
catalyst

AVL Structured Wiring System

Catalyst is the solution to allow systems integrators to rapidly install high-quality, dependable audio and lighting control cabling using standard structured wiring systems. Instead of specialty AV cables, Catalyst exploits shielded category cabling for analog audio and digital connections, allowing rapid installation, termination, and testing. In addition to labor savings, Catalyst exceeds the bandwidth performance of standard audio cabling systems.



CUSTOMIZE YOUR SOLUTION

Our ability to customize rack panels, wall plates and floor boxes provide integrators with greater flexibility and ease-of-installation.



Speed Up Your Workflow

Catalyst modules connect using shielded category cable. Now you can connect your entire building with one type of cable, rapidly installing audio, video, and lighting control cabling using structured wiring systems.

Wider Bandwidth Performance

Long distance runs and studio-grade connections are possible with a fraction of the conduit fill and difficulty of conventional methods. Grounding, shielding and electrical isolation has been carefully engineered to make quiet, high-performance systems possible with minimal effort.

Modular Termination

Cabling for the audio systems can be installed with other network wiring in the building, so you don't require an audio specialist to install it. Using standard modular connectors, we've eliminated the need for soldering in the field. With Catalyst, connecting audio devices and testing them can be a breeze.



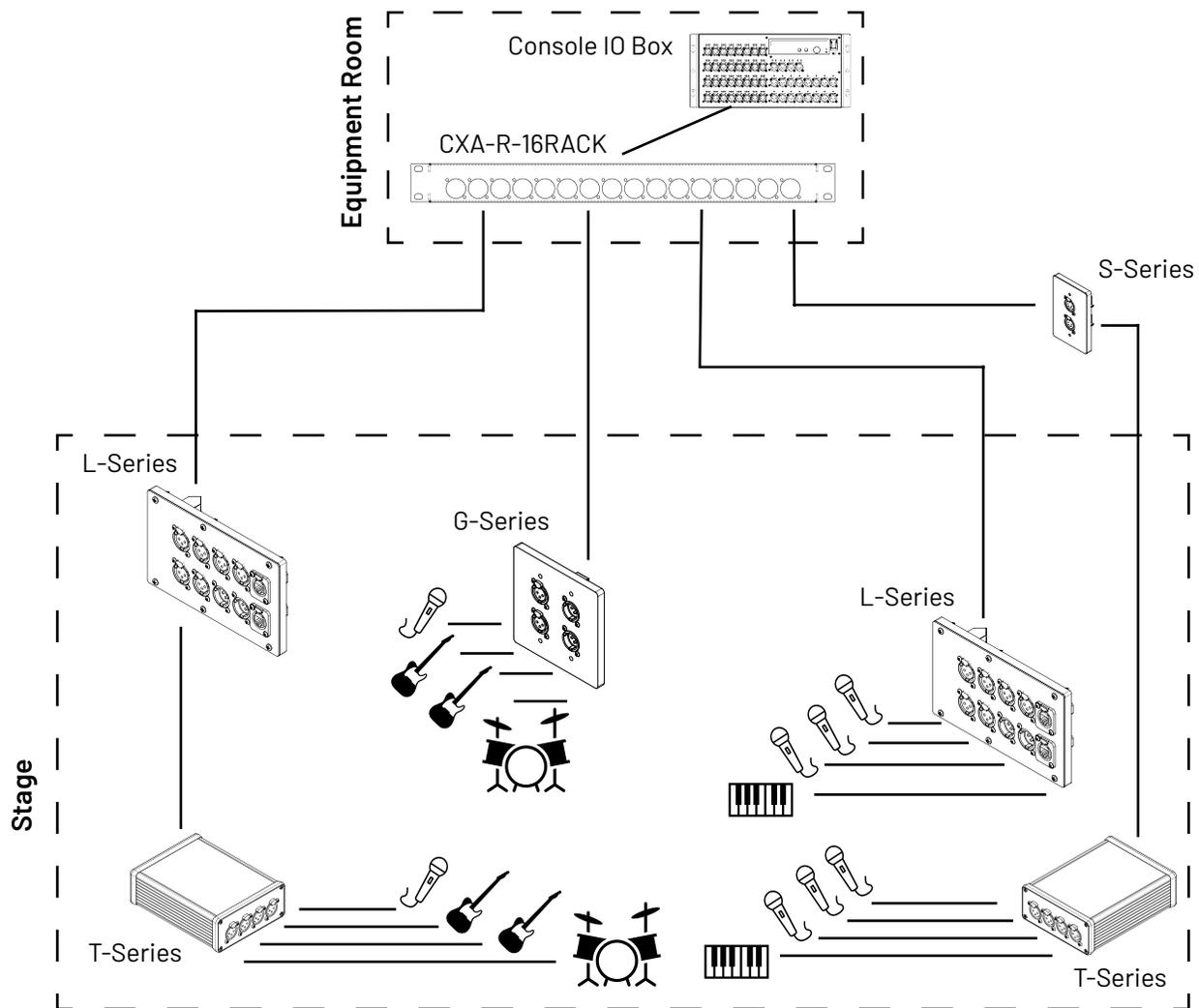
Catalyst

Example Application

Fully Customized System

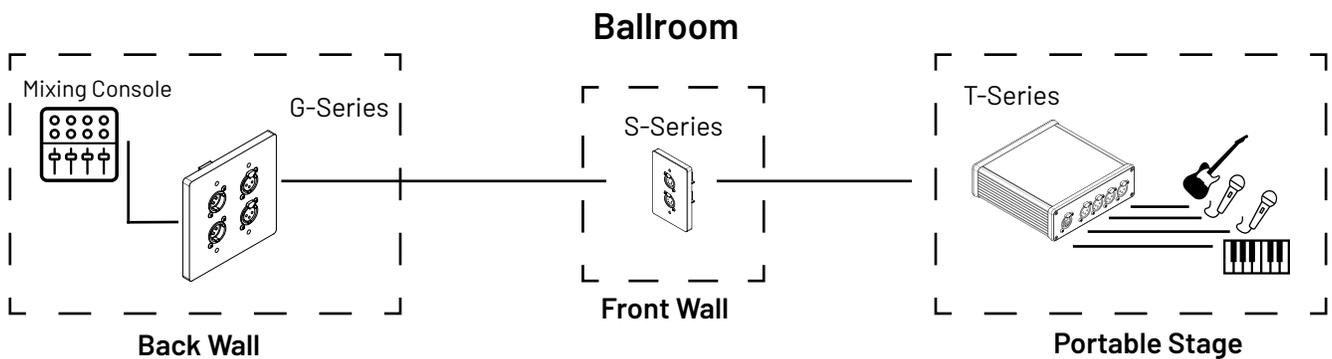
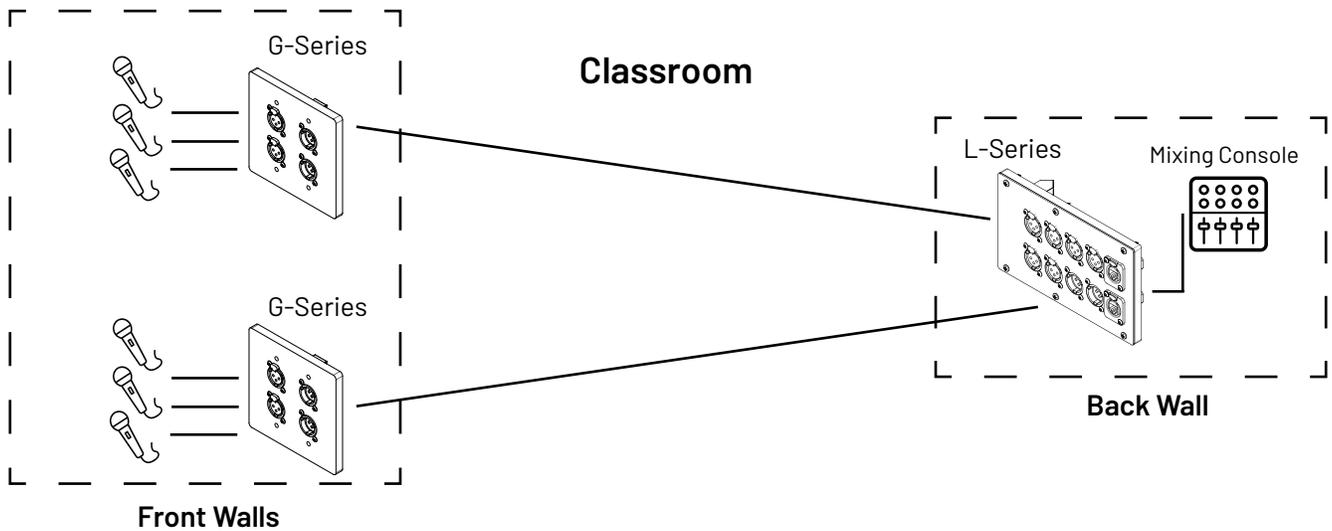
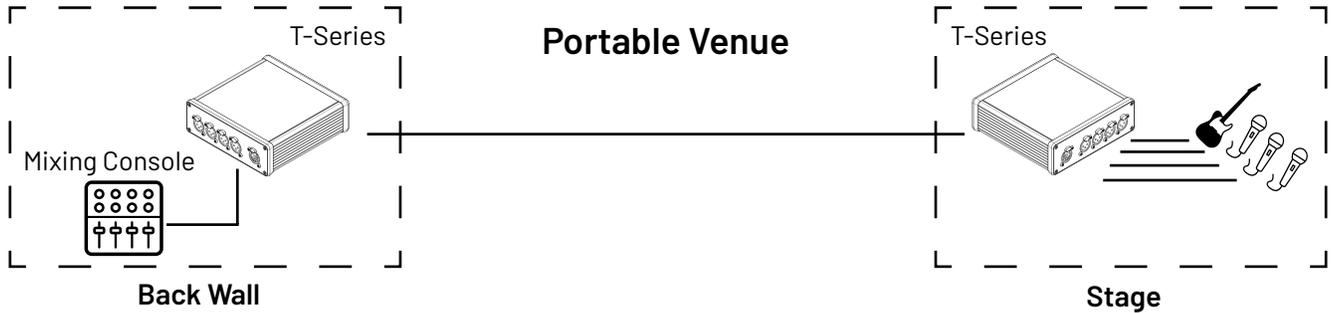
Below is an example application of the Catalyst system in a room utilizing a stage with several audio components. Modules are used to accomplish whatever needs may arise while offering plenty of options for floor or wall mount installation.

Your ability to customize rack panels, wall plates and floor boxes provide greater flexibility and ease-of-installation.



AUDIO	Wiring topology	AES 72-2019 Type 1M
	Maximum cable distance	Analog or AES3-2009 digital audio to 400m (1300ft)
LIGHTING	Wiring topology	ANSI E1.11 - 2008 (R2018)
	Maximum cable distance	DMX512 data to 300m (1000ft)
CABLING	Cabling type	ISO/IEC 11801 Category 5 or 6 Shielded
	Connector type	Shielded IEC 60603-7-18-position modular connectors (Shielded RJ45)

More Example Applications

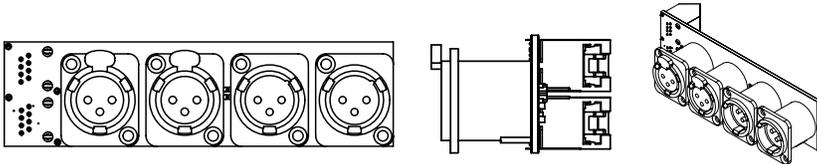


Venueflex Catalyst L-Series

The Catalyst L-Series is intended for use in Floor- and Wall-Box applications. Plate layouts are available for use with back boxes from Ace Backstage, FSR and Hoffman. Combine L-Series modules with S-Series modules or other D-Mount connectors for a complete plate and box design. The L-Series audio modules feature a pass-through for parallel connection to front-panel drop snake connections or to other modules in the system.

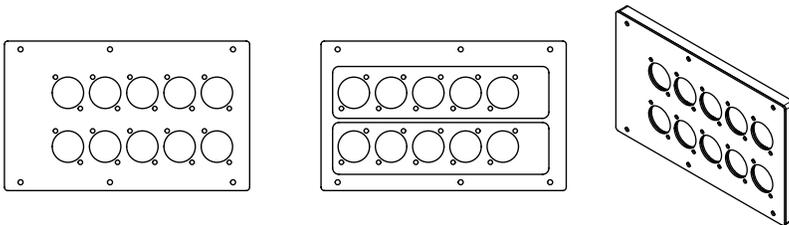
L-Module:

Four D-mount connectors across; RJ45 in and thru on back panel; M3 threaded hole mounts. Includes M3 screws.



L-Plate:

Non-conductive thermoplastic plates to mount Neutrik D or Catalyst modules. Custom laser etching available.



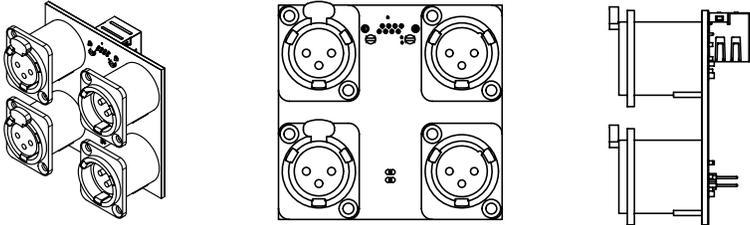
Model	Description	Drawing
CX-L-4XF	L-Series module - four female 3 pin XLR.	
CX-L-4XM	L-Series module - four male 3 pin XLR.	
CX-L-2XF-2XM	L-Series module - two female 3 pin XLR plus two male 3 pin XLR.	
CXA-L-10ACE	L-Series Ace Backstage non-conductive thermoplastic plate with laserable surface for Ace Backstage Super Pocket; 10 D-mount holes for Neutrik D or Catalyst modules. Holds up to two L-Series modules plus two additional D-mount connectors. Includes two CXA-BLANK.	
CXA-L-10FSR	L-Series 4 gang FSR mount non-conductive thermoplastic plate with laserable surface for FSR floor and wall boxes; 10 D-mount holes for Neutrik D or Catalyst modules. Holds up to two L-Series modules plus two additional D-mount connectors. Includes two CXA-BLANK.	
CXA-L-48-1212	L-Series non-conductive thermoplastic plate for 12in x 12in Hoffman Box, overall size 12in x 12in for surface mount box; up to 6 L modules with a total of 48 D-mount connectors.	
CXA-L-48-1313	L-Series non-conductive thermoplastic plate for 12 in x 12in Hoffman Box, overall size 13in x 13in for flush wall trim; up to 6 L-modules with a total of 48 D-mount connectors.	
Catalyst-Plate-Etching	Custom laser etching of thermoplastic plates from customer-supplied art. Must utilize Venueflex templates and provide original files. Per plate.	[Your Logo]

Venueflex Catalyst G-Series

The Catalyst G-Series is intended for use in standard NEMA gang boxes, and other NEMA-sized specialty boxes, such as those from FSR. *G-Series are numbered from top to bottom not left to right like the rest of the modules. So input 1 is top left and input 2 is bottom left...*

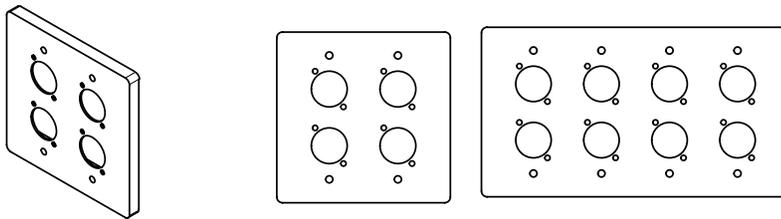
G-Module:

Four D-mount connectors in 2x2 grid; RJ45 input on back panel; M3 threaded hole mounts. Includes M3 screws.



G-Plate:

Non-conductive thermoplastic plates to mount Neutrik D or Catalyst modules. Custom laser etching available.



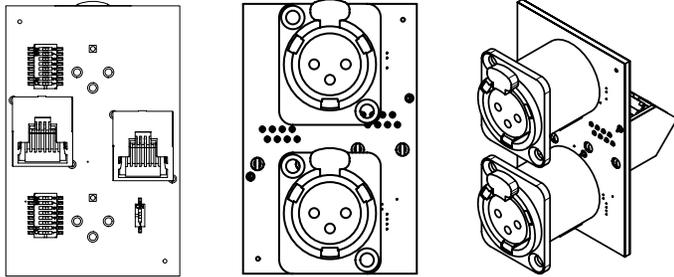
Model	Description	Drawing
CX-G-4XF	G-Series module - four female 3 pin XLR.	
CX-G-4XM	G-Series module - four male 3 pin XLR.	
CX-G-2XF-2XM	G-Series module - two female 3 pin XLR plus two male 3 pin XLR.	
CXA-G-4WALL	G-Series 2 gang wall mount non-conductive thermoplastic plate with laserable surface; 4 D-mount holes for Neutrik D or one Catalyst G module.	
CXA-G-4FSR	G-Series 2 gang FSR mount non-conductive thermoplastic plate with laserable surface; 4 D-mount holes for Neutrik D or one Catalyst G module.	
CXA-G-8FSR	G-Series 4 gang FSR mount non-conductive thermoplastic plate with laserable surface; 8 D-mount holes for Neutrik D or two Catalyst G modules.	
Catalyst-Plate-Etching	Custom laser etching of thermoplastic plates from customer-supplied art. Must utilize Venueflex templates and provide original files. Per plate.	[Your Logo]

Venueflex Catalyst GS-Series

The Catalyst GS-Series is intended for use in standard NEMA gang boxes, and other NEMA-sized specialty boxes, such as those from FSR. Each terminating connector may be individually assigned to a Catalyst audio channel at will using a simple DIP switch, allowing fully-custom channel and connector arrangements.

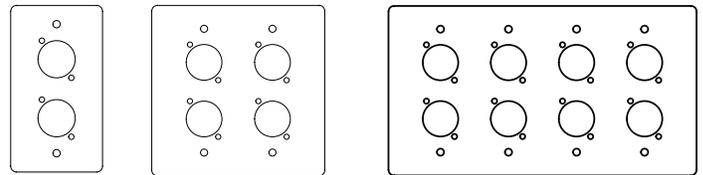
GS-Module:

Two D-mount connectors with DIP-switch channel assignment, RJ45 input and through on back panel; M3 threaded hole mounts. Includes M3 screws. May be fitted into G-Series Plates or S-Series Plates.



GS-Plate:

The GS-Module fits into both G-Series and S-Series non-conductive thermoplastic plates to mount Neutrik D or Catalyst modules (*only two plate examples shown below for reference*). Custom laser etching available.



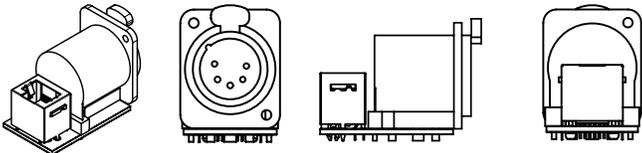
Model	Description	Drawing
CX-GS-4XF	GS-Style module - two female 3 pin XLR	
CX-GS-4XM	GS-Series module - two male 3 pin XLR.	
CX-GS-1XF-1XM	GS-Series module - one female 3 pin XLR plus one male 3 pin XLR.	
CXA-G-4WALL	G-Series 2 gang wall mount non-conductive thermoplastic plate with laserable surface; 4 D-mount holes for Neutrik D or one Catalyst G module.	
CXA-S-2WALL	S-Series single-gang non-conductive thermoplastic plate with laserable surface sized for drywall trim; 2 D-mount holes for Neutrik D or Catalyst modules. Holds up to two S-Series modules or two D-mount connectors. Includes two CXA-BLANK.	
Catalyst-Plate-Etching	Custom laser etching of thermoplastic plates from customer-supplied art. Must utilize Venueflex templates and provide original files. Per plate.	[Your Logo]

Venueflex Catalyst S-Series

The Catalyst S-Series complements our L- and G- series plate systems to provide additional connectivity beyond audio pairs. Single RJ45 modules can provide multipair pass-through for any audio pairs, either looping from L-series modules or additional remote lines, four pairs at a time. In addition, include ANSI standard DMX512 connections over the same category cabling.

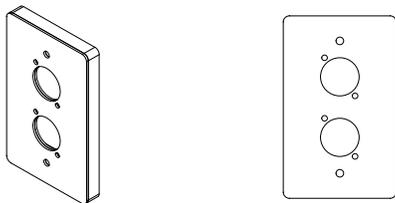
S-Module:

One D-mount connector; M3 threaded hole mounts.
Includes M3 screws.



S-Plate:

Non-conductive thermoplastic plates to mount Neutrik D or Catalyst modules. Custom laser etching available.



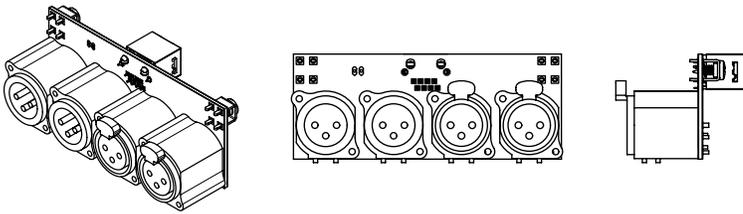
Model	Description	Drawing
CX-S-1DF	S-Series module - single female 5 pin XLR - ANSI DMX512 standard wiring to RJ45 on back panel.	
CX-S-1E	S-Series module - single female CAT6A Ethercon including shielded link cable for drop snake connection with L-Series modules.	
CXA-S-BLANK	D-mount blank, includes M3 screws.	
CXA-S-2WALL	S-Series single-gang non-conductive thermoplastic plate with laserable surface sized for drywall trim; 2 D-mount holes for Neutrik D or Catalyst modules. Holds up to two S-Series modules or two D-mount connectors. Includes two CXA-BLANK.	
CXA-S-2ACE	S-Series single-gang non-conductive thermoplastic plate with laserable surface sized for Ace Backstage pockets; 2 D-mount holes for Neutrik D or Catalyst modules. Holds up to two S-Series modules or two D-mount connectors. Includes two CXA-BLANK.	
CXA-S-2FSR	S-Series single-gang non-conductive thermoplastic plate with laserable surface sized for FSR pockets and wall boxes; 2 D-mount holes for Neutrik D or Catalyst modules. Holds up to two S-Series modules or two D-mount connectors. Includes two CXA-BLANK.	
Catalyst-Plate-Etching	Custom laser etching of thermoplastic plates from customer-supplied art. Must utilize Venueflex templates and provide original files. Per plate.	[Your Logo]

Venueflex Catalyst R-Series

The R-Series forms the core of a typical Catalyst system, allowing home runs from remote IO plates to be centrally terminated and patched in an equipment rack. Each remote plate can connect to a complementary rack module, which may then be patched with standard XLR patch cables into local equipment.

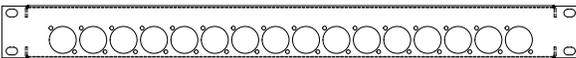
R-Module:

Four A-mount connectors across; RJ45 input on back panel; includes Plastite screws for mounting to rack panel.



R-Rack:

R-Series 1RU rack panel with laserable surface; 16 A-mount holes for up to four Catalyst R modules.



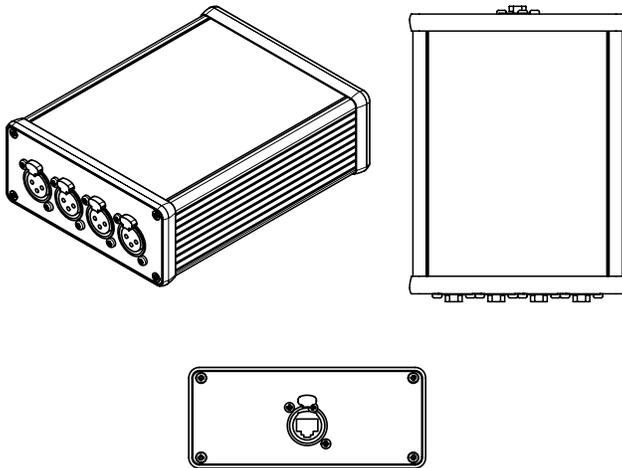
Model	Description	Drawing
CX-R-4XF	R-Series module - four female 3 pin XLR.	
CX-R-4XM	R-Series module - four male 3 pin XLR.	
CX-R-2XM-2XF	R-Series module - two male 3 pin XLR plus two female 3 pin XLR.	
CXA-R-BLANK	A-mount blank, includes M3 screws.	
CXA-R-16RACK	R-Series 1RU rack panel with laserable surface; 16 A-mount holes for up to four Catalyst R-Series modules	

Venueflex Catalyst T-Series

T-Series stage breakout boxes allow for remote IO to be connected throughout a stage, using a single shielded category cable for each set of four audio pairs. Use the CX-T-4XF and -8XF models to extend microphone inputs to areas like drum or keyboard risers. The CX-T-4XFM can be used to extend output lines, or can be used in standalone pairs to move audio around in portable applications.

T-Module:

Four style drop snake stage box components.



Model	Description	Drawing
CX-T-4XF	T-Series stage drop snake - one ethercon to four female 3 pin XLR.	
CX-T-8XF	T-Series stage drop snake - two ethercon to eight female 3 pin XLR.	
CX-T-4XFM	T-Series stage drop snake - two ethercon to four female 3 pin XLR and four male 3 pin XLR. Paralleled connections throughout (four total audio pairs).	