SMPTE®
PRODUCT GUIDE

» BROADCAST ENCLOSURES

» SMPTE CABLES

» SMPTE ASSEMBLIES

» SMPTE ACCESSORIES

» MHC®-T3 BYPASS SYSTEM

OCC®

SMPTE® BROADCAST ENCLOSURES

OCC's Broadcast SMPTE Enclosures are versatile, configurable powder-coated steel enclosures for SMPTE 311 or other commonly used connectors. Designed for quick and easy connections, OCC created these advanced modular enclosures to simplify connectivity and transmission in the fast-paced broadcast industry. Where repeatable performance is critical, our future-proofed enclosures ensure that your broadcast production runs seamlessly.

RC2U BROADCAST SMPTE ENCLOSURES

FEATURES & BENEFITS

OCC's modular enclosures are highly configurable and designed to terminate SMPTE 311 and other commonly used connectors on the back panel. There is also a unique reversible front panel: the panel can angle outward when space is at a premium inside the enclosure, or the panel can angle inward to buy precious space in front of the panel.

DESCRIPTION	OCC PART #
RC2U 8L ENCLOSURE, WITH 8 LEMO PLUGS, 8 CABLE GLANDS TO SC DISCRETE CONNECTIVITY, AND AMP PLUG FOR POWER	RC2U8LLPISC00P88A

Unique reversible panel allows for inward or outward angle to save space

Removable lid with knock-outs for TRIAX connectivity to be mounted within the same enclosure

Full cable management available within the enclosure

- Fully modular design
- Ground is fully isolated
- Triax knock-outs
- Available with up to 8 connector ports on the front and 8 cable glands on rear (multiple cable gland sizes available)
- Constructed of 16-gauge steel with a powder coated finish
- Front panel available with LEMO, Neutrik (D-Series), and Triax
- Offers three ways to terminate - discrete connectors only, splicing only, or both. All within the same enclosure
- Removable front panel
- Also available for any OCC snap-in adapter plate accommodating SC/LC/ST/FC connectivity
- May be ordered pre-terminated for plug-and-play operability
- Isolation plates are available for SMPTE 304M standard hybrid connectivity, D-Series (XLR Footprint) connectivity. Other connectivity options available such as LEMO SMPTE, as well as Neutrik Opticon Duo, and Quad
- Power connector options available: AMP/TYCO plug or receptacle, or blunt

SMPTE ENCLOSURE ORDERING GUIDE

RC2U   **8L**   **LP**   **I**   **LC**   **SP**   **P**   **6**   **6**   **A**   **E**   **-T2**

2RU CABINET

ENCLOSURE TYPE AND FRONT PORT CAPACITY	
60	JBT CHASSIS, 6 PORT
80	JBT CHASSIS, 8 PORT
6M	MID CHASSIS, 6 PORT
8M	MID CHASSIS, 8 PORT
6L	STD CHASSIS, 6 PORT
8L	STD CHASSIS, 8 PORT

CONNECTOR TYPE	
LP	LEMO PLUG*
LS	LEMO SOCKET*
ND	NEUTRIK DUO W/O GROUND*
NS	NEUTRIK DUO W/ GROUND*
NQ	NEUTRIK QUAD**

FRONT PANEL ORIENTATION	
I	FACING IN
O	FACING OUT
F	FLAT PANEL AVAILABLE FOR NEUTRIK CONNECTOR ONLY

SIMPLEX CONNECTOR TYPE	
00	NONE
LC	LC CONNECTOR
SC	SC CONNECTOR
ST	ST CONNECTOR
FC	FC CONNECTOR

SPLICE TRAY	
00	NONE
SP	SPLICE TRAY

POWER BRACKET CONNECTOR	
P	PLUG
R	RECEPTACLE
B	BLUNT

NUMBER OF FRONT PANEL CONNECTORS (UP TO FRONT PORT CAPACITY)

 # OF CABLE GLANDS 0 TO 8

CABLE GLAND SIZE	
0	NONE
A	Ø6.35mm – Ø12.0mm
B	Ø12.0mm – Ø16.5mm

OPTIONAL	
BLANK	NONE
E	LASER ENGRAVED

OPTIONAL	
BLANK	NONE
T1 thru T8	KINGS TRIAX (QTY: 1-8)
A1 thru A8	ADC TRIAX (QTY: 1-8)

For enclosures with Triax, total number of front connectors + Triax should be less than or equal to front port capacity

Example:

RC2U 6M enclosure with LEMO plugs, front panel oriented inwards, SC simplex and fiber connections, rectangular AMP plug electrical connections, with medium size cable glands.

| R | C | 2 | U | 6 | M | L | P | I | S | C | 0 | 1 | P | 6 | 2 | B |

*1: SMPTE & NEUTRIK DUO - 2 FIBERS PER CONNECTOR
**2: NEUTRIK QUAD - 4 FIBERS PER CONNECTOR

BROADCAST ENCLOSURES

OCC connectivity and transmission in the fast-paced broadcast industry. Where repeatable performance is critical, our enclosures ensure that your broadcast production runs seamlessly. The Compact Broadcast Service Panel by OCC is ideal for applications that do not require a full-size weatherproof broadcast service panel.

COMPACT BROADCAST SERVICE PANEL (CBSP)

FEATURES & BENEFITS

- As with all OCC enclosures, all connectivity and adapter plates in the wall box are fully modular and interchangeable

- The Compact Broadcast Service Panel (CBSP) is a lower cost option compared to industry standard enclosures populated with a variety of separate front panels to meet connectivity needs

- Internal optical connections are available either for fusion splicing or discrete terminations. This gives installers flexibility in how they would prefer to make fiber optic connections

- When the SMPTE fiber connections are specified to be terminated into discrete connectors, the required adapter plate is supplied with the wall box to simplify purchasing and installation of fiber terminations

- When the SMPTE fiber connections are specified to be terminated via fusion splicing, the required splice trays are supplied with the wall box to simplify purchasing and installation of fiber terminations

- SMPTE panel connectors are pre-terminated to rectangular power connectors. The mating power connector is supplied with the wall box to simplify purchasing and installation of copper terminations

- Designed for quick and easy connections; both when installing the enclosure into the facility and when connecting equipment to the enclosure

BROADCAST ENCLOSURES

COMPACT BROADCAST SERVICE PANEL ORDERING GUIDE

CBSP   P1 P2 P3 P4 WW XX Y   A1 A2 A3 A4

WALLBOX CABINET

PORT CAPABILITY	
C	LEMO PLUG
D	LEMO SOCKET
E	NEUTRIK SMPTE DUO
F	NEUTRIK DUO
G	NEUTIRK QUAD
0	BLANK ISOLATION PLATE
1	KINGS TRIAX ISOLATION PLATE
2	ADC TRIAX ISOLATION PLATE
3	CANARE TRIAX ISOLATION PLATE

NOTE: OPTIONS 1, 2 & 3 ARE
ISOLATION PLATES ONLY WITHOUT THE
CONNECTOR

ASSEMBLY END	
SP	FUSION SPLICE-IN 6FT BLUNT FIBER
LC	LC CONNECTOR ON 15" FIBER
SC	SC CONNECTOR ON 15" FIBER
ST	ST CONNECTOR ON 15" FIBER
FC	FC CONNECTOR ON 15" FIBER
NN	NONE

# OF ADAPTERS FOR SIMPLEX CONNECTORS	
06	6 ADAPTERS
12	12 ADAPTERS
24	24 ADAPTERS (LC ONLY)
NN	NONE

OR

# OF SPLICE TRAYS (IF SP SPECIFIED AS ASSEMBLY END)	
01	FOR UP TO 12 FIBERS
02	FOR UP TO 24 FIBERS
03	FOR UP TO 36 FIBERS
NN	NONE

ADAPTER PLATE OPTIONS	
0	BLANK
1	6x ST
2	8x BNC
3	6x D-Series - (XLR FOOTPRINT)
4	8x KEYSTONE MODULAR JACK (KMJ)
9	ADAPTER TO USE ANY OCC STANDARD ADAPTER PLATE (SUCH AS SC, LC, RJ45)

NOTE: OPTIONS 3&4 IS ADAPTER PLATE ONLY
WITHOUT CONNECTORS.

OPTION 9 IS ADAPTER ONLY, WITHOUT STANDARD
ADAPTER PLATE

POWER BRACKET CONNECTORS	
P	AMP PLUG (STANDARD CONFIGURATION)
R	AMP RECEPTACLE
B	BUTT SPLICE (NO BRACKET)
NN	NONE

A1
A2
A3
A4

P1   P2   P3   P4

Example:

(Shown in Photos) Compact Broadcast Service Panel with 4 LEMO Plugs,
Fusion Splice with 2 Trays, and Adapter to 600-Series Adapter Panel, 8 BNC's, 6
ST Connectors, and a D-Series (XLR Footprint) Cutout Panel.

C	B	S	P	C	C	C	C	S	P	0	2	P	9	2	1	3

SMPTE® CABLES

Offering the reliability and durability you can count on from OCC, these SMPTE cables allow you to source all your solution needs from one place. OCC is committed to meet market demands for easy installation and rapid turnaround on order delivery. We understand that there is more than the initial cost of a product to be considered when purchasing a Broadcast/AV solution. OCC products' unparalleled reliability and durability reduce the lifetime cost of a solution. **Simply put, OCC SMPTE cables fail less often than our competitors.**

DEPLOYABLE APPLICATIONS

OCC has found a way to essentially eliminate migration within our deployable cables through Migration Control Technology. Our cables lock the subunits in place preventing cross-over, reducing fatigue, and extending the life of the assembly – overall **reducing the total cost** of ownership.

SMPTE TACTICAL

DESCRIPTION	OCC PART #
SMPTE TACTICAL	**C-008HBAA5KM**

- Ideal for **extreme harsh outdoor** deployable applications and uncontrolled environments
- Perfect for mobile production trucks and sporting events
- 500µm acrylate primary buffered fiber offers military-grade durability
- Ultra-Fox™ Plus Buffer System provides maximum fiber protection via a UV-cured 500 micron acrylate primary buffer
- Fully SMPTE 311 compliant

SMPTE FLEX

DESCRIPTION	OCC PART #
SMPTE FLEX	**C-006HBAD5KB**

- **Weighs 30% less than standard cables without sacrificing electrical performance attributes** – resulting in lower transportation costs
- Flexible – allows frequent moves for deployable cameras
- Perfect for on-stage stabilized and jib mounted cameras
- Aramid yarn central strength member increases flexibility and decreases weight
- Polyurethane jacket ensures durability
- Ultra-Fox™ Plus Buffer System provides maximum fiber protection via a UV-cured 500 micron acrylate primary buffer
- SMPTE 311 compatible

SMPTE® CABLES

FIXED INSTALLATIONS

OCC's Riser and Plenum cable is suitable for complex installation and where environmental factors may be applicable. SMPTE Riser and Plenum cables terminate directly to high-definition (HD) cameras via LEMO or Neutrik connectors. SMPTE Stadium cables are designed rugged to terminate to an enclosure.
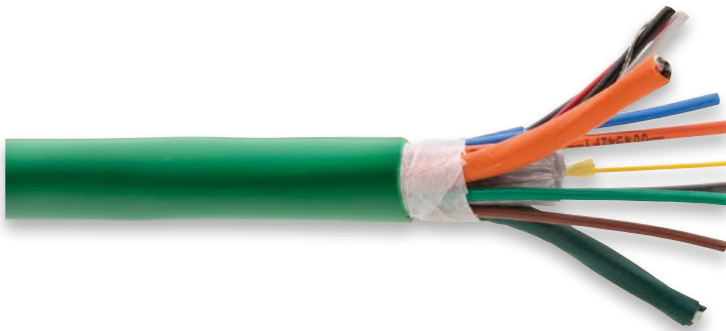
SMPTE RISER/PLENUM

DESCRIPTION	OCC PART #
SMPTE RISER RATED, WITH WATERBLOCKING TAPE	CX008HBWA9KR
SMPTE PLENUM RATED	CX008HBAF9KP

- Permanent installations where Riser or Plenum rating is required
- Perfect for installations in riser or plenum spaces that require direct terminations to HD cameras
- Water-blocking technology on riser-rated cable facilitates protection as cable transition between indoor/outdoor environments
- Riser or Plenum rated
- SMPTE 311 compliant

SMPTE STADIUM RISER/PLENUM

DESCRIPTION	OCC PART #
SMPTE 3-CHANNEL STADIUM RISER RATED, WITH WATERBLOCKING TAPE	CX021HBWH9GR
SMPTE 3-CHANNEL STADIUM PLENUM RATED	CX021HBAH9YP

- Perfect for when two or three cameras are needed for one location. Reduce labor cost with only one cable to run
- **Utilizes TIA color-coding for fibers**, providing easier and less costly installation, and easier termination in the field
- Perfect for installations through riser or plenum spaces where termination to a rack or patch panel are required
- Ideal for connecting fixed wall box connections to control room patch panels
- SMPTE 311 compatible
- Provides 900μm buffer over 250μm fibers for added protection
- Water-blocking technology on riser-rated cable facilitates protection as cable transition between stadium levels and indoor/outdoor environments
- Riser or Plenum rated

SMPTE® ASSEMBLIES

For more than 25 years, OCC has been dedicated to serving our customers with a broad range of the highest quality fiber optic assemblies worldwide. We ensure that our assemblies meet the individual requirements of the wide variety of fiber connectivity and backshells available in the market. We offer a diverse product family with the products you need, including SMPTE assemblies, and the commitment to deliver them. OCC has these standard assemblies in stock for immediate shipping turnaround in addition to the ability to quickly create custom assembly solutions for your needs.

CAMERA CONTROL UNIT ASSEMBLIES TO PATCH PANEL

DESCRIPTION	OCC PART #
SMPTE PLENUM CABLE, 25 FT, PUW/FMW - LEMO CONNECTORS	OCA-LFP1MAP1008-0025F
SMPTE RISER CABLE, 25 FT PUW/FMW - LEMO CONNECTORS	OCA-LFP1MAP1007-0025F

Variations of length and type of SMPTE available.

**SMPTE Assembly
on MARS® Reel**

SMPTE BREAKOUT/PIGTAIL ASSEMBLIES

DESCRIPTION	OCC PART #
LEMO PLUG (FXW) TO SC, 18-INCH, WITH AMP PLUG FOR POWER	OCA-LFFR1SCPP006-1515F
LEMO SOCKET (EDW) TO SC, 18-INCH, WITH AMP PLUG FOR POWER	OCA-LMFR1SCPP006-1515F

Variations of length and type of SMPTE available.

PRE-TERMINATED MT-TO-MT 12-FIBER TRUNK CABLES

DESCRIPTION	OCC PART #
MT-TO-MT, 12-FIBER ASSEMBLY, PLENUM	OCA211036MTMTXXXX
MT-TO-MT, 24-FIBER ASSEMBLY, PLENUM	OCA211037MTMTXXXX

Note: add PK to the end of the part number for a pulling eye (xxx = length in feet)

PRE-TERMINATED 1-FIBER CABLES

DESCRIPTION	OCC PART #
PRE-TERMINATED SC/APC - SC/APC 2.9MM CABLES, PLENUM	OCA209556SCSCXXXX
PRE-TERMINATED SC/APC - SC/APC 2.9MM CABLES, RISER	OCA211035SCSCXXXX

Note: add PK to the end of the part number for a pulling eye (xxx = length in feet)

SMPTE® ASSEMBLIES

CABLE ASSEMBLIES FOR PATCH PANELS & CAMERA CABLES

DESCRIPTION	OCC PART #
SMPTE TACTICAL CABLE, 25 FT, FUW TO PUW - LEMO CONNECTORS	OCA-LFAP1MAP1002-0025F
SMPTE TACTICAL CABLE, 50 FT, FUW TO PUW - LEMO CONNECTORS	OCA-LFAP1MAP1002-0050F
SMPTE TACTICAL CABLE, 75 FT, FUW TO PUW - LEMO CONNECTORS	OCA-LFAP1MAP1002-0075F

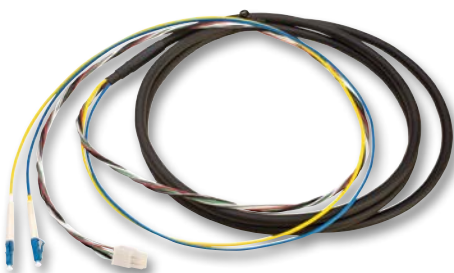** Variations of length and type of SMPTE available.*

FORGE FAN-OUT™ KIT

DESCRIPTION	OCC PART #
4F, MULTI COLOR, 3MM, 1100UM, 36 IN	FKS-A04C-36-MC
12F, MULTI COLOR, 3MM, 1100UM, 36 IN	FKS-A12C-36-MC
4F, YELLOW, 3MM, 1100UM, 48 IN	FKS-A04C-48-YL
12F, YELLOW, 3MM, 1100UM, 48 IN	FKS-A12C-48-YL
12F, MULTI COLOR, 3MM, 1100UM, 48 IN	FKS-A12C-48-MC
24F, YELLOW, 3MM, 1100UM, 48IN	FKM-B24C-48-YL
4F, YELLOW, 3MM, 1100UM, 36 IN	FKS-A04C-36-YL
12F, YELLOW, 3MM, 1100UM, 36 IN	FKS-A12C-36-YL
24F, MULTI COLOR, 3MM, 1100UM, 36 IN	FKM-B24C-36-MC

* More configurations are available, contact your OCC Sales Rep for more information.

SMPTE BREAKOUT KIT

- Designed for applications where SMPTE structured cable shield needs to be broken out to be used as ground
- Allows you to use a crimp sleeve and crimp retainer that requires no soldering. Simple and easy process in the field with any .360" HEX crimper

DESCRIPTION	OCC PART #
KIT WITH BLUE & YELLOW FIBER FURCATION, CUSTOM SMPTE, 3MM TUBING	675-0001-000

*SMPTE Breakout Kit Includes: (1) Blue and (1) Yellow Fiber Furcation Available in 2mm or 3mm Furcation Tube – (1) - Crimp Retainer , (1) - Crimp Sleeve , (1 - 3/8") Adhesive Shrink, (1 – ½") Adhesive Shrink – 18 AWG Green Ground Wire.

MHC®-T3 BYPASS SYSTEM

OCC'S MHC-T3 Connector and Modular Throwdown Box are used with MARS® REEL system as part of our MHC-T3 Bypass System Solution and Disaster Assistance and Recovery Throwdown Solution (DART). **Contact OCC Sales at 800-622-7711 for more information.**

MHC®-T3 CONNECTOR

FEATURES & BENEFITS

- Decreases patching points in network professional equipment (i.e. audio, video, and data). The MHC-T3 allows you to move up to 48 fibers via one connector, reducing set-up and tear-down times significantly

- With up to 48 channels in one connector, the MHC-T3 helps future-proof installations minimizing bandwidth limitations

- Provides noise and EMI protection for audio or video (LED wall) deployable broadcast systems and applications

- High density connector, with up to 48-CH, APC in Single-Mode

- Angles polished in single-mode for greater return loss performance

DESCRIPTION	OCC PART #
MHC-T3 PLUG-TO-PLUG 300M ON A MARS REEL	OCA-3AA2491MB1-0300M

MODULAR THROWDOWN BOX

FEATURES & BENEFITS

- Allows multi-fiber trunk cables to easily breakout into multiple discrete combinations

- Constructed of rugged polymer & designed with a latching lid to protect the optical connections when not in use

- Equipped with multi-fiber receptacle inputs and discrete outputs mounted on OCC standard adapter plates

- Can be configured for input and output to enable daisy chaining, depending on specific requirements

- Custom designed to meet end-user requirements

- Shown with MHC®-T3 Connector

DESCRIPTION	OCC PART #
MHC-T3-TO-LC SINGLE-MODE (UNIVERSAL FOR 24-CH)	OCA-1025377-0000

RC1U ENCLOSURE & ADAPTER PLATES

FEATURES & BENEFITS

- 3 configurable front panel openings that accept standard OCC 600-series fiber optic adapter plates allowing LC, SC, ST, or FC connectors
- Designed to accommodate termination of fusion-splice pigtails or mechanical connectors in a compact form factor
- Enclosure chassis is constructed of 18-gauge steel with a black powder coat finish
- The 2-port RC1U enclosure is available in our Quick Ship program. Also available in a 1RU, 2RU, and 4RU versions with powered-coated steel. Can be ordered in brush anodized aluminum.

DESCRIPTION	OCC PART #
RC1U CABINET, 2 ADAPTER PORT, BLANK CHASSIS	RC1US2BB00Y00N
RC1U CABINET, 3 ADAPTER PORT, BLANK CHASSIS	RC1US3BB00Y00N
RC1U CABINET, WITH 2 ADAPTER PORTS,12-PORT SINGLE-MODE ST, DUST COVERS W/ LANYARDS	RC1US2ST12Y00E*
RC1U CABINET, WITH 3 ADAPTER PORTS, 12-PORT SINGLE-MODE ST, DUST COVERS W/ LANYARDS	RC1US3ST12Y00E*

Engraving Included

PART NUMBER CONFIGURATOR

OCC PART #	# OF ST'S "nn"	CUSTOM ENGRAVING "m"
RC1US2ST NN Y00 M	01 – 12	E – Yes N – No Engraving
Engraving if required must be defined at the time of order.		

SMPTE/TRIAX 2RU PATCH PANELS & ACCESSORIES

FEATURES & BENEFITS

- Available with 8- or 6-port front panel
- Front panel is reversible for inward or Outward Facing Angles
- Modular Isolation Plates for SMPTE 304M Standard, D-Series (XLR Footprint), and TRIAX to Isolate Ground
- Standard Patch Panel for all OCC SMPTE Enclosures
- Electrical Isolation Plates for Connectivity

DESCRIPTION	OCC PART #
SMPTE/TRIAX 2RU REVERSIBLE PATCH PANEL, 6-PORT, IN/OUT EMPTY	BCPAIO6
SMPTE/TRIAX 2RU REVERSIBLE PATCH PANEL, 8-PORT, IN/OUT EMPTY	BCPAIO8

DESCRIPTION	OCC PART #
ISOLATION PLATE FOR SMPTE	BCIPSN
ISOLATION PLATE FOR KINGS TRIAX	BCIPTXK
ISOLATION PLATE FOR ADC TRIAX	BCIPTXA
ISOLATION PLATE FOR CANARE TRIAX	BCIPTXC
ISOLATION PLATE FOR OPTICON	BCIPO
ISOLATION PLATE BLANK	BCIPB
ISOLATION PLATE FOR CABLE GLAND	BCIPG

REPAIR & RESTORATION

In the fast-paced, intense broadcast industry, products need to be durable and reliable. But the reality is that breaks happen, and they need to be fixed quickly.

All of OCC's SMPTE deployable cables and assemblies are designed to reduce the occurrence of subunit failures. It only takes one or two prevented repairs per year to offset any price differential.

At OCC, we not only offer highly reliable products, but also Repair and Restoration Services for most broadcast connectivity and cable products on the market. OCC's Repair and Restoration Services provide value to our customers, whether it's through our diverse product family or helping to extend the life of our competitors' products. OCC also offers ongoing maintenance and testing of your cable assemblies.

Please contact an OCC Representative at **1-877-509-1500 for a quote** and lead-time estimation.

LEAD TIME
• **24-hour** turnaround on quotes
• **1 to 3 days** to repair, if necessary materials are on site
• **3-5 days** to repair, once materials not on site are received

JOIN OUR SOCIAL NETWORK

For the most up-to-date information on all of OCC's products, news, and information, visit our website at occfiber.com. Registered users get added benefits, access to additional information and white papers, and more.

Like us on Facebook:
facebook.com/OCCSolutions

Follow us on Twitter:
twitter.com/occsolutions

Watch us on YouTube:
youtube.com/user/occsolutions

Follow us on Linked In:
linkedin.com/company/optical-cable-corporation

OCC ROANOKE, VA

Corporate Headquarters and Fiber Optic Cable Manufacturing Facility

5290 Concourse Drive
Roanoke, VA 24019 USA
540-265-0690 or 800-622-7711

OCC DALLAS, TX

Harsh Environment and Specialty Connectivity Manufacturing Facility

1700 Capital Avenue, Suite 150
Plano, TX 75074 USA
972-509-1500 or 877-509-1500

OCC ASHEVILLE, NC

Enterprise Connectivity Manufacturing Facility

33 Superior Way
Swannanoa, NC 28778 USA
828-298-2260 or 800-880-7674

11/2024