



MADE FOR LIFE



TFS-100
HANDHELD THERMAL STRIPPER
FOR RIBBON OR SIMPLEX FIBER
INSTRUCTION MANUAL

SAFETY PRECAUTIONS

- Please read through this manual before operating your device
- While heating, the heating chamber will be hot. Do not touch the heating chamber while the device is powered on.

1. Product Specifications

TFS-100 SPECIFICATIONS	
FIBER TYPES	Single fiber, Ribbon fiber
COATING MATERIAL	UV curable resin
SINGLE CORE COATING DIAMETER	0.25 mm - 0.4 mm
RIBBON FIBER COATING DIAMETER	0.3 mm - 0.4 mm
CLADDING DIAMETER	125 µm
MAX. COATING STRIP LENGTH	1.18" (30 mm)
TEMPERATURE SETTINGS	90°C, 100°C, 110°C, 120°C
TYPICAL HEATING TIME	4 - 5 seconds
BATTERY CAPACITY	800 mAh Li-battery (300+ cycles)
WEIGHT	0.87 lb (394 g)
ENVIRONMENTAL REQUIREMENTS	Humidity <85%

2. Included Components

Thermal Stripper, A/C Adapter, Power Cord, Brush, and Operating Instructions

NOTE: Fiber holders are not included and must be purchased separately.

3. Function Keys

POWER/MODE

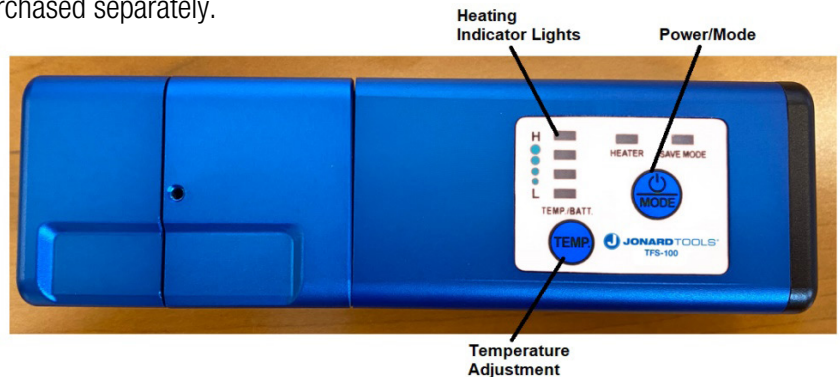
Press and hold the Power button for 1 second to power on the device. To turn it off, hold the Power button for 4-5 seconds.

There are two modes of operation for this machine:

1. HEATER Mode
 - a. This mode allows the heating element to remain in a heating state after the power is turned on, allowing for continuous operation and shortening the heating waiting time. In this mode, the HEATER indicator light is on.
2. POWER SAVING Mode
 - a. This mode saves batter life by heating the device after the heating chamber is closed and stops heating when the fiber optic chamber is opened. The status of this mode is that the indicator light SAVE MODE is on after the cover is closed, and the indicator light HEATER is always off.

The default mode for powering on this machine is power saving mode.

Press the MODE key on the keyboard to switch between the two modes.



TEMP

- When turning on the device, all four Heating Indicator lights will illuminate, indicating the device is heating to the preset temperature of 60°C (140°F).
- Pressing the TEMP button once will increase the temperature to 90°C, and only the bottommost Heating Indicator light will illuminate.
- Pressing the TEMP button again will increase the temperature of the device by 10°C. This device has four temperature settings, from bottom to top: 90°C (194°F), 100°C (212°F), 110°C (230°F), and 120°C (248°F). Press the TEMP button to increase the temperature by one level. When the temperature is at max and you press the TEMP button, it will revert to 90°C.

NOTE: The recommended temperature for most singlemode fiber applications is either 90°C or 100°C.

HEATING INDICATOR LIGHTS

When the heating indicator lights are on, the device is heating to the corresponding temperature level. After loading the fiber and closing the cover, the SAVE MODE or HEATER lights will start blinking green. When the SAVE MODE or HEATER light turns solid green, the heating chamber has reached the desired temperature, and the fiber is ready to strip.

4. Operating Instructions

Before you start, note that fiber can be stripped up to 1.18" (30 mm) long using this device. To operate the thermal stripper, please follow the instructions below:

1. Place the optical fiber into the fiber holder you are using, exposing the length of fiber that needs to be stripped.
2. Open both covers of the fixtures of the thermal stripper.
3. Place the fiber holder (with fiber installed) onto the fixture pad of the thermal stripper.
4. Turn ON the device by holding the Power button for approximately 1 second.
5. Using the TEMP key, set the temperature to the appropriate level.

NOTE: If you are unsure about which temperature level to set it to, start with the second or third lowest temperature. If the strip fails, increase the temperature by one level and strip again.

6. Close both covers of the fixtures of the thermal stripper. Depending on the mode set, the green HEATER or SAVE MODE indicator light will start flashing.
7. Wait for the thermal stripper to reach the desired temperature. When ready, the green HEATER or SAVE MODE indicator light will be a solid green color and will make a beeping sound.
8. Once at the desired temperature, press and hold the moveable left fixture down and slowly pull it from the main body.
9. The fiber is now stripped!
10. Open both covers of the fixtures and remove the fiber holder with fiber inside.
11. Be sure to clean any debris from the acrylate coating or fiber are cleaned using the included brush.
12. When done stripping, turn off the device by holding the Power button for 4-5 seconds.

NOTE: There is an auto-off feature built into the device. If it is not in use for more than 5 minutes, the device will automatically shut off to prolong the life of the device.

5. Maintenance

To ensure optimal performance of the device, be sure to clean the blades, heating pads, and rubber parts using a cotton swab soaked in 99%+ isopropyl alcohol before and after using the device.

⚠ IMPORTANT: Coating debris attached to the blades, heating pads, and rubber parts can cause damage to the thermal stripper. When cleaning please use over 99% isopropyl alcohol. If the alcohol percentage is lower than that, the blades may rust, and the rubber may deteriorate.

6. Blade Replacement

The blades of this device are very sharp. Please be cautious while replacing the blades. To do so, follow these instructions:

1. Turn off the device and wait at least 3 minutes for it to cool off.
2. Use a hex key to unscrew the blades of the device.
3. Replace the upper and lower blades one at a time, leaving the screws loose. Both blades are identical, so they can be installed in either position.
4. Close the fixture and tighten the top screws for the top blade.
5. Press the fixture closed so there is no visible gap between the blades and tighten the bottom blade screws.

NOTE: Ensure the blades left and right edges of the blades are aligned in a straight line before tightening the screws down.






6. Test the blades by doing a trial strip, following the Instructions for Use. Adjust the blades as needed if stripping quality is poor.

7. Selection of Optical Fibers

If the coating layer of the fiber is difficult to strip, the coating layer may become prone to breakage while stripping.

1. Adjust the temperature of the machine to accommodate for factors such as coating material of the fiber and ambient temperature. In general, when the ambient temperature is low, increasing the temperature of the heating plate can make it easier to strip the fiber.
2. Poor quality optical fibers may break when stripped, regardless of the temperature settings. Make sure to select good quality fiber before stripping.
3. Suitable fiber optic cable is typically made from 125 μm quartz glass with UV hardened resin coating, ranging from 0.25 – 0.40 mm in diameter.

8. Common Problems During Stripping

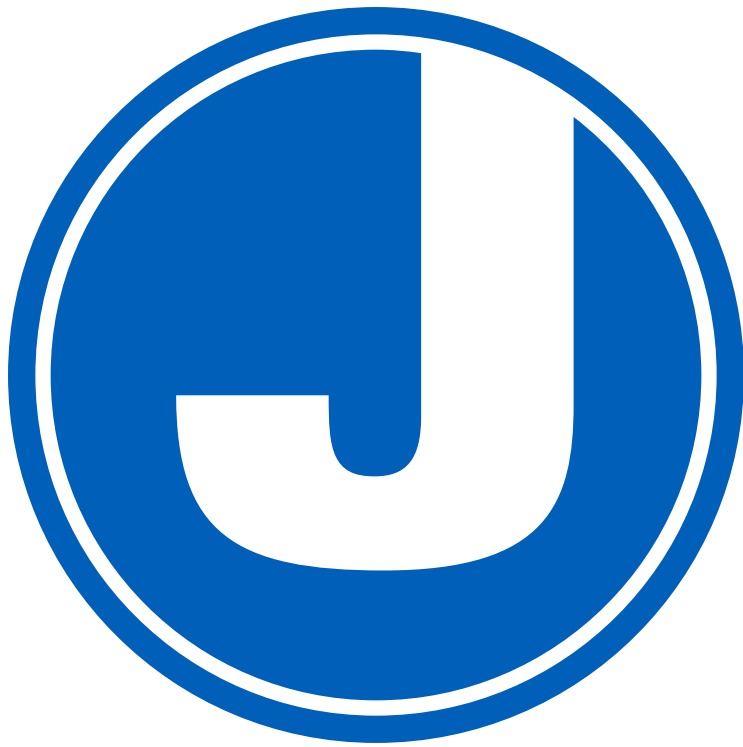
Good		Overall stripping is good
		Window stripping is good
Defective		Fiber breakage
		Poor removal of optical fiber coating layer
		Fiber optic coating not removed

Incomplete Cleaning

Residual coating on the blades, heating plate, or rubber parts can cause poor thermal stripping results. If you find the status of the strip is defective, try cleaning these parts using 99% isopropyl alcohol.

Blade Did Not Cut into Coating Layer

1. Improper adjustment of the blades
 - a) This may cause the blades not to touch the fiber while stripping.
 - b) If you run into this issue, make sure the blades are installed properly and the screws tight.
2. Blade Wear
 - a) If the positions of the blades are correct and poor stripping still occurs, the blades might have worn down.
 - b) If you find the blades to be dull, please reach out to us for servicing options.
3. Heating Temperature Not High Enough
 - a) It is also possible that the heating temperature may need to be increased to deal with harder-to-strip fiber coatings.
 - b) Please also wait for the indicator light to be a solid green before stripping if not done so already.



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