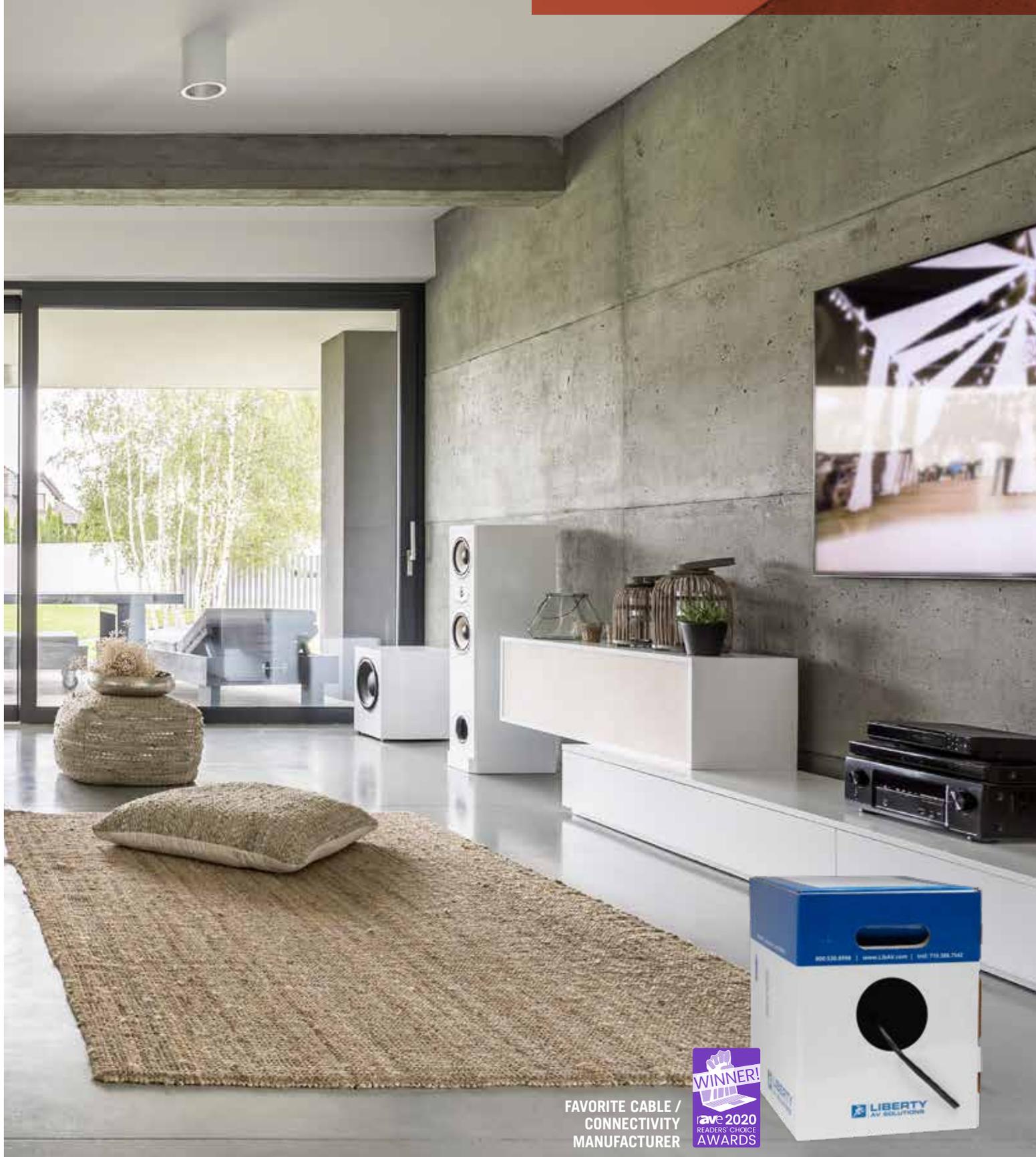


# CABLE GUIDE

Celebrating Nearly 30 Years of  
Trusted and Respected Cabling



FAVORITE CABLE /  
CONNECTIVITY  
MANUFACTURER



# WE DIDN'T JOIN THE CABLE GAME WE INVENTED IT

## Passion for Quality Since Day 1

Founded in 1991 by Gary Michelson, Liberty Wire and Cable was started with a receptionist, a plan and a vision: to create quality cables that were better than what was on the marketplace. Gary's passion for quality stemmed from his background at IBM, where he developed three core values: the search for excellence, respect for the individual (both customers and employee), and providing superior quality and service.

## 'Why Don't You Do It In Color?'

These core values are what have driven Liberty to build a quality product base on feedback from installers and users. Unlike larger cable manufacturers, Liberty's nimble structure and close connections to both the customer and production facilities, has equipped us with the ability to answer customer needs swiftly and stay ahead of product development and in-demand innovations.

Early on in his venture, a home remodeling project presented Gary with his first revolutionary product

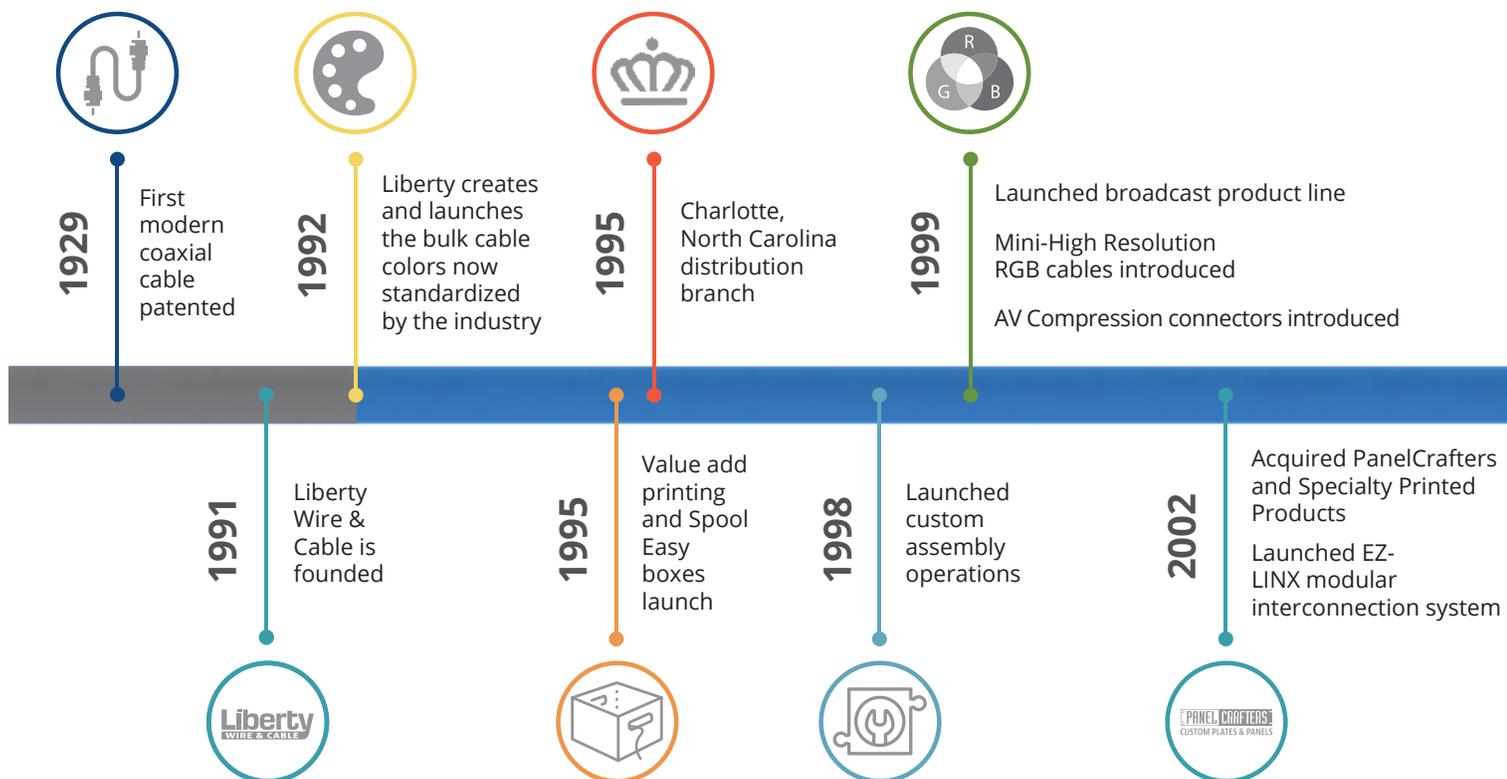
innovation. In every room of the home he observed many cables, each with a different purpose but all of them were the same color gray. The contractor couldn't identify which cable was which, when Gary asked, 'Why don't you do it in color?'

## The Industry Standard

It was with this question that the Liberty colored cable pattern was born and the industry standard created, providing installers the ability to now differentiate cable function by color. At the very next CEDIA Expo, Liberty presented colored cable with a durable, flexible and easy-to-pull jacket that became a game-changer for the industry. Our mission to provide optimal performance via quality cables that save the installer time and money... was well on its way. Over the next three decades, Liberty became the most recognized brand of cabling in the CEDIA and InfoComm AV custom and commercial install channels.

## Thirty Years of Service & Evolution

In 2006, Liberty Wire & Cable was acquired by WESCO



International, a Fortune 500 Company. WESCO ranked among the Top 4 companies on *Fortune Magazine's* annual list of the World's Most-Admired Companies in the Wholesalers: Diversified Category. In 2010, with WESCO's strong backing and resources, Liberty Wire & Cable became Liberty AV Solutions, coinciding with the expansion into digital solutions and maintaining its reputable Liberty Wire & Cable products. Throughout the years, Liberty has evolved into a full-service business partner offering innovative, value-added and managed-service offerings, as well as access to a large offering of distributed brands.

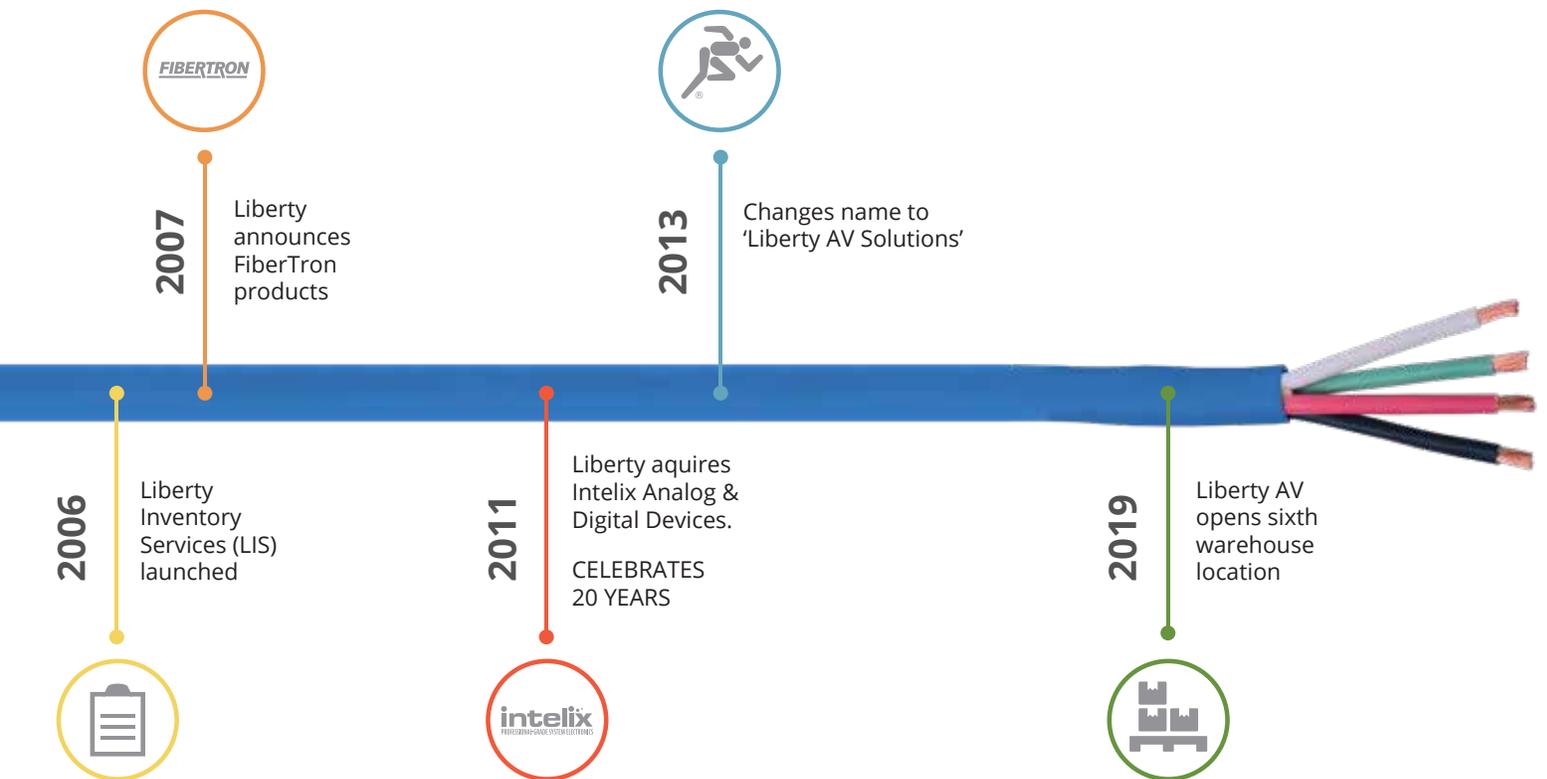
Staying true to its origins, Liberty remains nimble, continuing to develop and broaden its line of cable in order to provide installers with the products they need to get the job done right and on time. Our commitment has never been stronger to build the best-quality cables, with better stranding, more flexibility, colors, thicker jackets, easy to pull, and with our installers and end users in mind, with all cables being backed by industry leading support and a *trusted lifetime warranty*. These

values have paved our way for nearly 30 years and will continue to be the foundation our business is built upon.

### The Products You Need, Quickly

It's one thing to be able to supply Every-AV-Thing, however, it's quite another to do it in a timely fashion and Liberty recognizes the need to have products quickly and efficiently. In 2019, Liberty opened a sixth warehouse location, adding to a list of convenient and strategically placed warehouses throughout the United States. In addition to Connecticut, Liberty has warehouse locations in North Carolina, California, Illinois, Phoenix, and Colorado.

Each of these locations give Liberty a unique, supporting capability not offered by other wire and cable providers. Need your order right away? Aside from access to more inventory, each warehouse offers the benefits of Will Call and same-day shipping, with select locations offering same-day delivery. Expedited shipping is also available. Orders can arrive as soon as next day.





## THE LIBERTY AV DIFFERENCE

### THE INDUSTRY'S MOST TRUSTED, HIGH-PERFORMANCE CABLE

We won't give you vague reasons to purchase from Liberty. Our attention to quality, adherence to standards, certifications, and regulatory requirements sets Liberty apart from the competition.

Our dedication for the last thirty years has earned the trust, respect and confidence of the largest firms in the Pro AV Industry and made Liberty AV the 'go-to' cable. We take pride in our role in ensuring that we provide a product that performs well. Liberty has been the most recognized brand of cabling in the CEDIA and InfoComm AV custom and commercial install channels since 1991.

#### Better Safety & Performance

Ensuring that our cables are tested, certified, and meet the required specifications is a part of our mission to provide the highest-quality of cables that operate safely and at peak performance.



#### Tested and Certified

- **Certified and Built to Specifications Set Forth by the Experts:** Liberty AV quality meets or exceeds the standards set forth by the experts, including Underwriters Laboratory (UL) and Intertek (ETL). For example, Liberty adheres to precise cable conductor specifications (UL-758) UL standards published for low voltage power limited control cable (UL-13) and Communications Cable (UL-444). Code and performance certifications are through UL and ETL. Proper certification ensures both safety and performance.
- **Third-Party Tested:** All Liberty category cables are third-party tested to ensure compliance.
- **Optimum Performance:** With the increased cost of copper, many competing cables are shaving copper



(and therefore performance) to reduce costs. Liberty products are built for the project at hand and performance / conductive demand, including copper gauge required for the job, and we will never shave copper (or our standards). Cable datasheets are always available for review on the Liberty AV website, highlighting all cable specifications.



All of Liberty's cables are comprised of Oxygen-Free Copper or ASTM annealed copper. Both copper variations are laboratory tested and produce equivalent, solid performance.

- **Quality Control:** Mechanical and electrical specs are re-validated after manufacturing to ensure compliance.
- **In-House Experts:** Liberty AV has multiple in-house UL compliance experts. Our experienced team will make sure that you have the support and information needed to choose the right cable for the job.
- **Third-Party Certified, Direct Burial Rated Cables:** All Liberty AV Direct Burial Cables are verified by a third party and meet UL Direct Burial requirements, including:
  - Black cable jacketing for natural UV resistance. Black is the only UL-approved jacket color.
  - Polyethylene insulation which is naturally waterproof with a super low capacitance
  - Very thick and heavy PVC jackets

# BUILDING THE BEST

## THE INDUSTRY'S MOST TRUSTED, HIGH-PERFORMANCE CABLE

### Manufacturing

Liberty AV sources and develops the highest-quality cables from only best-in-class partners around the world. Our cables and compounds are sourced and produced in the United States and Asian-Pacific.

Liberty AV ensures every cable has:

- **The Right Amount of Copper** – if the UL standard and performance dictates a certain amount of copper is needed, you receive that amount. Not a shaved off amount.
- **TruDistance** – a foot to us is 12". Not 11.9, not 11.75... 12". Every TruDistance Marker identifies a true foot of cable, and you will receive just that.
- **Certification** – Liberty adheres to precise cable specifications as defined by UL standards UL-758, UL-13, and UL-444. Proper certification ensures both safety and performance.

### Serialization & Traceability

Every single put-up of Liberty cable is serialized with its own unique serial number allowing for the ultimate in traceability to the manufacturing lot, the performance testing, and the history of that put-up. This feature allows us to support our lifetime, Liberty Edge Warranty, and reporting. This practice is above and beyond the safety agencies (UL and ETL) requirements for product tracing.



### Increasing USA Manufacturing

Over the last few years, Liberty AV has taken steps to expand its 'Made in the USA' manufacturing presence. Most control and general purpose

cables, including Cat5E/Cat6/Cat6A EN Series cables are now proudly Made in the USA. Liberty is committed to increasing our 'Made in the USA' manufacturing in the coming years.

### Customized Solutions

As a manufacturer, Liberty can provide the unique offering of cutting cabling to any length. Cable is priced per 1,000 feet.

### Packaging

Fighting packaging to complete an installation can be frustrating and cost time, money, and labor. Compromising of cable performance is also a byproduct when using difficult, nested cable boxes as kinking and tangling causes damage and limits the pulling capabilities of the cable. Cables with high-performance electrical requirements, such as Networking cable, coaxial cables, and RS data requirements, are especially susceptible to this type of damage.

Liberty AV is the only manufacturer that provides three types of cable packaging to make pulling easier than ever:



REEL

- **Spools** – When selecting Liberty AV Spools for packaging, the cable is expertly paired with the proper sized spool, (with the core being at least 20x the diameter of the cable. This pairing ensures that the cable, its fibers or conductors, and therefore the performance, is protected.



COOL SPOOL

- **Cool Spool (reel in box)** – These unique reels incorporate adjustable braking end stands for tangle-free cable pulls. The reels can be used stand alone or mounted in a rugged, double-wall cardboard box dispenser for multiple uses. A versatile hand truck is also available for transporting cable and other materials on and off the job site. Easily converted to an adjustable cart that may be used in various positions to facilitate vertical or horizontal cable pulling.



REELEX

- **Wide-Mouth Reelx™ (Wide-Mouth Payout, Nested Box):** – No hassles, just pull. Pulls up to 30% faster with no tension, no twists, no tangles, no overruns, no spills, no splinters, no brakes, no tension controls. Also known as Reelx coil in box.

**Support Space** – Liberty AV’s bulk cable boxes now come equipped with Support Space by Teleportivity, a virtual portal to detailed instructions, video tutorials, product specifications, ordering, and best practices so you can nail every installation! Support Space gives you on-demand access to Liberty’s trusted and knowledgeable tech support team when you need an extra hand— simply scan the barcode with your phone’s camera and you’re all set; no app needed.

## THE LIBERTY EDGE

### A Warranty that Withstands the Test of Time

Every cable and product has a solid warranty for peace of mind that products will be performing optimally as intended, and we’ll stand behind the products we sell:

- **Bulk Liberty Cable** – Lifetime Warranty
- **Pre-mades** – 3-Year Warranty
- **Liberty AV Electronics & Devices** – 5-Year Warranty
- **Custom, project-based warranties**

When an issue arises, Liberty AV will remedy the situation, ensuring our customers are beyond satisfied with our products. It’s been the backbone behind our customers ‘Liberty Loyalty’.

### Support at Day 2 and Beyond

Liberty AV’s knowledgeable team is available beyond the installation, providing tech support at day 2 and beyond. Our knowledgeable team can assist with any installation issues, troubleshooting, and future updates.



Support Space on Cable Box

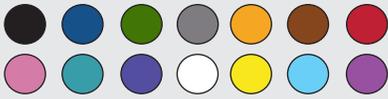


# DETAILS THAT MATTER

SAVING YOU TIME AND MONEY ON EVERY INSTALL STARTS WITH ATTENTION TO DETAIL

## The Original Colored Cable Jackets

Liberty started the cable revolution with color variations to make pulling the right cables easier and guess-less, without relying on bands or tape that can come off over time. Now the industry standard, this feature saves the installer both time and money by eliminating guesswork.



## Copper, Uncompromised

With the increased cost of copper, many competing cable manufacturers are shaving copper (and therefore performance) to reduce costs. Liberty products are built for the project at hand and performance / conductive demand, including copper gauge required for the job, and we will never shave copper (or our standards). Cable datasheets are always available for review on the Liberty AV website, highlighting all cable specifications.

All of Liberty's cables are comprised of Oxygen-Free Copper or ASTM annealed copper. Both copper variations are laboratory tested and produce equivalent, solid performance.

ULC UTP CAT5E TESTED TESTED TESTED

## TruDistance® Printing

Ascending and descending foot markers printed on every cable identify location, wire ID, and cable length or run distance. Foot markers are noted on cable as 0-1000/1000-0, 0-500/500-0 depending on put-up.

## Certified and Built to Specifications

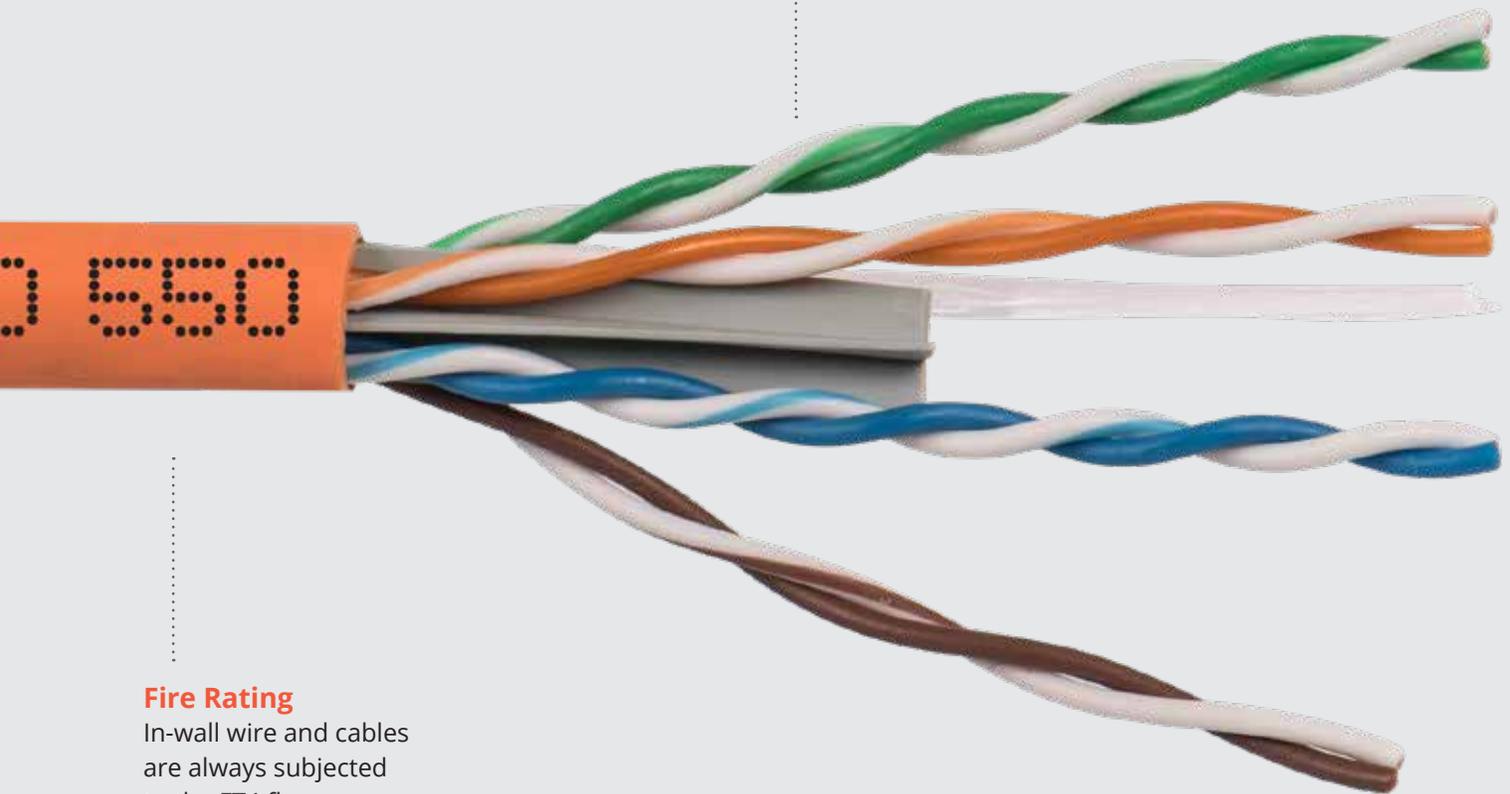
Set Forth by the Experts: Liberty AV quality meets or exceeds the standards set forth by the experts, including Underwriters Laboratory (UL) and Intertek (ETL). Liberty adheres to precise cable specifications defined by UL758, UL standards published for low-voltage power limited control cable (UL-13) and Communications Cable (UL-444). Code and performance certifications are through UL and ETL. Proper certification ensures both safety and performance.



Liberty AV is the industry expert and supplier of the AV industry's most relied upon cable features, recognized as the industry standard. Liberty products are engineered to deliver time and cost savings, a solid performance, and the industry's best value and warranty, with a long history of building quality product based on feedback from installers and users.

### SimpliStrip®

Rip Cords included in all speaker wire, category, and control cable for added ease of stripping.

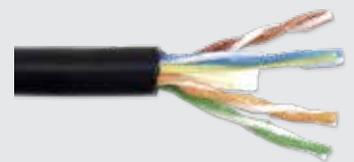


### Fire Rating

In-wall wire and cables are always subjected to the FT4 flame test, with additional products being further tested CPR ECA ratings.



**True Direct Burial Ratings** Unlike other manufacturers, adheres to the UL Specifications including utilizing black jackets and polyethylene insulation. If you see a non-black cable claiming to be Direct Burial, know that it is probably not adhering to UL.

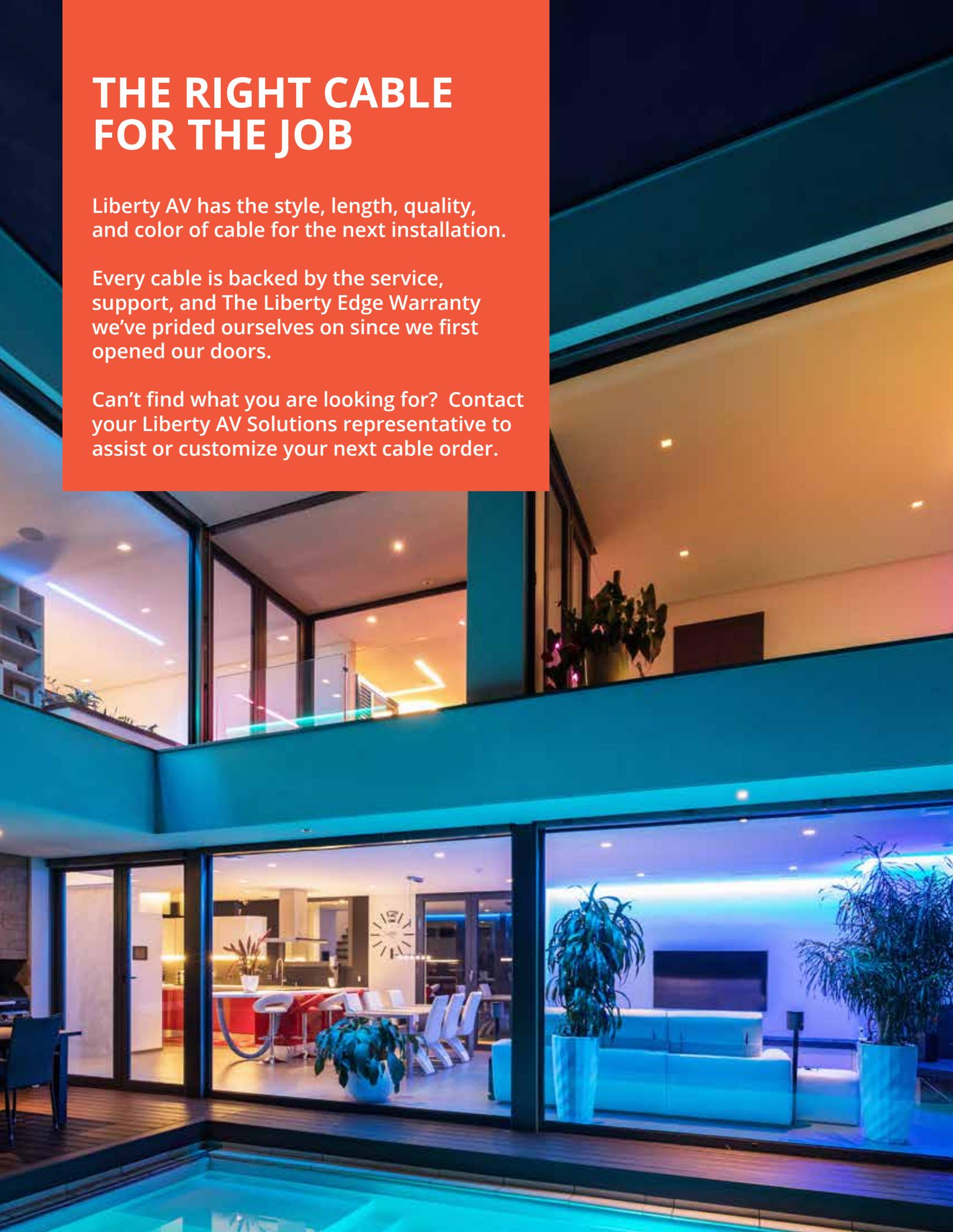


# THE RIGHT CABLE FOR THE JOB

Liberty AV has the style, length, quality, and color of cable for the next installation.

Every cable is backed by the service, support, and The Liberty Edge Warranty we've prided ourselves on since we first opened our doors.

Can't find what you are looking for? Contact your Liberty AV Solutions representative to assist or customize your next cable order.



# CAT 7 & 8

CAT/LAN



## Liberty Brand Category 8 Cable

24-4P-L8SH-BLU

- 22 AWG solid bare copper conductors
- Foamed polyethylene Insulation
- S/FTP Individually shielded twisted pairs with an overall braided shield



1000 FT



## Liberty Brand Category 7 Cable

24-4P-L7SH-BLU

- 23 AWG solid bare copper conductors
- Foamed polyethylene Insulation
- S/FTP Individually shielded twisted pairs with an overall braided shield



500 FT



1000 FT



# CAT 5 & 6 / LAN CABLE

## CAT/LAN



**Category 6A U/UTP EN Series**  
**23 AWG 4 Pair Unshielded Cable**  
 24-4P-L6A

- 23 AWG solid bare copper conductors
- HDPE, high-density polyethylene insulation
- Varying lay twisted pairs cabled on a common axis



1000 FT



**Category 6 U/UTP EN Series**  
**23 AWG 4 Pair Unshielded Cable**  
 24-4P-L6-EN

- 23 AWG solid bare copper conductors
- HDPE, high-density polyethylene insulation
- Color striping on white conductors



1000 FT



**Category 6 F/UTP EN Series**  
**23 AWG 4 Pair Shielded**  
 24-4P-L6SH

- 23AWG Solid Bare Copper Conductors
- Core of 4 twisted pairs with an overall foil shield
- Riser-rated Lead-Free PVC Jacketing



1000 FT



**Category 5e U/UTP EN Series**  
**24 AWG 4 Pair Unshielded Cable**  
 24-4P-L5-EN

- Solid annealed bare copper conductors
- High-density polyethylene insulation
- 4 pairs twisted in varying lays and cabled



1000 FT



**Category 5e F/UTP EN Series**  
**24 AWG 4 Pair Shielded Cable**  
 24-4P-L5SH-EN

- 24 AWG solid bare copper conductors
- HDPE, high-density polyethylene insulation
- Color striping on white conductors



1000 FT



# SPEAKER CABLE

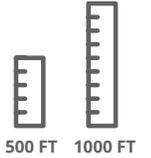
Speaker • Better • ExtraFlex Plus (EX+)



## EXTRAFLEX 16 AWG 2-Conductor Heavy-Duty Speaker Cable

16-2C-EX+-(COLOR)

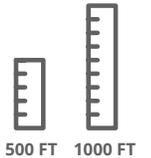
- 105 Strand Oxygen-Free Copper Conductors
- Semi-Rigid PVC Insulation
- Twisted, unshielded



## EXTRAFLEX 14 AWG 2-Conductor Heavy-Duty Speaker Cable

14-2C-EX+-BLK

- 105 Strand Oxygen-Free Copper Conductors
- Semi-Rigid PVC Insulation
- Twisted, unshielded



## EXTRAFLEX 14 AWG 4-Conductor Heavy-Duty Speaker Cable

14-4C-EX+-(COLOR)

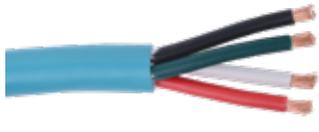
- 105 Strand Oxygen-Free Copper Conductors
- Semi-Rigid PVC Insulation
- Twisted, unshielded



## EXTRAFLEX 12 AWG 2-Conductor Heavy-Duty Speaker Cable

12-2C-EX+-(COLOR)

- 105 Strand Oxygen-Free Copper Conductors
- Semi-Rigid PVC Insulation
- Twisted, unshielded



## EXTRAFLEX 12 AWG 4-Conductor Heavy-Duty Speaker Cable

12-4C-EX+-(COLOR)

- 105 Strand Oxygen-Free Copper Conductors
- Semi-Rigid PVC Insulation
- Twisted, unshielded



## EXTRAFLEX 10 AWG 2-Conductor Heavy-Duty Speaker Cable

10-2C-EX+-(COLOR)

- 105 Strand Oxygen-Free Copper Conductors
- Semi-Rigid PVC Insulation
- Twisted, unshielded



Premium • UltraCap THX-certified



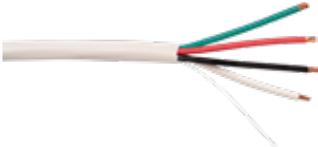
## THX-Certified 14 AWG 1-Pair Speaker Cable

14-1P-UC-WHT

- 168-Strand Rope Lay Annealed Bare Copper Conductors
- Foamed Polyethylene Insulation
- Twisted, unshielded



Value Line, Priced Accordingly Run AV (Good)

	<p><b>RUNAV 14/4 SPEAKER BLACK</b> RVSPK144BK</p> <ul style="list-style-type: none"> <li>• 105-Strand Annealed Bare Copper Conductors</li> <li>• Lead-Free PVC Insulation</li> <li>• Twisted, unshielded</li> </ul>	 REELEX 	 500 FT
	<p><b>RUNAV 16/4 SPEAKER BLACK</b> RVSPK164BK</p> <ul style="list-style-type: none"> <li>• 65-Strand Annealed Bare Copper Conductors</li> <li>• Lead-Free PVC Insulation</li> <li>• Twisted, unshielded</li> </ul>	 REELEX 	 500 FT
	<p><b>RUNAV 16/2 SPEAKER BLACK</b> RVSPK162BK</p> <ul style="list-style-type: none"> <li>• 65-Strand Annealed Bare Copper Conductors</li> <li>• Lead-Free PVC Insulation</li> <li>• Twisted, unshielded</li> </ul>	 REELEX 	 500 FT
	<p><b>RUNAV 14/2 SPEAKER BLACK</b> RVSPK142BK</p> <ul style="list-style-type: none"> <li>• 105-Strand Annealed Bare Copper Conductors</li> <li>• Lead-Free PVC Insulation</li> <li>• Twisted, unshielded</li> </ul>	 REELEX 	 500 FT
	<p><b>RUNAV 14/4 SPEAKER WHITE</b> RVSPK144WH</p> <ul style="list-style-type: none"> <li>• 105-Strand Annealed Bare Copper Conductors</li> <li>• Lead-Free PVC Insulation</li> <li>• Twisted, unshielded</li> </ul>	 REELEX 	 500 FT
	<p><b>RunAV Category 5 Enhanced U/UTP Riser-rated Cable</b> RVLNRC5E</p> <ul style="list-style-type: none"> <li>• 24AWG Solid Bare Copper Conductors</li> <li>• 4 twisted unshielded pairs in varying twist lengths</li> <li>• 350Mhz Sweep Test</li> </ul>	 REELEX 	 1000 FT



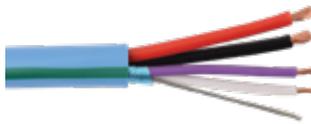
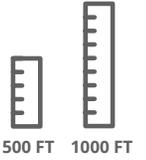
# CONTROL - LIGHTING, SHADES, AUTOMATION



## OEM Systems Lighting Control for Lutron EcoSystems Bus Cable

LUTRON-EBC

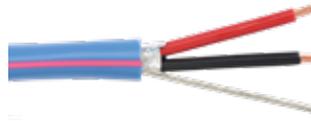
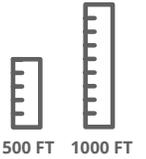
- Lutron EcoSystems bus cable
- Equivalent to C-CBL-216-GR-1
- 16 AWG solid annealed bare copper



## OEM Systems Lighting Control for Lutron Universal Control GRX-CBL-346S Equal Cable

LUTRON-GRN

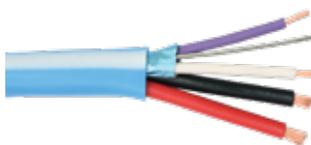
- Lutron universal control and power cable
- Equivalent to GRX-CBL-346S (Grafik Eye)
- Twisted, shielded 22 AWG data pair



## OEM Systems Lighting Control for Lutron Dimmer & Switch 18 AWG 2-Conductor 300V Cable

LUTRON-PNK

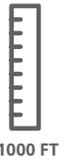
- 7-strand annealed bare copper conductors
- Semi-rigid PVC insulation
- Twisted, shielded



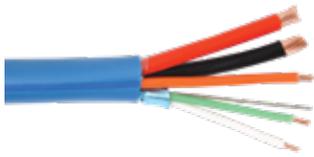
## OEM Systems Lighting Control for Lutron Quantum QSH-CBL-M Equal Cable

LUTRON-QSC

- Lutron universal control and power cable
- Equivalent to QSH-CBL-M
- Twisted, shielded 22 AWG data pair



# CONTROL - LIGHTING, SHADES, AUTOMATION

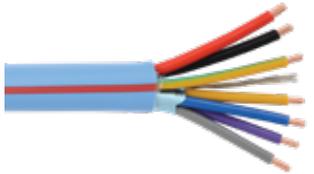


## OEM Systems Lighting Control for Lutron Universal Control GRX-CBL-46L Equal Cable LUTRON-RBL

- Lutron universal control and power cable
- Equivalent to GRX-CBL-46L
- Twisted, shielded 22 AWG data pair



1000 FT



## OEM Systems Lighting Control for Lutron Sivoia Shade Control SVQ-CBL Equal Cable LUTRON-RED

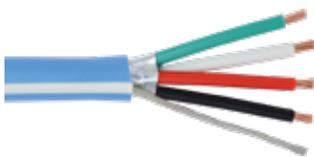
- Lutron control and power cable
- Equivalent to SVQ-CBL
- Twisted, shielded 18 AWG shielded quad



500 FT



1000 FT

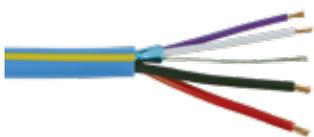


## OEM Systems Lighting Control for Lutron Dimmer & Switch 18 AWG 4 Conductor 300V Cable LUTRON-WHT

- 7-strand annealed bare copper conductors
- Semi-rigid PVC insulation
- Twisted, shielded



1000 FT



## OEM Systems Lighting Control for Lutron Universal Control GRX-CBL-346S Equal Cable LUTRON-YEL

- Lutron universal control and power cable
- Equivalent to GRX-CBL-346S (keypad)
- Twisted, shielded 22 AWG data pair



500 FT



1000 FT



## CABLE MANAGEMENT



Part #	Enclosure Style	Connector Style	Size	Supported Panel Strips	Brand
RF-RM1RU03P	Rack Tray	Panel Strip	1RU	3	Run Fiber
RF-RM2RU06P	Rack Tray	Panel Strip	2RU	6	Run Fiber
RF-RM4RU12P	Rack Tray	Panel Strip	4RU	12	Run Fiber
RF-WM01PS	Wall-Box	Panel Strip	Small	1	Run Fiber
RF-WM02PS	Wall-Box	Panel Strip	Medium	2	Run Fiber
RF-WM04PS	Wall-Box	Panel Strip	Large	4	Run Fiber

### ENCLOSURE PANEL STRIP OPTIONS



Part #	Fiber Type	Connector Style	Quantity	Brand
RF-12PLSM-12ST	Single Mode	ST	12 simplex	Run Fiber
RF-06PLSM-6ST	Single Mode	ST	6 simplex	Run Fiber
RF-12PLSM-6DSCA	Single Mode	SC/APC	6 duplex	Run Fiber
RF-06PLSM-6STA	Single Mode	SC/APC	6 simplex	Run Fiber
RF-06PLSM-6SC	Single Mode	SC	6 simplex	Run Fiber
RF-12PLSM-6DSC	Single Mode	SC	6 duplex	Run Fiber
RF-12PLSM-6DLCA	Single Mode	LC/APC	6 duplex	Run Fiber
RF-24PLSM-12DLC	Single Mode	LC	12 duplex	Run Fiber
RF-12PLSM-6DLC	Single Mode	LC	6 duplex	Run Fiber
RF-06PLOM3/4-6SSC	Multimode	SC	6 simplex	Run Fiber
RF-12PLOM3/4-6DSC	Multimode	SC	6 duplex	Run Fiber
RF-24PLOM3/4-6DLC	Multimode	LC	12 duplex	Run Fiber
RF-12PLOM3/4-6DLC	Multimode	LC	6 duplex	Run Fiber
RF-PLBLK	Blank Panel Strip			Run Fiber

\*Additional options available. Visit us online at [www.libav.com](http://www.libav.com).



### INDOOR/OUTDOOR WALL-BOXES

Part #	Coupler Style	Max Fiber Strands	Material	Brand
RF-WM04PIO	Panel Mount	8 (4 duplex)	UV-rated plastic with weather gasket	Run Fiber
RF-WM06PIO	Panel Mount	12 (6 duplex)	UV-rated plastic with weather gasket	Run Fiber
RF-WM08PIO	Panel Mount	16 (8 duplex)	UV-rated plastic with weather gasket	Run Fiber
RF-WM12PIO	Panel Mount	24 (12 duplex)	UV-rated plastic with weather gasket	Run Fiber
RF-WM16PIO	Panel Mount	32 (16 duplex)	UV-rated plastic with weather gasket	Run Fiber

\*Additional options available. Visit us online at [www.libav.com](http://www.libav.com).

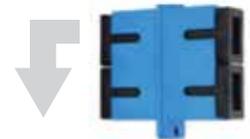
### WALLPLATE KEYSTONES



Part #	Fiber Type	Color	Connector Type	Brand
ISKM-OM3/4DSC-WH	Multimode	White	Duplex LC	Run Fiber
ISKM-SMDLC-WH	Single Mode	White	Duplex LC	Run Fiber
ISKM-OM3/4SC-WH	Multimode	White	Simplex SC	Run Fiber
ISKM-SMSSC-WH	Single Mode	White	Simplex SC	Run Fiber

\*Additional options available. Visit us online at [www.libav.com](http://www.libav.com).

### COUPLERS & ADAPTERS



Part #	Type	Fiber Type	Side A	Side B	Enclosure Compatibility	Brand
RF-OM4DLC-PL	Coupler	Multimode	Duplex Female LC	Duplex Female LC	Yes – Panel Mount	Run Fiber
RF-DSMLC-PL	Coupler	Single Mode	Duplex Female LC	Duplex Female LC	Yes – Panel Mount	Run Fiber
RF-OM4DSC-PL	Coupler	Multimode	Duplex Female SC	Duplex Female SC	No	Run Fiber
RF-DSMSC-PL	Coupler	Single Mode	Duplex Female SC	Duplex Female SC	No	Run Fiber
RF-OM4SSC-PL	Coupler	Multimode	Simplex Female SC	Simplex Female SC	Yes – Panel Mount	Run Fiber
RF-SSMSC-PL	Coupler	Single Mode	Simplex Female SC	Simplex Female SC	Yes – Panel Mount	Run Fiber
RF-SSMLCFSCF-PL	Adapter	Single Mode	Simplex Female LC	Simplex Female SC	Yes – Panel Mount	Run Fiber
RF-SSMLC-PL	Coupler	Single Mode	Simplex Female LC	Simplex Female LC	No	Run Fiber
RF-DSMLCFSCF-PL	Adapter	Single Mode	Duplex Female LC	Duplex Female SC	No	Run Fiber
RF-SSMFCMLCF-IL	Adapter	Single Mode	Simplex Female ST	Simplex Male SC	No	Run Fiber
RF-SSMLCFSTM-IL	Adapter	Single Mode	Simplex Female LC	Simplex Male ST	No	Run Fiber
RF-SSMFCMLCF-IL	Adapter	Single Mode	Simplex Female LC	Simplex Male FC	No	Run Fiber
RF-SSMLCFSCM-IL	Adapter	Single Mode	Simplex Female LC	Simplex Male SC	No	Run Fiber
RF-SSMLCFSCF-PL	Adapter	Single Mode	Simplex Male LC	Simplex Female SC	No	Run Fiber
RF-SSMLCA-IL	Coupler	Single Mode	Duplex Female LC/APC	Duplex Female LC/APC	Yes – Panel Mount	Run Fiber
RF-SSMSCA-PL	Coupler	Single Mode	Simplex Female SC/APC	Simplex Female SC/APC	Yes – Panel Mount	Run Fiber
RF-DSMLCA-PL	Coupler	Single Mode	Simplex Female LC/APC	Simplex Female LC/APC	No	Run Fiber
RF-DSMSCAFFCAF-PL	Adapter	Single Mode	Simplex Female SC/APC	Simplex Female FC/APC	Yes – Panel Mount	Run Fiber

\*Additional options available. Visit us online at [www.libav.com](http://www.libav.com).

## END POINTS



From end-to-end, Liberty is your full-line fiber optic provider. Our team of experienced sales professionals and highly trained fiber technicians will help you design and integrate turnkey systems that deliver industry-leading performance and ease of installation.

Liberty manufactures and distributes thousands of fiber optic solutions. Visit our website for our complete portfolio of solutions.

## SFP NETWORK MODULES

Part #	Fiber Type	Connectors	Bandwidth	Brand
RF-SFP01GMM	Multimode	Duplex LC	1G up to 550m	Run Fiber
RF-SFP01GSM	Single Mode	Duplex LC	1G up to 20km	Run Fiber
RF-SFP10GMM	Multimode	Duplex LC	10G up to 300m	Run Fiber
RF-SFP10GSM	Single Mode	Duplex LC	10G up to 10km	Run Fiber
RF-SFP10GCU-0.5M	Pre-built network patch cable with two SFP modules		10G up to 0.5m	Run Fiber
RF-SFP10GCU-01M	Pre-built network patch cable with two SFP modules		10G up to 1m	Run Fiber
RF-SFP10GCU-03M	Pre-built network patch cable with two SFP modules		10G up to 3m	Run Fiber
RF-SFP10GCU-07M	Pre-built network patch cable with two SFP modules		10G up to 7m	Run Fiber

\*Universal firmware for compatibility with most makes and models of network and AV equipment. Additional options available. Visit us online at [www.libav.com](http://www.libav.com).

## MEDIA CONVERTERS

Part #	Fiber Type	Signal Side A	Signal Side B	Brand
RF-FMCTRX-11	Single Mode or Multimode	Duplex Fiber (SFP Module)	1 twisted pair (RJ45)	Run Fiber
RF-FMCTRX-12	Single Mode or Multimode	Duplex Fiber (SFP Module)	2 twisted pair (RJ45)	Run Fiber
RF-FMCTRX-20	Single Mode or Multimode	Duplex Fiber (SFP Module)	Duplex Fiber (SFP Module)	Run Fiber

\*SFP modules sold separately. Additional options available. Visit us online at [www.libav.com](http://www.libav.com).

## NETWORK SWITCHES

Part #	SFP Ports	RJ45 Ports	Type	Brand
N10GSM1T24	24	1	Layer 3	Niveo
N10GSM2TC12	2	12	Layer 3	Niveo
N10GSM2TC8	2	8	Layer 3	Niveo
N10GSM4QT48	28	4	Layer 3	Niveo
N10GSM8T12	12	8	Layer 3	Niveo
N10GSM8T8	8	8	Layer 3	Niveo
NGS18T16	16	16	Enterprise	Niveo
NGSM24G4S	4	24	Enterprise	Niveo
NGSM24T2	2	24	Enterprise	Niveo
NGSM24T2-AV	2	24	Enterprise	Niveo
NGSM48T2	2	48	Enterprise	Niveo
NGSME16T2H	2	16	Enterprise	Niveo
NGSME16T2H-AV	2	16	Enterprise	Niveo
NGSME24G4S	4	24	Enterprise	Niveo
NGSME24T2H	2	24	Enterprise	Niveo
NGSME24T2H-AV	2	24	Enterprise	Niveo
NGSME48T2H	2	48	Enterprise	Niveo
NGSME8H	2	8	Enterprise	Niveo

\*SFP modules sold separately. Additional options available. Visit us online at [www.libav.com](http://www.libav.com).

## HDMI, DVI, USB & SDI OVER FIBER EXTENDERS

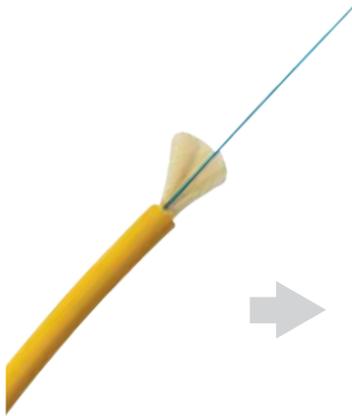
Part #	Fiber Type	Supported Signals	Max Length	Brand
DL-FHD2	Duplex Single Mode or Multimode	18G HDMI, IR, RS232, ARC	1,000 ft.	Digitalinx
BJK-0	Simplex Multimode	18G HDMI	1,000 ft.	Inneos
BPK-XT-0	Simplex Multimode	18G HDMI, IR	1,000 ft.	Inneos
TL-FO-HD	Simplex Single Mode or Multimode	10G HDMI	1,000 ft.	TechLogix
TL-FO-DVI	Simplex Single Mode or Multimode	1920x1200 DVI	1,000 ft.	TechLogix
DIGI-FO-USB3.0	Duplex Single Mode or Multimode	USB 3.0	330 ft.	Intelix
TL-FO-USB2-01	Duplex Single Mode or Multimode	USB 1.1, USB 2.0	1,640 ft.	TechLogix
TL-FO-USB3-02	Duplex Single Mode or Multimode	USB 1.1, USB 2.0, USB 3.0, USB 3.1	660 ft.	TechLogix
MINI-12GSDI	Simplex Multimode	12G SDI	1,000 ft.	Broaddata
MINI-3GHD	Simplex Multimode	3G HD-SDI	1,000 ft.	Broaddata

\*Additional options available. Visit us online at [www.libav.com](http://www.libav.com).

## SSF™ BULK FIBER

Part #	Fiber Type	Strand Count	Jacket Rating	Environment	Brand
S19125SMOSP	Single Mode   OS2	1	Plenum	Indoor/Outdoor	Cleerline
D29125SMOSP	Single Mode   OS2	2 (zip cord)	Plenum	Indoor/Outdoor	Cleerline
2D9125SMOS2P	Single Mode   OS2	2	Plenum	Indoor/Outdoor	Cleerline
4D9125SMOS2P	Single Mode   OS2	4	Plenum	Indoor/Outdoor	Cleerline
6D9125SMOS2P	Single Mode   OS2	6	Plenum	Indoor/Outdoor	Cleerline
12D9125SMOS2P	Single Mode   OS2	12	Plenum	Indoor/Outdoor	Cleerline
2ACS9125OS2PE	Single Mode   OS2	2	Direct Burial	Outdoor	Cleerline
6ACS9125OS2PE	Single Mode   OS2	6	Direct Burial	Outdoor	Cleerline
12ACS9125OS2PE	Single Mode   OS2	6	Direct Burial	Outdoor	Cleerline
6IAD9125SMOS2P	Single Mode   OS2	6	Plenum	Indoor	Cleerline
12IAD9125SMOS2P	Single Mode   OS2	12	Plenum	Indoor	Cleerline
S50125MOM3R	Multimode   OM3	1	Riser	Indoor	Cleerline
S50125MOM3P	Multimode   OM3	1	Plenum	Indoor/Outdoor	Cleerline
D50125MOM3P	Multimode   OM3	2 (zip cord)	Plenum	Indoor/Outdoor	Cleerline
D50125MOM3P	Multimode   OM3	2 (zip cord)	Riser	Indoor	Cleerline
4B50125OM3R	Multimode   OM3	4	Riser	Indoor	Cleerline
4B50125OM3P	Multimode   OM3	4	Plenum	Indoor/Outdoor	Cleerline
2D50125MOM3P	Multimode   OM3	2	Plenum	Indoor/Outdoor	Cleerline
4D50125MOM3P	Multimode   OM3	4	Plenum	Indoor/Outdoor	Cleerline
6D50125MOM3P	Multimode   OM3	6	Plenum	Indoor/Outdoor	Cleerline
12RMD50125OM3R	Multimode   OM3	12	Riser	Indoor	Cleerline
12D50125MOM3P	Multimode   OM3	12	Plenum	Indoor/Outdoor	Cleerline
2ACSS0125OM3PE	Multimode   OM3	2	Direct Burial	Outdoor	Cleerline
6ACSS0125OM3PE	Multimode   OM3	6	Direct Burial	Outdoor	Cleerline
12ACSS0125OM3PE	Multimode   OM3	12	Direct Burial	Outdoor	Cleerline
6IAD50125MOM3P	Multimode   OM3	6	Plenum	Indoor	Cleerline
12IAD50125MOM3P	Multimode   OM3	12	Plenum	Indoor	Cleerline
S50125MOM4P	Multimode   OM4	1	Plenum	Indoor/Outdoor	Cleerline
D50125MOM4P	Multimode   OM4	2 (zip cord)	Plenum	Indoor/Outdoor	Cleerline
6D50125MOM4P	Multimode   OM4	6	Plenum	Indoor/Outdoor	Cleerline
12D50125MOM4P	Multimode   OM4	12	Plenum	Indoor/Outdoor	Cleerline

\*Additional options available. Visit us online at [www.libav.com](http://www.libav.com).



## SSF™ BULK CONNECTORS

Part #	Fiber Type	Connector Type	Style	Brand
SSF-LC-MMFPC-10	Multimode	LC	Ultra (standard)	Cleerline
SSF-SC-MMFPC-10	Multimode	SC	Ultra (standard)	Cleerline
SSF-LC-SMUPC-10	Single Mode	LC	Ultra (standard)	Cleerline
SSF-LC-SMAPC-10	Single Mode	LC	Angled (APC)	Cleerline
SSF-SC-SMUPC-10	Single Mode	SC	Ultra (standard)	Cleerline
SSF-SC-SMAPC-10	Single Mode	SC	Angled (APC)	Cleerline

\*Additional options available. Visit us online at [www.libav.com](http://www.libav.com).



## ECONOMY FIBER PATCH CORD PART NUMBER CONFIGURATOR

RF	Fiber Cable	Fiber Type	Fiber OD	Connector Side A	Connector Side B	Cable Length	Unit of Measure
RunFiber	<b>2</b> Fiber Zip-cord OFNR	<b>M3</b> Singlemode OS2	<b>C</b> 2.0mm	<b>2D</b> LC/UPC Duplex	<b>2D</b> LC/UPC Duplex	<b>001</b>	<b>M</b> Meters
	<b>1</b> Fiber Simplex (SC-SC only)	<b>M1</b> 62.5 um Multimode OM1		<b>4D</b> SC/UPC Duplex	<b>4D</b> SC/UPC Duplex	<b>Total Cable Length</b>	
		<b>M3</b> 50 um Multimode OM3		<b>5S</b> ST Simplex	<b>5S</b> ST Simplex		
		<b>M4</b> 50 um Multimode OM4					

# HDMI CABLE SOLUTIONS



Wide selection  
UL, CSA and RoHS  
High-quality product  
Competitive pricing

- Economy and premium levels
- High-Speed HDMI®
- Copper and Fiber versions
- Plenum, non-Plenum and AWM rated



<p><b>E2-HDSEM-M SERIES</b> LIBERTY E2 HIGH-SPEED HDMI WITH ETHERNET</p> 	<ul style="list-style-type: none"> <li>• 28 &amp; 26 AWG TMDs pairs</li> <li>• Low-Profile molded head</li> <li>• High-Retention plugs up to 12 lbs</li> <li>• CL2 and CMG FT4 rated, RoHS Compliant</li> <li>• 5 meters and up feature RedMere® Chipsets</li> </ul>	<p><b>COMMERCIAL-GRADE</b></p> <ul style="list-style-type: none"> <li>• 5 meters and longer are directional</li> <li>• 10.2 Gbps, 4K Video, all HDMI® Audio formats</li> <li>• Supports CEC, Audio Return, and Ethernet</li> <li>• Lengths from ½ meter to 20 meters</li> <li>• Black with blue molded heads</li> </ul>	<p><b>BETTER</b></p>
<p><b>M2-HDSEM-M SERIES</b> LIBERTY M2 HIGH-SPEED HDMI WITH ETHERNET</p> 	<ul style="list-style-type: none"> <li>• 30 AWG copper TMDs pairs</li> <li>• Super Low-Profile molded heads</li> <li>• High-Retention plugs up to 12 lbs</li> <li>• AWM rated, RoHS compliant</li> </ul>	<p><b>PERFECT FOR PATCHING CABLES IN RACKS</b></p> <ul style="list-style-type: none"> <li>• Up to 8 feet, 10.2Gbps, up to 15 feet 5.0Gbps</li> <li>• Supports CEC, Audio Return, and Ethernet</li> <li>• Available in 1,2,3,4,5,6,8,10,12 and 15 feet</li> <li>• Ultra flexible Black with black molded heads</li> </ul>	<p><b>BETTER</b></p>
<p><b>E-MHDM-M SERIES</b> LIBERTY HIGH-SPEED MICRO HEAD HDMI WITH ETHERNET</p> 	<ul style="list-style-type: none"> <li>• HDMI "A" Male to "A" Male Connectivity</li> <li>• Ultra small flexible diameter cable 3.6mm in diameter</li> <li>• Flexible Polyvinyl Chloride Jacket</li> <li>• AWM rated, RoHS Compliant</li> </ul>	<p><b>MAXIMUM FLEXIBILITY PERFORMANCE</b></p> <ul style="list-style-type: none"> <li>• ATC Certified HDMI® High-Speed with Ethernet</li> <li>• 10.2 Gbps / 4Kx2K / 3D / CEC</li> <li>• Lengths 2m and longer are directional</li> <li>• 4m length does not support Ethernet</li> </ul>	<p><b>GOOD</b></p>
<p><b>Z100HDE SERIES</b> LIBERTY HIGH-SPEED HDMI WITH ETHERNET</p> 	<ul style="list-style-type: none"> <li>• 28 AWG copper TMDs pairs</li> <li>• Economy public mold design</li> <li>• AWM rated, RoHS compliant</li> <li>• 10.2 Gbps, 4K Video, all HDMI® Audio formats</li> </ul>	<p><b>IDEAL FOR BUDGET-CONSCIOUS INSTALLATIONS</b></p> <ul style="list-style-type: none"> <li>• Supports CEC, Audio Return and Ethernet</li> <li>• Available in 3, 6, 10, 15 and 25 foot lengths</li> <li>• Quantity discounts</li> <li>• Black</li> </ul>	<p><b>VALUE</b></p>





# CT CAT

Increasing bandwidth needs for higher video resolutions makes cable and connector selection more important than ever.



## TERMINATING CATEGORY CABLES CAN BE A CHALLENGE...

frustrating connectors that are impossible to terminate, have a high failure rate, or are overpriced? It's maddening... and expensive!

Introducing connectors and termination tools that are cost-effective, easy to terminate, flexible, and provide a solid connection....

## ENTER THE REVOLUTIONARY CONNECTEC CAT BY LIBERTY AV SOLUTIONS

### **CONNECTEC CAT**

#### CONNECTEC CAT (CTCAT) FEATURES:

- Easy to Terminate: tested by installers, termination averages less than 90 seconds.
- Offered in Cat 6A, Cat6, and Cat5E
- Matched offering of plugs and keystone jacks
- Best Value: 50-60% less than competitive systems
- Tried and true 180° termination, can be terminated with or without tools
- Can be re-terminated up to 5 times
- ANSI/TIA-568 Compliant
- UL Approved
- UTP jacks available in Black, Blue, Green, Gray, Orange, Red, White, and Yellow
- Applications: Data Centers, AV, HDBaseT, LAN

The Termination Series:  
See CT Cat in Action and  
Review Product Specs



## SIMPLE TERMINATION WITH QUALITY CONNECTIONS

ConneTec Cat is designed for both shielded and unshielded category cable, offering Cat5e, 6 and 6A connectors and tools that makes 90-second successful and high-quality terminations a reality.

### RJ45 JACK TERMINATION



CABLE  
PREPARATION



INSERT  
LOAD BAR



TERMINATE  
CONNECTOR



COMPLETED  
TERMINATION

### RJ45 PLUG TERMINATION



# CT CAT

## Cat 6A (10G Ethernet)



**Category 6A Shielded 8P8C Field Terminable RJ45 Plugs**  
FTP5A0A



**Category 6A 180 Degree Shielded RJ45 Keystone Jack**  
1A68TPZA0



**Category 6A Unshielded RJ45 180 Degree Keystone Jack**  
(available in 8 colors)  
1A68TP0A0-(color)



**Category 6A Shielded RJ45 Keystone Coupler Insert**  
CP8DZ00A



**Category 6A 180 Degree Cut & Crimp Tool for Keystone Compatible Inserts**  
EHT010

## CONNECTEC CAT

Standardization is important for your company and Liberty understands that. One complete tool kit and one installation practice makes for consistent installations. Standardize your installation with Liberty AV's industry-leading offering of category cable and Connectec Cat connectors today!

**All CT Cat products meet all applicable compliance and certifications:**



## Cat 6



**Category 6 Unshielded Field Terminable RJ45 Connector**  
FTP60A



**Category 6 180 Degree Shielded RJ45 Keystone Jack**  
2A68KPS00



**Category 6 Unshielded RJ45 180 Degree Keystone Jack**  
(available in 8 colors)  
0A68RP000-(color)



**Category 5E/6 180 Degree Cut & Crimp Tool for Keystone Compatible Inserts**  
EHT040

## Cat 5E



**Category 5E Unshielded RJ45 180 Degree Keystone Jack**  
(available in 8 colors)  
2A58KP5E0



**Category 5E Unshielded RJ45 180 Degree Keystone Jack**  
(available in 8 colors)  
0A58RP0E0-(color)



**Category 5E Shielded RJ45 Keystone Coupler Insert**  
CP8DZ00E



**Category 5E/6 180 Degree Cut & Crimp Tool for Keystone Compatible Inserts**  
EHT040

## Additional Tools



**110/Krone Insert Stripper with Cable Jacket Stripper**  
CCT110



**RJ45 Patch Cord Release Tool for Tight High-Density Patch Bays and Switches**  
CCT070



## PERFECT FOR THE HOME OFFICE 'WORK FROM ANYWHERE' KITS

### EASY TO DEPLOY AND PERFECT FOR THE HOME OFFICE: KEEP THE FOCUS ON WORK

With this year's drastic shift in work practices, organizations are seeking reliable equipment that will keep their workforce productive both in the office and while working remotely.

Work from Anywhere pre-bundled solutions designed with effortless, supported set-up and reliability in mind. Standardized, Simplified, Scalable, and Supported:

- **Simple Set-up** – Arrives in one package, ready to distribute or set-up.
- **Quality components** – Technology from trusted, industry-leading brands.
- **System Standardization** – Streamline deployment. All users receive the same products, eliminating equipment guesswork for IT / tech support.
- **Scalable** – From ten to ten-thousand, Work from Anywhere kits can be deployed across an entire organization.
- **Live Support:** Instant face-to-face video set-up assistance.
- **1-Year Warranty** with 48-hour advanced replacement.
- **Service Terms** – Extendable and customizable, powered by Teleportivity.

# MULTIPLE PRE-CONFIGURED SOLUTIONS

Choose from a variety of pre-configured, pre-bundled solutions or customize:



## High-Quality Sound:

*Audio On The Go (WHFAUDIO1.1)*

Crystal-clear audio for laptop or phone. Hear and be heard, regardless of location with noise and echo cancellation.



## Premium Sound & Video:

*Audio & Video On the Go (WHFAV1.1)*

Look and sound the best on every call. Upgrade the video conferencing experience with adaptable noise & echo cancellation, plus 4K video.



## Complete Workstation:

*Audio & Video with Docking (WHFDESK1.1)*

Turn any laptop into a quality workstation. Easily connect to the provided monitor, camera, keyboard, and audio with a single USB-C cable.



## Enhanced Display:

*Audio & Video Docking Set-up with Curved Display (WHFDESK2.1)*

Transform your laptop into a workstation that looks and sounds amazing. Enhanced audio and video experience with a 34" NEC curved ultra wide monitor and Bose Professional headset.



## Conferencing:

*Executive Remote Conferencing with BYOD (WHFROOM1.1)*

Perfect for work or in-home office. BYOD capability for presenting with ease. Wirelessly connect any personal device or laptop to a 55 inch NEC 4K display and Bose Professional Video Conferencing Sound Bar.

**Customization Available:** Fully customizable bundles, designed with the right components and right amount of support for the job are available. Contact your Liberty AV representative for more information.

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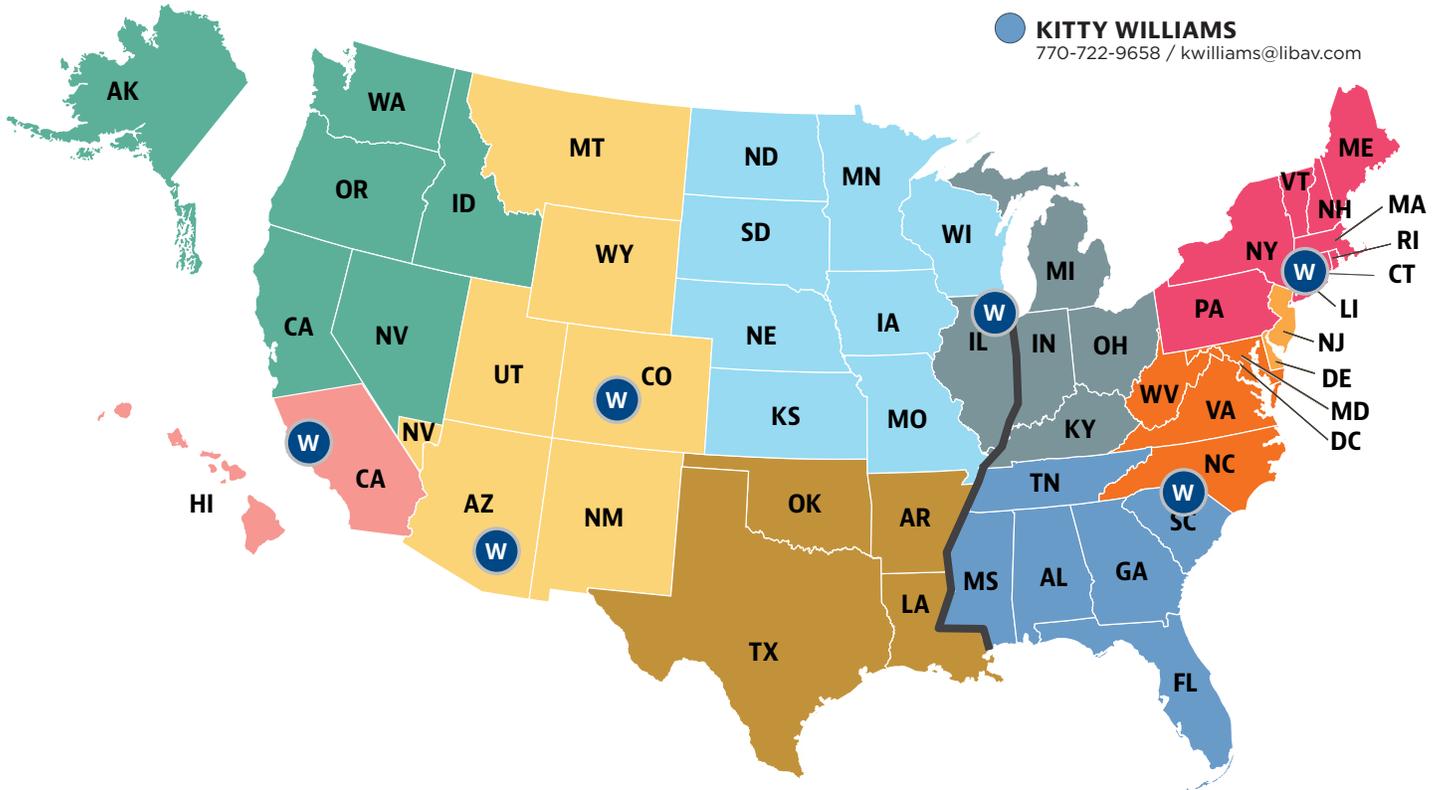
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