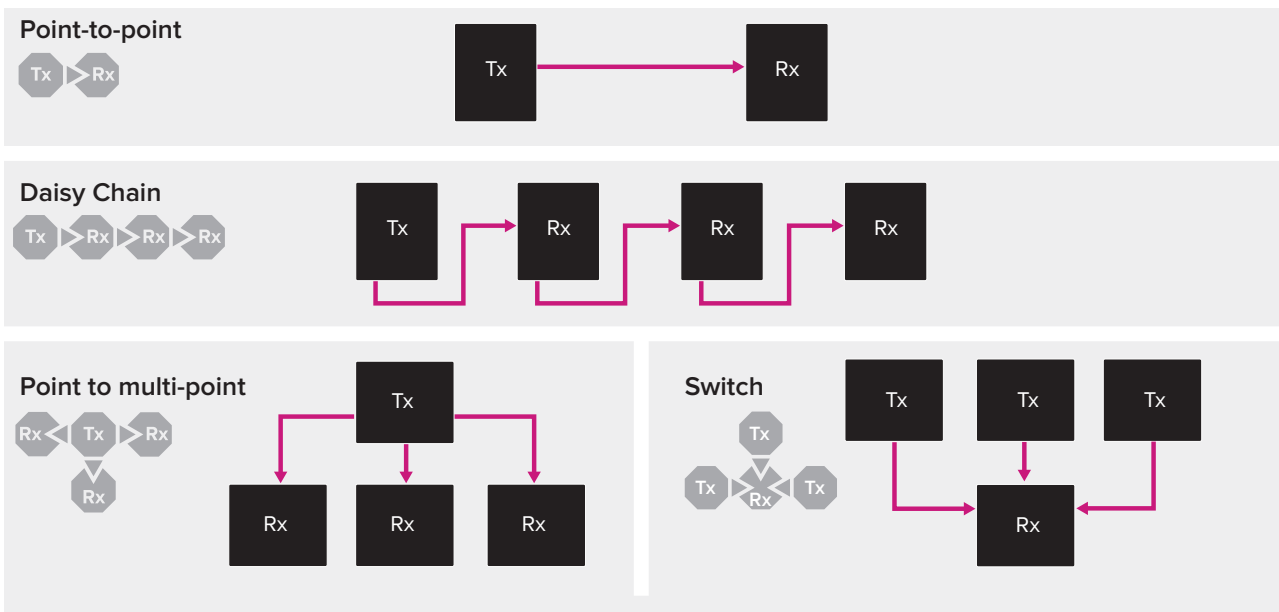
Suffering from degraded video? Step up to tvONE's leading range of reliable and robust video extension solutions. Choose from our range of cost effective, ultra-high performance and flexible extenders; 4K, HDMI, VGA, RGB, CV, Copper and Fiber - we have the perfect solution for you!

### Extender selection guide:

**Distance** – Determining the distance is a key factor when choosing the right solution. tvONE offers the widest reach, from 197 feet (60 meters) to over 18 miles (30 Kilometers). All solutions are fully tested in real-world environments, guaranteeing system performance no matter the emissions and interference from other video signals, power or air conditioning. This means there are no “up to’s” with tvONE, just a guarantee we go the full distance!

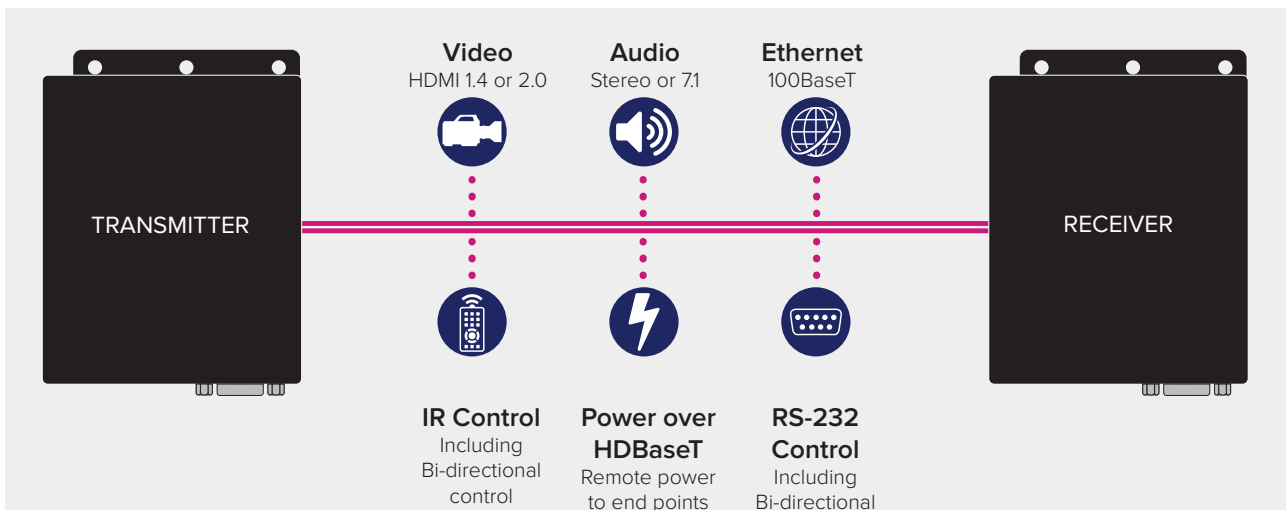
**Cable** – When it comes to extending video you can choose from UTP cable (Cat 5e or Cat 6) or Fiber. UTP is the perfect solution for most applications, but for a longer reach or power isolation (i.e. Medical operating rooms) choose Fiber.

**Topologies** – Select the best design solution for the ultimate workflow. Options include:



Other options include distribution, auto-switch and matrix switching.

**Function** – Choose from a wide range of functionality to meet your specific requirements.



Topologies:



Distance: Up to 500' (150m)



## Short to medium range point-to-point extension

Magenta provides simple yet powerful solutions for extending high resolution video up to 300m with no compression.

### DisplayPort 1.4 Extension



8K60, 4:4:4 from 32 up to 328 feet (10 - 100 meters)

The MG-AOC-88x DisplayPort 1.4 plug and play cable series supports up to 8K60 4:4:4 with no compression or latency up to 328ft (100m) and is available in UL rated Plenum (CMP) or non-Plenum versions, providing the ultimate flexibility.

### HDMI 2.0 Extension



4K60, 4:4:4 from 32 up to 328 feet (10 - 100 meters)

The MG-AOC-66x HDMI 2.0 plug and play cables series supports up to 4K60 4:4:4 with no compression or latency up to 328ft (100m) and is available in UL rated Plenum (CMP) or non-Plenum versions, providing the ultimate flexibility.



4K60, 4:4:4 up to 984 feet (300 meters)

The MG-FB-61x fiber optic transmitter and receiver kit is a powerful solution for extending uncompressed 4Kx2k 60Hz HDMI 2.0 signals over very long distances using multimode or singlemode LC fiber.

### Compatible tvONE products



CORIOmaster



1T-SX-654

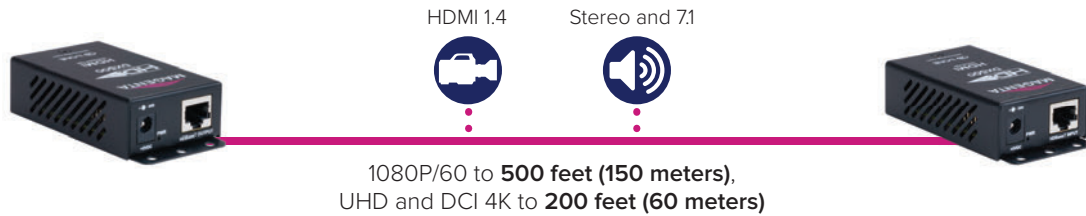


1T-MX-6588

## Superior point-to-point extension

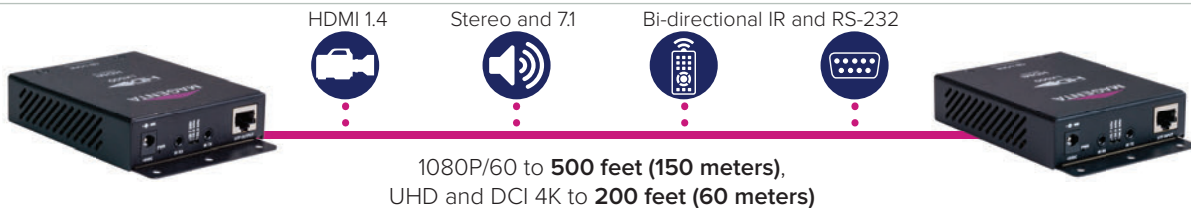
HD-One extension delivers ultra-reliable HDMI extension with real performance and distances up to 500 feet (150 meters) using Cat 5e, Cat 6 and Cat 7 cables, together with class leading performance in environments with emissions and interference.

### HDBaseT Extension



The HD-One DX series is available in HDBaseT and extended range variants in a compact form factor for the transmission of HDMI 1.4 signals including 1080p, 3D, UHD/4K and 4K DCI. Together, the HD-One DX series has full audio support including LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS-HD.

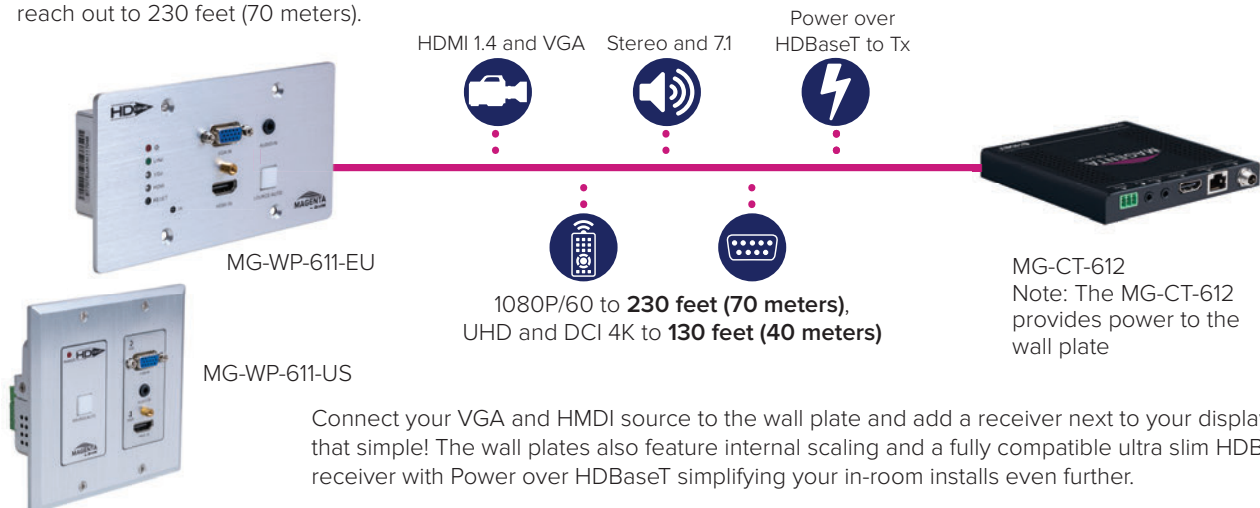
### HDBaseT Extension with control



The HD-One LX series offers the same superior performance of the DX Series with additional support for bi-directional RS-232 and two-way, triple band Infrared signals.

### Wall plate Transmitters

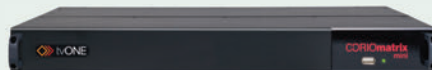
The proven reliability of the HD-One series also comes in a high quality anodized wall plate version that is available in both US and EU form factors. The MG-WP-611-US and MG-WP-611-EU are perfect for corporate and meeting room installs with proven reach out to 230 feet (70 meters).



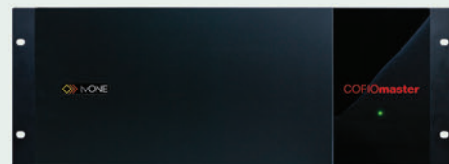
### Compatible tvONE products



CORIOview: 4K multi-window viewer

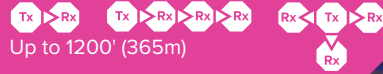


C3-310: CORIOmatrix mini  
4K universal scaling matrix router



C3-540: CORIOmaster  
4K video processor

Topologies:



© Antoine Javreau

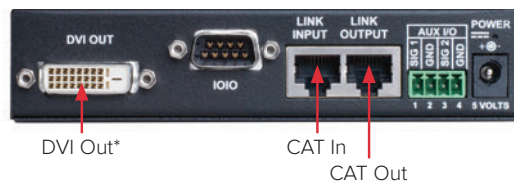
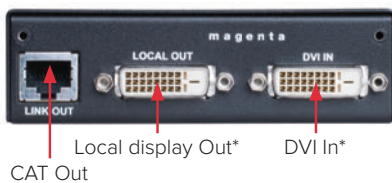
## Long range copper extension (MultiView Series)

Multiview guarantees uncompressed performance with distances to 1000ft (303m) for HDMI and 1200ft (365m) for analog signals, using Cat5e/6 cable, together with industry leading performance in environments with emissions and interference. Auxiliary data options include serial control and audio as well as screen cascading and local monitor outputs.



Easily adapt to any application footprint. Transmitters can be cascaded and receivers can be daisy chained to deliver video, audio and control signals from a single source to hundreds of displays.

DVI Transmitter



DVI Receiver

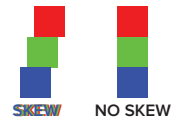
CAT Out Local display Out\* DVI In\*

DVI Out\* CAT In CAT Out

\*HDMI & HDCP compatible

### Combating the Skew Factor

Variance in twist rates of standard CAT cable results in a color shift on the RGB channels. This "skew" can become noticeable at higher resolutions and longer distances. To combat skew, utilize approved skew-free cables or choose the AkuComp II option with Magenta receivers. Skew compensation is automatic with all MVII DVI Receivers.



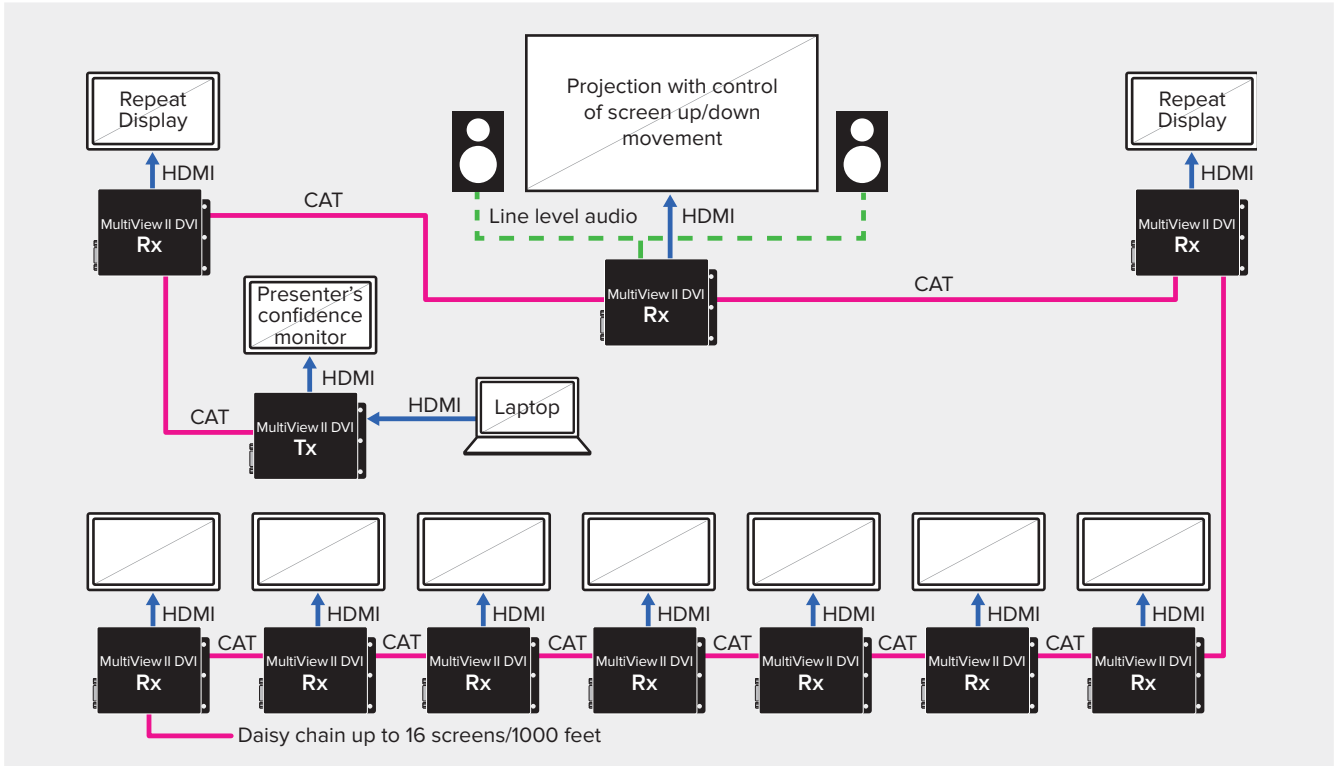
## MultiView family products



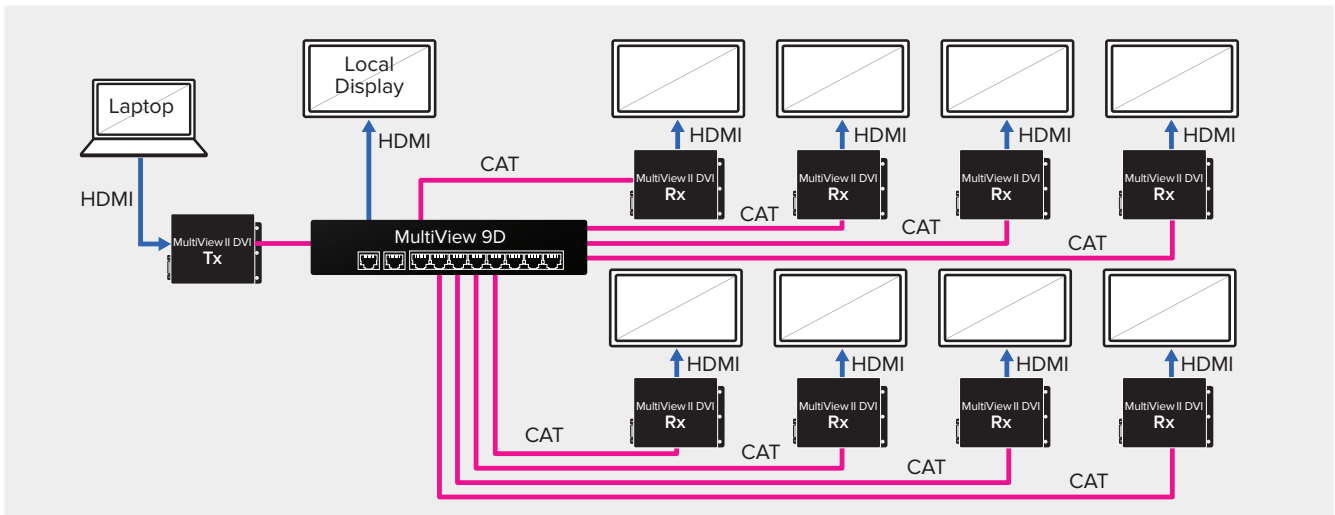
1. Standard Analog Tx
2. Analog Extended Range Tx
3. Analog Four port Tx
4. Eight port Analog Tx
5. DVI Tx
6. 600ft Analog Rx
7. 1200ft Analog Rx
8. 1000ft DVI Rx

# Installation examples

## Daisy Chain with audio and bi-directional control

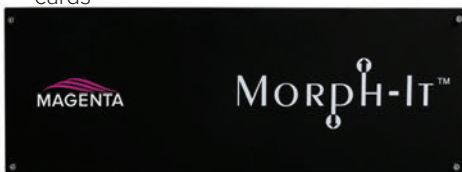


## Point to multi-point configuration

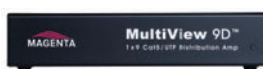


## MultiView family products

Morph-it:  
Powered chassis for high density Tx cards



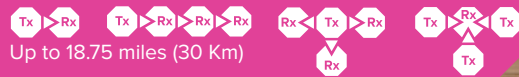
9D: nine port CAT DA



Mondo: expandable matrix up to 256 x 512



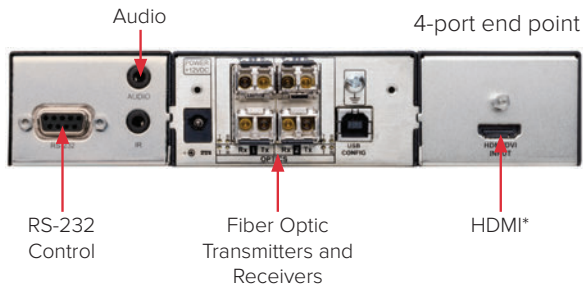
Topologies:



New York Stock Exchange (NYSE)

## Long range Fiber extension (Voyager Series)

Voyager guarantees high performance on both short and long hauls of uncompressed 1080p/60 video. Options include single-mode (up to 18.75 miles / 30 kilometers) and multi-mode (up to 6,600 feet / 2 Kilometers) even with RS-232 control and audio. Choose between flexible 4-port or slim 2-port compact form end points, with built in duplex daisy chaining for the ultimate flexibility.



\*HDCP compatible

A Modular building block means that you can deliver hundreds of different system configurations, all over fiber. Options include single mode and multi-mode mixing, four-port switchable endpoints and slim two-port compact endpoints, as well as analog to digital conversion, and a powered chassis for card based Tx's and Rx's. Oh and it can all be attached to a massive 1000+ port matrix.

## Voyager family products

VG-48x: 48 port modular matrix



Voyager CF-18 Rackmount system



USB 2.0 end points

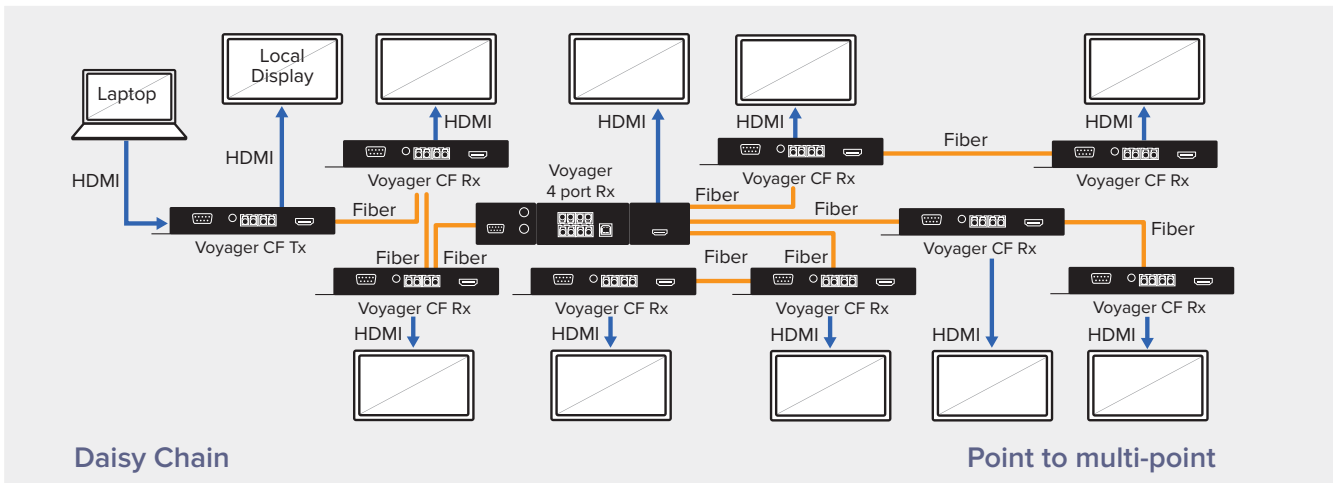
VG-160x: 160 port modular matrix with optional touch panel control



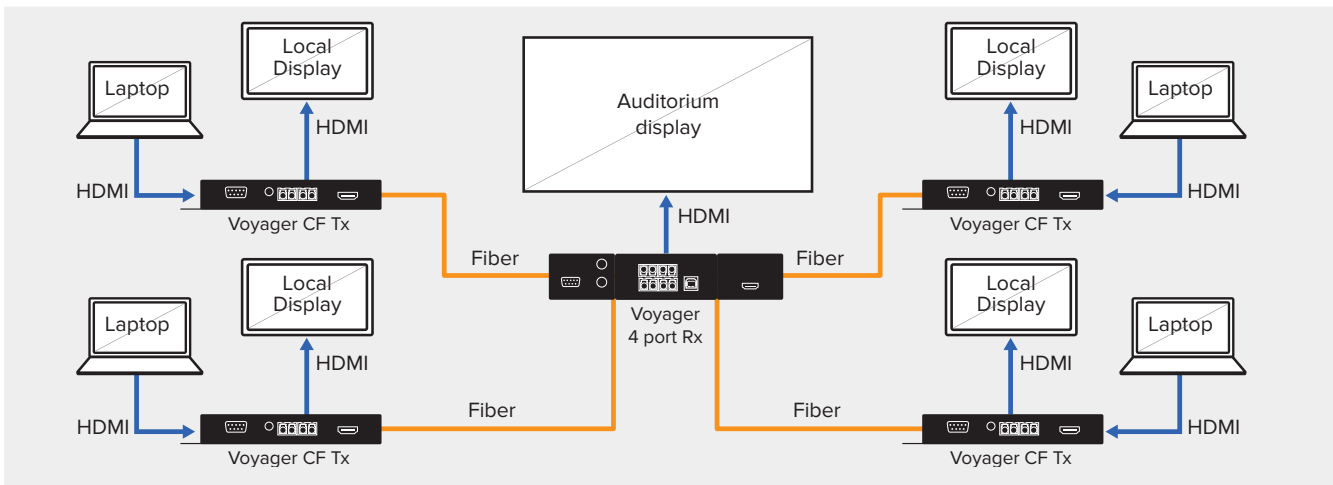


# Installation examples

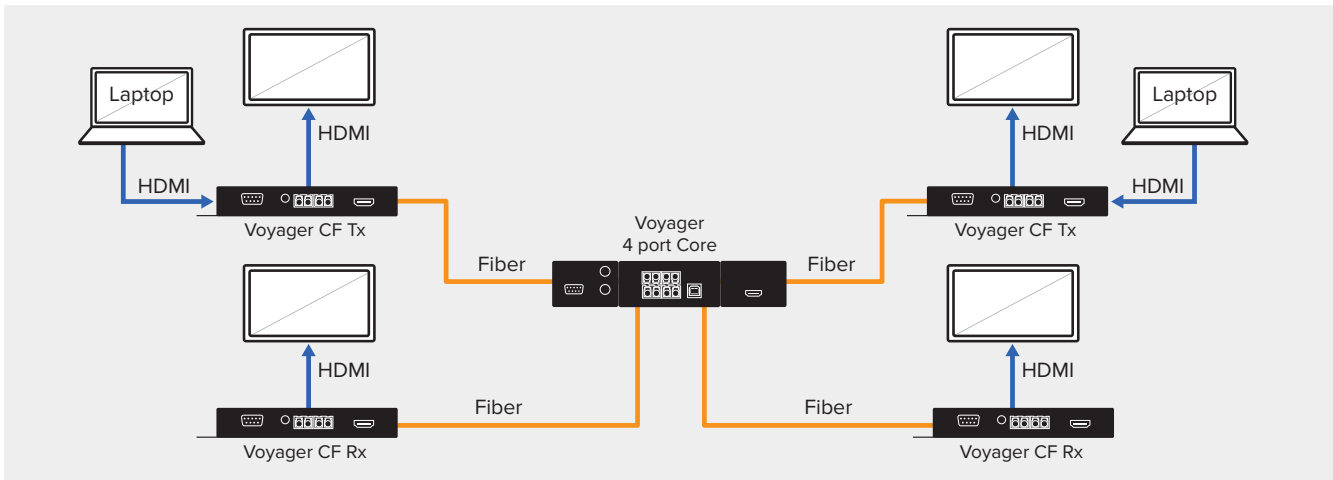
## Daisy Chain and point to multi-point



## Small switch



## Auto switch (listening ring)



## Feature comparison

	Signal			Control					Resolution			Distance						Cable								
	DisplayPort	HDMI	DVI	Analog	Infrared	RS-232	Ethernet	USB	POE	1080p	4k	8k	197 feet	230 feet	325 feet	500 feet	1000 feet	1200 feet	18 miles	CAT 5e	CAT 6	CAT 7	MM Fiber	SM Fiber	Armored	Plenum (CMP)
1T-CT-641/2		◆			◆					◆	◆		◆								◆					
1T-CT-647		◆			◆					◆	◆		◆								◆					
1T-CT-653/654A		◆			◆	◆	◆		◆	◆	◆				◆						◆					
MG-WP-611 HD-One Wallplate		◆		◆	◆				◆	◆	◆		◆								◆					
MG-CT-612		◆		◆	◆	◆			◆	◆	◆		◆								◆					
HD-One DX		◆								◆	◆				◆					◆	◆	◆				
HD-One DX500		◆								◆						◆				◆	◆	◆				
HD-One LX		◆			◆	◆				◆	◆				◆					◆	◆	◆				
HD-One LX500		◆			◆	◆				◆						◆				◆	◆	◆				
MultiView-II series		◆	◆	◆	◆					◆								◆		◆	◆					
Voyager series		◆		◆	◆		◆			◆													◆	◆		
MG-AOC-661-xxx		◆								◆	◆				◆								◆		◆*	
MG-AOC-662-xxx		◆								◆	◆				◆								◆			◆
MG-AOC-881-xxx	◆									◆	◆	◆			◆								◆		◆*	
MG-AOC-882-xxx	◆									◆	◆	◆			◆								◆			◆
Encoder-100		◆								◆					*IP					◆	◆					
MG-FB-61x		◆			◆	◆				◆	◆					◆							◆	◆		
CORIO HDBT input module		◆		◆			◆			◆	◆				◆					◆	◆					
CORIO HDBT output module		◆					◆			◆					◆					◆	◆					

\*Armored version available

## Product compatibility

### Medium range HDBaseT extenders

	1T-CT-642 ONeTask Rx	1T-CT-654A ONeTask 5-PLAY Rx	2211094-02 HD-One DX Rx	221122-01 HD-One DX500 Rx	2211096-02 HD-One LX Rx	221124-01 HD-One LX500 Rx	MG-CT-612 HD-One PoH Rx	CM-HDBT-2IN- 1ETH CORIO HDBaseT input module (Rx)
1T-CT-641 ONeTask Tx	◆							◆
1T-CT-647 ONeTask 7 Port Tx	◆							◆
1T-CT-653 ONeTask 5-PLAY Tx		◆						◆
2211093-02 HD-One DX Tx			◆				◆	◆
221121-01 HD-One DX500 Tx				◆				◆
2211095-02 HD-One LX Tx					◆		◆	◆
221123-01 HD-One LX500 Tx						◆		◆
MG-WP-611 HD-One Wall Plate	◆	◆	◆	◆	◆	◆	◆	◆
CM-HDBT-SC-2OUT-1ETH CORIO HDBaseT output module Tx	◆	◆	◆	◆	◆	◆	◆	

Note: Where HDBaseT and HDBaseT Lite are used together, range will be the distance for the lesser extension.

### MultiView II long range copper extenders

	2620006-03 600ft Analog Rx	2620009-03 1200ft Analog Rx	MVII-DVI-RX-1K-S/A 1000ft DVI Rx
2620001-02 Standard analog Tx	◆		
2620002-03 Analog extended range Tx	◆	◆	
2620003-02 Analog 4 port Tx	◆	◆	
2620050-02 Analog 8 port Tx	◆	◆	
2620063-02 DVI Tx	◆	◆	◆

MultiView is available in several variants which add other options:

- A: Summed Audio & configurable to the -S version
- S: Simplex RS-232 (transmit only) & configurable to the -A version
- SAP: Stereo Audio, Duplex RS-232 with addressable receivers

### Voyager long range fiber extenders

	221110-01 Compact Rx	2320008-01 HDMI 2 port Rx with scaling	2320017-01 HDMI 4 port Rx	2320018-01 HDMI 4 port Rx with scaling	2350201-MM USB 2.0 Rx
2211108-01 Compact Tx	◆	◆	◆	◆	
2310008-01 Analog 2 port Tx	◆	◆	◆	◆	
2310018-01 Analog 4 port Tx	◆	◆	◆	◆	
2310016-01 HDMI 4 port Tx	◆	◆	◆	◆	
2350500-MM USB 2.0 Tx					◆

Voyager can be ordered with several options:

- Voyager can use Single or Multi Mode technology
- Compact Tx and Rx can also be ordered as cards for an 18 slot powered chassis


# EXTEND

# SWITCH

# DISTRIBUTE


**DisplayPort 1.4 extension**

Active Optical Cable  
32- 328ft  
MG-AOC-88x  
ARMORED MG-AOC-88A-xxx




**HDMI 2.0 extension**

MG-FB-61x Series  
Active Optical Cable  
32- 328ft  
984ft  
MG-AOC-66x  
ARMORED MG-AOC-66A-xxx




**Point-to-point HDBaseT extension up to 500ft**

LX500 → 500ft  
DX500  
DX → 328ft




**HDBaseT wallplate and compact receiver**

MG-WP-61t: HDBaseT wallplate with HDMI, VGA and audio inputs  
MG-CT-612: Compact form HDBaseT Receiver




**HDMI 2.0 Matrix Switchers**

MX-6588 4K60 8x8 HDMI 2.0 Matrix  
MX-6544 4K60 4x4 HDMI 2.0 Matrix  
**Ultra-compact HDMI 2.0 Switcher**  
1T-SX-654 4K60 4x1 HDMI 2.0 Switcher



**4K Universal Scaling Matrix Router**

CORIOmatrix C3-340



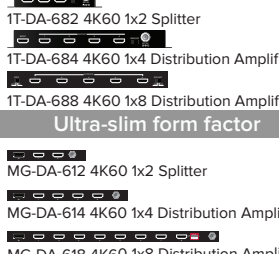
**4K Universal Scaling Matrix Router**

CORIOmatrix mini C3-310



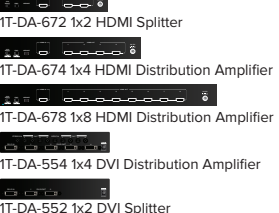
**HDMI 2.0 Distribution**

1T-DA-682 4K60 1x2 Splitter  
1T-DA-684 4K60 1x4 Distribution Amplifier  
1T-DA-688 4K60 1x8 Distribution Amplifier  
**Ultra-slim form factor**  
MG-DA-612 4K60 1x2 Splitter  
MG-DA-614 4K60 1x4 Distribution Amplifier  
MG-DA-618 4K60 1x8 Distribution Amplifier



**HDMI & DVI Distribution**

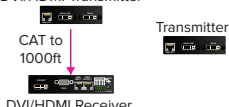
1T-DA-672 1x2 HDMI Splitter  
1T-DA-674 1x4 HDMI Distribution Amplifier  
1T-DA-678 1x8 HDMI Distribution Amplifier  
1T-DA-554 1x4 DVI Distribution Amplifier  
1T-DA-552 1x2 DVI Splitter



**Magenta MultiView**  
Ultra-robust CAT6 matrix switching to 512 end points and distribution from 1 source to 729 displays

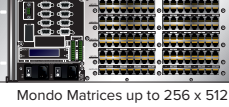
**Point-to-Point CAT Extension - up to 1000ft**

DVI/HDMI Transmitter  
Transmitter  
CAT to 1000ft  
DVI/HDMI Receiver



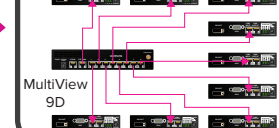
**CAT Matrix Switcher**

Mondo Matrices up to 256 x 512



**CAT Distribution**

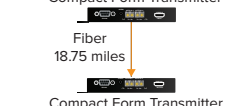
MultiView 9D



**Magenta Voyager**  
Dependable fiber distribution and matrix switching to 2000+ end points


**Fiber point-to-point extension - up to 18.75 miles**

Compact Form Transmitter  
Fiber  
18.75 miles  
Compact Form Transmitter



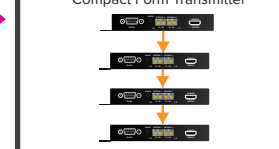
**Fiber Optic Matrix Switcher**

Fiber Matrices up to 320 ports  
Also available in a 48 port version.



**Fiber Optic Distribution**

Compact Form Transmitter




Toll Free: 800-721-4044

sales@tvone.com

www.tvone.com