# Home Deployment Kit
*Installation Manual*

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## 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) 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.

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.
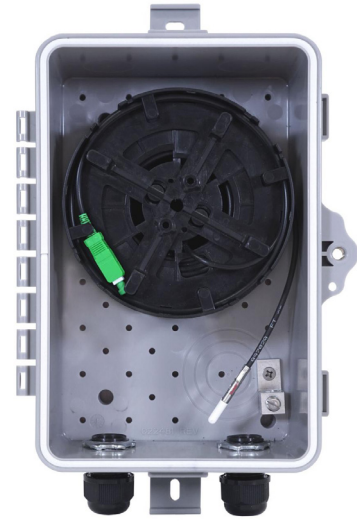
## Technical Specifications

| | CraftSmart TAP-Splice | FieldSmart SCD-TAP | FieldSmart Mini TAP |
|---|---|---|---|
| Dimensions | 4.00 x 6.50 x 1.75 Inches | 12.17" H x 8.62" W x 3.91" D | 9" H x 6" W x 3.91" D |
| Material | PC+ ABS | UV Stabilized, Flame Retardant Polycarbonate | UV Stabilized, Flame Retardant Polycarbonate |
| Rating | IP-66 | GR-771 and Designed for NEMA-4 | GR-771 and Designed for NEMA-4 |
| Max. Capacity | SC: 2 Ports, LC: 4 Ports, PLC: 1x2 (SC), 10ft 3mm storage | 1 Port, 200ft FLEXdrop deployed, 100ft storage | 1 Port, 100ft FLEXdrop deployed, 50ft storage |

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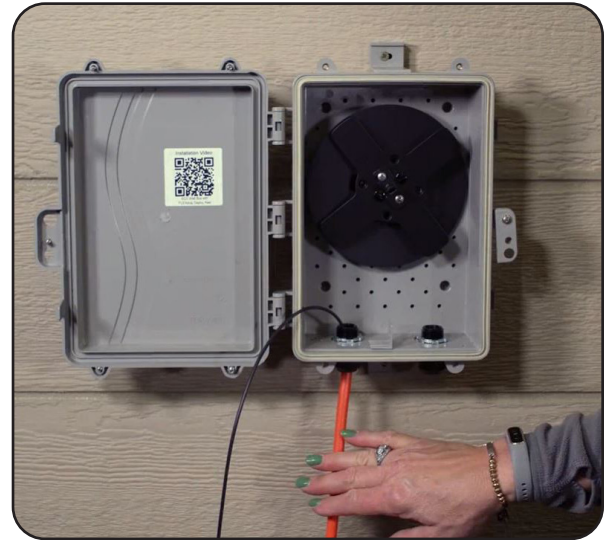
3. Pull your incoming cable slack into box and store it on the slack reel.

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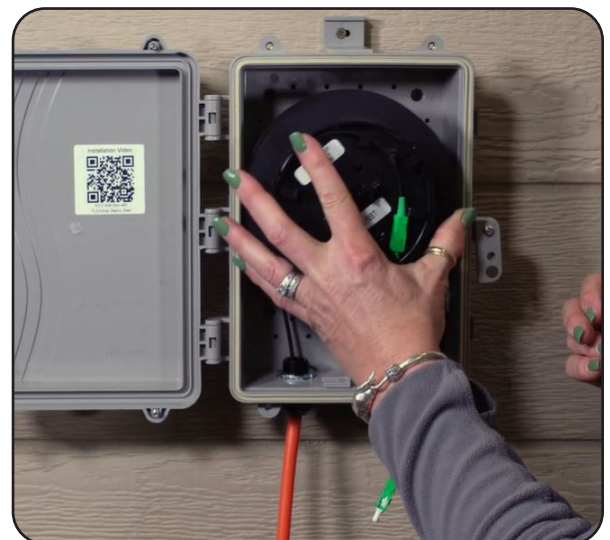
**5.** Feed your FLEXdrop through the sealcon, pulling the outgoing fiber off the reel and into the premises, up to the CraftSmart Fiber Outlet box.

*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.
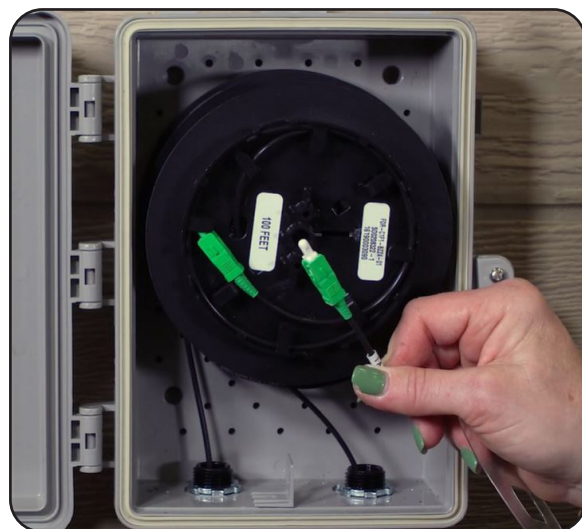


**8.** You can now make the connection between the incoming feeder fiber and your FLEXdrop outgoing fiber.

*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.

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## 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 one meter pigtail provided with the CraftSmart TAP-Splice.

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



3. After performing your splice, install the pigtail's connector into the provided adapter.

4. Install the adapter into its location on the back wall of the box and wrap your remaining slack inside the splice tray.
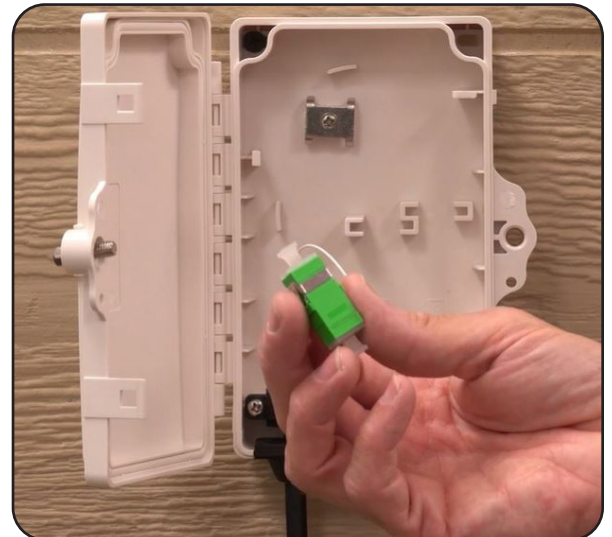


5. Pass the outgoing pushable FLEXdrop, provided with the CraftSmart TAP-Splice, through the rubber entrance grommet.
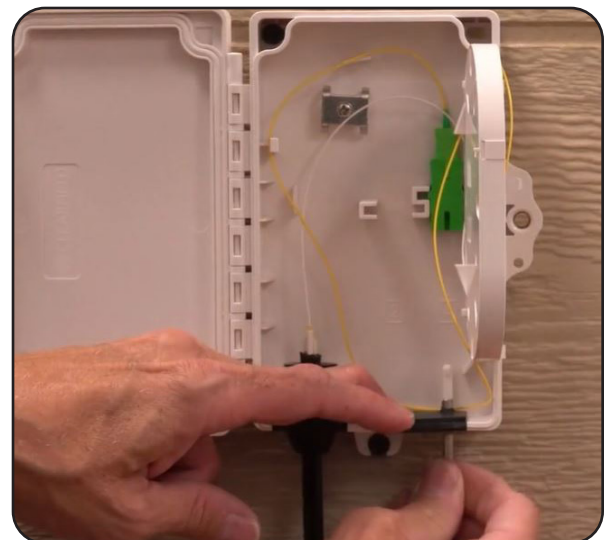
6. Carefully follow the connectorizing instructions provided with the FLEXdrop cable, and make the connection to the spliced pigtail.



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

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## CraftSmart Fiber Outlet

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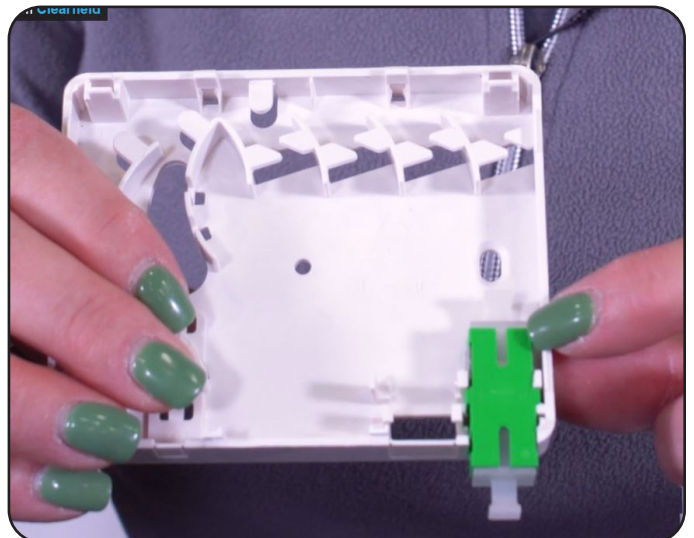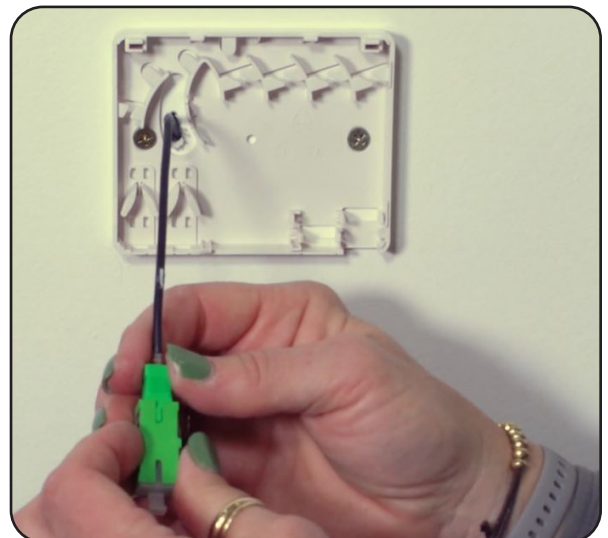
**5.** Install the Fiber Outlet box onto the wall using the two mounting holes. If applicable, feed the fiber through the back wall's pass-through hole first.
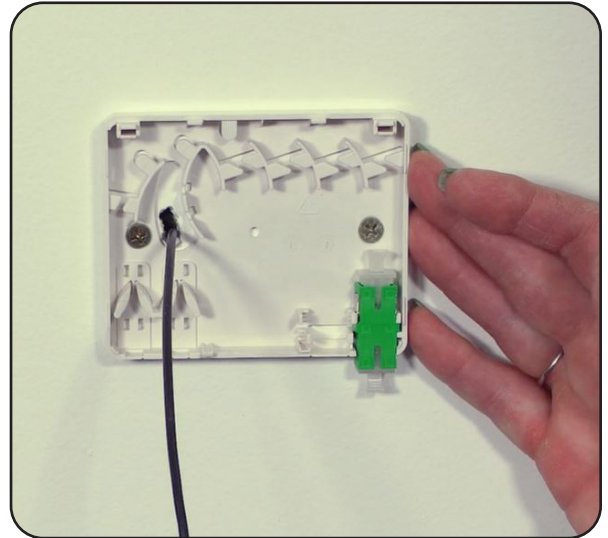


**6.** Carefully follow the connectorizing instruction provided with the FLEXdrop cable.
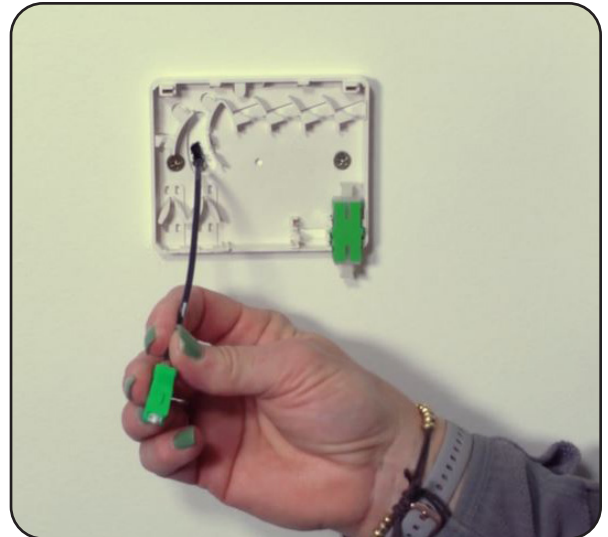


**7.** Remove the adapter from the box and insert your connectorized FLEXdrop into the adapter, ensuring the keys are aligned.

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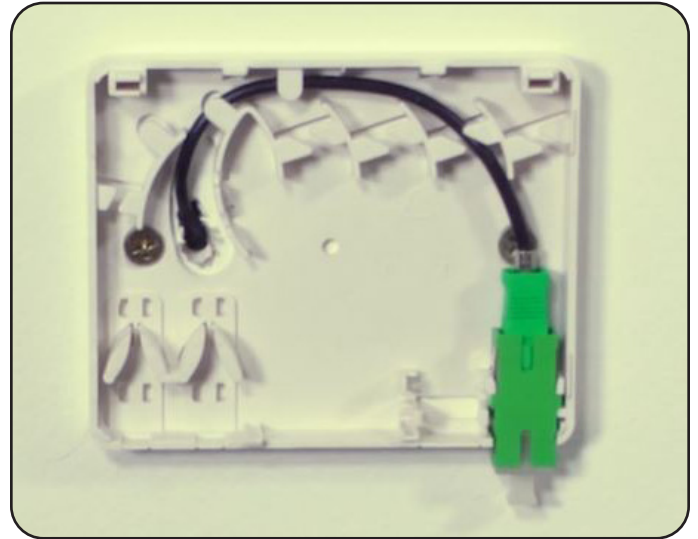


9. Reinstall the cover of the CraftSmart Fiber Outlet box. You are now ready to make your connection to the ONT.

## 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**

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## 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**)
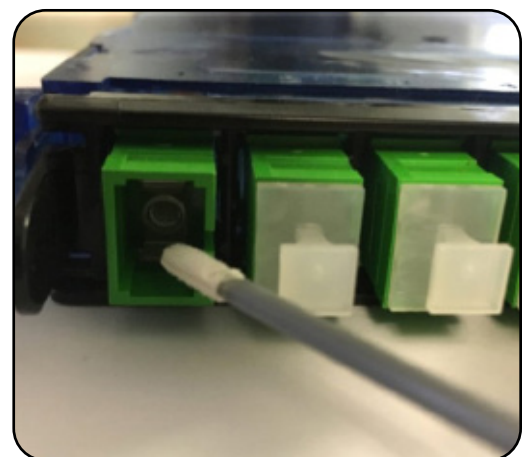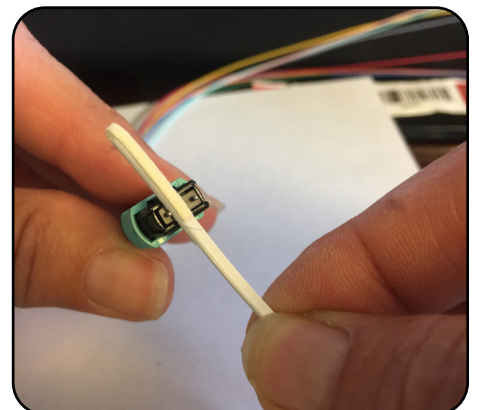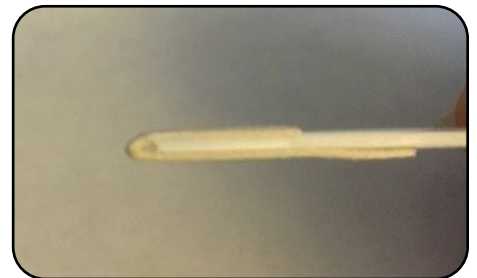


**Figure 6**

## 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.



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- 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.
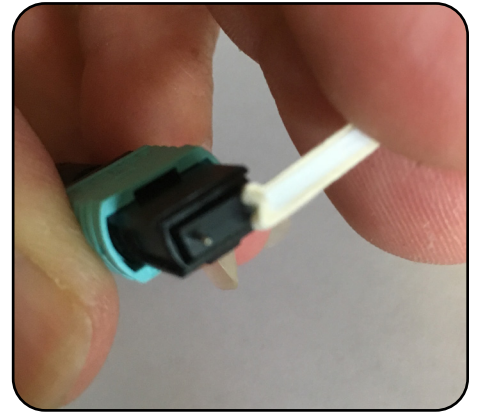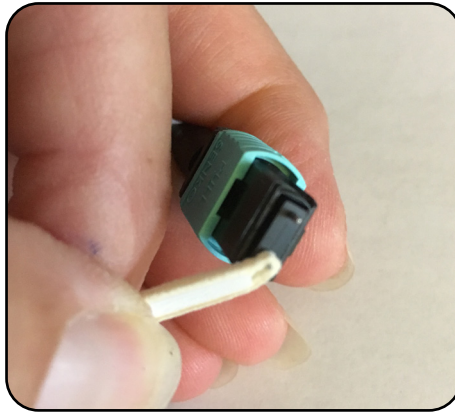
## Female Connector (without pins)

- 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.

## 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.
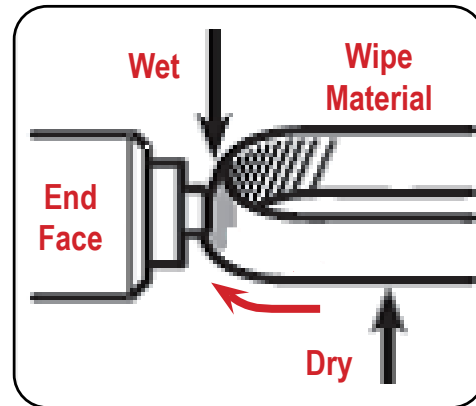




• Insert connector or insert probe though adapter and click 2-3 times to move past the wet area and allow material to dry wipe.
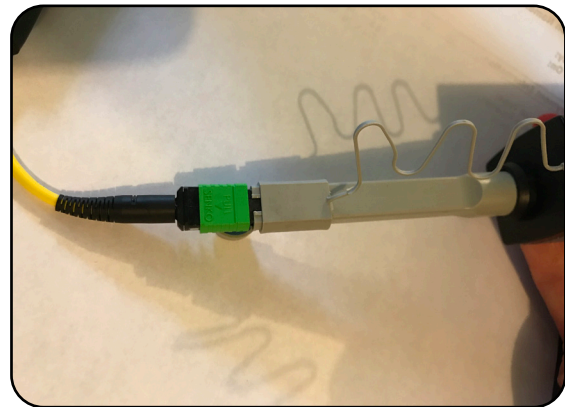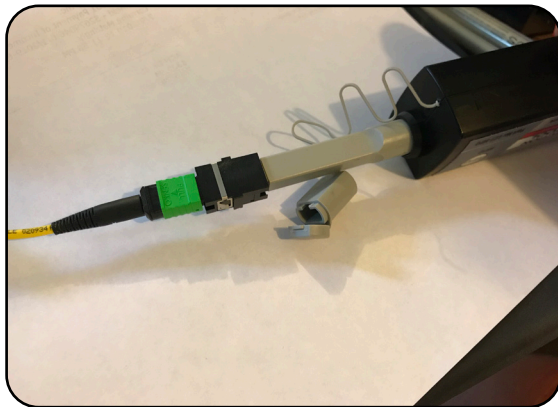




• Inspect connector, repeat if necessary (following standards)

• 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

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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.

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