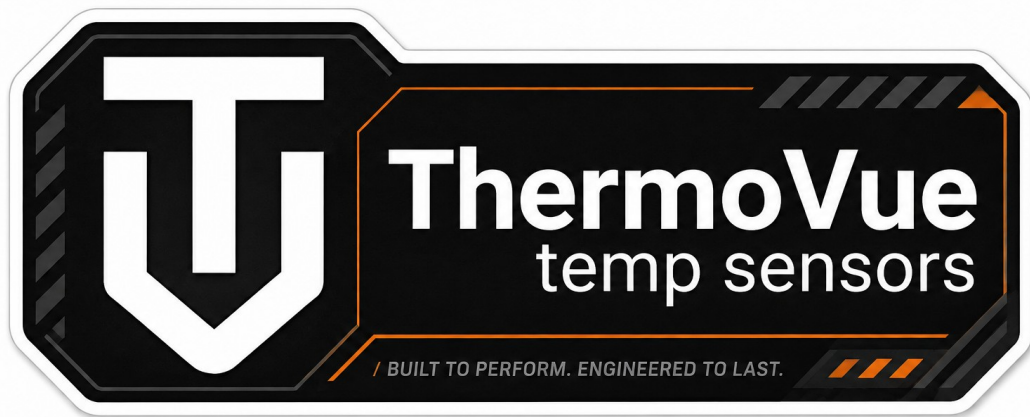




CUSTOMER SUPPORT GUIDE

ThermoVue Pro2

Troubleshooting Guide

Fast checks for power, sensor, screen, cooling-request, and wireless-update issues.

VERSION 1 | SEPTEMBER 2026
SOFTWARE REFERENCE: PRO2 INITIAL RELEASE V1_14

WORK SAFELY Park on level ground, set the parking brake, and keep hands, clothing, and tools away from the CVT and belt. Turn the key off unless a specific test requires power. Let hot parts cool before inspection.

Use this guide after installation. For mounting, routing, and wiring, use the Vehicle Installation Manual.

START HERE

Read the status before touching anything

The Home screen usually identifies whether the problem is power, the sensor, or a setting.

SCREEN	WHAT IT MEANS	FIRST ACTION
READY	The live sensor reading is current; no cooling request is active.	Continue normal monitoring.
COOLING	The selected cooling request is active.	Treat this as an on-screen request. Pro2 V1_14 does not switch an external output.
NO SENSOR	ThermoVue cannot find the belt sensor.	Check the sensor cable, both M8 connections, pins, and seals.
STALE	The last valid reading is no longer current.	Stop relying on the temperature until live data returns.
--	ThermoVue is waiting for a valid temperature.	Allow startup to finish, then inspect the sensor and cable.

NO LIVE READING Do not use NO SENSOR, STALE, or -- as a belt-temperature reading. Correct the fault before relying on the display.

Five-minute triage

1. **Read the Home status.** Note the exact word and whether the belt or ambient value is missing.
2. **Check power quality.** Confirm the key-on source, inline fuse, ground, POWER plug, and wiring are secure.
3. **Check the sensor path.** Inspect both cable ends, M8 pins and seals, cable routing, sensor opening, aim, and distance.
4. **Check settings while parked.** Use the sun/moon action and Control pages for Brightness, Dim Level, cooling, alert, and units.
5. **Recheck before driving.** Do not operate until the mount and cables are secure and READY returns with a believable live reading.

POWER AND DISPLAY

Solve screen and restart problems first

An unstable supply can look like a touch, sensor, or software problem.

SYMPTOM	CHECK
Display does not turn on	Key-on source, inline fuse, clean ground, POWER M8 coupling, damaged wiring, and connector strain.
Display stays on with key off	The red lead may be on constant power. Move it to a verified fused key-on source.
Unexpected restart	Loose fuse holder, intermittent red connection, weak ground, damaged cable, or unstable vehicle voltage.
Screen is too dim	Tap the sun to leave Night Mode. Check vehicle dimming, then adjust Control > Brightness or Dim Level.
Headlights do not dim it	Confirm the approved dim interface is present and Control > Dim Level is set. Never apply raw 12 V to GPIO2 / DIM_N.
Touch seems unresponsive	Dry the screen, use one finger, tap inside the large target, and fully lift before the next tap.

PROTECT THE DIM INPUT Vehicle voltage must never be connected directly to GPIO2 / DIM_N. Use only the approved interface described for the installation.

Power-path check

1. **Key off.** Inspect the power harness, fuse holder, ground point, M8 coupling, and exposed or pinched conductors.
2. **Correct defects.** Replace damaged cable, seals, fuse holders, or connectors. Never fit a larger fuse to hide a recurring fault.
3. **Key on.** Confirm the unit starts once, reaches Home, and remains stable while the harness is undisturbed.
4. **Check dimming after startup.** V1_14 keeps the display bright for five seconds, then applies an active dim request. The darkest active setting wins.

INSTALLATION AND WIRING [Vehicle Installation Manual V1.5](#)

SENSOR AND READINGS

Restore a believable live temperature

Pro2 retries a missing MLX90614 sensor automatically; the physical path still has to be sound.

WHAT YOU SEE	LIKELY AREA	WHAT TO DO
NO SENSOR	Sensor not detected	Seat both sensor-cable ends, tighten the M8 couplings by hand, inspect pins and seals, and confirm the SENSOR port.
STALE	Recent data stopped	Inspect for a loose coupling, crushed cable, poor strain relief, unstable power, or a blocked sensor opening.
--.-	No valid value yet	Wait through startup. If it remains, perform the NO SENSOR checks.
Reading does not change	Sensor may not see the belt	Clean the sensing opening and aim directly at the moving belt surface.
Reading seems wrong	Aim, distance, contamination, or reflection	Keep the sensor within 3 inches, restore a clear direct view, and compare belt response as load changes.
Reading cuts in and out	Intermittent cable or power	Check pin damage, M8 coupling, cable flex points, routing, support, and the power path.

AUTOMATIC RECONNECT When the sensor is missing, V1_14 retries discovery about every two seconds and resumes live readings after a successful reconnect. Power cycling should not be the first fix.

Sensor inspection

- Turn the key off and let the CVT area cool before reaching near the belt or clutch system.
- Use a soft cloth on the sensing opening. Do not scrape the sensor surface with a tool.
- Confirm the bracket and sensor nut are secure and the sensor points directly at the belt.
- Keep the sensor within 3 inches of the belt and make sure no guard, loom, mud, or hardware blocks its field of view.
- Support the cable away from heat, sharp edges, moving parts, abrasion, and suspension travel.

CONTROLS AND WARNINGS

Separate a setting from a hardware fault

Make changes only while parked, then confirm the Home screen behaves as expected.

OBSERVATION	WHY	ACTION
COOLING appears	Cooling Mode is ON, or AUTO has reached its threshold with a healthy live reading.	This is an on-screen request only in V1_14; Pro2 does not energize a fan, pump, relay, or controller output.
COOLING never appears	Cooling Mode may be OFF, the AUTO threshold may be above the current belt temperature, or the sensor is not healthy.	Check Control > Cooling Mode, Auto Cooling, and Home status.
HOT BELT warning	The current healthy belt reading reached the saved alert threshold.	Reduce load and follow the vehicle and belt manufacturers' instructions. Inspect before continuing.
Warning disappears	The reading fell below the threshold, or the sensor became invalid, stale, or disconnected.	Check Home status. Never treat a missing warning as proof that the belt is cool.
Red-and-black screen	Night Mode is on.	Tap the sun or set Control > Night Mode to OFF. Night Mode resets to Day after a power cycle.
Units look wrong	Temperature Units is set to °C or °F.	Open Control > Temp Units and select the preferred unit.

HIGH TEMPERATURE IS REAL UNTIL PROVEN OTHERWISE Do not raise the alert or cooling threshold merely to silence a warning. Reduce load, stop safely, and inspect the belt and cooling system.

Saved and session-only settings

Saved when changed: Brightness, Dim Level, belt-life date, cooling selections and thresholds, Hot Belt Alert, and temperature units.

Session only: Night Mode always starts in Day Mode after power is cycled.

WIRELESS SOFTWARE UPDATE

Recover the update workflow safely

Download the official Pro2 .bin file before joining the ThermoVue network.

WHAT YOU SEE	WHAT TO DO
ThermoVue Update is missing	On Control page 10/10, tap START. Wait for UPDATE WI-FI ON, move closer, then refresh the Wi-Fi list. Tap EXIT and START again if needed.
Phone says no internet	Stay connected. ThermoVue Update is a direct device network and intentionally has no internet or password.
Update page will not open	Confirm you are connected to ThermoVue Update. Type http://192.168.4.1 exactly, including http://. Temporarily disable a VPN or mobile data if necessary.
.bin file cannot be found	Return to your normal internet connection, download the official Pro2 file again, and note its Downloads or Files location before reconnecting.
Install update does nothing	Select the file first. Its .bin filename must replace No file selected before you tap Install update.
UPDATE ERROR	Keep the key on. Tap EXIT, tap START, reconnect, and retry once with a fresh official Pro2 .bin download.
BUSY or INSTALLING	Wait. Do not close the browser, change networks, or remove power until ThermoVue restarts and Home returns.

USE THE CORRECT FIRMWARE Install only an official ThermoVue Pro2 .bin file. Never use a Pro4 file or a file made for another product. Removing power during installation can prevent normal startup.

FULL PHONE AND COMPUTER STEPS [Wireless Software Update Guide V1.1](#)

SERVICE AND SUPPORT

Stop when the fault is not resolved

Record what the screen showed and what you checked before requesting support.

Stop driving or stop relying on the display when

- NO SENSOR, STALE, or --.- remains on the Home screen.
- The display restarts, loses power, or has damaged wiring or connectors.
- The sensor mount, cable supports, fuse holder, or M8 couplings are loose or damaged.
- A Hot Belt warning persists, the belt smells hot, or the CVT shows damage or abnormal behavior.
- A wireless update reports an error again after one careful retry with the correct official file.

DO NOT OPEN THE ENCLOSURE Customer troubleshooting is limited to the installed harness, sensor, mounting, settings, and approved update process. Internal service requires qualified support.

Information to record

ITEM	DETAILS
Vehicle / machine	
Install date / installer	
Screen status or exact message	
When the problem occurs	
Checks already completed	
Firmware or update filename, if relevant	

CUSTOMER SUPPORT thermovuepro.com/support

ALL PRO2 DOCUMENTS thermovuepro.com/pro2-documents.html

INSTALLATION GUIDE [Vehicle Installation Manual V1.5](#)