

## Secure Keyed LC Fiber System

Introducing the only truly lockable secure LC system built to work with any industry compliant LC duplex or quad adapter.



Leviton's **Secure Keyed LC Fiber System** prevents unauthorized and inadvertent changes in highly sensitive government applications such as data centers, telecommunications rooms, workstation areas, and secure IT networks, creating an ideal “lock-in” system. Once connected to a port, the patent-pending locking design — built into the body of each duplex LC connector — prevents removal by hand, and the connector can only be removed with a matching color extraction tool. Eight keyed connector colors are available to segregate networks. The system is made up of trunks, harnesses, patch cords, pigtails, connectors, port protection plugs, extraction tools, and QuickPort® fiber adapters. All Secure Keyed LC assemblies and connectors work with any industry compliant LC duplex or quad adapter.



Secure Keyed LC Patch Cords

The Secure Keyed LC System is designed specifically for mission critical circuits where networks are segregated by color for identification and protected from accidental moves, adds, or changes — typical requirements in government networks like SIPRNet and JWICS. The system is also ideal for commercial data centers, municipalities, education networks, colocation spaces, and financial sector markets.



Secure Keyed LC Pigtails

Leviton also offers “lock-out” capabilities with **Secure LC Locking Port Protection Plugs**. The plugs lock and protect unused LC ports from the unauthorized insertion of a cable assembly or connector. Only those operators with an authorized extraction tool can open a port.

**Extraction Tools** allow for easy cable assembly removal, even from high density panels and enclosures. For removal, extraction tools must be the same color as the connector. In addition, custom **Dust Caps** protect connectors upon removal from a port, promoting good fiber discipline. And Secure Keyed LC **Field-Installable Connectors** are available for 900  $\mu\text{m}$  tight buffer fiber termination in the field.



Secure Keyed MTP®-LC Harnesses

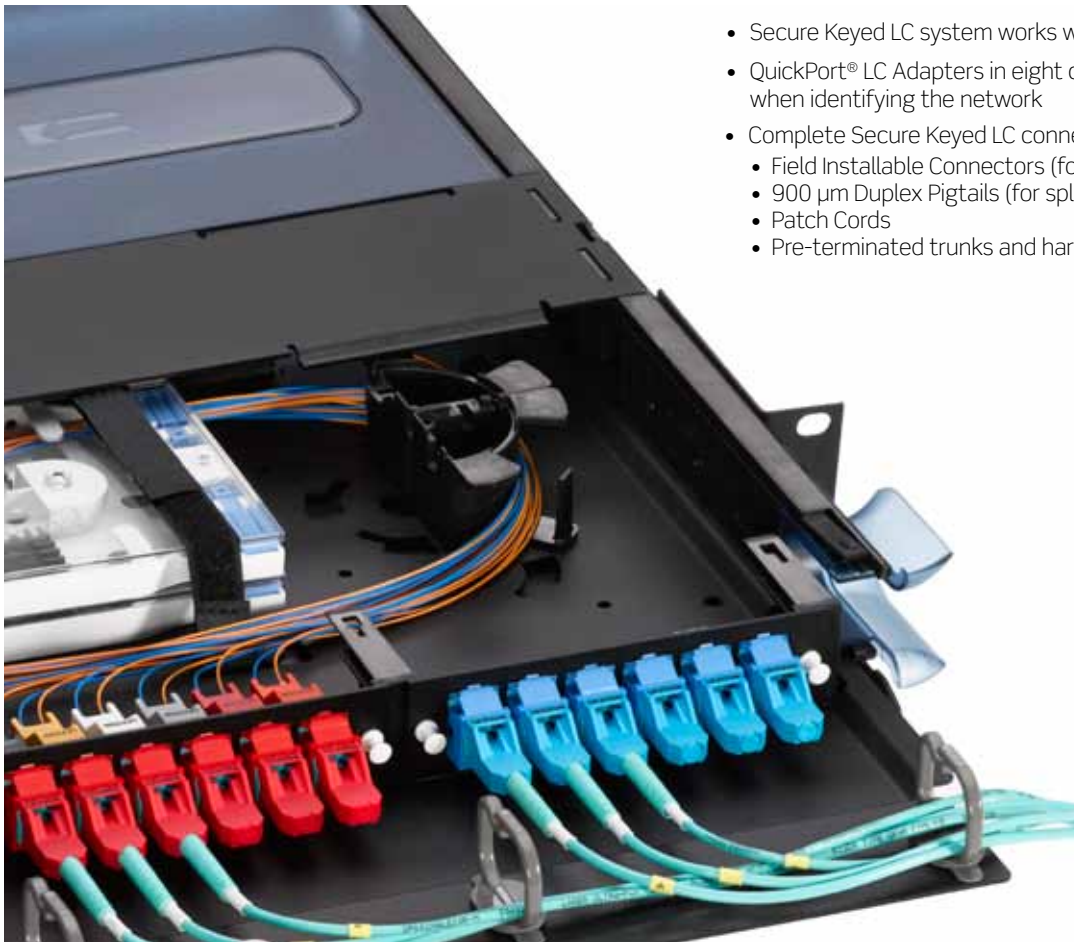
### Features

- Patent-pending design prevents unauthorized and inadvertent MACs
- Secure Keyed LC connectors plug into any industry compliant LC adapter or interface, unlike traditional Keyed LC solutions
- Most cost-effective solution for retrofitting networks and new builds for improved security
- Choose from eight keyed connector colors to segregate and secure networks
- Extraction tools allow for easy connector removal from adapter plates and wallplates
- Port protection plugs enable unused LC ports to be locked
- Secure Keyed LC anaerobic adhesive-style connectors are designed for indoor/outdoor application on 900  $\mu\text{m}$  tight buffer fiber cable
- Outside body of QuickPort Fiber connectors match key color, while adapter designates fiber type for better visibility and identification
- Patch cords, pre-terminated trunks, pre-terminated harnesses and pigtails are part of Leviton's custom-build make-to-order (MTO) program
- Made in the United States



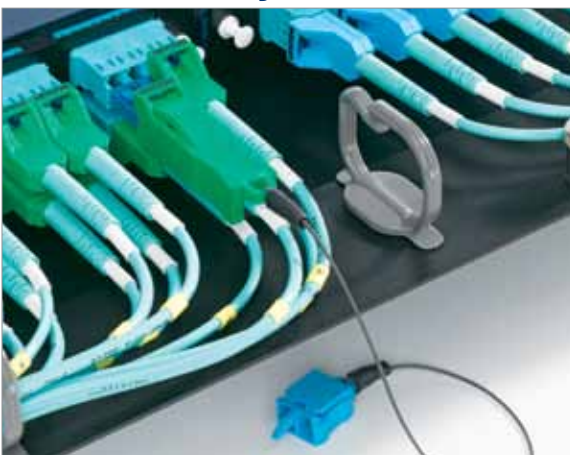
Secure Keyed LC Fiber Trunks

## Rack/Cabinet Mount Application



- Secure Keyed LC system works with Opt-X® Adapter Plates
- QuickPort® LC Adapters in eight colors allow for more visibility when identifying the network
- Complete Secure Keyed LC connectivity solution:
  - Field Installable Connectors (for 900 µm termination)
  - 900 µm Duplex Pigtails (for splicing)
  - Patch Cords
  - Pre-terminated trunks and harnesses

## Cable Assembly Removal



- Only extraction tools with the same color as the LC connectors can remove cable assemblies
- Extraction tool features easy push-and-pull motion to remove connectors, even in high density adapter plates
- Dust cap must be inserted onto connector in order to remove extraction tool from connector. This protects fiber and ensures good fiber practices

## Work Area Application

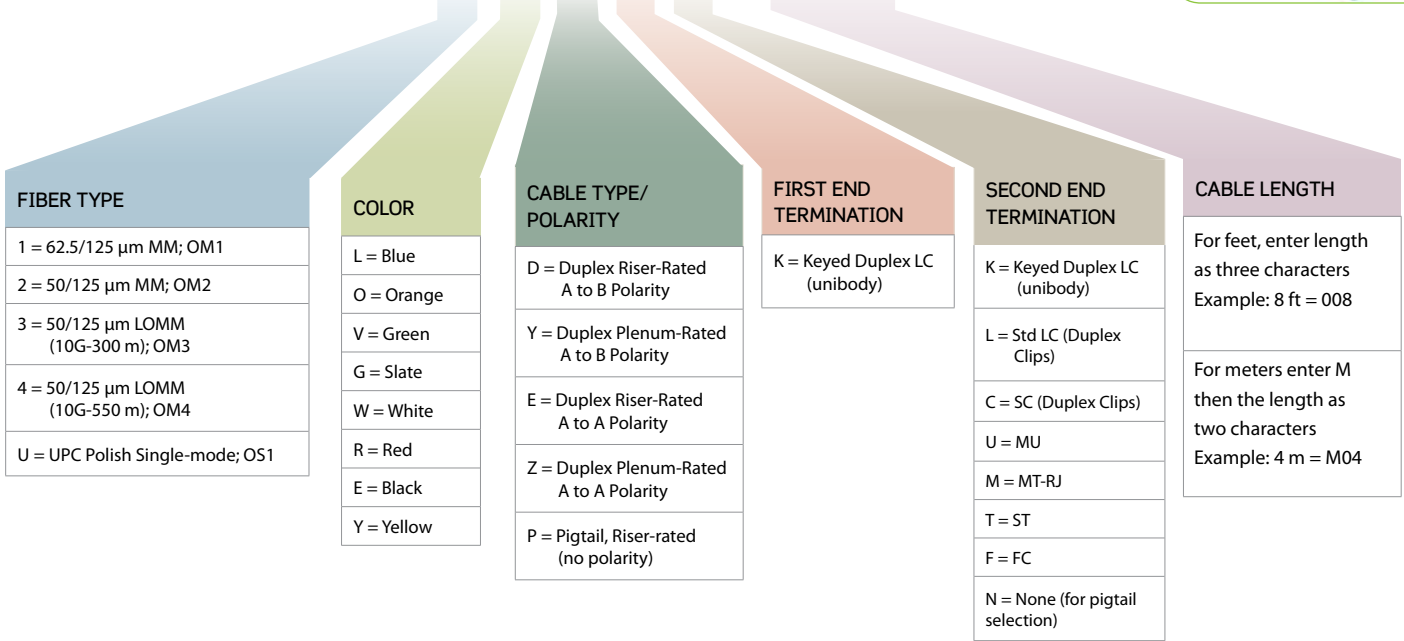


- Use with Multimedia Outlet System (MOS) wallplates and inserts for fiber to the desk applications
- Use of MOS style wallplate, along with fiber storage slack ring, is recommended for proper fiber cable management
- Use port protection plugs to protect and identify unused ports
- QuickPort LC Adapters in eight colors allows for greater visibility and easy network identification

Part Number Configurator — **Secure Keyed LC Patch Cords & Pigtails**



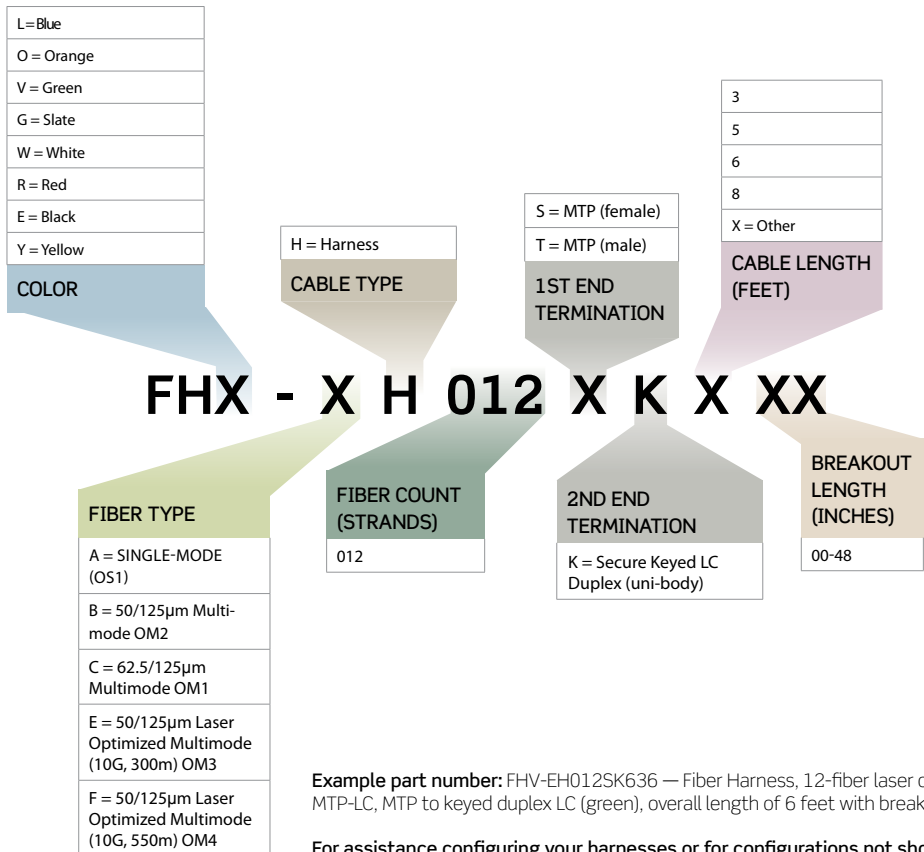
**X X X K X - XXX**



**Example part number:** 3VDKC-M03 — Fiber Patch Cord, 50/125μm LOMM (10G-300m) OM3 duplex riser-rated, Keyed duplex LC (Green) to duplex SC, 3 meter length

For assistance configuring your patch cords or for configurations not shown, please call 1.800.722.2082.

Part Number Configurator — **MTP® to Secure Keyed LC Harnesses**



**Example part number:** FHV-EH012SK636 — Fiber Harness, 12-fiber laser optimized multimode cable (10G-300m), MTP-LC, MTP to keyed duplex LC (green), overall length of 6 feet with breakout length of 36 inches.

For assistance configuring your harnesses or for configurations not shown, please call 1.800.722.2082.



L = Blue
O = Orange
V = Green
G = Slate
W = White
R = Red
E = Black
Y = Yellow
<b>COLOR</b>

A = Riser I/O Dry Loose Tube
B = Plenum I/O Dry Loose Tube (Standard)
C = Plenum Armor I/O Dry Loose Tube (Standard)
G = Riser Distribution (Standard)
H = Plenum Distribution
<b>CABLE TYPE</b>

K = Secure Keyed LC Duplex (unibody)
<b>TERMINATION (FIRST END)</b>

001-999
<b>CABLE LENGTH</b>

F = Feet
M = Meters
<b>UNIT OF MEASURE</b>

A = 900 µm buffered fiber
C = 3mm jacketed fiber
<b>1ST BREAK-OUT LEG</b>

A = 900 µm buffered fiber
B = 2mm jacketed fiber
C = 3mm jacketed fiber
<b>2ND BREAK-OUT LEG</b>

Y = Yes
N = No
<b>1ST END STAGGERED TERMINATION</b>

A = A-A or MTP Method A
B = A-B or MTP Method C
C = MTP Method B
<b>POLARITY</b>

**FTX - X X XXX K X XXX X XX C XX X X - X X X X**

<b>FIBER TYPE</b>
A = Single-Mode (OS1)
B = 50/125 µm std Multimode (OM2)
C = 62.5/125 µm Multimode (OM1)
E = 50/125 µm Laser Optimized Multimode (10G, 300m) (OM3)
F = 50/125 µm Laser Optimized Multimode (10G, 550m) (OM4)

<b>FIBER COUNT</b>
004
006
012
024
036
048
072
096
144

<b>TERMINATION (SECOND END)</b>	
A = ST	K = Secured Keyed LC Duplex (unibody)
B = SC (duplex clip)	Q = MT-RJ (female)
C = LC (duplex clip)	R = MT-RJ (male)
D = FC	S = MTP (female)
E = SC/APC	T = MTP (male)
F = LC/APC	U = MU
G = FC/APC	Z = Pigtail

<b>1ST BREAK-OUT (INCHES)</b>
12-99 (Typ 36")

<b>2ND BREAK-OUT (INCHES)</b>
12-99 (Typ 36")

<b>PULLING EYE</b>
Y = Yes
N = No

<b>2ND END STAGGERED TERMINATION</b>
Y = Yes
N = No

<b>LABELING</b>
S = Standard
C = Custom

**Example part number:** FTG-EB072KB150F36C36CY-YNBS. Fiber trunk, 72-fiber Laser Optimized Multimode plenum cable (10G-300m), Keyed Duplex LC (Green) to SC, overall length of 150 feet with breakout lengths (to 3 mm jacketed fiber) of 36 inches on both ends, with pulling eye on first end connector termination. First end termination is staggered. Second end termination is even (polarity A-B).

For assistance configuring your trunks, please call 1.800.722.2082.



**SECURE KEYED LC CONNECTOR & ACCESSORIES**

Description	Part No.
[A] Port Protection Plug w/ Dust Cap	PPRTN-xLG
[B] Extraction Tool w/ Dust Cap	ETRTRN-xTL
[C] Secure Keyed LC Field-Installable Connector	4999K-xLC
Boots, 900 µm, Beige (for 62.5/125 µm MM, OM1), bag of 50	4999K-BGE
Boots, 900 µm, Black (for 50/125 µm MM, OM2), bag of 50	4999K-BLK
Boots, 900 µm, Aqua (for 50/125 µm LOMM, OM3/4), bag of 50	4999K-AQU
Boots, 900 µm, Blue (for Single-mode, OS1), bag of 50	4999K-BLU
Dust Cap (bag of 10)	DUSTK-CAP
Fast-Cure® Tool Kit	49800-FTK
Fiber Scope Adapter, standard duplex LC configuration (use with Leviton 200x Scope)	49886-LCD
QuickPort® Duplex LC Adapter, MM, phosphor bronze sleeve, beige	41085-ML*
QuickPort Duplex LC Adapter, zirconia ceramic sleeve, blue	41085-SL*
QuickPort Duplex LC Adapter, 10G LOMM, zirconia ceramic sleeve, aqua	41085-LL*

x = color: White (W), Yellow (Y), Orange (O), Red (R), Blue (L), Green (V), Slate (G), Black (E)  
 \* = color: Ivory (I), White (W), Slate (S), Black (E), Almond (A), Yellow (Y), Red (R), Blue (L), Green (V), Orange (O)

**NEW!**

**Secure Keyed RJ Copper System**



Providing physical security for critical network ports, Secure RJ CAT 6 patch cords and port-blocking plugs can only be removed with a matching color extraction tool. The system is compatible with all industry standard RJ ports in network equipment, devices, patch panels, and work area outlets. For more information, go to [leviton.com/SecureRJ](http://leviton.com/SecureRJ)