



The Sticklers™ Pro360™ Touchless Cleaner is an innovative cleaning tool designed for efficient and non-contact cleaning of fiber optic connector end faces. This portable device, suitable for field or bench use, sets the industry standard with its 360° cleaning capability, replaceable high purity solvent canister, and versatility in cleaning various connector types and sizes.

### Key Features:

#### Portable and Versatile:

Designed for field use or at the workbench, making it adaptable to various work environments. Powered by rechargeable lithium-ion batteries or plug-in line power for bench use.

#### High Purity Fiber Cleaning Fluid:

Packaged in a rugged, spill-proof, replaceable solvent canister. Ensures continuous hassle-free cleaning. Not Hazardous/Not Regulated for all modes of transport.

#### +2,000 Cleans:

Offers over 2,000 cleans per solvent canister, setting a new standard for durability and longevity in the portable class.

#### 360° Cleaning:

Industry-first design for complete cleaning across the full end face geometry, providing optimal performance.

#### Multiple Size Connector Cleaning Tips:

Stainless Steel Cleaning Tips for both male and female 1.25mm & 2.5mm connectors. Other connector sizes in R&D. Contact your Sticklers representative for further details.

#### Contactless Clean:

Utilizes a non-contact "touchless" cleaning method, eliminating the risk of scratching surfaces. Ensures a thorough clean for any endface geometry.

#### Eliminates Static and Migratory Matter:

Incorporates advanced technology to eliminate static and prevent the migration of contaminants.

#### How it Works:

The Pro360™ utilizes groundbreaking Coandă\* Effect fluid flow technology to achieve remarkable cleaning capabilities. The Coandă Effect is a principle of fluid dynamics where a high-velocity fluid is manipulated by surface drag to establish precise fluid flow. Coandă fluid flow technology allows the Pro360° to create a powerful and precisely controlled process, ensuring effective dust and oil removal across the entire end face surface geometry. This method surpasses traditional mechanical tools that clean only around the end face core zone using the rubbing action of a ribbon material.

*\*The Coandă Effect is established by injecting a microburst of fluid into a high velocity airstream. This instantly atomizes the fluid into the airstream cleaning the entire end face's surface, regardless of geometry. The cleaning is immediately followed by a stream of clean air to dry the end face.*

#### Contact Information:

For any inquiries or assistance, please contact Sticklers™ Customer Support at Pro360@microcare.com or 1 (800) 638-0125.

Thank you for choosing Sticklers™ Pro360™ Touchless Cleaner - the ultimate solution for efficient and effective fiber end face cleaning!

Register your Pro360°:



## Pro360° Fiber Cleaning Tool:



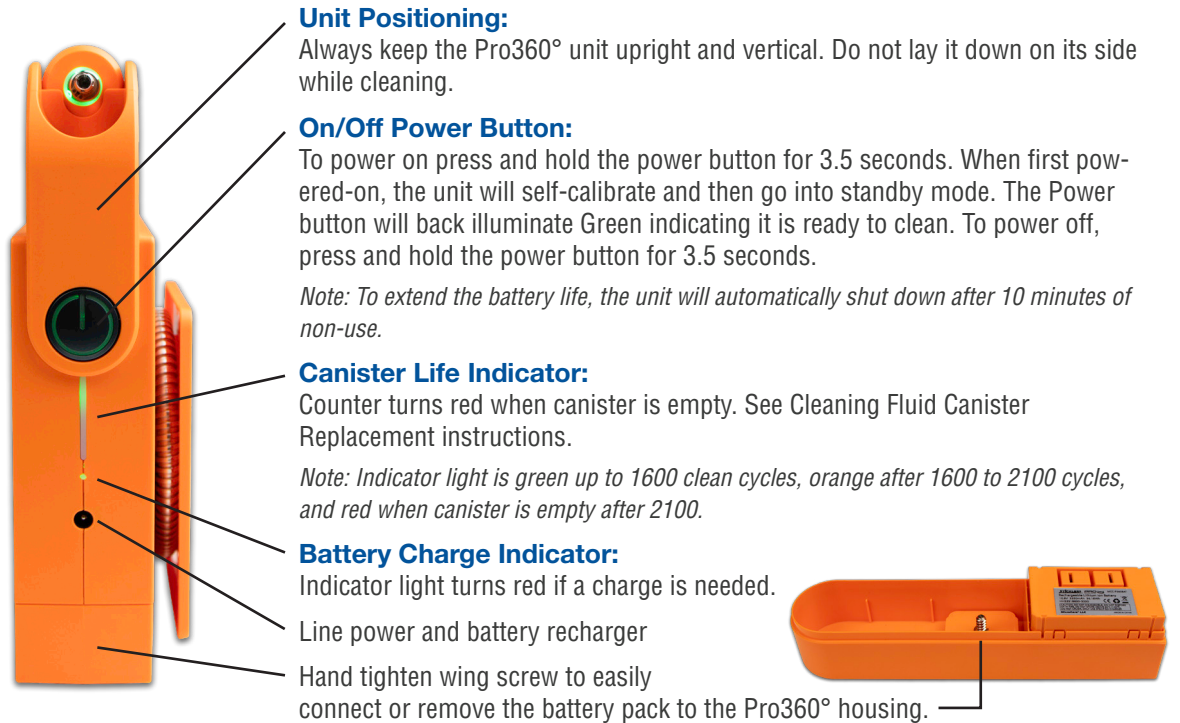
### Handset Dock for Benchtop Usage:

Unwrap handset cord once from its storage position to allow extra play in the cord and reduce the bend radius. Then place handset in cradle handle as shown. This way the cleaning tip is protected from getting hit and possibly bent.

*Note: When not in use wrap the metal handset cord counterclockwise loosely around the cord storage plate. Store the handset in the carry handle. Avoid wrapping too tight.*



## Instructions:



### Cleaning Fluid Canister and Battery Pack Replacement:

The solvent canister is unidirectional, allowing for easy docking in the compressor assembly without concern for top or bottom orientation. A bridge (b) securely holds the fluid canister in place during operation.

To remove the solvent canister, start by removing handset from the Pro360° carry handle and position the device upside down on a table or any flat surface. Loosen the battery tray wing-screw using your fingers. Note the wing-screw is held captive with the battery tray to prevent loss. Grab the battery tray by the square end and pull up to remove. Reverse the process to replace the battery tray.

Next loosen the bridge thumb dial (a) by turning counterclockwise. Rotate the bridge (b) to one side.

Remove the empty canister (c) by pushing the metal spring clip (e) off canister edge while pulling the top of the canister up and out. Replace with a new fluid canister making sure the metal spring clip is over the edge of the canister securely.

Position the bridge (b) by centering over the fluid canister valve. Tighten the thumb dial (a) clockwise until secure.

**Important: Hand tighten to the point the thumb dial (a) stops rotating—DO NOT OVERTIGHTEN.**

### Instructions for Replacing Filter Cartridge:

Remove the handset from the carry handle and position the device upside down on a flat, secure surface. Loosen the wing-screw and remove the battery pack. Remove the filter cartridge by squeezing the filter (d) plastic support tabs and pull up. Our recommendation to change filter after 12 fluid canisters (+25,000 clean cycles) but may require more frequent in high dust environments. A new filter is included in every case of fluid canisters.



## The Cleaning Process:

Best practice is to start with the bulkhead (female) end and then move to the male end of the fiber connector.

### Two Cleaning Methods:

**Portable Cleaning:** The Pro360° can clean portably since it has a shoulder strap for easy carry and a battery pack. Unwrap the metal handset cord fully from its storage plate, hold handset in your hand, and follow Cleaning Process instructions.

**Line Power (Benchtop) Cleaning:** Unwrap metal handset cord once from storage plate for extra play, and place handset with cleaning tip protected as shown on page 2. Follow Cleaning Process instructions.

### Bulkhead (Female) End:

Place proper sized cleaning tip into bulkhead. Activate the unit with a slight push inward on the handset. Relax hand after push but continue to hold the handset in position for the 3.8 second clean cycle. The LEDs on the handset and power button will flash green. When the cycle is complete, the LEDs will go back to continuous green, now you can move the handset away.

### Patch Cord (Male) End:

Clean the male or patch cord end by inserting the male end into the cleaning tip of the handset. Activate the cycle with a slight push and hold the patch cord end for the 3.8 second cleaning cycle.

### Completion & Mating:

Both ends of the connector should be clean per IEC 61300-3-35 SM-UPC Standard. A second cleaning cycle may be needed if the environment has excessive floating oil derivatives or heavy construction debris. Once cleaning is done, proceed to mate the pair unless an inspection process is required.

## Cleaning Tip Instructions:

Touchless Cleaning Tips (b) for cleaning 1.25 and 2.5 size connectors are included and clean APC and UPC geometries. Cleaning Tips are interchangeable on the handset spray nozzle by means of a threaded mount. Call your Sticklers representative to inquire about other size cleaning tips.

### Alignment Importance:

Ensure proper alignment of the cleaning tip with the connector endface.

**Male End Face:** The ferrule should be a loose fit inside the cleaning tip (a) – straight on as shown.

**Female End Face:** Use the same cleaning tip. Insert into the bulkhead until it bottoms out. The cleaning tip will open shutters and will automatically set the proper alignment.

### Cleaning Tip Maintenance:

The Cleaning Tips are made of stainless steel and generally maintenance free. However, dust can accumulate inside the cleaning tip during use or if dropped. This can have a negative impact on the cleaning results. We recommend use of the included Sticklers Fiber Optic Splice & Connector Cleaner along with the optical grade CleanWipes and/or CleanStixx™ to remove dust and contamination from your cleaning tip.

The universal power cord (c) is suitable for use with various power sources around the world. Choose the correct power adapter for your location, snap, and twist into place in the universal power cord. Push down on the outside tab to release and change to another adapter if needed.



## Environmental Limitations:

The Pro360° is not recommended for use in rainy or high humidity climates. In wet or high humidity environments, water droplets may form in the airstream and prevent end face cleanliness due to solubilized contamination and/or limit dry cycle effectiveness. The Pro360° is not designed to be waterproof or water-resistant, avoid contact with water or use outdoors in rainy or wet conditions.

Pro360° is engineered for ideal use in ambient temperatures from 40°-120°F (4°-49°C) and in relative humidity under 75%. If the device or fluid canisters are stored in ambient temperatures above 125°F (52°C) or high humidity (+75% RH), allow both to reach comfortable room temperatures before use.

## Legal:

The cleaning fluid is designed to clean and evaporate off the surface. The solvent is not to be inhaled, sprayed in eyes or mouth, and not to be released into any public water source.

## Limited Warranty:

MicroCare™ warrants the Sticklers™ Pro360™ Touchless Cleaner against defects in materials and workmanship for a period of 12 months from the date of purchase including parts and labor with the following qualifications.

Customer must provide proof of purchase. Proof of purchase can be validated through providing copy of original receipt. It is recommended that at the time of purchase, customer registers product purchase online at [www.MicroCare.com/RegisterPro360](http://www.MicroCare.com/RegisterPro360). Warranty applies to original, validated purchaser and cannot be transferred.

Warranty claims shall be accompanied by a MicroCare issued RMA and the product return shipped to MicroCare by customer, prepaid and insured. Completed warranty claims will be shipped back to customer prepaid and insured. For qualified claims MicroCare has sole discretion, and this warranty is limited to, either the repair or replacement of defective product(s).

This Limited Warranty does not apply to: (a) "wear and tear" through normal use; (b) filters, batteries, fluid cartridges, arm straps and cleaning tips; (c) damage from tampering or attempted access to main unit or handset; (d) damage caused by unauthorized modification or repairs performed on the Pro360°; (e) damage caused by accidental or intentional misuse, abuse, fire, flood, acts of God or neglect; (f) damage caused by operating the Pro360° outside of MicroCare published guidelines; (g) contamination of the base unit and/or handset from attempted use of cleaning fluid other than Pro360° High Purity Fiber Cleaning Fluid; (h) cosmetic damage including but not limited to scratches, dents, cracks or chips to Pro360°.

No representation, warranty or affirmation of any employee, contractor, agent, distributor or any other person actually or purporting to represent MicroCare, by word or action, will constitute a warranty and such word or action does not, and will not, expand or change the express warranty given in this Limited Warranty.

MICROCARE EXPRESSLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF ANY KIND, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHETHER ARISING BY LAW, CUSTOM, CONDUCT, USAGE OR TRADE.

For damage not covered under Limited Warranty, Sticklers will provide quote for repair cost (if repairable).



## Understanding Pro360° LED Indicators and Troubleshooting:

Under normal operating conditions, the indicator lights on the device are as described below:

Condition	Handset Light	On/Off Button Light	Canister Life Indicator Light	Battery Charge Indicator Light
Standby, Ready to Clean	Green	Green	Normal Green, Orange < 500 cleans left, Red when empty	Changes From Green to Orange to Red as battery charge is depleted
Active Cleaning Cycle	Flashing Green	Flashing Green		

If the device detects a problem these lights will change to indicate the issue. Here is a list of potential problems you may encounter and steps to take to troubleshoot them prior to calling for technical support.

### Problem: The cleaning fluid canister is not installed in the device.

Condition	Handset Light	On/Off Button Light	Canister Life Indicator Light	Battery Charge Indicator Light
Canister not installed	Off	Flashing Red	Flashing Red	As normal

The device will not operate without a cleaning fluid canister installed and will indicate when it does not detect a cleaning fluid canister by flashing both the on/off button and canister life lights red.

**TO CORRECT:** Turn device power off. Follow instructions to install the cleaning fluid canister.

### Problem: The cleaning fluid canister is empty.

Condition	Handset Light	On/Off Button Light	Canister Life Indicator Light	Battery Charge Indicator Light
Cleaning fluid canister is empty	Off	Red	Red	As normal

The device indicates when the cleaning fluid canister is empty and needs to be changed when the canister life indicator light changes from orange to red. The device will not allow a cleaning cycle to start until the current cleaning fluid canister is replaced.

**TO CORRECT:** Turn device power off. Follow instructions to replace the cleaning fluid canister and then turn device power on to resume cleaning.

### Problem: The battery charge is too low for the device to operate.

Condition	Handset Light	On/Off Button Light	Canister Life Indicator Light	Battery Charge Indicator Light
Battery charge is depleted	Off	Red	As normal	Red

The device will not operate when the battery charge level is too low. The device indicates this when the battery charge indicator light changes from orange to red.

**TO CORRECT:** Replace battery with a charged battery or connect the universal power cord to device to resume cleaning. The device may be operated while battery is charging using the universal power cord (battery charge indicator light will flash).

**Problem: The device is lying on its side or otherwise not in the vertical position.**

Condition	Handset Light	On/Off Button Light	Canister Life Indicator Light	Battery Charge Indicator Light
Device is not in the vertical position	Off	Flashing Orange	Flashing Orange	As normal

The device will not operate when it is not in a vertical orientation. The device indicates this by flashing both the on/off button and canister life lights orange.

**TO CORRECT:** Return the device to a vertical orientation to resume cleaning.

**Problem: During startup, the cleaning fluid canister is incorrectly installed / leaking.**

Condition	Handset Light	On/Off Button Light	Canister Life Indicator Light	Battery Charge Indicator Light
Normal startup sequence takes longer than 15 seconds	Off	Red	Flashing Red	As normal

During startup the device prepares the cleaning fluid for delivery to the handset. Normally this operation takes seconds but if the cleaning fluid canister is incorrectly installed or leaking the device will stop the startup sequence after 15 seconds and indicate an error by flashing the canister life light red.

**TO CORRECT:** Turn device power off. Follow instructions to replace the cleaning fluid canister in the device, checking to ensure that the metal spring clip is over the edge of the canister securely and the thumb dial is properly tightened. After canister replacement turn device power on to resume cleaning.

**Problem: After cleaning the end face appears wet or moisture droplets are seen.**

The device is not designed to clean when in conditions of very high humidity (see Environmental Limitations on pg. 5). In these conditions moisture droplets may be observed after a cleaning cycle.

**TO CORRECT:** Only operate the device in recommended environmental conditions for proper cleaning. If the device has been operated in conditions of very high humidity for an extended period, the device may need to be cycled several times or the cleaning fluid canister may need to be changed to restore proper cleaning operation.



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