

INSTALLATION INSTRUCTION

OAsys® Equipment meets
BT OTIAN® Equipment Specifications

OAsys® INTERNAL PLANT OPTICAL CONSOLIDATION RACK 1A (OCR1A)

Part Number: XPFSC00040 BT Item Code: 050640

Description

OPTICAL CABLE TERMINATION & CONSOLIDATION RACK

Supplied in "flat pack" format to ease handling.

Easily assembled near point of installation by one person, for subsequent positioning in suite M12 fixing points provided in Top Frame.

Provision for fixing to suitable floor.

REQUIRED SPACE ENVELOPE: 900 mm x 300 mm x2200 mm (W x D x H).

PLEASE READ THESE INSTRUCTIONS BEFORE BUILDING THE OCR.

Tools & Additional Items Required

Additional Items Required:	Prysmian Part No BT Item Code	
Optical Consolidation Sub Rack 1A	XPFSC00041 050641	
Fixings: (NOT SUPPLIED)	2 off M12 x 50 mm hexagonal bolt	
Top Frame to suite ironwork fixings	4 off M12 nuts	
Suitable floor	2 off	

	10- & 19-mm A/F Spanner
Tools:	Pozi Drive Screwdrivers 2 & 3
	7 mm Dia. Masonry Drill

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Component Parts (pictures not to scale)

1.Base Frame (XCRSG00042) Qty: 1	2. Rear Mounting Uprights (XCRSG00021/2)	3. Top Frame (XCRSG00023) Qty:1
4. Right Hand Side Panel (XCRSG00044) Qty:1	5. Cable Breakout Assembly (XCRSG00079) Qty:1	6. Left Hand Side Panel (XCRSG00043) Qty:1
7. Rear Panel Assembly (XCRSG00067) Qty:1	8. Upper Rear Panel (XCRSG00045) Qty:1	9. Hydra Guide Assembly (XCRSG00070) Qty:1

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Component Parts (pictures not to scale)

10. Splicing M/C Support Shelf (XCRSG00047) Qty: 1	11. Right Hand Door (XCRSG00051) Qty:1	12. Left Hand Door (XCRSG00049) Qty:1
13. M6 x 20mm Hex.	14. M6 Plain Nut	15. M6 x 12mm Pozi Pan
Head Screw	Qty: 4	Head
Qty: 4	20,00	Qty: 12
16. 6mm White Push Fit	17. M4 x 4mm Pozi Pan Head	18. M5 x 12mm CSK Head
Rivets	Screw	Pozi.
Qty: 13	Qty: 25	Qty: 12
19. M6 x 40mm Cap	20. Sheets of Self-adhesive	21. CBO Fibre Storage Key
Head Screw	Labels	Qty: 4
Qty: 2	Qty: 3	-
22. 48mm x 5mm diameter tube Qty: 50	23. Instruction Wallet	

Step 1





- Position the Base Frame (1) upside down (with the rectangular cut outs facing the floor and insert the 4 M6 x 20mm Hex. Head screws (13) into the 4 threaded holes.
- Loosely hand tighten fully home.
- Determine the centreline of the suite and final fixing position for the OCR1A
- Turn the Base Frame over and place it in its final installation position.
- Using a Spirit Level check for level left to right and back to front and adjust the 4 Hex. Head bolts as necessary to ensure the Base Frame is level, fit an M6 nut (14) on each bolt and tighten down onto the Base Frame with 10mm AF Spanner.
- Mark the floor through the two 8mm dia. holes for the floor fixing positions.

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Step 2





IDENTIFY A SAFE WORKING POSITION AWAY FROM OTHER OPERATORS.

WHERE POSSIBLE THE OCR 1 BUILD SHOULD BE STARTED SUCH THAT THE REAR OF THE RACK IS APPROXIMATELY 0.5 M AWAY FROM A VERTICAL SURFACE.

• Position the Base Frame (1) on the floor with the rectangular cut outs facing upwards.

Step 3



- Take the Left Hand Upright (2) and slide into the 'L' shaped slot on the left of the Base Frame (1).
- Push down until the Left-Hand Upright keys into the bottom of the Base Frame.
- **TIP** the end with the long cut out and two holes fits into the Base Frame.
- Insert two M6 x 12mm Pozi Pan Head screws (15) through the upright and into the Base Frame.
- DO NOT fully tighten currently.
- **TIP** If the screws are difficult to fit then the upright is not seated correctly.

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- Take the **Right** Hand Upright (2) and slide into the 'L' shaped slot on the right of the Base Frame (1).
- Push down until upright keys into the bottom of the Base Frame.
- **TIP** the end with the long cut out and two holes fits into the Base Frame.



- Insert two M6 x 12mm Pozi Pan Head screws (15) through the upright and into the Base Frame.
- DO NOT fully tighten currently.
- **TIP** If the screws are difficult to fit then the upright is not seated correctly.



Step 6





The following operations will require the user to work approx. 2m from the floor.

Safe working practices MUST be followed.
Ensure that no persons are standing behind the rack during the following operations.

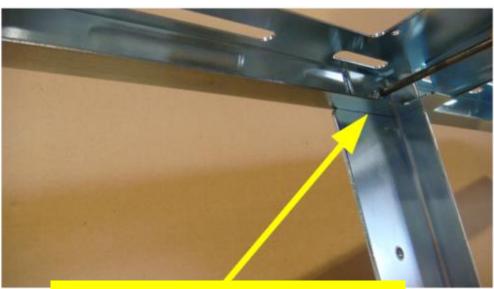
Secure the rack to prevent it from falling over if necessary.

• Locate the Top Frame (3) over the Mounting Rails.



- Secure the Left hand Upright using an M6 x 12mm Pozi Pan Head screws (15). Fit the screws from the front and fully tighten using a No.3 Pozi-drive screwdriver.
- **TIP** If the screws are difficult to fit then the upright is not seated correctly.

Step 8



Upright flush with this face, no visible gap.

- Secure the Right Hand Upright using an M6 x 12mm Pozi Pan Head screws (15). Fit the screws from the front and fully tighten using a No.3 Pozi-drive screwdriver.
- FULLY TIGHTEN the 4 screws in the Base Frame.







- Offer the Right-Hand Side Panel (RHSP) (4) up to the right-hand side of the rack.
- Slide it into position ensuring that the 6 large holes line up (4 at the bottom and 2 at the top).
- Select the white push fit rivet (16) and detach the head from the body.
- Push the body through the RHSP until the head of the rivet body is flush with the panel surface.
- Push the head of the rivet through the rivet body and push firmly to engage the rivet. The rivet is engaged when the head is flush with the body and on the inside the 4 legs are splayed.

TIP: insert the top two rivets first

- Fit a M4 x 4mm Pozi Pan Head Screw (17) to secure the RHSP to the back of the rack in 4 positions.
- Tighten the 4 screws using a Pozi Screwdriver (No. 2).

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Step 10



M6 x 12mm Pozi Panhead Screws

Insert two M6 x 12mm Pozi Pan Head screws (15) into the Rear Uprights as shown. Leave the heads approx. 3mm proud of the surface.

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Step 11



• Carefully unpack the Cable Breakout (CBO) Assembly.

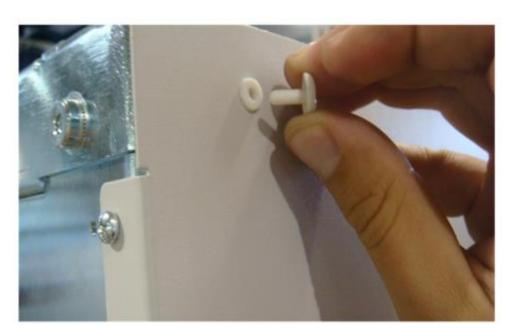


Do not attempt to rotate the reels as it will cause damage to the mechanism.

Step 12



- Push the CBO Assembly up into the Top Frame and engage the two slots behind the previously installed M6 Pozi Screws in the Rear Uprights fully tighten both screws.
- Insert two M6 x 12mm Pozi Pan Head screws (15) into the CBO Bracket and tighten.
- Fit the 48mm by 5mm OD tubes (50 supplied) into the CBO.



- Offer the Left-Hand Side Panel (LHSP) up to the left-hand side of the rack.
- Slide it into position ensuring that the 6 large holes line up (4 at the bottom and 2 at the top).
- Fix the LHSP to the rack with 6 white push fit rivets (16).
- Fit M4 x 4mm Pozi Pan Head Screw (17) to secure the LHSP to the back of the rack in 4 positions.
- Tighten the 4 screws using a Pozi Screwdriver (No. 2).

Step 14



Working behind the rack:

- Offer the Rear Panel Assembly up to the back of the rack. You will notice that there is a blip on the panel which rests on the Base Frame. There are also cut outs with clearance for threaded bushes (4 positions). These help to locate the Rear Panel Assembly to the rack.
- Secure the Rear Panel Assembly to the rack using M4 x 4mm Screws in 12 positions.
- Tighten the 12 Screws using a Pozi Screwdriver (No.2).



Do not attempt to part the two rear panels.



Step 15



Working behind the rack:

- Offer the Upper Rear Panel up to the back of the rack. Note that there are 2 clearance holes for locating around the 2 threaded bushes on the Left- & Right-Hand Uprights. These must align before the Upper Rear Panel is fixed into position.
- Secure the Upper Rear Panel to the rack using M4 x 4mm Pozi Pan Head Screw (17) in 4 positions.
- Tighten the 4 Screws using a Pozi Screwdriver (No.2).



Step 16



The following operation requires the user to drill the floor. Check that it is permissible for the floor to be drilled and take all necessary safety precautions for the material being drilled.

Floor fixing:

- Decide on suitable floor fixings and drill 2 suitable holes in the positions previously marked in Step 1.
- Manoeuvre the assembled OCR1A into its final position.
- Adjust the position of the rack to line up with the floor fixing holes.

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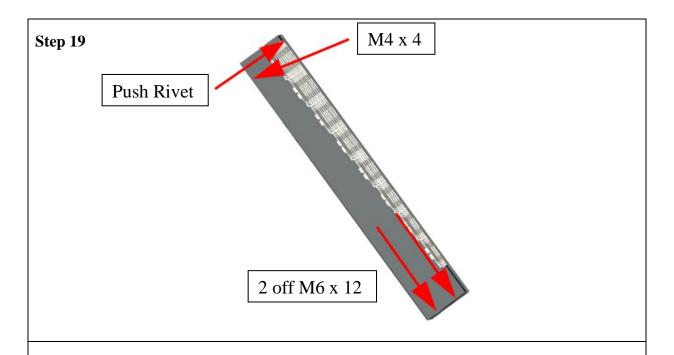
Step 17
Overhead gantry fixing:
• Secure the rack to the overhead gantry mountings using two suitable M12 bolts and 4 nuts (Not supplied).
• Secure the OCR to the floor
Do not over tighten

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- Position the Hydra Guide Assembly (HGA) onto the Base Frame and push into the right-hand corner and align the hole in the HGA with the hole in the Right-Hand Side Panel (RHSP).
- Select the White Push Fit Rivet and detach the head from the body.
- Push the body through the RHSP until the rivet body is flush with the surface.
- Push the head of the rivet through the rivet body and push firmly to engage. The rivet is engaged when the head is flush with the body and on the inside all 4 legs are splayed.



- Insert the two M6 x 12mm Pozi Pan Head screws (15) through the HGA and into the Base Frame, do not tighten.
- Insert the M4 x 4mm Pozi Pan Head Screw (17) through the HGA and onto the RHS panel and fully tighten.
- From outside the rack insert a white push fit rivet (16) through the RHSP and into the Hydra Guide Assembly.
- Push the body through the RHSP until the head of the rivet body is flush with the with the panel surface.
- Push the head of the rivet through the rivet body and push firmly to engage the rivet. The rivet is engaged when the head is flush with the body and on the inside the 4 legs are splayed.
- If you cannot gain access to the RHSP then the push fit rivet can be inserted from inside the rack through the HGA into the RHSP.
- Tighten the M6 x 12mm Pozi Pan Head screws.



Step 20



• Insert 2; M6 x 40 Cap Head Screws (19) as shown.

NOTE: This is only applicable for the initial OCR1A supply, it is intended that these screws will be factory fitted.

• Fit the Splicing Machine Support Shelf (SMSS) into position.



- Ensure the 3 hinges on the RHSP are in their 'open' position.
- Rest the right-hand door on the upper surface of the SMSS.
- **Tip** fold a piece of cardboard twice and place it between the base of the door and the SMSS to help align the holes in the door with the holes in the hinges
- Place your foot against the door to ensure it is stable.
- Close the middle hinge and insert an M5 x 12 CSK Head Pozi Screws (18), loosely tighten.
- Close the other 2 hinges and insert a screw in each.
- Insert a further M5 x 12 CSK Head Pozi Screw (18) in each hinge and fully tighten all 6 screws.



Step 22



Open the right-hand door:

- Ensure the 3 hinges on the LHSP are in their 'open' position.
- Rest the left-hand door on the upper surface of the SMSS.
- **Tip** fold a piece of cardboard and place it between the base of the door and the SMSS to help align the holes in the door with the holes in the hinges.
- Place your foot against the door to ensure it is stable.
- Close the middle hinge and insert an M5 x 12 CSK Head Pozi Screws (18), loosely tighten
- Close the other 2 hinges and insert a screw in each.
- Insert a further M5 x 12 CSK Head Pozi Screw (18) in each hinge and fully tighten all 6 screws.

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INSTALLATION INSTRUCTION

OCR ASSEMBLY





The OCR1A is now ready for use, please refer to the following documents for Fibre & Cable Installation Instructions contained in the ISIS holding document EPT/COF/D901.

OPTICAL CONSOLIDATION RACK (OCR) CABLE & FIBRE INSTALLATION **SECTION 1**

Installation, termination and storage of COF201 in the Cable Break Out (CBO)

SECTION 2

Extract fibres from the Cable Break Out (CBO) storage and route to Sub-Rack/Splicing Trays

SECTION 3

Installation, termination & storage of Hydra Cable in the Hydra **Cable Storage Area (HCSA)**

SECTION 4

Extract Hydra fibres from HCSA storage and Splice





Before you leave:

Place the Instructions into the Wallet (23) provided on the left-hand door.

Put a CBO Fibre Storage Key (21) into the first reel position of each CBO segment (4 keys are provided) by pushing the key into the hole and turning 90 degrees clockwise.

Ensure there are 3 sheets of self-adhesive labels (20) in the wallet

If any of the above parts are missing please contact Prysmian via email or on the Helpline, details are given below.

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