



four star  
wire & cable inc.

# SYNTAX® INTERCONNECT

Audio, Broadcast & Lighting



Since 1981, SYNTAX® multipin connectors and application specific cables by Valentini of Rivoli, Italy, have been used in public entertainment; convention centers; exhibitions; sporting events; concerts and live shows; pro audio multipin gear; I/O panels; drive/FX racks; big audio routing; stage & snake boxes; broadcast installations; amp racks & speakers; HMI ballast; stage lighting; pro lighting cables; lighting consoles & equipment... all marketed by industry leading technical service companies, OEMs, distributors, cable assemblers, system integrators and installers, such as:

Four Star Wire and Cable, Inc is a leading North American Wire, Cable and Connectivity distributor and manufacturer of the MyStarSound brand of Pro Audio, Video, Stage and Lighting Cables. We strive to provide the best of products to all the industries we service and have established quality standards that exceed our customers expectations.

	Series	Pin Configuration(s)	Specs available at lolabcorp.com
	<b>SVK</b>	13, 19, 25, 37, 54, 85, 100 & 150 pins	Panel & inline; IP67 waterproof; MIL-C-5015; gold or silver contacts
	<b>SVS</b>	72 & 101 pins	
	<b>SHD</b>	13, 19, 25, 37, 54, 85, 100 & 150 pins	Roadline: Enhanced, robust, heavy-duty version of the SVK Series
	<b>SV</b>	24 Audio & 6 Video (Coax) Pins	Panel & Inline Audio/Video Hybrid Connectors; gold plated precision contacts
	<b>SMA</b>	122 & 176 pins	Hermaphroditic IP67 panel & inline audio, up to 56 channels; gold plated solder contacts
	<b>SPK</b>	4, 8 & 19 pins   CA-COM Loudspeaker	Pro loudspeaker panel & inline; rubber locking ring; CA-COM mateable; silver & gold solder or crimp contacts
	<b>SPK008</b>	8 pin CA-COM Loudspeaker Adapter	Adapter; CA-COM 8 compatible; male one end, female other end
	<b>SB</b>	2, 3, 4, 6, 7, 8 & 9 pins	HMI Ballast & Lamp connector; 400W - 200KW; configurable; bayonet lock & coupling roller; silver plated contacts
	<b>SSX</b>	19, 16 pin   UL & Heavy Duty Versions	Lighting connector; Socapex 419 compatible; panel & inline; fast wiring, indestructible; IP67; first make, last break gold or silver plated contacts
	<b>SPX</b>	Single Pole High Amperage Power	Power 400A - 750A; panel & inline;
	<b>SPZ</b>	Connectors	US, EU, UK & AU color codes; IP67; IP2X; silver plated contacts
	<b>Cables</b>	Application Specific Cables	Expertly engineered pro audio & video
	<b>Drums</b>	Cable Drums (featuring optional IO Side Panels)	features; power distribution; data
	<b>Glands</b>	Metric Glands   Expand Cable O.D.'s	Glands, standard or spiral flex and metal types
	<b>Tooling</b>	Tooling & Accessories	Contact us for more information

Four Star Wire and Cable, Inc.  
Sterling Heights, Michigan 877<789<1626 | Nashville, Tennessee 877<853<8106  
Technical Support Line 866<445<4630

## SVK & SHD ROADLINE SERIES AUDIO

### 13, 19, 25, 37, 54, 85, 100 & 150 pins

Manufactured in Italy 



The audio multipin **SVK & SHD Roadline** Series are MILCO05015 compliant and IP067 waterOproof.

Unlike any other multipin connector, the **SYNTAX<sup>®</sup> SVK Series** backshell's interior has been cleverly designed to be a little wider, providing added room, allowing for easier



access and added simpler wiring.



While this innovative feature furnishes help for wiring space even in the smaller pin configurations, it delivers significant impact in 85, 100 & 150 pin configurations.

The **SHD Roadline** is a virtually indestructible version of our worldOclass **SVK** audio connector series.



**SHD's** durability and reliability were engineered for the toughest outdoor use.

Key features include IP067 waterOproof connections and an increased number of mating cycles even in the most rigorous conditions. MILCO05015 compliant.

The **SHD Roadline** also features bigger coupling roller pins for easier mating. The locking ring's increased thickness delivers a robust design that prohibits ovalization caused by unintentional blows. Deeper knurling on the hand grip of the oversized locking ring delivers superior mating and deOmating. Specs available at [iolabcorp.com](http://iolabcorp.com).

Please refer to **SVK & SHD Part Number Key** on Page 6.

### SVK & SHD SERIES ORDERING OPTIONS

- Gold or Silver Plated Solder or Crimp Contacts
- Gold Plated Combo Crimp+Solder Contacts on 100 & 150 pin Versions
- Panel Mount & Inline, Male & Female Versions
  - Aluminum or Rubber Coated Locking Rings
- Dust Caps feature highOresistance 7 strand stainless steel lanyard with a black, antiOscratch teflon coating



## SYNTAX CONNECTOR CLAMPING RANGES

The design of the Syntax multipin backshell enables wider O.D. support for cables.

Thread Size	Clamping Range MM	Clamping Range INCHES	SVK / Pin Count	Gland Designator
M 20 x 1.5	6 -12	.236 - .472	13, 19	<b>MH</b>
M 20 x 1.5	10 - 14	.394 - .551	13, 19	<b>MI</b>
M 25 x 1.5	6 - 13	.236 - .512	25	<b>MJ</b>
M 25 x 1.5	13 - 18	.512 - .709	25	<b>ML</b>
M 32 x 1.5	7 - 15	.276 - .590	37, 54	<b>MN</b>
M 32 x 1.5	11 - 21	.433 - .827	37, 54	<b>MM</b>
M 32 x 1.5	18 - 25	.709 - .984	37, 54	<b>MO</b>
M 40 x 1.5	15 - 23	.590 - .905	85, 100, 150	<b>MQ</b>
M 40 x 1.5	19 - 28	.748 - 1.102	85, 100, 150	<b>MP</b>
M 40 x 1.5	22 - 32	.866 - 1.26	85, 100, 150	<b>MR</b>

Example: SVK054FVRSSXXNT = 54 pin F inline, rubber locking ring, Ag solder installed

Please refer to **SVK & SHD Part Number Key** on Page 6. Specs available at [iolabcorp.com](http://iolabcorp.com).

### SVK & SHD SERIES ORDERING OPTIONS

- Gold or Silver Plated Solder or Crimp Contacts
- Gold Plated Combo Crimp+Solder Contacts on 100 & 150 pin Versions
  - Panel Mount + Inline, Male & Female Versions
  - Aluminum or Rubber Coated Locking Rings
- Dust Caps feature highOresistance 7 strand stainless steel lanyard with a black, antiOscratch teflon coating



## SVS SLIMLINE SERIES AUDIO CONNECTOR

### 72 & 101 pins

Slim line, lower profile high density multipin connector for audio applications.

The SVS Series is available in



CO5015 compliant with an IP67 waterproof rating.

Highly conductive copper alloy crimp pins and sockets, available with gold plating.



Panel mount and inline

cable versions available. Insert layout and wiring lists are

available for download on the IOL web site at [iolabcorp.com](http://iolabcorp.com).

Like the SVK & SHD, the SVS Series features a connector backshell with a special aluminium alloy with a high scratch resistant black hard anodized powder coated finish.

Tough & reliable like all SYNTAX connectors. Marked knurling on the circumference of the SVS locking ring provides optimal grip and easy coupling and decoupling, especially in tight quarters. An audible click indicates locking is complete.

The thicker locking ring delivers higher resistance to shocks.

The aluminium housing for the neoprene insert does not protrude from the edge of the locking

ring, avoiding ovalization due to accidental blows. The extra wide backshell allows for easier wiring. Robust coupling roller pins on locking rings increases durability & reliability.



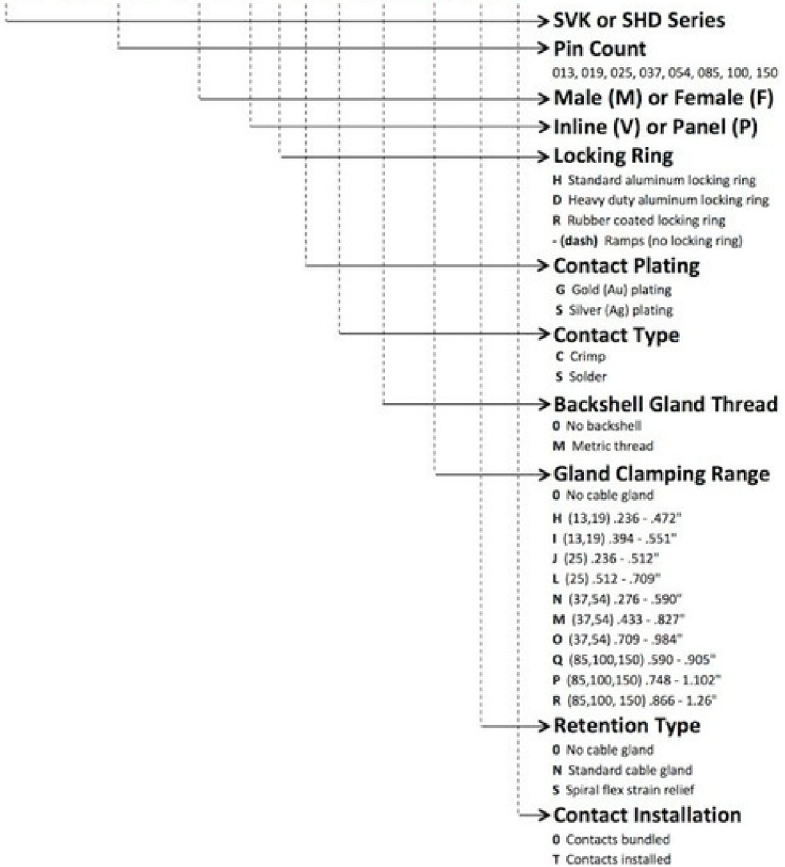
Vibration proof stainless steel safety pin prohibits insert rotation. Contact shoulders mate firmly at installation and are solidly retained by the insulator.

Please refer to SVS Part Number Key on Page 7. Specs available at [iolabcorp.com](http://iolabcorp.com).

#### SVS SERIES ORDERING OPTIONS

- Gold Plated Crimp Contacts
- Panel Mount + Inline, Male & Female Versions
  - Aluminum or Rubber Coated Locking Rings
  - Wide Cable O.D. Clamping Range
- Dust Caps feature high resistance 7 strand stainless steel lanyard with a black, anti-scratch teflon coating

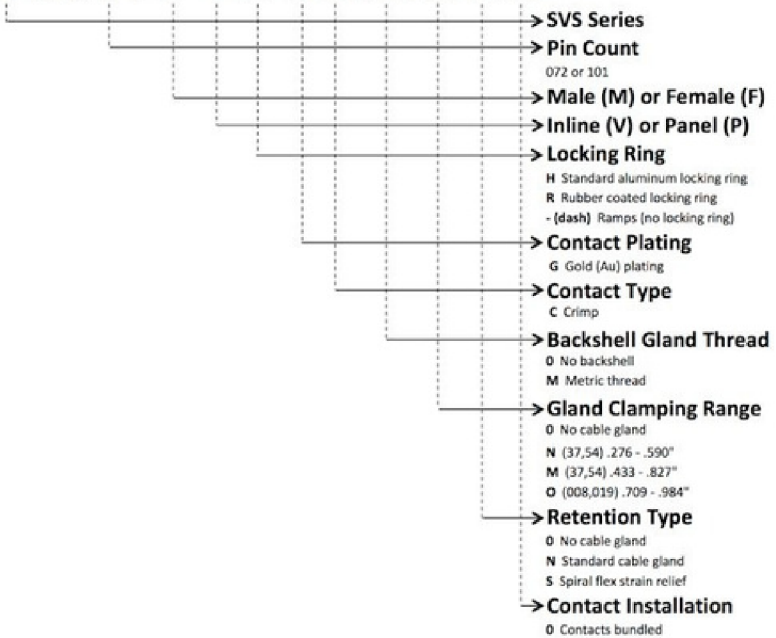
# SVK019MV-SSMHNT



#### NOTES

- All Syntax SVK & SHD part numbers have 15 characters
- Combo Gold Crimp+Solder Pins standard on 85, 100 & 150 pin versions (GC)
- Crimp contacts are bundled. Specs available at [iolabcorp.com](http://iolabcorp.com).

# SVS072FVHGCMONO



#### NOTES

- All Syntax SVS part numbers have 15 characters
- Gold Crimp Pins standard on both 72 & 101 pin versions (GC)
- Crimp contacts are bundled. Specs available at [iolabcorp.com](http://iolabcorp.com).



## SSX SERIES PRO LIGHTING CONNECTORS

## 19 pins | UL Version



The SYNTAX<sup>®</sup> SSX UL listed Series is designed for professional lighting applications.

Fully compatible with industry standard Socapex 419 type designs.

Robust thick wall machined aluminum alloy. Uber durable anodized or high quality painted finish. Thermoplastic rubber insert enables removable contacts, either crimp or solder. Panel, inline & spider versions.

IP67 watertight when mated. UL E 302043.

Electrical safety and UL compliance achieved by internal insulation of the shells, featuring a safety insulating sleeve to prevent electric shock, as well as “first make last break” ground contacts.

Grounding rings allow bussing of ground contacts. Locking rings and backshells designed for better ergonomic handling.

- Underwriter's Laboratories Listed E 302043
- Anti-Rotation Set Screw
- Ingress protection: IP67<IEC 529 norms
- Salt atmosphere resistance: 96 h IEC 68<21<11
- Operating temperature: <55°C to +125°C
- Shell material: machined aluminum alloy
- Anodized or powder coated finish
- Thermoplastic rubber insulators & protection sleeves
- Cable gland on inline versions: Metric M40 thread
- Cable gland on spider versions: Metric M50 thread
- Silver or gold plated removable crimp or solder contacts



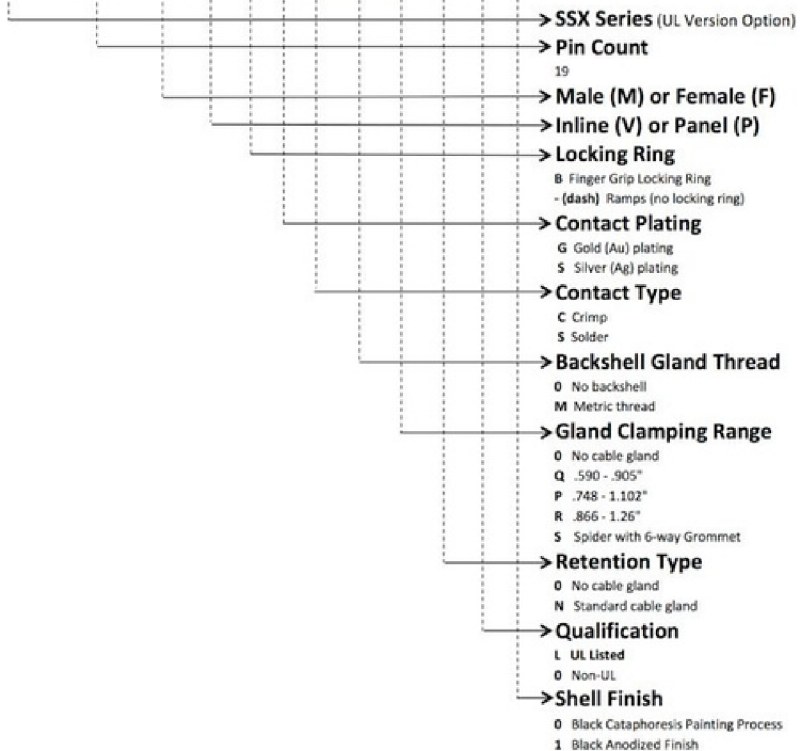
SSX color coded ID locking rings

Please refer to SSX UL Part Number Key on Page 9. Specs available at [iolabcorp.com](http://iolabcorp.com).

## SSX UL SERIES LIGHTING CONNECTOR

### PART NUMBER KEY

# SSX19MVBSSMPNLO



#### NOTES

- All Syntax SSX part numbers have 15 characters
- Please specify bundled or installed solder contacts when ordering
- Crimp contacts are bundled. Specs available at [iolabcorp.com](http://iolabcorp.com).

## SSX SERIES PRO LIGHTING CONNECTORS

### 19 & 16 pins | Heavy Duty Version

SSX Heavy Duty Series 190pin & 160pin connectors feature the stablest coupling and the fastest wiring possible. Socapex 419 compatible & IPO67 waterproof when mated.

The insert is chloroprene rubber, enabling the use of removable contacts, either crimp or solder.

Electrical safety and UL compliance achieved by internal insulation of the shells, featuring a safety insulating sleeve to prevent electric shock, as well as “first make last break” ground contacts. Grounding rings allow bussing of ground contacts. Locking rings and backshells designed for better ergonomic handling.



SSX 60way Neoprene SPIDER Gland



SSX SPIDER Assembly



SSX 80way Neoprene SPIDER Gland



SSX Heavy Duty 160Pin

Please refer to **SSX Heavy Duty** Part Number Key on Page 11.

### SSX HEAVY<DUTY SERIES ORDERING OPTIONS

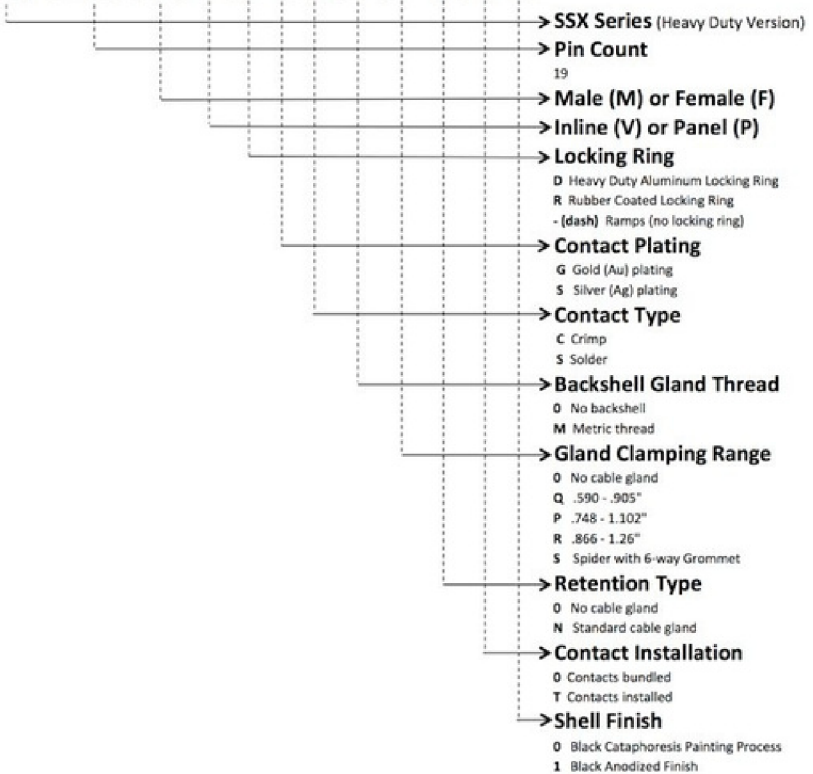
- Silver or Gold Plated Crimp or Solder Contacts
- Panel Mount Male or Female
- Inline Versions Features Wide Cable O.D. Clamping Range
  - Finger Grip or Standard Cylindrical Locking Rings
- Contact Us for 60way or 80way SSX Spider Data.
  - Specs available at [iolabcorp.com](http://iolabcorp.com).



## SSX HEAVY DUTY LIGHTING CONNECTOR

### PART NUMBER KEY

# SSX19MVDSSMPNT0



#### NOTES

- All Syntax SSX part numbers have 15 characters
  - Optional 16 pin Version Available
- Crimp contacts are bundled. Specs available at [iolabcorp.com](http://iolabcorp.com).

## SPK SERIES LOUDSPEAKER CONNECTORS

### CA<COM 4, 8 & 19 pins

The rugged **SPK Series** CAOCOM connector, especially the 8 pin model, has been used extensively in professional speaker installations globally. All **SPK Series** connectors are fully CAOCOM compatible. Male or female inline and panel mount versions, silver or gold plated contacts, multiple cable gland support, ramps, aluminum or rubber coated locking rings.



*Note: for 19 pin PA/COM compatible connectors, please refer to the SVK & SHD Roadline Series.*

### SPK008 CA<COM ADAPTER

The singular SPK008 Adapter cleverly allows two 8 pin CAOCOM cables with locking rings to be interconnected, instantly creating an extension cord.

Time & cost saver. Very handy in the toolkit at the install site; e.g., 93' is needed but only 75' cords are at hand.

Male + Female interface available in Ag or Au plated solder contacts (installed). CAOCOM compatible.

#### SPK008 ADAPTER OPTIONS

- 8 Installed Pins, Ag or Au Plated
- One End Male, Other End Female
- Ramps O No Locking Ring(s)
  - SPK008ADIVOSV (Ag)
  - SPK008ADIVOGD (Au)

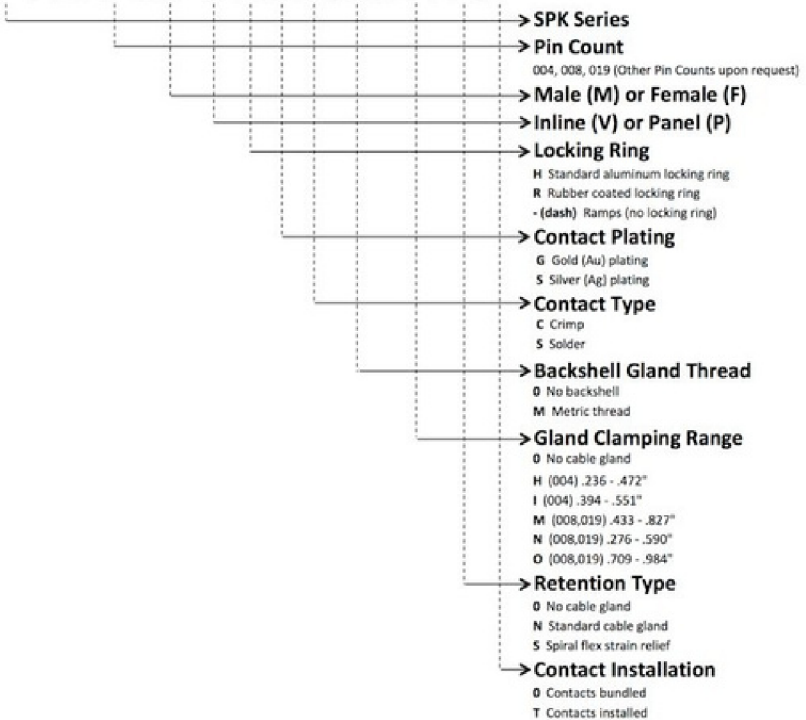


#### SPK008 SERIES ORDERING OPTIONS

- 4, 8 or 19 pins, Silver or Gold Plated installed Solder Contacts
- All Panel Mount or Inline Configurations CAOCOM Compatible
  - Optional Locking Ring or Ramps (No Locking Ring)
  - 8 pin Version: Rubber or Aluminum Locking Ring
  - SPK008 Adapter Available as 8 pin Male + Female
    - Specs available at [iolabcorp.com](http://iolabcorp.com).
- Contact Us for Complete Descriptions & Alternate CAOCOM Pin Sizes.

### PART NUMBER KEY

# SPK008FVRSSMMNT



#### NOTES

- All Syntax **SPK** part numbers have 15 characters (except the **SPK008** Adapter)
  - Custom Pin Counts Available Upon Request
- Crimp contacts are bundled. Specs available at [iolabcorp.com](http://iolabcorp.com).
- Please refer to Page 12 for **SPK008 Adapter** product part number ordering information



## SMA SERIES HERMAPHRODITIC

### 122 & 176 pins

The **SMA Series** is derived from the manufacturing of prime quality extruded aluminum alloy. The connector's machined metallic shells are anodized in black to protect the connector from long term heavy usage damage. Suitable for a long distance interface, the **SMA** system also enables the creation of a standard extension cord. All connectors are equipped with protection dust caps.

Inline connectors' retention is ensured by a SKINTOP® plastic compression gland, rated IPO67 waterOproof.

The **SMA Series** comes in two different configurations: 122 and 176 contacts, well suited for up to 56 channel connections.

**SMA Series** solder cup connectors are compatible with the MASS series solder/crimpO type contact connectors.



#### SMA SERIES ORDERING OPTIONS

- Inline Cable 122 pins + Cable Gland O includes Dust Cap
- Inline Cable 176 pins + Cable Gland O includes Dust Cap
- Panel Mount 122 pins O 2U Square or Rounded Flange O includes Dust Cap
- Panel Mount 176 pins O 2U Square or Rounded Flange O includes Dust Cap

## SV SERIES BROADCAST CONNECTOR

### 24 Audio + 6 HD Coaxial Pins



The unique hybrid Audio/Video **SV Series** connector has been designed for professional broadcasting, especially for outdoor environments and heavy usage applications.

Two contact connections are suited for RG59 coaxial cable. The cable gland on the backshell has been specifically designed to host the combined audio/video cable **7YA08V65X**.

Specs available at [iolabcorp.com](http://iolabcorp.com).

#### SV SERIES ORDERING OPTIONS

- Panel Mount Male + Heavy Duty Locking Ring
  - Panel Mount Female
    - Inline Female Cable End Connector
  - Inline Male + Rubber Locking Ring
  - Inline Male + Heavy Duty Locking Ring

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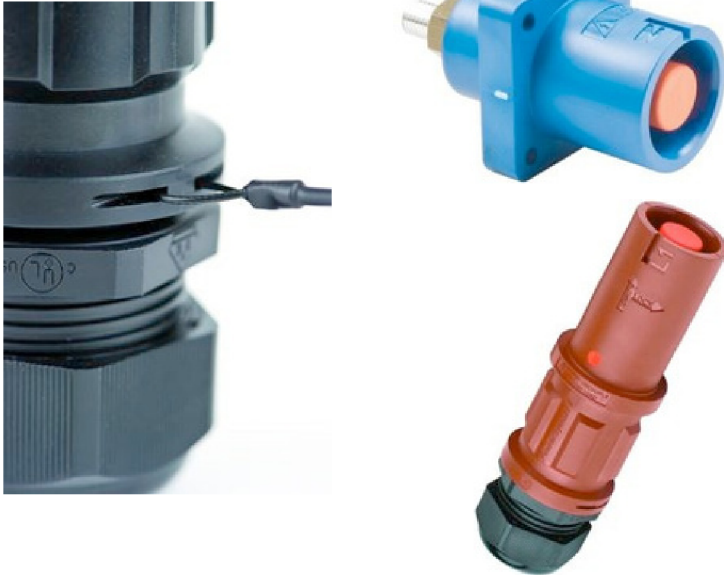
Four Star

[fourstarwire.com](http://fourstarwire.com)

## SPX/SPZ SERIES POWER CONNECTORS

### Single Pole 400A < 750A

The **SPX/SPZ Series** connectors are specifically suited for electrical supply management of 650A continuous, up to 750A intermittent. Many technical details have been improved on the new **SPX/SPZ Series** design to deliver the best in safety and reliability across a variety of rigorous work conditions.



#### SPX/SPZ SERIES ORDERING OPTIONS

- LineDrain, LineSource, Neutral/Earth
- Panel Drain, Panel Source, Neutral/Earth
- Protective Plastic Caps

## SB SERIES HMI BALLAST/LAMP

### 2 to 9 pins

The **SB Series** connector delivers a high quality, extremely durable and safe connection between HMI Ballast units and lamps. The **SB Series** is fully customizable to specific applications.



#### SB SERIES ORDERING OPTIONS

- Specified Prior to Quoting: Numerous Insert Arrangements & Pin Counts Available.
- Please Contact Us. Specs available at [iolabcorp.com](http://iolabcorp.com).

## APPLICATION SPECIFIC CABLE PRODUCTS

### HYBRID CABLES

One cable to better manage multifarious mission-critical, show-stopping signals. Versatile, suitable for parallel controls for light mixing boards. Also used for analog audio cabinets. Specs available at [iolabcorp.com](http://iolabcorp.com).



#### HYBRID ORDERING OPTIONS

- Power + Digital
- Power + 2 x CAT5E
- Power + 2 x CAT5E x Digital
- Power + 1 x CAT5E + 1 x Video + 2 x Digital
- 6 x Video + 8 x Digital
- Contact Us for Complete Descriptions

### ANALOG CABLES

Multipair, crystal-clarity microphone, audio installation and rich sounding instrument cables. Specs available at [iolabcorp.com](http://iolabcorp.com).



#### ANALOG ORDERING OPTIONS

- Audio Multipair
- Installation Audio
- Audio Microphone
- Audio Microphone Double Jacketed
  - Instrument Cable
- Contact Us for Complete Descriptions

### DIGITAL CABLES

Developed for high-standard professional applications in rigorous environments. Single pair, two twisted pairs and multi-pair cables. These cables have been designed per the AES/EBU specification. Includes ruggedized Ethernet.



#### DIGITAL ORDERING OPTIONS

- Digital Multipair 4, 8, 12 & 16 Pair
- Single Pair Digital for DMX
  - Dual Pair Digital
  - Ruggedized Ethernet
- Ruggedized Outdoor Ethernet
- Contact Us for Complete Descriptions

### SPEAKER POWER CABLES

Clarity and balance of sound, high conductivity and brilliance to cover the full dynamic range of sound. Specs available at [iolabcorp.com](http://iolabcorp.com).



#### SPEAKER ORDERING OPTIONS

- 2 Conductor, 11AWG/13AWG/16AWG
- 4 Conductor, 13AWG/16AWG
- 6 or 8 Conductor, 13AWG
- 8 or 16 Conductor, 11AWG
- Contact Us for Complete Descriptions



## APPLICATION SPECIFIC CABLE PRODUCTS

### VIDEO / BROADCAST CABLES

Designed for standard or high definition video signal. All copper construction enhances signal strength, while highO density shielding protects the signal from internal and external interference (ingress/egress).



#### VIDEO ORDERING OPTIONS

- 75 ohm Video Installation Cable
- Halogen Free 75 ohm HD Video Installation Cable
- Contact Us for Complete Descriptions

### MAIN POWER CABLES

Flexible and easy to handle. Professional cables for lighting, audio and video technology. Durable and highly reliable. The best choice when winding operations are intensive. Specs available at [iolabcorp.com](http://iolabcorp.com).



#### POWER ORDERING OPTIONS

- 3, 5 or 6 Power Conductors
- 12/19 Conductors, Marked Inner Jackets
- Ruggedized Multicore Power
- Halogen Free Multicore Power
- Contact Us for Complete Descriptions

### RUGGED CABLE DRUM SERIES

We enlarged the internal diameter of the drum to make it extremely functional and protect cables from damage caused by winding. Less mess...and less stress!

The SYNTAX<sup>®</sup> Cable Drum Series has an extremely strong structure, thanks to high resistance bent and soldered structural steel tubes. External finish is a highOresistance matte black powdercoat. The handle can be lodged on the side of the external frame, making the cable drum a proper parallelepiped structure without any protrusion to reduce space for shipping.

The Cable Drum Series are easy to use and perfect in applications such as recording studios, live entertainment shows, broadcasting, reality video production or sporting events, and are especially useful in a multicore distribution system.



#### DRUM ORDERING OPTIONS

- 3 Versions of Drum Cable Capacity: 13Kg/28.7lbs | 18Kg/39.7lbs | 21.5Kg/47.4lbs
- 3 Optional I/O Side Plates: 16, 24 or 32 Metal D Shell XLR Connectors
- Specs available at [iolabcorp.com](http://iolabcorp.com).

75VCR190 with optional side plate shown

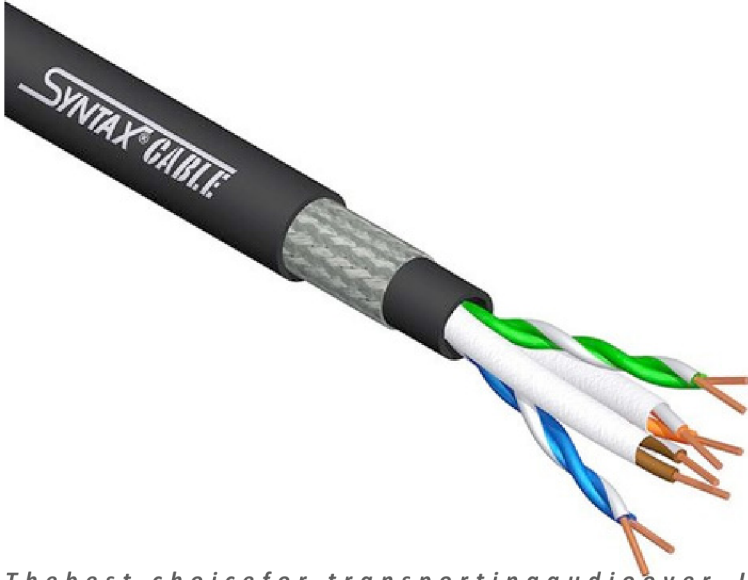
### 7XLANCAT5 | 7XLANCAT5PUR



- Designed for broadcast & network installations demanding high Class D bit rates.
- ISO/IEC11801 & EN501731EIA/TIA 568B.2 compliant (90m), Category 5E.
- Single or Double jacketed constructions.
- Flexible jacket; round, smooth design; zero interstices.
- Indoor (**7XLANCAT5**) & Outdoor (**7XLANCAT5PUR**) versions.
- **7XLANCAT5PUR** features a second exterior jacket of highly durable & temperature resistant polyurethane.
- Foam Polyolefin insulation on conductors to maintain exacting electrical & signal tolerances over a longer service life span.
- Double shielded: heavy braid + overlapped foil.
- Reel sizes: 100m, 305m (1,000') & 500m, continuous lengths.

**7XLANCAT6PUR**

AUDIO OVER IP | RUGGEDIZED FOR BROADCAST, OUTDOOR &amp; TOURING APPLICATIONS

*The best choice for transporting audio over IP*

Designed for outdoor and mobile use in broadcasting and in all Class E network installations with a required transmission frequency of up to 250MHz, and installations demanding high bit rates & low latency. Durability for coiling/uncoiling over cable drums.

Perfect in AVB, Ravenna, Dante, CobraNET, FormatOA, AES67 or other AoE networking applications where the sum latency cannot exceed 2ms across 7 hops. **7XLANCAT6PUR** is fully compliant with ISO/IEC 11801 O EN 50173 O EIA/TIA 568B.2 and ensures accurate transmission of data over a maximum 90 meters per the Category 6 standard.

- ISO/IEC11801 & EN501731EIA/TIA 568B.2 compliant (90m).
- Flexible dualOjacketed design; round, smooth surface with zero interstices.
- Exterior jacket of tough, highly durable & temperature resistant polyurethane.
- Foam polyolefin insulation maintains exacting electrical & signal specification tolerances.
- Heavy coverage tinned copper braided shield = superior shielding at application frequencies.
- Designed to physically withstand constant coiling on cable drums.
- Delivers longer service life & greater value.
- Reel sizes: 100m, 305m (1,000') & 500m, continuous lengths.

# SYNTAX<sup>®</sup>



**AUDIO, VIDEO & DATA NETWORKING, LIVE PERFORMANCE & TOURING, STADIUMS  
& CONCERT VENUES, LOUDSPEAKER INSTALLATIONS, PRO AUDIO, SIGNAL  
ROUTING, STAGE BOXES & SNAKES, LIGHTING & CONSOLES, POWER & BALLAST I/O  
PANELS, BROADCAST**

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