

Home Deployment Kit

Installation Manual





Table of Contents

Application	3
FieldSmart SCD-TAP and Mini TAP	4
CraftSmart TAP-Splice	6
CraftSmart Deploy Reel TAP	8
Storing Pre-Connectorized Cable	8
Splicing a Pigtail	9
Deploy Reel	10
Angled Wall Plate	12
CraftSmart Fiber Outlet	13
Connector Cleaning Procedure	16
Standard Warranty	21
Proprietary Notice	22
Technical Support	22

Application

A CraftSmart/FieldSmart Home Deployment Kit (HDK) extends Clearfield's field-proven fiber management expertise and leading-edge fiber connectivity performance all the way into the home. Starting with the Test Access Point (TAP) solution of your choice, the Home Deployment Kit packages the required patch cords, fiber jack (Clearfield's CraftSmart Fiber Outlet or Angled Wall Plate) and necessary adapter and splice sleeve installation accessories in a single box. Truck rolls are minimized and customer turn-up is rapid.

Choose the CraftSmart TAP-Splice HDK for environments where splicing or patch is needed and minimal slack storage is desired within the unit mounted outside the home, and choose the FieldSmart SCD-TAP HDK or FieldSmart Mini TAP HDK for environments where plug-and-play along with internal slack storage is desired within the unit mounted outside the home.

CraftSmart Deploy Reel TAP Home Deployment Kit (HDK) extends Clearfield's field-proven fiber management expertise and leading-edge fiber connectivity performance all the way into the home. With the CraftSmart Deploy Reel TAP, the Home Deployment Kit packages the required patch cords, angled wall plate with SC adapter, and necessary SC adapter installation accessories in a single box. Truck rolls are minimized and customer turn-up is rapid. Choose the CraftSmart Deploy Reel TAP HDK for environments where plug-and-play along with internal slack storage are desired within the unit mounted outside the home.

The CraftSmart Angled Wall Plate is designed to attach to a single-gang outlet box. The angled design of the connection provides a low profile, natural strain relief. This plate and snap-in module is available in white. The SC/APC adapter is included in the assembly.

The CraftSmart Fiber Outlet allows for easy demarcation inside the premise and cable management for incoming feeder cable. The CraftSmart Fiber Outlet can accommodate 4 entrance points for 3mm cable and up to 4 output of SC adapter ports. The splice cassette is hinged and easily removable for nonsplicing applications. This small indoor enclosure provides both bend limiting protection and a secure termination point to connect the entrance fiber to the included equipment jumper.



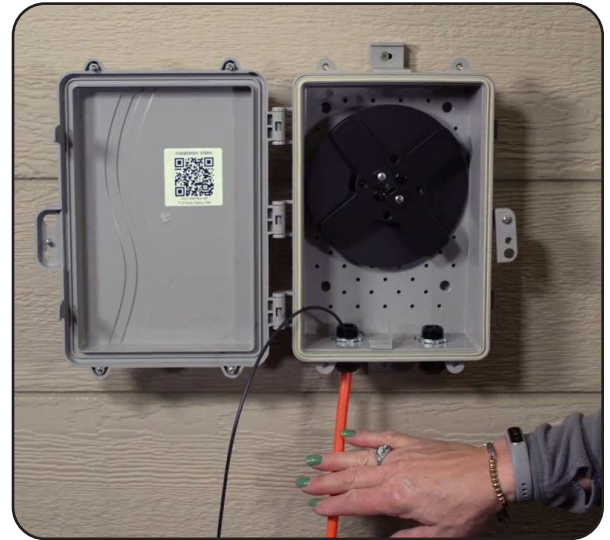
Home Deployment Kit

Installation Manual



FieldSmart SCD-TAP and Mini TAP

1. Mount your box to the wall using the 4 mounting locations inside.
2. Bring your microduct and incoming cable into the box through the sealcon.



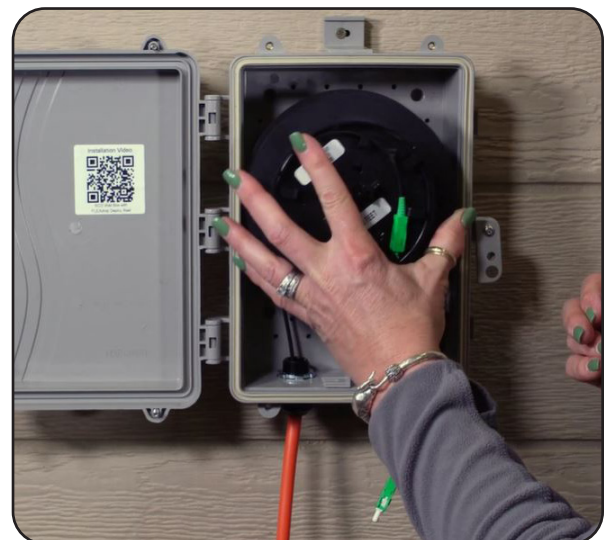
3. Pull your incoming cable slack into box and store it on the slack reel.

Note: The FieldSmart SCD-TAP HDK can hold up to 100ft of incoming cable slack, while the FieldSmart Mini TAP HDK can hold up to 50ft of incoming cable slack



4. Install your FLEXdrop fiber reel onto slack reel or mount until the first click, where the reel can still spin freely.

Note: Do not remove the rubber band around the FLEXdrop reel, as it will help prevent over-spooling when pulling the fiber into the premises.



5. Feed your FLEXdrop through the sealcon, pulling the outgoing fiber off the reel and into the premises, up to the CraftSmart Fiber Outlet box.

Note: Before proceeding, jump to the CraftSmart Fiber Outlet section and complete the setup inside the premises.



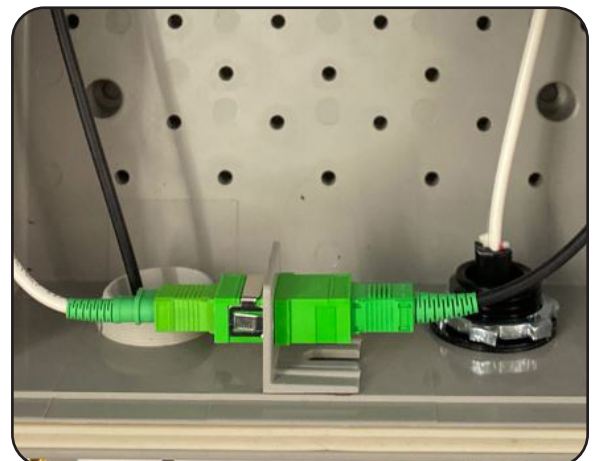
6. Once your outgoing fiber is secured at the Fiber Outlet box, reel the remaining slack back onto FLEXdrop reel.
7. Press on the FLEXdrop reel until you get to the 2nd click, locking it into place.



8. You can now make the connection between the incoming feeder fiber and your FLEXdrop outgoing fiber.

Note: The top of the reel can hold about 14 inches of slack.

9. Make your connection in the adapter housed in the L-bracket in the base of the box, dress the fibers into the slack storage on top of the reel and reinstall the protective cover.



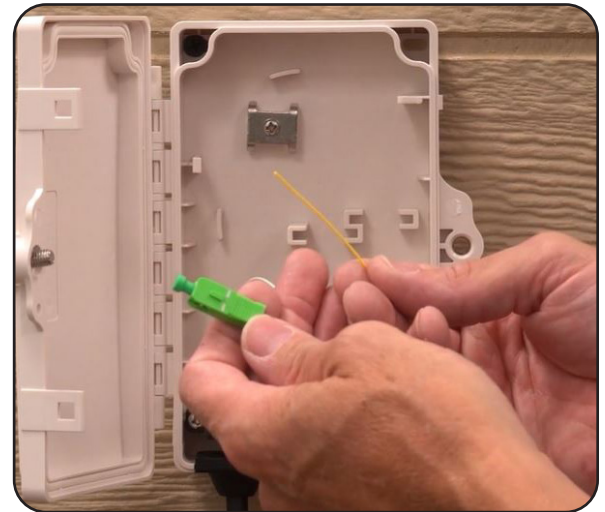
Home Deployment Kit

Installation Manual



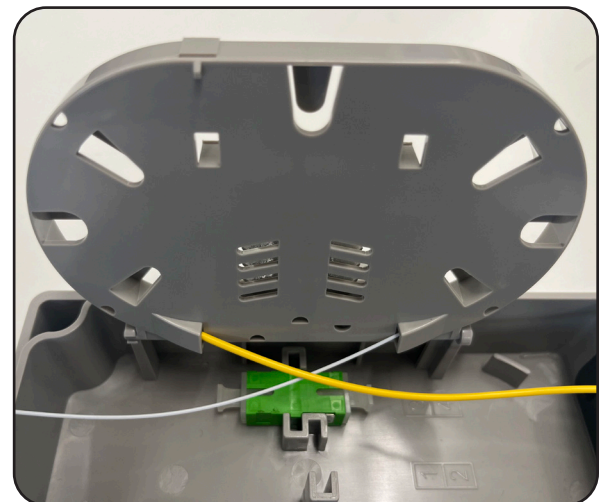
CraftSmart TAP-Splice

1. Mount the CraftSmart TAP-Splice to the wall using the 3 mounting holes on the box.
2. Bring your drop fiber into the box, which will be spliced to the 1m pigtail provided with the CraftSmart TAP-Splice.



3. Transition the drop fiber and pigtail into the splice tray through the openings on the underside of the tray.

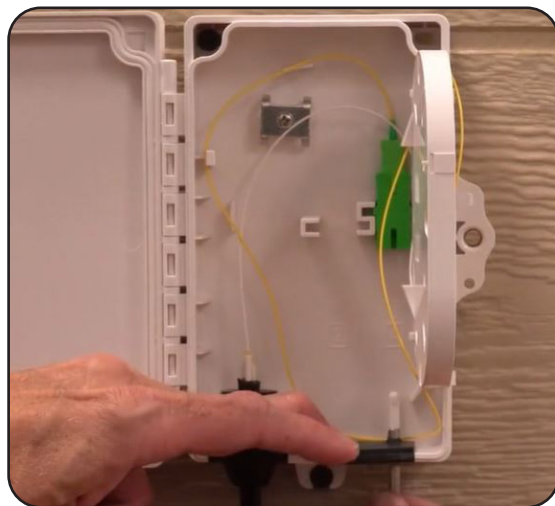
Note: The maximum recommended drop slack storage is 10ft of 3mm cable.



4. After performing your splice, inspect, clean if necessary, then connect the pigtail's connector into the provided adapter.
5. Install the adapter into its location on the back wall of the box and wrap your remaining slack inside the splice tray.



6. Pass the outgoing pushable FLEXdrop, provided with the CraftSmart TAP-Splice, through the rubber entrance grommet.



7. Carefully follow the connectorizing instructions provided with the FLEXdrop cable, and make the connection to the spliced pigtail.



8. Return the swinging splice tray to the closed position and secure the lid.



Home Deployment Kit

Installation Manual



CraftSmart Deploy Reel TAP

1. Remove Deploy Reel TAP box from packing and secure to the wall/pole via the top and bottom mounting locations with customer supplied mounting hardware.
2. Open the box with a 5/16" can wrench and swing the lid up



Storing Pre-Connectorized Cable

1. Bring your cable into the box through the rubber entrance grommet on the left side. Pull the desired amount of slack (max 50ft) and secure in place with the strain relief clamp.
2. Store slack in the box, routing it around underneath the fiber management tabs.



3. Optionally, secure the end of the cable jacket to the slack loop to ensure protection of the fiber subunit breakout.
4. Inspect, clean if necessary, and connect the cable into the adapter in the middle of the box's base.

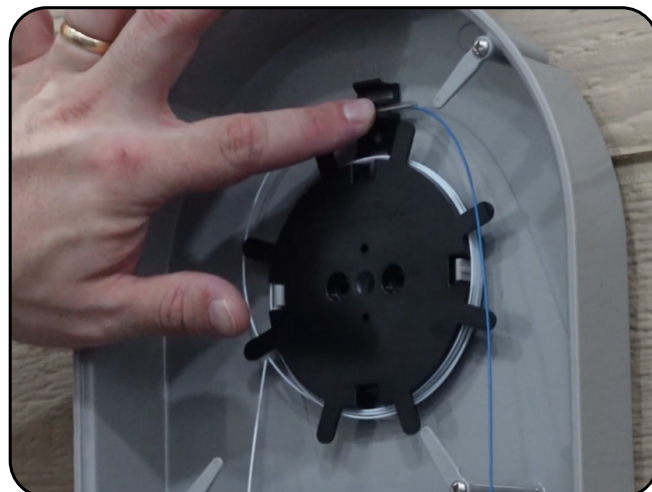


Splicing a Pigtail

1. Pull the desired amount of slack into the box through the left side rubber entrance grommet and prep your cable.
2. Secure the cable jacket into the box with the strain relief clamp.



3. Splice the pigtail to your cable.
4. Store the slack around the base of the box's mounting plate behind the fiber management tabs.
5. Route up and secure the splice sleeve in the splice tray holder at the top of the mounting plate.



Home Deployment Kit

Installation Manual



6. Finish storing the slack around the mounting plate
7. Inspect, clean if necessary, and connect the fiber to the adapter located in the center of the box's base.



Deploy Reel

1. Remove the Deploy Reel from the packaging and locate the reel's mounting pin. Install it onto the mounting bracket inside the box.
2. Remove the tape from the deploy reel, leaving the rubber band in place to prevent overspooling.
3. Install the Deploy Reel onto the mounting pin, clicking it into the first position which will allow it to spin.

Note: After your fiber has been deployed you can further push the reel into the second position which will lock it in place, preventing rotation.



4. Pierce the rubber exit grommet on the right side of the box and pull the fiber off the Deploy Reel through the grommet. Pull the fiber to the destination.



5. Remove the clear cover from the reel.
6. Remove the tape holding the connector in place and route the fiber out of the center of the reel through one of the gaps.
7. Route the fiber down to the adapter in the center of the bottom of the box. Inspect, clean if necessary, and connect the fiber to the adapter.
8. Reinstall the clear plastic cover on the Deploy Reel.



Home Deployment Kit

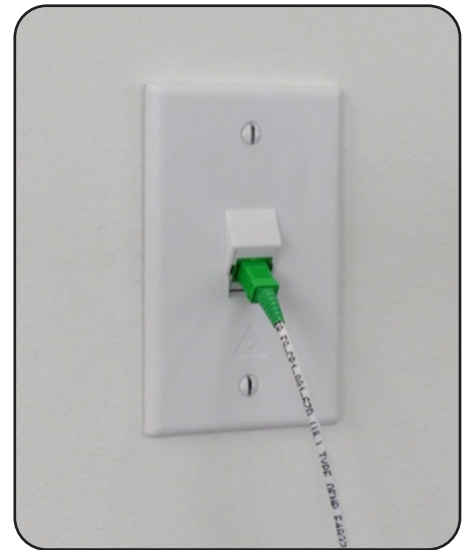
Installation Manual



Angled Wall Plate

For in-house use with Clearfield's Home Deployment Kits, to extend fiber connection from TAP of choice to the ONT.
Mounts to standard in-wall construction boxes

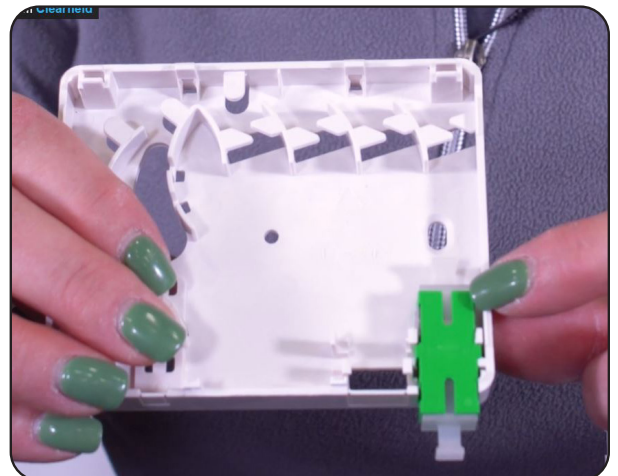
1. Inspect, clean if necessary, and connect the fiber into the back of the adapter pre-installed in the wall plate.
2. Mount the wall plate to the construction box.
3. Inspect, clean if necessary, and connect the jumper to the ONT to the wall plate.



CraftSmart Fiber Outlet

For in-house use with Clearfield's Home Deployment Kits, to extend fiber connection from TAP of choice (SCD-TAP, Mini TAP, and TAP-Splice, not available with Deploy Reel TAP) to the ONT.

1. To open the CraftSmart Fiber Outlet box, press along the longer top and bottom sides and lift away the cover.
2. The inner tray located inside the box can be removed, it will not be used in this recommended application.
3. Note that when installing the provided adapter into the box, the key side must face up and the adapter retaining clips must be within the Fiber Outlet box.
4. The incoming fiber can either come through the back of the box if passing through the wall, or through the other side of the bottom of the box. Simply snap off the tab to make the opening.

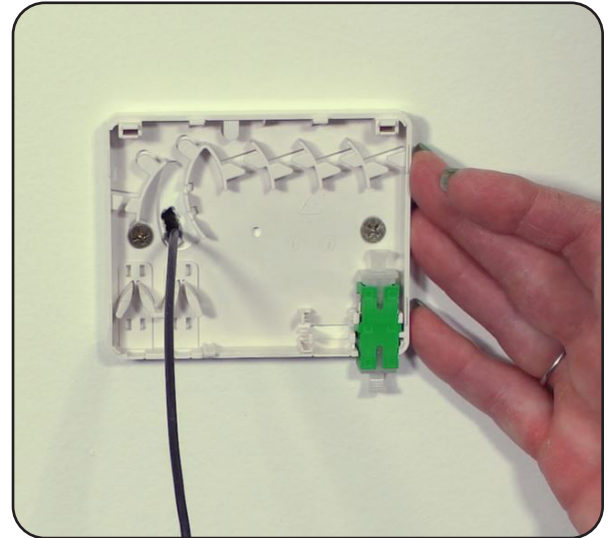


Home Deployment Kit

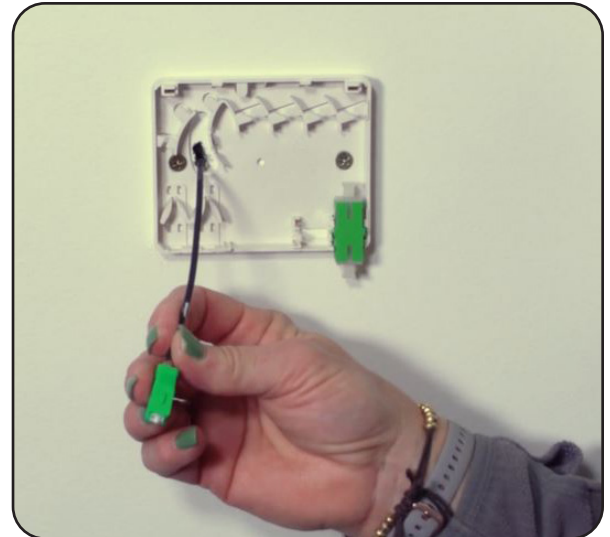
Installation Manual



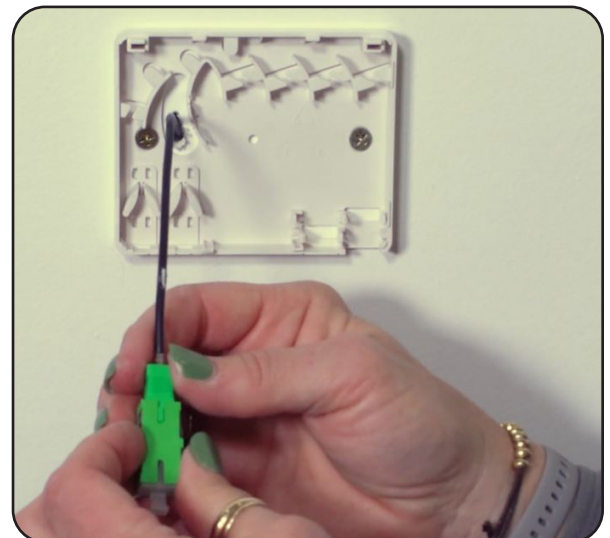
5. Install the Fiber Outlet box onto the wall using the two mounting holes. If applicable, feed the fiber through the back wall's pass-through hole first.



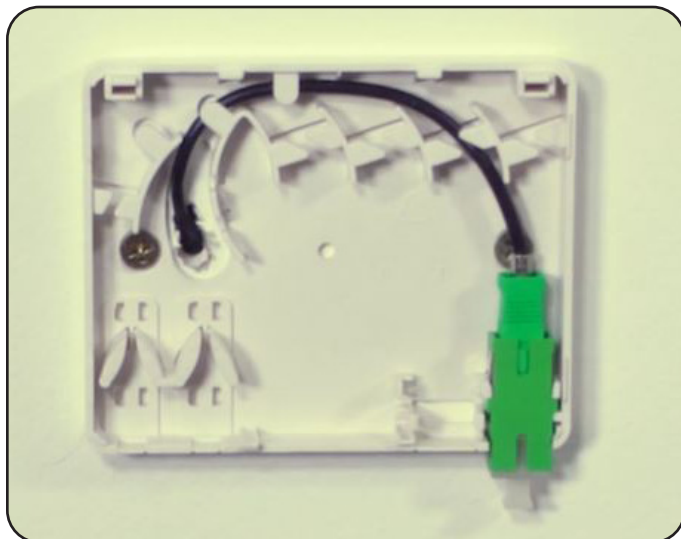
6. Carefully follow the connectorizing instruction provided with the FLEXdrop cable.



7. Remove the adapter from the box and insert your connectorized FLEXdrop into the adapter, ensuring the keys are aligned.



8. Route the fiber around the outside edge of the box through the fiber management fingers and reinstall the adapter into its location



9. Reinstall the cover of the CraftSmart Fiber Outlet box. You are now ready to make your connection to the ONT.



Home Deployment Kit

Installation Manual



Connector Cleaning Procedure

Whether factory terminated or field spliced, clean connectors are essential for proper system operation. Even the smallest dust particle can cause transmission problems, so for optimal network performance inspect, and if necessary, clean connectors and adapters prior to mating.

Inspect Then Connect

These are Clearfield recommended products/applications. Use the product you feel will complete your cleaning procedures. Create a “best practice” for your company and follow those procedures.

The use of Chemtronics end face and bulkhead cleaning products and techniques ensures a clean end face, no matter the type of contamination.

Before cleaning any connector, be sure you know what type of contaminate you are cleaning (dry, fluidic, or combination). All the available products are good, it's the process that you need to be aware of. Using a dry cleaning method to clean “dirt” can lead to scratching of the end face. Learn the process of cleaning properly.

Note: It is **NOT** recommended to use isopropyl alcohol to clean the end face.

Cleaning an SC/LC Connector

Cleaning the End Face

- Place one wiping paper on QbE-2 FiberSafe™ Cleaning Platen. (Figure 1)
- Apply small amount of precision cleaner (about 1” in diameter) with Electro-Wash MX pen on to one end of the wipe. (Figure 2)
- Hold end face at a 90 degree angle. For APC connection, adjust by slightly tilting the container or end face. Angle is correct when no drag is felt on the end face. (Figure 3)
- Draw end face from wet to dry part of the wipe 3 times. Use just enough pressure to ensure complete contact between end face and the wipe.

Note: **DO NOT** retrace previous step.



Figure 1



Figure 2



Figure 3

Cleaning the Ferrule

- Lightly moisten the fiber optic swab (2.5mm/38542F or 1.25mm/38040) by spotting a small amount (about 1") of Electro-Wash PX or Electro-Wash MX pen onto the QbE. Hold the swab, 1 side down to the wetted area and hold for a count of 1-2-3-4-5. (**Figure 4**)



Figure 4

- Insert swab into side of ferrule, wet side to the ceramic ferrule and circle around 2-3 times and remove. Turn swab to dry side and repeat. (**Figure 5**)



Figure 5

Cleaning the Mate Through an Adapter AND the Adapter Itself

- Lightly moisten the fiber optic swab (2.5mm/38542F or 1.25mm/38040) by spotting a small amount (about 1") of Electro-Wash PX or Electro-Wash MX pen onto the QbE. Hold the tip of the swab onto the wetted area and hold for a count of 1-2-3-4-5.
- Insert the swab into the adapter to the connector, press lightly against the connector, twist 2-3 times, remove and discard.
- Dry with a second dry swab.
- Inspect, repeat cleaning if necessary, and test for signal strength.
- Use additional swabs to clean inside the actual adapter. Moisten swab, like above, and insert through hole and remove while twisting. (**Figure 6**)

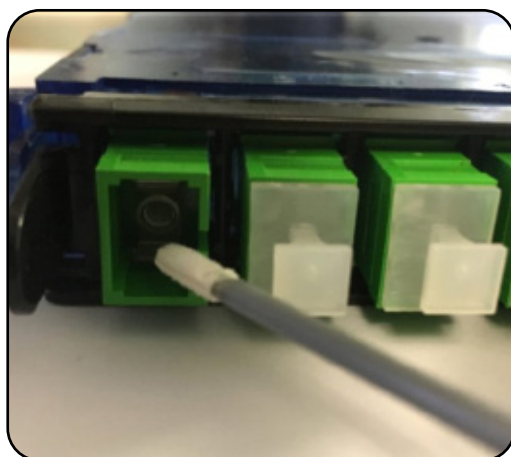


Figure 6

Home Deployment Kit

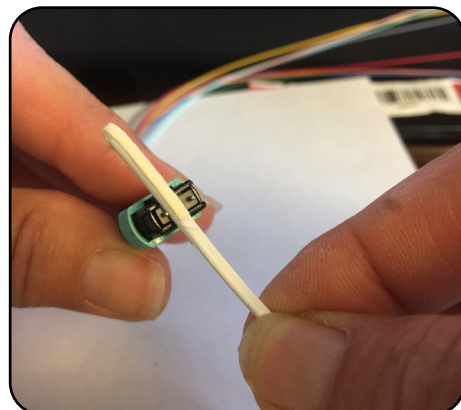
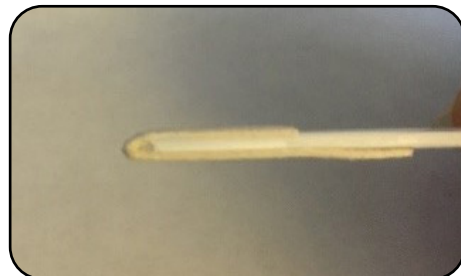
Installation Manual



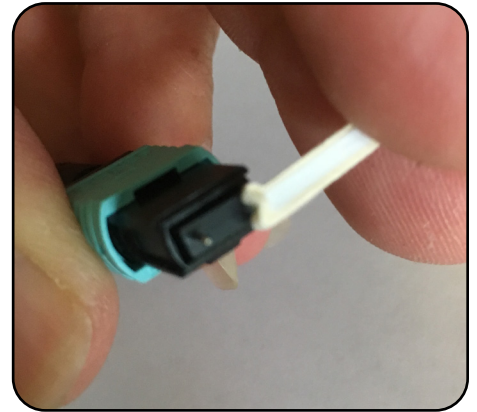
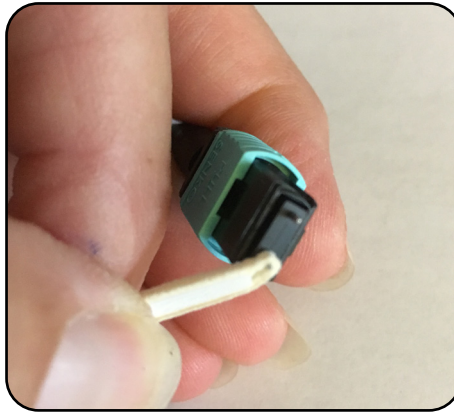
Cleaning an MPO/MTP Connector

Male Connector

- Use of Chemtronics MTP Connector Cleaning Swabs (CC505F) is recommended. Even after cleaning with a probe cleaner, you should always clean the pins with this (or an equivalent) type swab. Cleans ALL MTP/MPO connector end faces. This swab also cleans the “pins” of the male connector
- Lightly “spot” a QbE-2 wipe on the platen with Electro-Wash PX Fiber Optic Cleaner, the FiberWash or MX Pen.
- Lightly touch short side of the MTP/MPO Connector Swab to the wetted area (3-5 secs) to absorb some cleaning solution (DO NOT over saturate the swab).
- Wipe connector areas to be cleaned, sliding pad from bottom of pad across and forward to tip of swab, from 1 side to the other, turn over and use long side to dry in same movement.



- Use the hole on end of pad to clean one alignment pin, then press the end of the swab into the other pin to clean.
- Check your work with a fiber scope. This can take several attempts to get the endface clean.



Female Connector (without pins)

- Cleaned like a single fiber connector, using a cleaning platform. The receptacles will be cleaned as long as you are using a combination cleaning process as recommended.
- Again, using a platen, moisten the platen with cleaning solvent on one end to accommodate 3 swipes of the MPO female endface.
- Holding the connector (If APC, slightly at an angle to accommodate for 8° angle) swiping with medium pressure, from the wet area into the dry area 3 times, without wiping over previous area.
- Inspect, and if clean, make the connection. If NOT, repeat above steps until clean or if determined that the end face is damaged (based on standards of 5 cleanings per connection), replace.



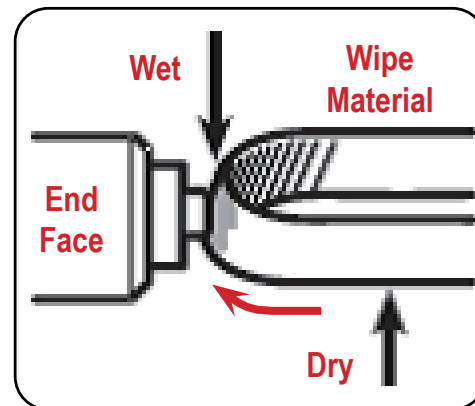
Home Deployment Kit

Installation Manual

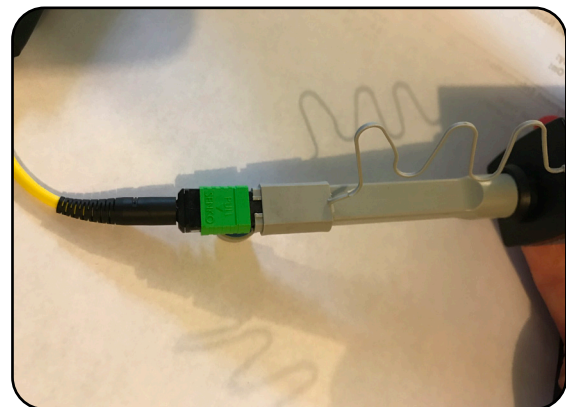


Cleaning Using a Probe-Style Cleaning Tool

- The probe style cleaning tools are capable of cleaning a connector end face separately or through the adapter.
- Slightly engage probe by pulling back but do not allow to click. Lightly “spot” a QbE-2 wipe on the platen with Electro-Wash PX Fiber Optic Cleaner, this will help alleviate “over saturation” of the material.
- Lightly touch the tip of probe and release.



- Insert connector or insert probe through adapter and click 2-3 times to move past the wet area and allow material to dry wipe.



- Inspect connector, repeat if necessary (following standards)
- If cleaning a male connector, clean the pins (see above)



Standard Warranty

Clearfield warrants to the original purchaser of the Product sold hereunder is free from defects in material and workmanship under normal use and service, subject to exceptions stated herein. Product purchased is warranted as follows: Clearfield designed and branded Products are warranted for three (3) years; Products manufactured by Clearfield to customer prints and/or specifications are warranted for one (1) year; and any Product Clearfield acquires from or through a third-party manufacturer or distributor and resells to Customer as the original customer will carry the manufacturer's pass-through warranty, if any. In all cases, the warranty period commences on the date of shipment to the original purchaser.

Warranty Claim Procedure

If any Product purchased from Clearfield is found defective under the above warranty, the following basic procedure must be followed:

1. Customer must contact Clearfield and obtain a Return Materials Authorization
2. Following authorization, the Customer ships the product-freight collect to Clearfield's manufacturing facility
3. Clearfield shall repair or replace the defective Product at its sole option and discretion, and return the repaired or replacement Product to Customer's site, freight prepaid

Note: If the Product is not found to be defective by Clearfield, the product will be returned to the Customer and the customer billed for freight in both directions.

View our warranty policy here: <https://www.seeclearfield.com/warranty.html>

Limitations of Warranty

Correction of defects by repair or replacement, at the option of Clearfield Inc, shall constitute the exclusive sole remedy for a breach of this limited warranty. Clearfield shall not be liable under any circumstances for any special, consequential, incidental, punitive, or exemplary damages arising out of or in any way connected with the product or with agreement to sell product to buyer, including, but not limited to damages for lost profits, loss of use, or for any damages or sums paid by buyer to third parties. The foregoing limitation of liability shall apply whether the claim is based upon principles of contract, warranty, negligence or other tort, breach of statutory duty, principles of indemnity or contribution, the failure of any limited or exclusive remedy to achieve its essential purpose, or otherwise.

Clearfield will not be responsible for any labor or materials costs associated with installation or incorporation of Clearfield products at customer sites, including any costs of alteration, replacement or defective product, or any field repairs.

Other Limitations

Clearfield assumes no warranty liability regarding defects caused by:

1. Customer's modification of Product, excepting installation activities described in Clearfield documentation
2. Customer re-packaging of Product for shipment to third parties or destinations other than those originally shipped to by Clearfield, or any defects suffered during shipping where the Product has been re-packaged
3. Customer's installation or maintenance, excepting activities described in and performed in accordance with Clearfield documentation
4. Customer's improper or negligent use or application of Product
5. Other causes external to the Product, including but not limited to accidents, catastrophe, acts of God, government action, war, riot, strikes, civil commotion, sovereign conduct, or the acts or conduct of any person or persons not party to or associated with Clearfield
6. Environmental factors and weathering resulting in aging and damage not necessary or applicable to the function of the product

Home Deployment Kit

Installation Manual



Proprietary Notice

Information contained in this document is copyrighted by Clearfield, Inc. and may not be duplicated in full or part by any person without prior written approval of Clearfield, Inc.

Its purpose is to provide the user with adequately detailed documentation to efficiently install the equipment supplied. Every effort has been made to keep the information contained in this document current and accurate as of the date of publication or revision.

However, no guarantee is given or implied that the document is error free or that it is accurate with regard to any specification.

Technical Support

Clearfield, Inc. can be contacted for any issues that arise with the supplied product.

If you need to return the supplied product, you must contact the Clearfield, Inc. Customer Service Department to request a Returned Materials Authorization (RMA) number.

Clearfield, Inc.
7050 Winnetka Ave N
Minneapolis, MN 55428

Toll Free: 800.422.2537
Phone: 763.476.6866
Fax: 763.475.8457

Customer Support: sales@seeclearfield.com
Technical Support: techsupport@seeclearfield.com