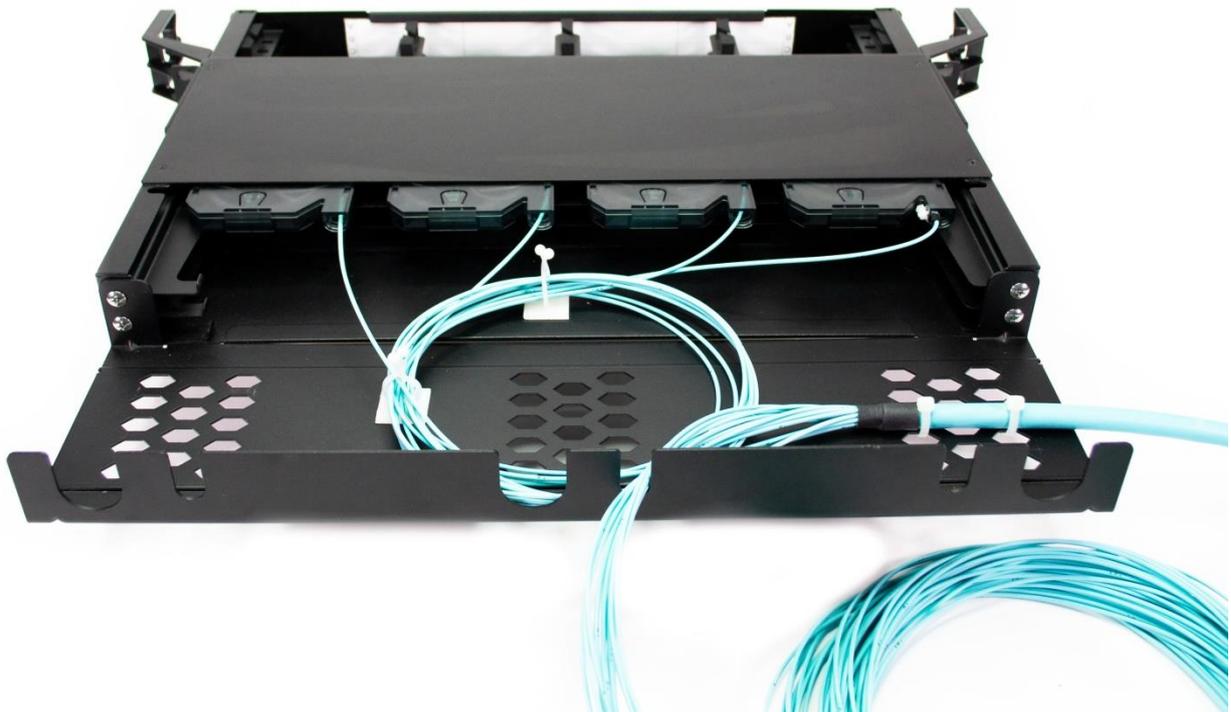


## LC single-fibre pigtail splicing recommendation for VERTEX patch panel

This installation guide describes the method of splicing the LC pigtails pre-installed in the VERTEX module (12 x LC) to the backbone cable in the SYLEX VERTEX panel system.



### Contents:

1. Assembly and installation of LC splicing modules into 1U 19" VERTEX panel
2. 144F cable installation recommendation into 1U VERTEX panel – splicing version

## Installation Guide IG-FOI-011

### 1. Assembly and installation of LC patching modules into 1U 19" VERTEX panel

Unpack the 1U HD patch panel and its accessories (saddles, rear management plate and screws) from the packaging.

Mount the saddles on the left and right side of the patch panel.

Tools and materials used:

1x Screwdriver

4x Screw M3 x 4mm

4x Washer



## Installation Guide IG-FOI-011

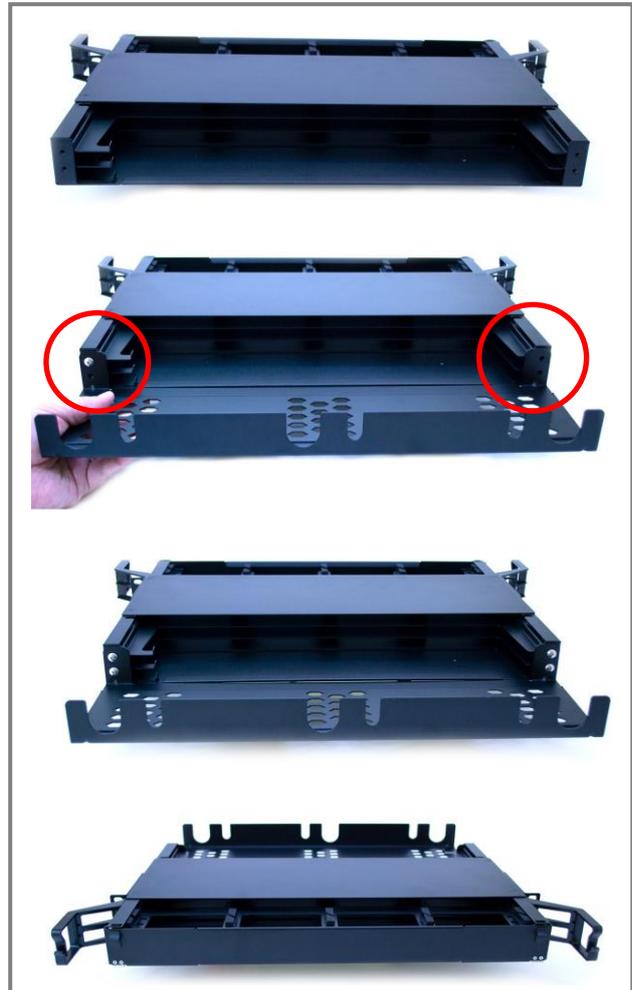
Turn the patch panel to the back side.

Mount the rear management plate.

Tools and materials used:

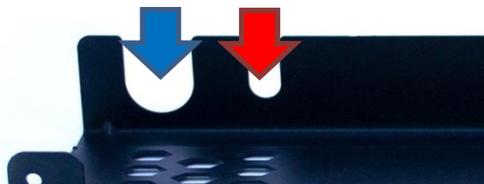
1x Screwdriver

4x Screw M4x7mm



### Additional panel information:

There is a cutout for cable entry on both sides of the panel. Through each cutout, you can install:



Cutout	Duralino with grommet	Suitable for thread	Hole diameter
<b>1. Blue</b>	1x Duralino XL or Multi-hole cable gland	M20 / PG13 or M25	Ø25mm
<b>2. Red</b>	2x Duralino S or 1x Duralino L	M12 / PG7	Ø12mm

## Installation Guide IG-FOI-011

Open the front door of the patch panel.

Pull out the first drawer "C" and insert the first HD patching module.

Insert the second HD patching module.

Equip the whole drawer "C" and put the drawer back inside of the patch panel.

Repeat the above-mentioned steps with drawers "B" and "A".

The panel is now ready for LC trunk backbone cable installation.



## Installation Guide IG-FOI-011

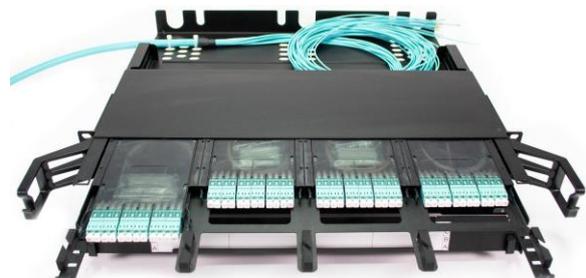
### 2. Installation of 144-fibre cable into 1U VERTEX panel – splicing version

Prepare cable for installation and affix it to the rear management plate using two cable ties.

Open the front door of the patch panel.

Take out upper drawer “C”.

Release the first module from the left side.



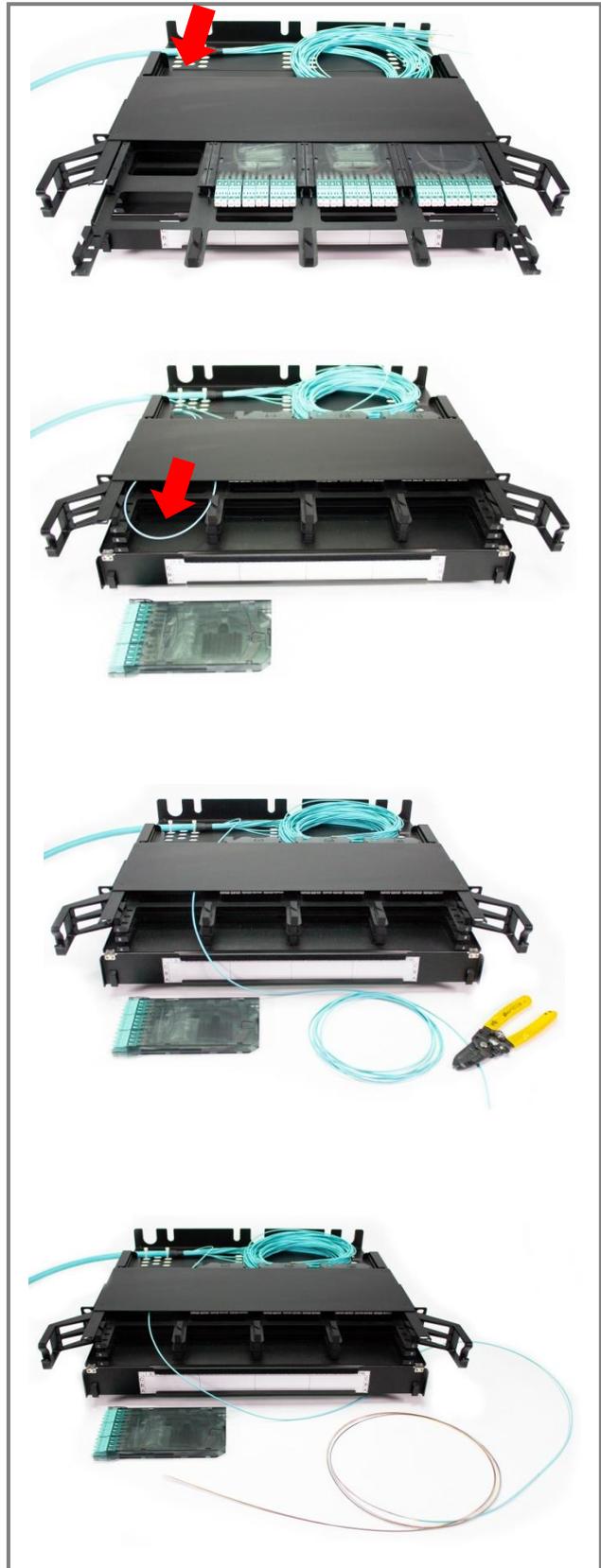
## Installation Guide IG-FOI-011

Take the first minicore bundle from the cable and insert the bundle into the patch panel in the position from which the module was taken.

Pull out the minicore bundle from the patch panel.

Use the stripping tool to strip a 1,500mm length of the jacket off of the minicore bundle.

Pull down the outer jacket.



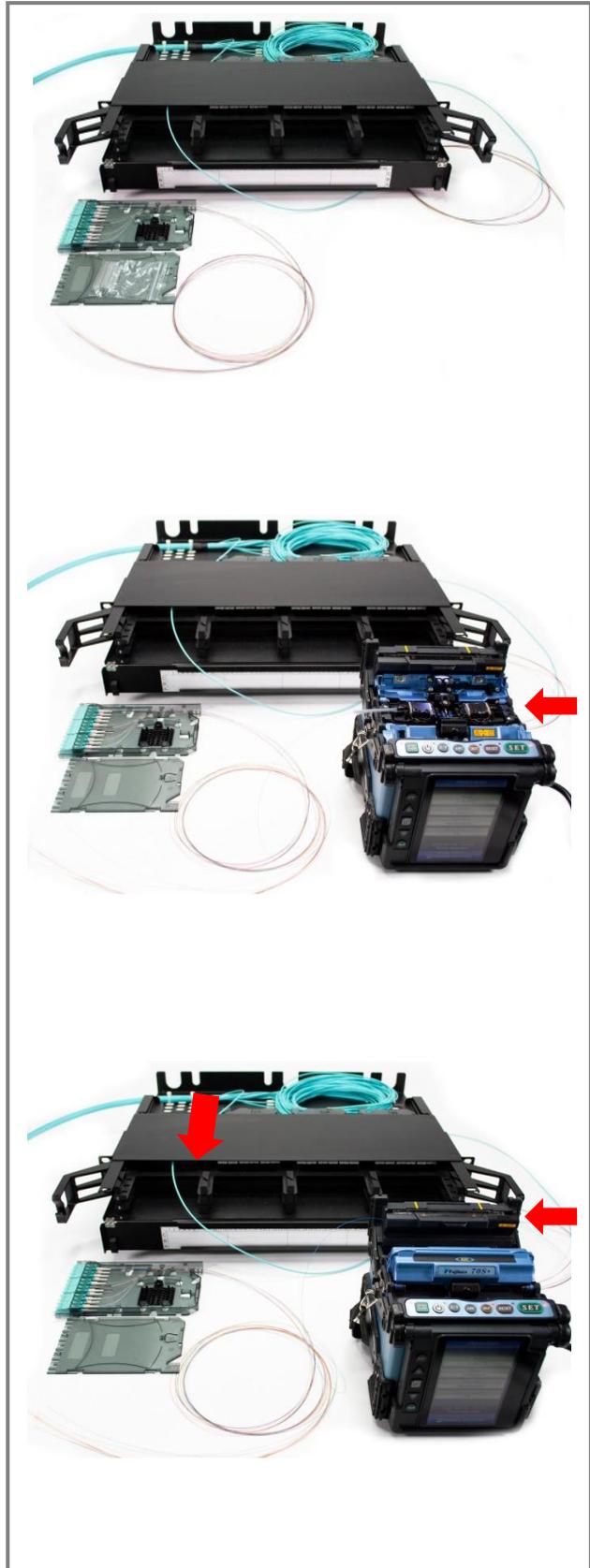
## Installation Guide IG-FOI-011

Open the splicing module and take out the 250um fibres which are terminated on LC connectors. Keep the LC connectors plugged into the LCD adaptors.

Prepare the splicing machine for optical fibres. Take the first fibre (blue, for example) from the cable and from the splicing module. Slide the splice protector onto one of the two blue fibres. Perform the splice in the machine.

After the automatic splicing process, take out the optical splice and slide the splice protector onto the position where the splice has been made.

Put the splice protector into the next position in the splicing machine to heat the heat shrink to affix the optical protection in the correct position.



## Installation Guide IG-FOI-011

Repeat the splicing process with each of the next 11 fibres.

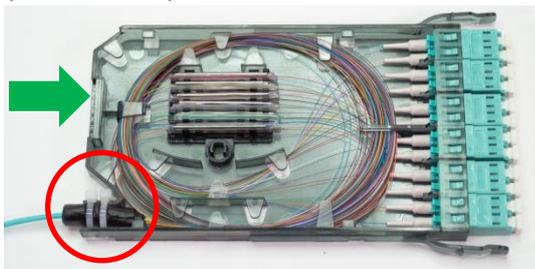
Cable	Fibres from the module
1 - fibre	1 - fibre
2 - fibre	2 - fibre
3 - fibre	3 - fibre
4 - fibre	4 - fibre
5 - fibre	5 - fibre
6 - fibre	6 - fibre
7 - fibre	7 - fibre
8 - fibre	8 - fibre
9 - fibre	9 - fibre
10 - fibre	10 - fibre
11 - fibre	11 - fibre
12 - fibre	12 - fibre

After the whole splicing process of all fibres, start to coil the fibres back into the module.

First, coil the fibres, from the LC connectors to the splice protectors, into the module.

Second, place the splice protectors into the splice protector holder.

(see View A)

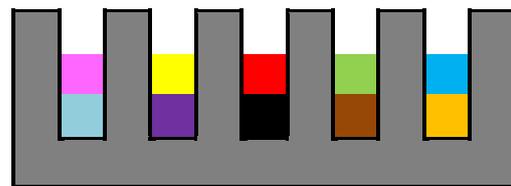


Finally, coil the rest of the 250um fibres into the module. Use a 30mm-long piece of vulcanization tape and put it on the beginning of the outer jacket of the minicore bundle.

Use two cable ties to affix the minicore bundle to the module (red circle).



View A



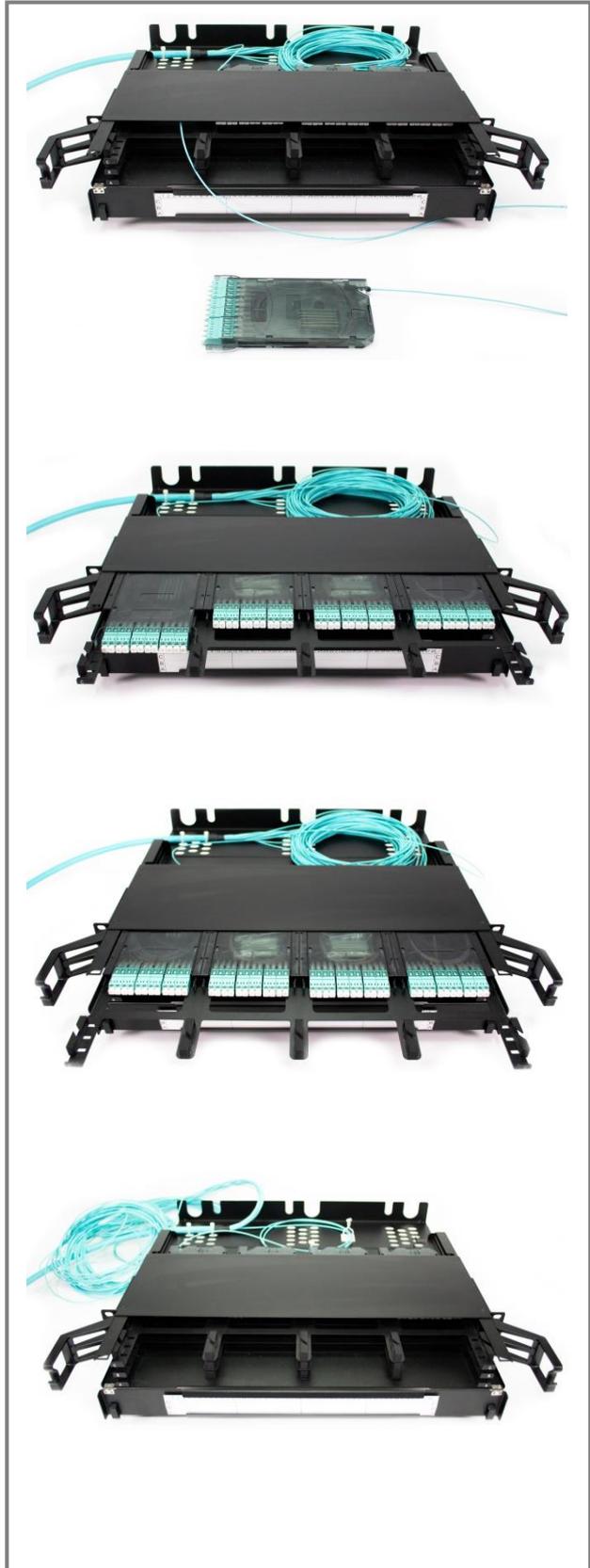
## Installation Guide IG-FOI-011

Put the top cover back on the module and close it.

Pull the rest of the minicore bundle back into the patch panel.

Put the module into position in the patch panel.

Place two cable twisters in a position to create a neat circle in the middle of the rear management plate.



## Installation Guide IG-FOI-011

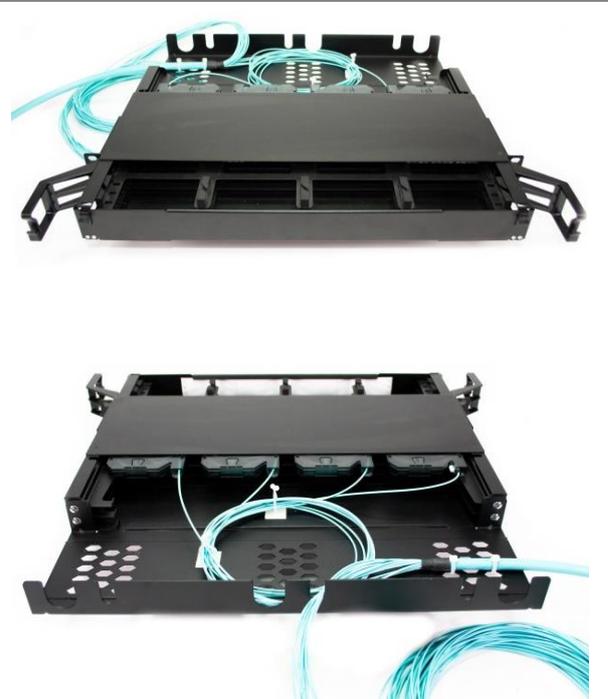
Repeat all above points with the next three minicore bundles and the next three modules in drawer "C".

The first drawer "C" is now fully connected through the process of optical splicing.

Continue with the next drawers "B" and "A", or leave the minicore bundles for future connections.

Continue with the LC front patching installation.

Use the document: **IG-FOI-009** LC front patching cable installation for VERTEX patch panel



For more information, contact our sales team at [sales@sylex.sk](mailto:sales@sylex.sk)