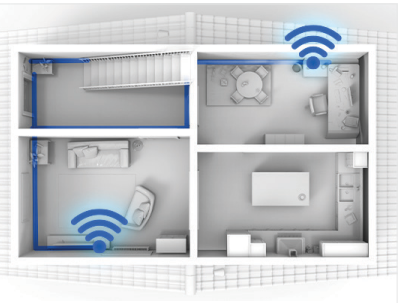
HellermannTyton

Welcome

Fibre Broadband Extension Kit
User Guide







⚠ IMPORTANT!

Before applying adhesive to this product, complete the pre-test connection step in Section 2 and verify that the connection is working correctly.

ONCE THE ADHESIVE HAS BEEN APPLIED TO THIS PRODUCT, IT IS CONSIDERED INSTALLED AND CANNOT BE RETURNED.
This does not affect your statutory rights.

FIBRE OPTIC CABLE CONTAINS A FINE GLASS FIBRE. HANDLE WITH CARE AND DO NOT EXCESSIVELY BEND OR STAND ON THE CABLE.

Video guide

Full installation video can be found on our website.

Tap the icon to the right to be taken to the webpage.

Alternatively navigate in your web browser to **www.htdata.co.uk/fbek**



Glossary of terms

- **ONT:** Your broadband providers fibre box. A small powered box that the outside fibre plugs into
- **ROUTER:** A box that receives internet through a cable from your ONT and sends it around your home using Wi-Fi signals or Ethernet cables
- **FIBRE PLUG:** Small connector on the end of a fibre cable that links internet into a socket/adaptor
- **FIBRE ADAPTOR:** Connecting socket that joins two fibre optic cables together so light signals can pass between them
- **ETHERNET:** Copper patch lead that connects the ONT to the router
- **PULLING SOCK:** A protective sleeve around a fibre plug to protect it from damage while it is pulled through walls
- **MINIMUM BEND RADIUS:** The minimum bend radius is simply the tightest curve you can bend a fibre optic cable without snapping the glass inside or breaking your internet connection

Contents

1 In the box
Identifying your current setup
Preparing your installation

2 Preliminary fitting

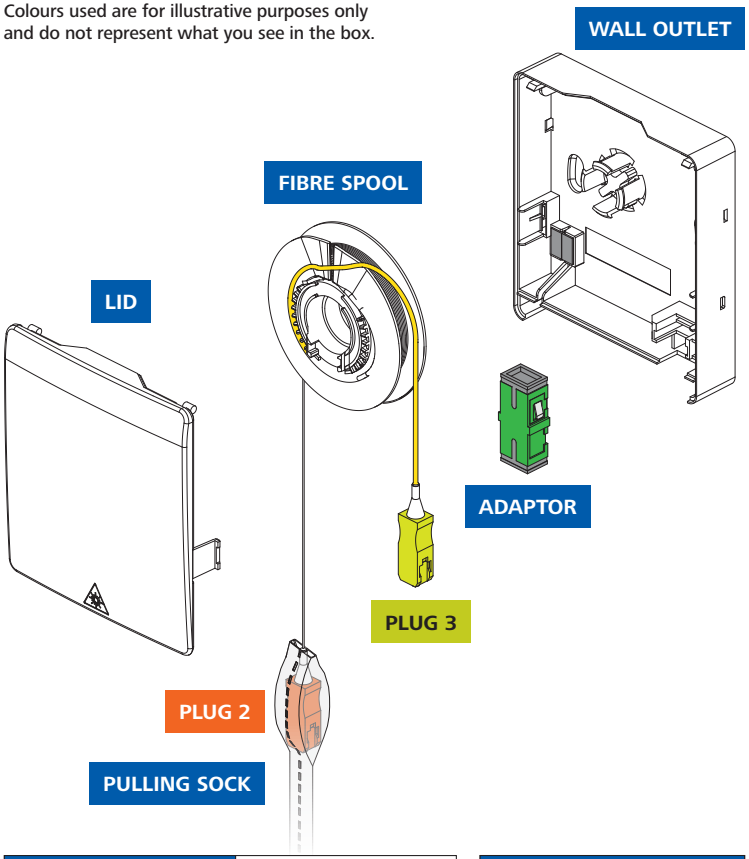
3 Permanent fitting

4 Fibre cleaning instructions

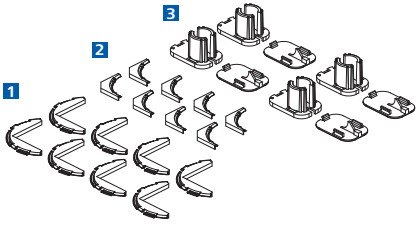
5 Through the wall routing guides

1 In the box

Colours used are for illustrative purposes only and do not represent what you see in the box.



CABLE ROUTING KIT



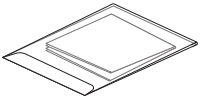
1. 8 x internal corner guides
2. 8 x external corner guides
3. **4 x wall routing guides** (fittings for safely taking fibre cable through walls)

WALL FIXING KIT



2 x screws and wall plugs

FIBRE CLEANING CLOTH



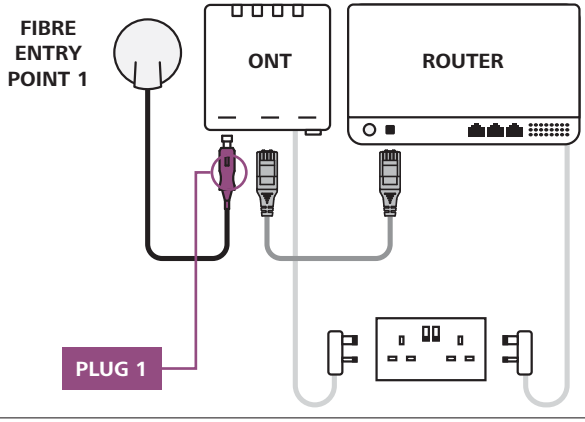
For plug cleaning only.
DO NOT use to dust or clean debris.

1 Identifying your current setup

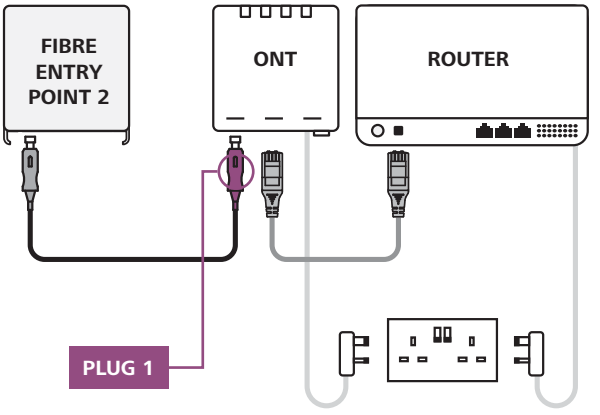
Diagrams are for illustration purposes only.

Your equipment may differ from the ones shown.

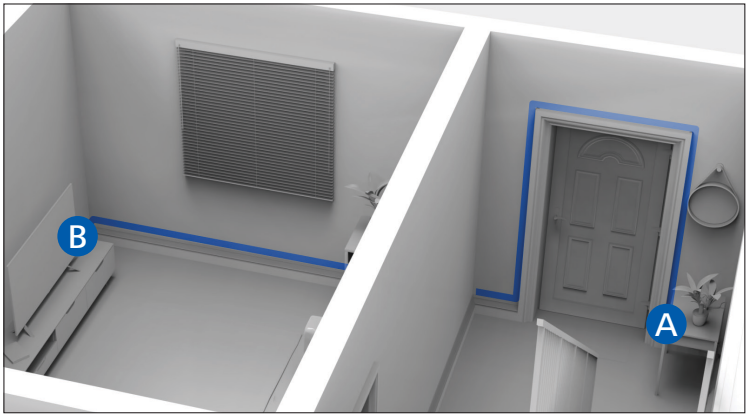
SCENARIO 1 This installation guide will show you how to fit this scenario.



SCENARIO 2 Can be found at www.htdata.co.uk/fbek



1 Preparing your installation



Where would you like to move your equipment to?

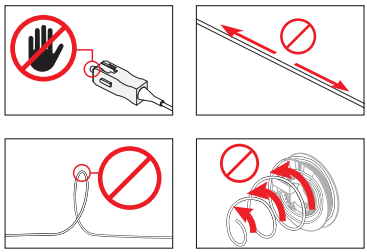
Clear and measure the route accurately from A to B. Route must be less than 30 metres. Remember to account for going through walls and round door frames and corners.

What you'll need to fit this product:

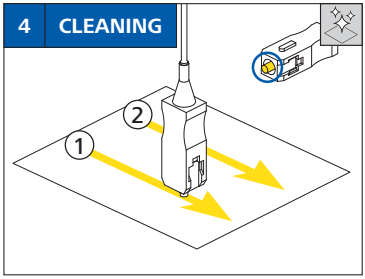
- Spirit level
- Pencil
- Power drill
- 6mm drill bit
- 12mm drill bit (if going through walls)
- Screwdriver
- A rubber mallet hammer (for pushing in wall plugs
- PVA glue and brush (if fixing to skirting)

DO NOT...

- **Twist** the fibre optic cable during installation as it can cause damage.
- **Crush or trap** under furniture; doors and feet harm the cable.
- **Pull** the cable too hard as this can cause breakage.
- **Remove dust caps** until installation, this keeps connector ends clean.
- **Bend tighter** than recommended, especially around corners (Use radius managers).
- **Unspool in one go** as this can lead to kinks, always try to remove fibre from the spool in small sections

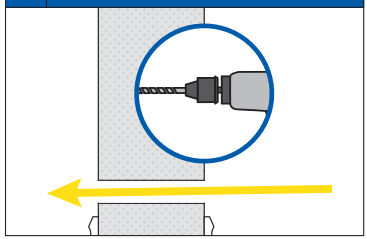


4 CLEANING



Plugs should be cleaned whenever dust caps are removed. See **Section 4** for instructions.

5 ROUTING THROUGH WALLS



Are there walls on your route? These need to be drilled and **PLUG 2** passed through before laying the route. Before drilling, check for hidden pipes and electrical cables. See **Section 5** for instructions.

2 Preliminary fitting

This section shows the steps to route the fibre cable to the new location for your equipment and how to test your connection works.

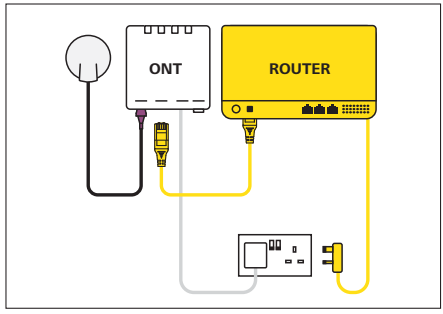
It is essential to complete prior to applying adhesive to fix the cable.

DO NOT APPLY ADHESIVE AT THIS STAGE.

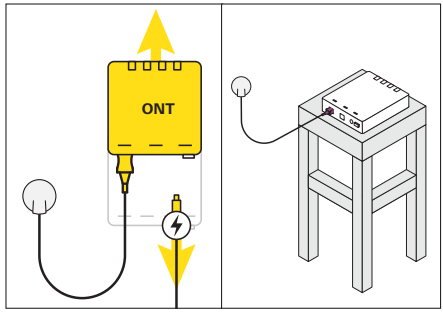
Once adhesive has been applied to this product, it is considered installed and cannot be returned.



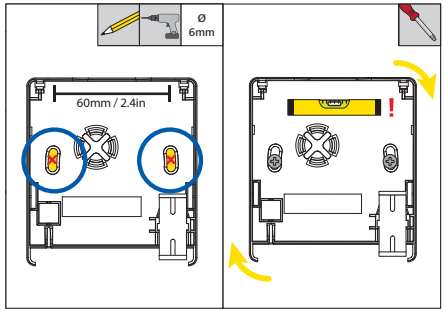
1. Move the router
   - The router has a cable that runs between it and the ONT called the Ethernet cable
   - Unplug the Ethernet plug from the ONT
   - Unplug the power from the socket
   - Move the router to the desired location



2. Remove ONT
   - Unplug the power cable (leaving PLUG 1 still plugged in)
   - Remove the box from the wall
   - **DO NOT** bend or stretch the fibre cable, rest the ONT nearby on a stool or box

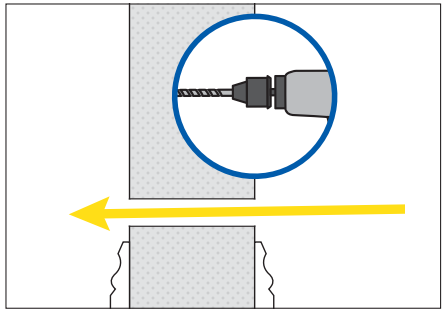


3. Fit wall outlet base to wall
   - Position the outlet flush to the wall in the former ONT location, or as close to it as feasible
   - Mark with a pencil where the screw holes will be
   - These are 60mm apart
   - Remove outlet from wall
   - Drill with 6mm drill bit
   - Push or tap in wall plugs using a rubber mallet
   - Reposition the outlet and secure it with the mounting screws
   - Use a spirit level to ensure outlet is level

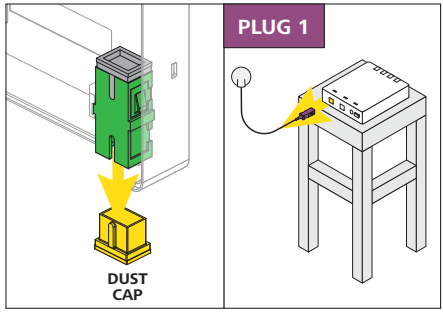


2 Preliminary fitting (cont.)

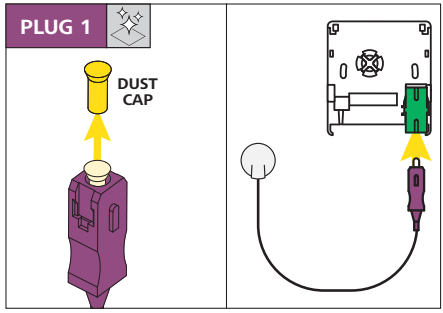
4. Prepare route
   - Do all dusty jobs first to avoid any contamination of the fibre connections
   - PLUG 2 needs to be passed through any walls before laying the route
   - Before drilling, check for hidden pipes and electrical cables
   - See **Section 5** for instructions on how to route fibre through a wall
   - Clean up all debris and dust along the route prior to routing fibre



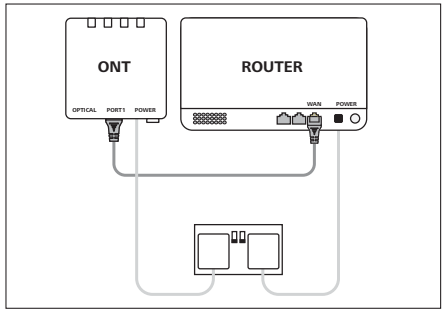
5. Removing dust caps
   - Identify the bottom of the adaptor in the wall outlet
   - Remove the dust cap by gently pulling it away from the adaptor
   - Unplug PLUG 1 from the ONT



6. Connecting the wall outlet
   - Clean PLUG 1 using the instructions in **Section 4**
   - Insert PLUG 1 into the bottom adaptor

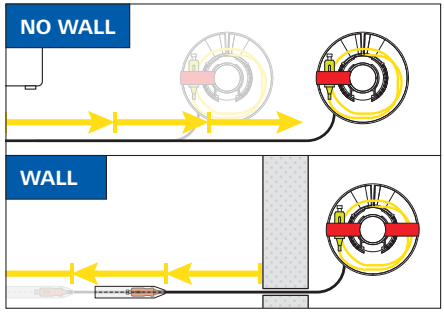


7. Move ONT and router
   - Install your ONT in its new location alongside the router
   - Ensure distance between ONT and Router is not further than the length of the Ethernet cable
   - Plug in Ethernet cable between the ONT and the router

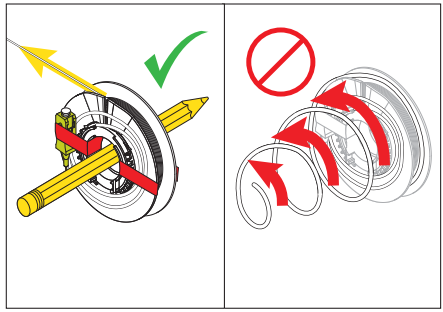


2 Preliminary fitting (cont.)

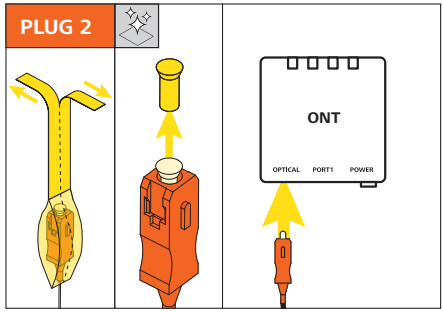
8. **The ONT and the wall outlet**
   - Let's take PLUG 2 to the ONT
   - **DO NOT** remove the red tape on the fibre spool
   - **No wall?** Unspool in loose sections from the ONT back to the outlet ensuring there are no twists or bends
   - **Wall?** Route through wall first. See **Section 5** for instructions. Unspool in sections from the wall to the ONT



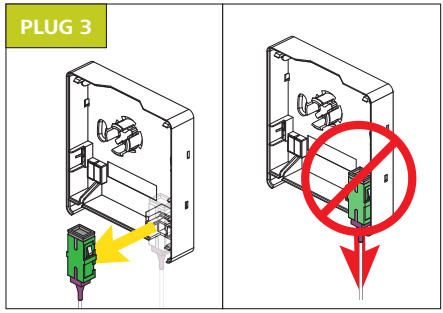
9. **Unspooling**
   - Through the wall is best with two people, one on either side of the wall
   - For smooth unspooling, use your finger or a pencil as a makeshift axle through the spool centre
   - Once the route is completed, rest the spool on the stool/box next to the wall outlet



10. **Plugging PLUG 2 into the ONT**
    - Remove sock from PLUG 2
    - **DO NOT** use scissors
    - The sock is perforated down the centre to gently tear apart
    - Remove dust cap from PLUG 2
    - Clean PLUG 2 using the instructions in **Section 4**
    - Plug PLUG 2 into your ONT



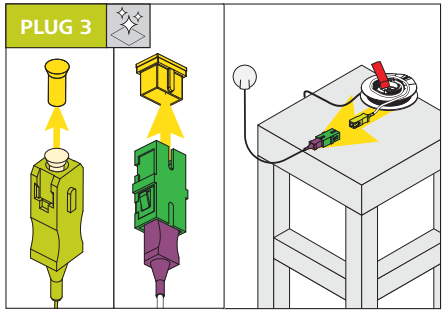
11. **Preparing the wall outlet**
    - Remove adaptor from the wall outlet base
    - This can be done by holding the top and bottom of the adaptor and sliding it towards you
    - **DO NOT** pull on the fibre cable



2 Preliminary fitting (cont.)

12. Plugging PLUG 3 in the wall outlet

- **DO NOT** fit spool into the outlet base
- Remove the dust caps on PLUG 3 and top of adaptor
- **DO NOT** discard plug caps
- Peel up red tape to allow a longer tail of cable from PLUG 3
- Clean PLUG 3 using the instructions in **Section 4**
- Plug in PLUG 3 into top of adaptor
- Once PLUG 3 is connected, check your internet connection below

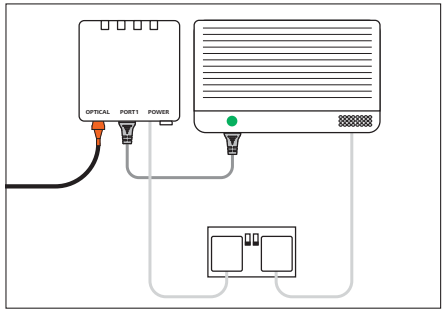


Test connection to make sure fibre on the spool has not been damaged during routing and before you permanently fix.

Ensure both the ONT and router are powered on and the Ethernet cable between them is plugged in.

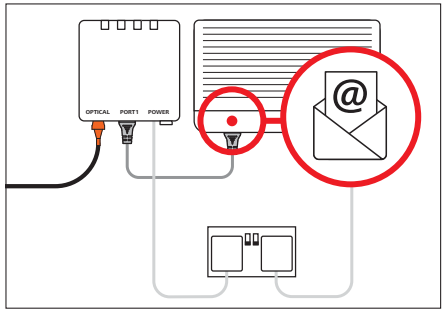
You may have to wait several minutes for the router to connect to your provider.

Internet working?
If yes, go to **Section 3.**



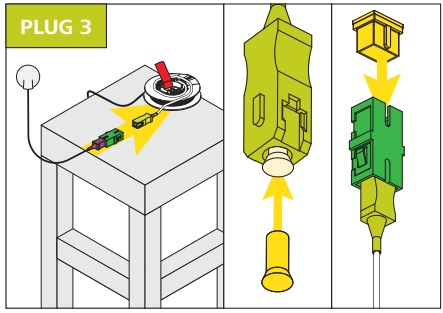
Not working?
If the guide has been followed correctly and the fibre has not been fixed to the property, you may be eligible for an exchange. It is likely the fibre was broken during routing.

Please put the ONT and router back to their original positions and reconnect them until a replacement is received.

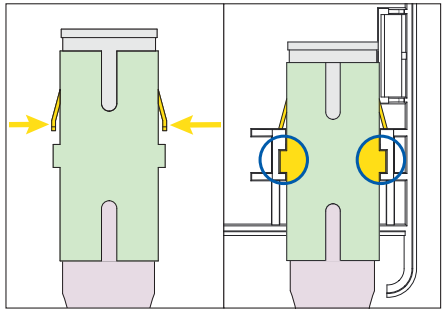


3 Permanent fitting

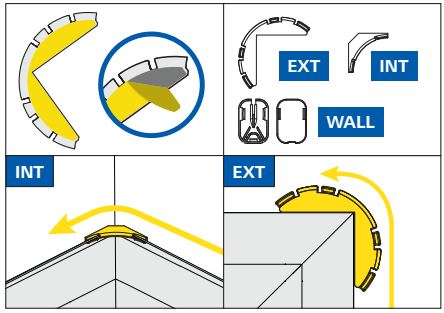
1. **Unplugging the connection to permanently fix the cable**
   - To fix the fibre to the skirting, excess fibre will need to be respooled
   - Unplug PLUG 3 from the top of the adaptor
   - Replace dust cap on adaptor
   - Replace dust cap on PLUG 3
   - Return PLUG 3 to its original position secured with red tape. This protects it in the next steps



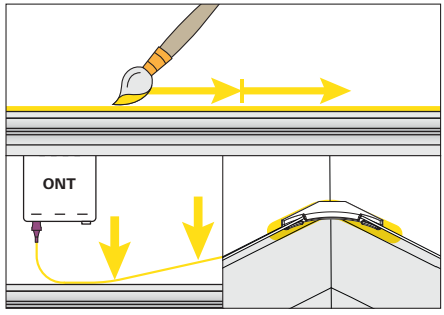
2. **Return adaptor to base**
   - Squeeze the metal side clips on the left and right sides of the adaptor and push into base
   - The wings on the adaptor should fit into the small slots
   - Ensure the metal side clips are at the top of the adaptor and PLUG 1 is facing down



3. **Prepare to permanently fix the cable**
   - Fit corner routing managers before fixing the cable
   - Make sure the surface is clean before sticking
   - Peel back the adhesive backing and stick to surfaces
   - External corner guides route round the top of doors and outer corners of skirting boards
   - Internal corner guides route round tighter bends between skirting boards



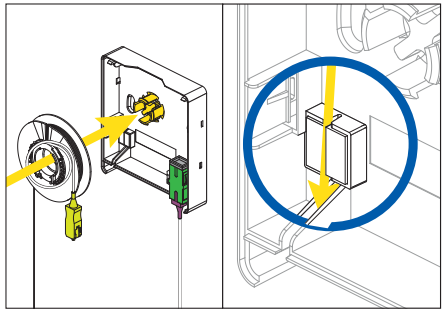
4. **Permanently fixing the cable**
   - Starting at the ONT, glue back to the wall outlet
   - Work in small sections
   - Apply a little PVA glue on the skirting with a small brush
   - Let the PVA go off and then gently push the fibre into the glue
   - Working backwards will result in an excess of fibre near the wall outlet. This can be respooled to avoid kinks/knots
   - Dot some glue on cable route managers to keep fibre secure



3 Permanent fitting (cont.)

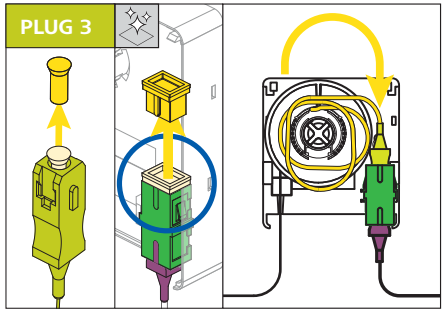
5. **Loading the spool**

- Carefully wind the majority of the excess fibre cable onto the spool
- Remove red tape securing PLUG 3
- Load the spool onto the wall outlet base by lining up the spool with the teeth and pushing until it clicks into position
- Wind on any remaining fibre until desired drop to skirting or wall is achieved
- Slot fibre into foam slot to restrict movement



6. **Plugging in the connection**

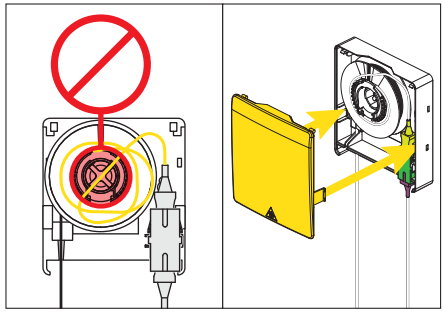
- Remove dust caps from PLUG 3 and top of the adaptor
- Clean PLUG 3 using the instructions in **Section 4**
- Plug PLUG 3 into the top of the adaptor



7. **Wall outlet lid**

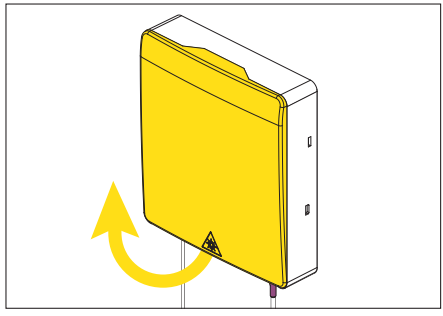
Fitting

- No fibre cable should cross the spools centre
- Line up the side bars and push lid onto wall outlet
- Listen for the click
- **DO NOT** pull on the fibre cable when the lid is on. When secured, the lid locks the spool in place to prevent tampering and unspooling



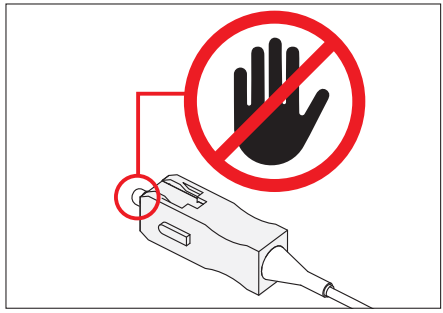
Removing

- The lid has a overhanging edge at the bottom of the outlet to shield the connectors from damage
- Pull the lid from the overhanging edge to remove

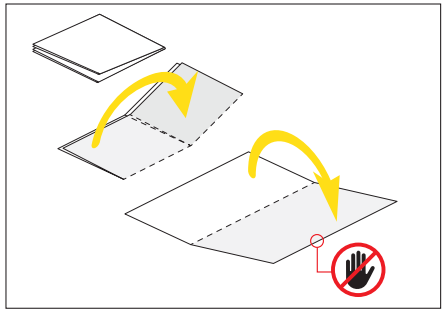


4 Fibre cleaning instructions

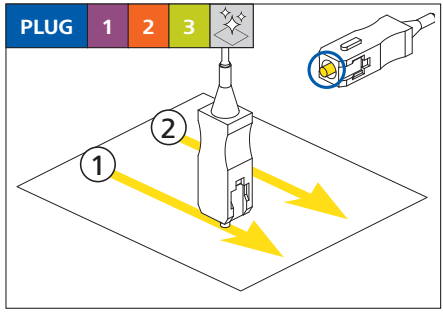
Use this process whenever you handle a fibre connector plug.



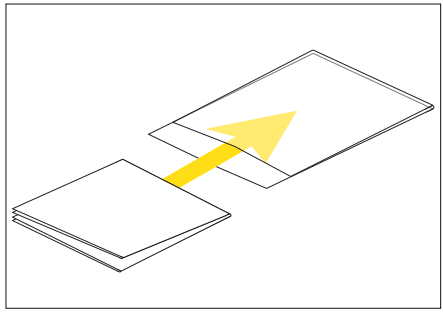
1. Housekeeping
   - **DO NOT touch the connector end**. Oils and dirt block the light signal and effect connection
   - **DO NOT** use the cloth for anything other than cleaning fibre plugs



2. Cleaning cloth
   - Unfold the fibre cleaning cloth
   - **DO NOT touch the inner face**



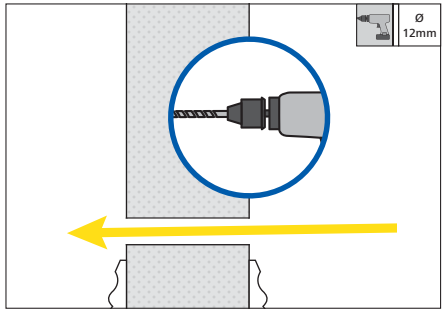
3. Cleaning process
   - **1st swipe.** Holding the plug upright, swipe the end over the inner face of the cloth
   - **2nd swipe.** Move to new spot and swipe again before immediately inserting into adaptor



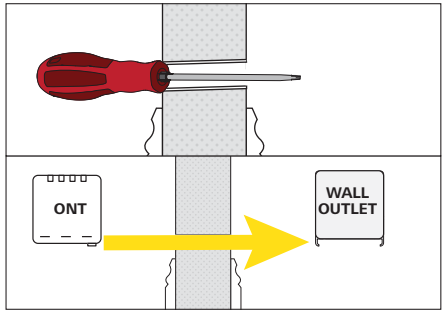
4. Protection of the cloth
   - Refold the fibre cleaning cloth
   - Place fibre cloth back to the bag to preserve its sterility

5 Through the wall routing guides

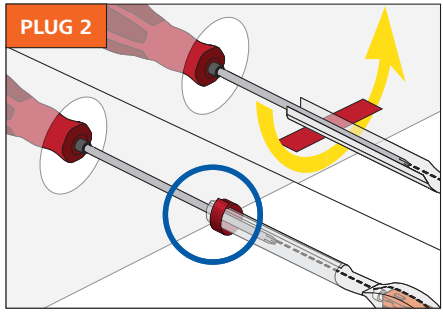
1. **Drilling a 12mm hole**
   - Using a 12mm drill bit, create a clean channel through any walls on your route
   - Before drilling, check for hidden pipes and electrical cables



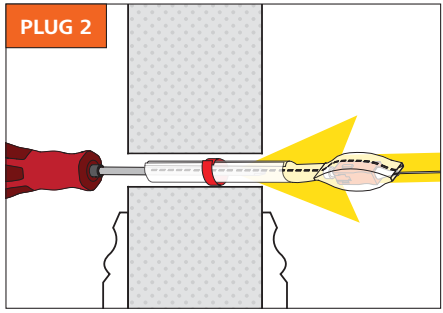
2. **Moving the plug through the wall**
   - In order to move PLUG 2 through the wall, push a long screwdriver or equivalent through the exit hole
   - We are going to use this to assist in pulling PLUG 2 through the hole



3. **Securing the connector**
   - Take the flat end of the pulling sock, wrap it round the end of the screwdriver
   - Tape the pulling sock to the screwdriver using the supplied adhesive tape

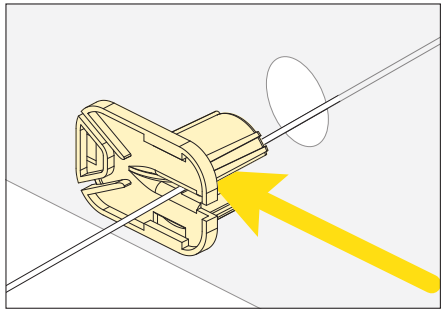


4. **Passing through the wall**
   - Gently pull the screwdriver back through the wall, passing PLUG 2 and the pulling sock through the wall with it
   - **DO NOT** push/pull the fibre cable or plug itself

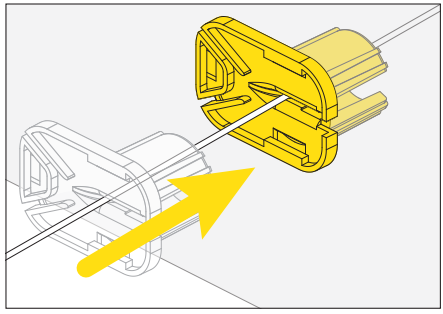


5 Through the wall routing guides (cont.)

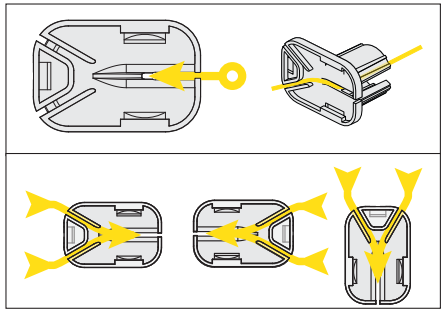
5. **Through the wall routing guide**
   - Peel back the adhesive backing
   - Pass the fibre cable into the slot on the wall routing guide



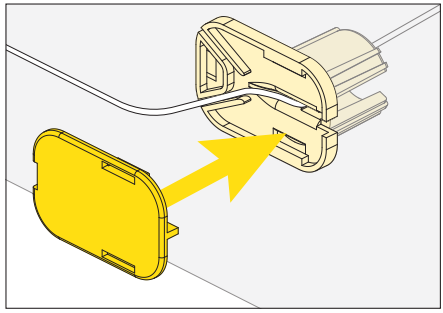
6. **Fitting the wall routing guide**
   - Push the wall routing guide into the drill hole, it should sit flush with the wall
   - **DO NOT** trap the fibre cable
   - Do this on both sides of the wall



7. **Assembly of the cable route guide**
   - Align the routing channels in the direction the cable is going to route
   - The guide can face in any direction to maintain the minimum bend radius for the fibre



8. **Cable route guide lid**
   - Once the fibre cable has been permanently fixed to your property with adhesive, clip the lid in place to secure the fibre
   - WARNING: DO NOT do this before the excess fibre has been respooled and fixed as it could result in fibre breakage



HellermannTyton

HellermannTyton Data Ltd – UK
Waterside House,
Edgar Mobbs Way
Northampton NN5 5JE
Tel.: +44 1604 707 420
Email: sales@htdata.co.uk
www.htdata.co.uk

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