Optimyst®: Set Up to Service

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Glen Dimplex Americas | HPBExpo 2026

Agenda

- Introduction to Optimyst Technology
- What's New in the CDFI500-PRO-RGB
- Installation Essentials
- Water Quality & Environmental Factors
- Safety
- Flame Connect App
- Maintenance & Cleaning
- Troubleshooting & Dealer Best Practices
- Q&A (15 minutes)

Introduction to Optimyst

What is Optimyst?

- Water-based flame technology producing a 3D flame effect via ultra-fine vapor.
- Safe, heat-free flame visuals — ideal for residential & commercial installs.
- RGB generation adds full-color capabilities.
- Uses antimicrobial components throughout the water path.

Why Dealers Love It

- High realism without the constraints of gas or venting.
- Flexible installation options.
- Growing demand for “experiential” electric fireplaces

Introducing the CDFI500-PRO-RGB

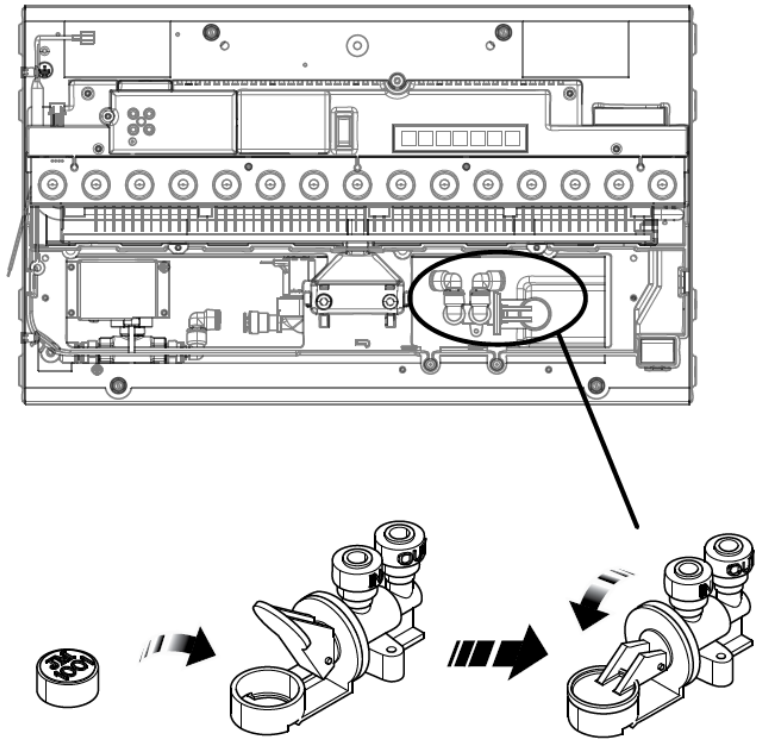
The newest generation of Cassette-based Optimyst

Key New Features:

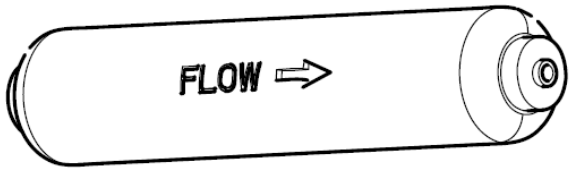
- Full RGB flame color system (not just yellow/orange)
- Flame Connect app – Customize every detail of the fire with complete control over flame colors, brightness, crackling sound, and personalized mood presets.
- Added safety with a new absorption valve
- Built-in linking system for multi-Cassette installations including improved daisy chaining feature up to a maximum of 10 units controlled by one Remote/App
- Hotel Mode added – unit automatically switches the unit on when power is switched on
- **NEW! – RGB compatible Pro boxes (CBX1000-AM and CBX1500-AM)**

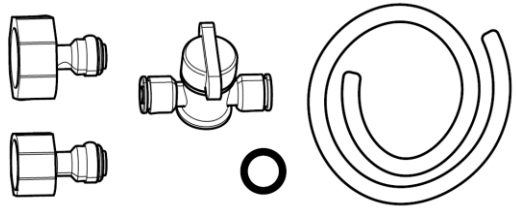
What's Included in the Box (RGB Model)

New for the RGB Series



- Absorption valve pads (critical; unit will not refill if pads become wet)
- Inline filter (optional but recommended)
- Plumbing connection parts (piercing valve sold separately)



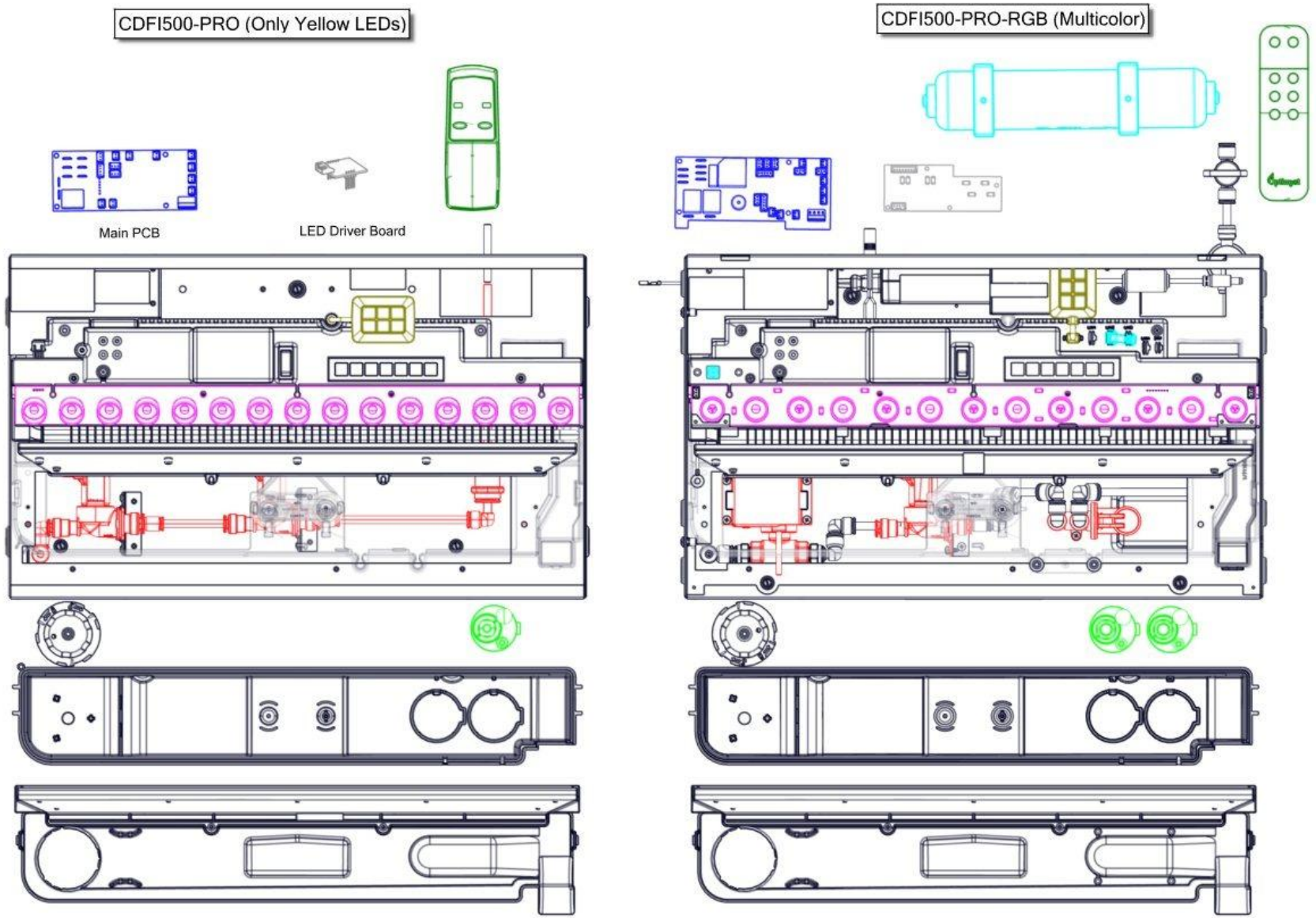


Key Component Evolution

Changes vs. prior CDFI500-PRO

- Primary mechanical valve replaces first solenoid. Should the product detect an overflow, the valve (under its own power) will close preventing any water from spilling out of the product
- RGB LED strips replace amber LED strips
- Multi-unit linking connector and rotary identifier added
- Flame Connect app compatibility added
- Remote control changed
    - Note that the remote no longer directly pairs 1:1 with Cassettes but sends a broadcast signal to all Cassettes within Bluetooth range.
- 4th adjustable leg added (leg positions changed)

Comparison Between Versions



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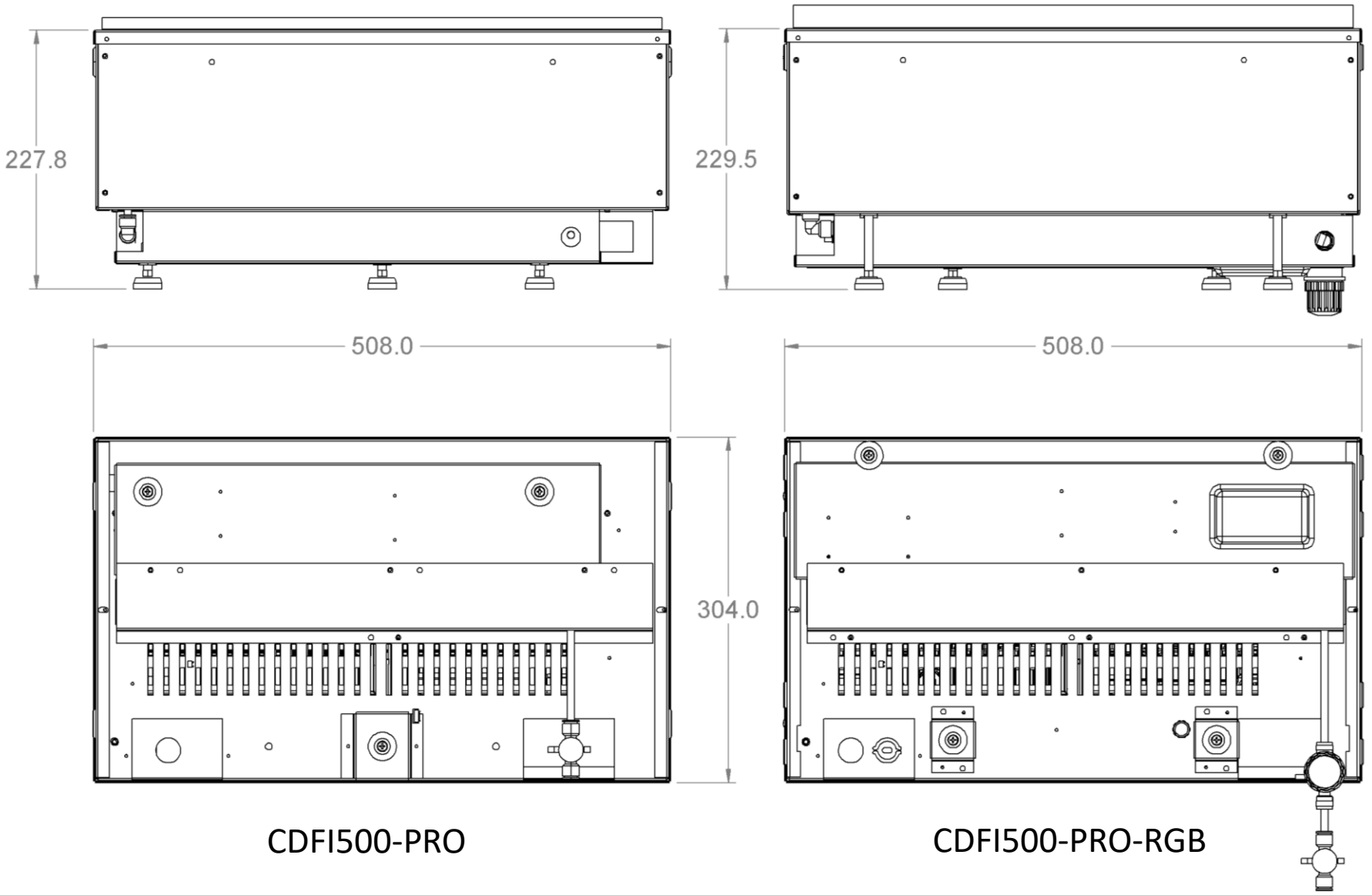
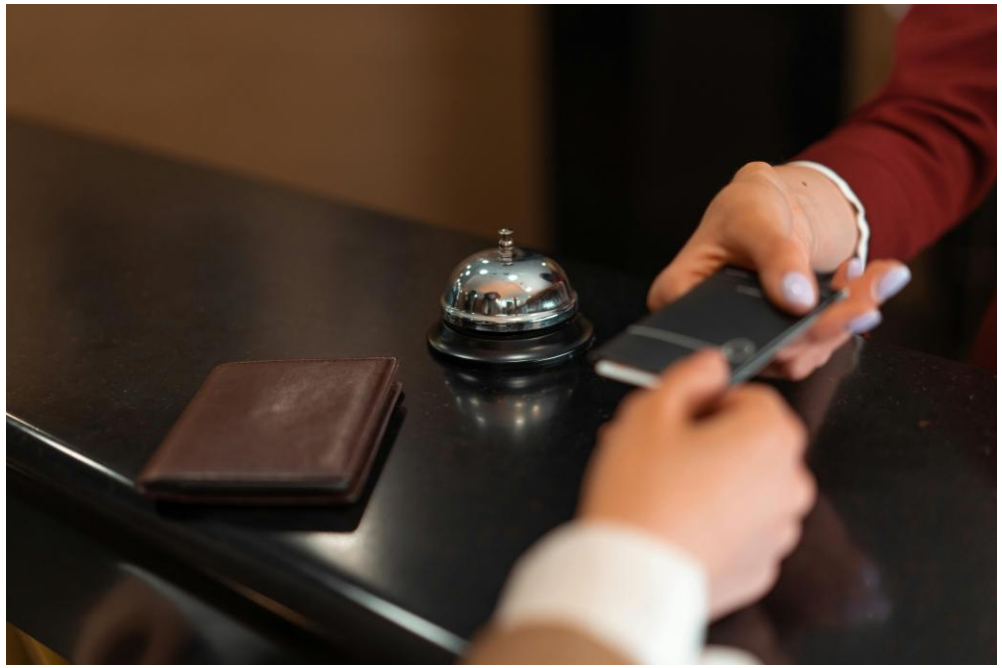


CDFI500-PRO

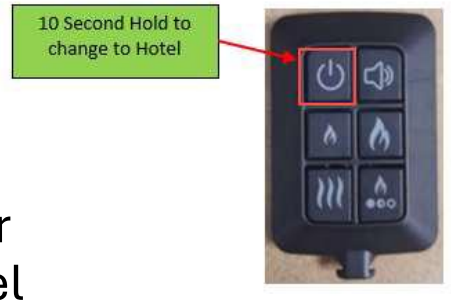
CDFI500-PRO-RGB

Hotel Mode



Automatically switch unit on when powered

With the Cassette on, press and hold the standby button on the UI tether for 10s. You will hear 2 beeps, and Hotel Mode is activated. Press and hold again for 10s, you will hear 1 beep, and Hotel Mode is deactivated.

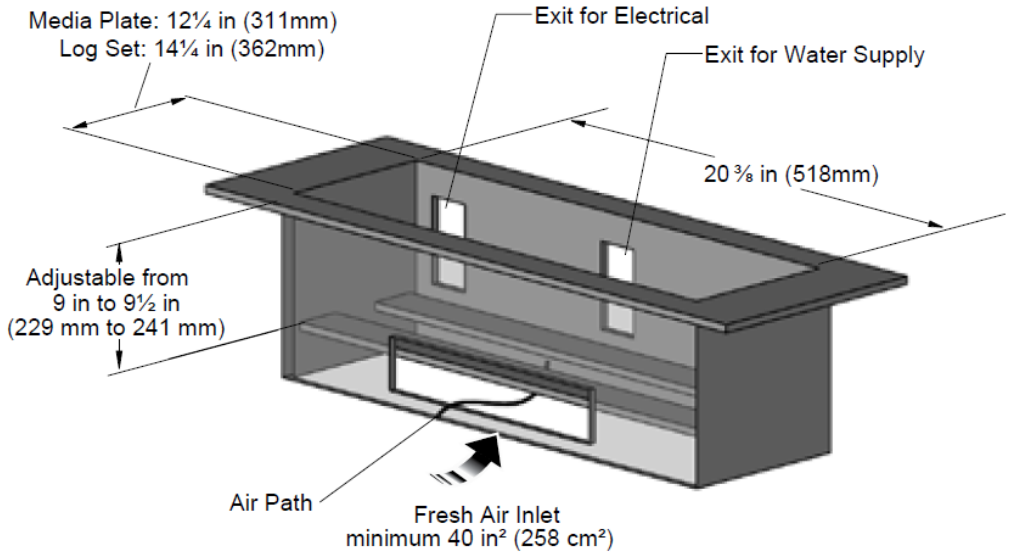


Hotel Mode Default Settings	
Flame Height	Set to Level 3
Sound Volume	Set to Level 1
Flame Color	Set to 1 - Natural

Installation Overview

Universal Requirements

- **Fresh air inlet required:** 40 in^2 (258 cm^2) minimum (and equal exhaust in closed applications). **No venting doesn't mean no airflow!**
- Ensure airflow is maintained to bottom of Cassette
- Install at least 16–18" of vertical clearance for proper flame formation
- Rating 120 V, 230 W per Cassette
- Avoid drafts: HVAC vents, ceiling fans, negative pressure zones. **Airflow must be isolated to Cassette only!**
- For multi-unit installs, maintain level alignment and spacing



Hard Plumbed vs Refillable Tank

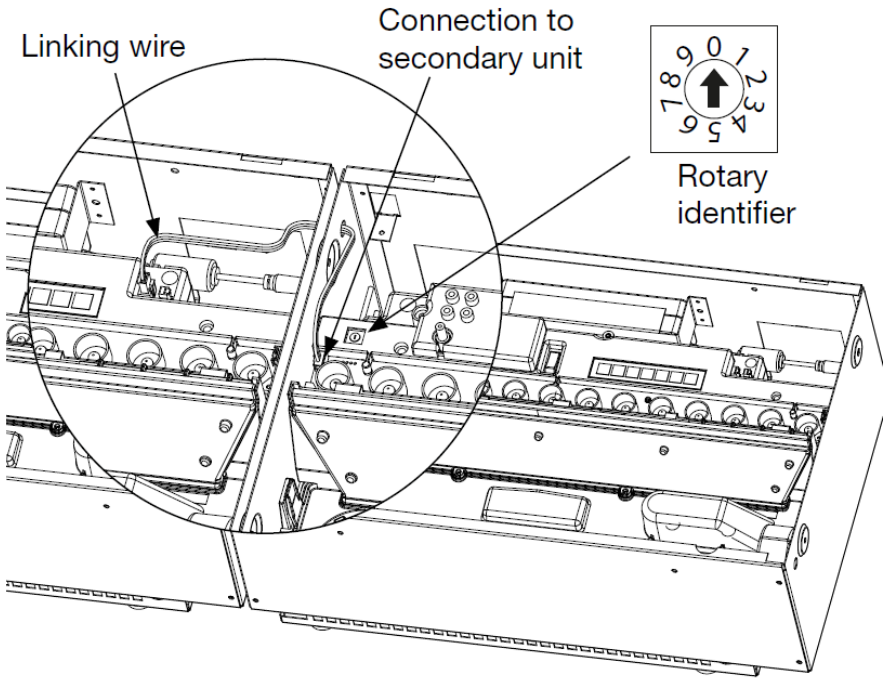
Hard-Plumbed:

- Water quality very important – use soft water or water filtration (optional inline filter included)
- Water pressure: 20–72 psi
- Must flush line for 2 minutes before connecting
- Ideal for commercial installs

Refillable Tank:

- 750 mL bottle automatically dispenses into sump
- LED will blink 2x every 8 seconds when water is low
- Quick and simple for residential installs

Multi-Unit Linking (Daisy Chain)



Make a visual statement!

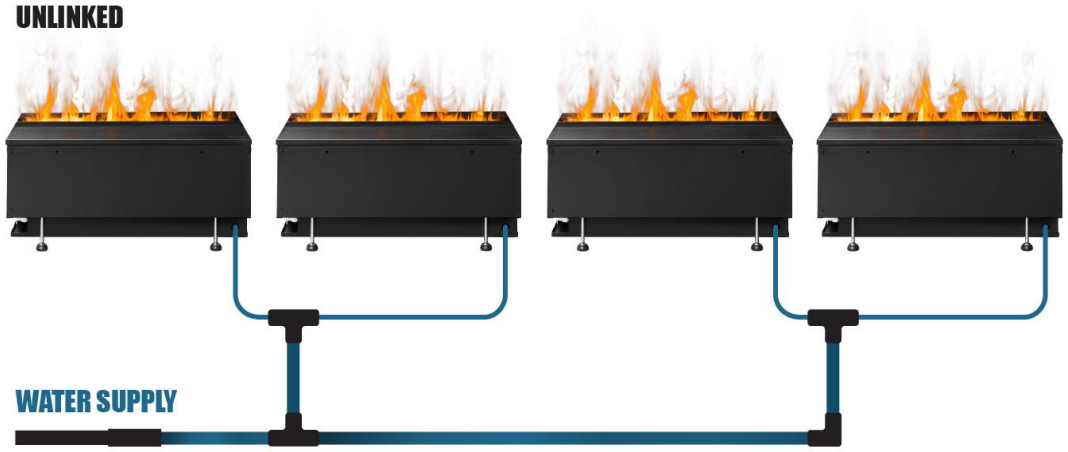
- Up to **10 units** can be linked
- Assign rotary ID numbers: Primary = 0; others = 1–9
- Only **one** Bluetooth receiver (UI tether) in the chain and must be connected to Primary (0) unit.
- LIN communications ensure sequential filling
- The primary unit should be the last one powered on so it can “count” all the units in a chain.

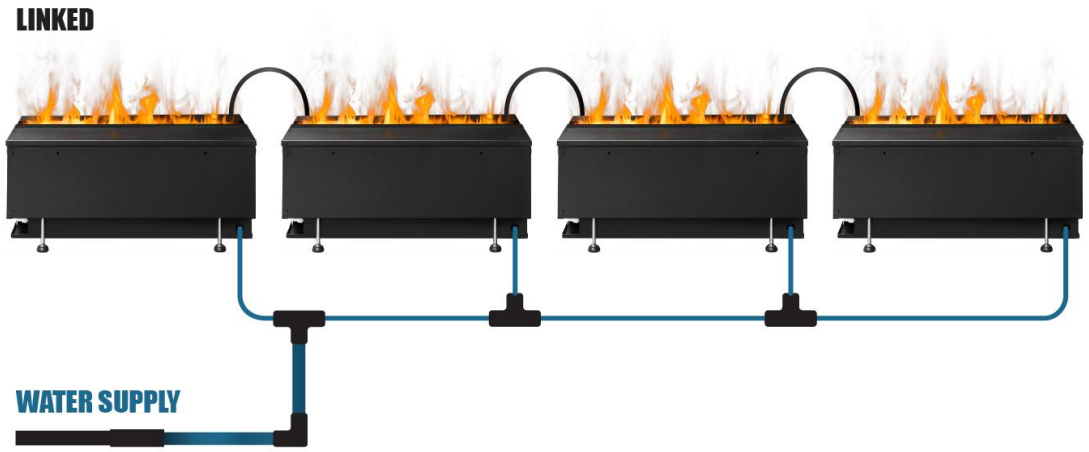
Common Mistakes: multiple Bluetooth receivers, incorrect ID numbering

Multi-Unit Plumbing

Ensuring proper flow rates

- When connecting multiple individual units, ensure proper flow rates and pressures by using a manifold approach. Branch off primary plumbing lines, for example ½", to individual cassettes. No more than 2 cassettes should be branched off a single ¼" tubing supply.
- When connecting multiple units using the linking wires, you don't need to use a manifold approach since the software will use a queuing system to fill each unit, therefore filling only one at a time. A manifold system may still be the appropriate option in some cases.





Water Quality Requirements

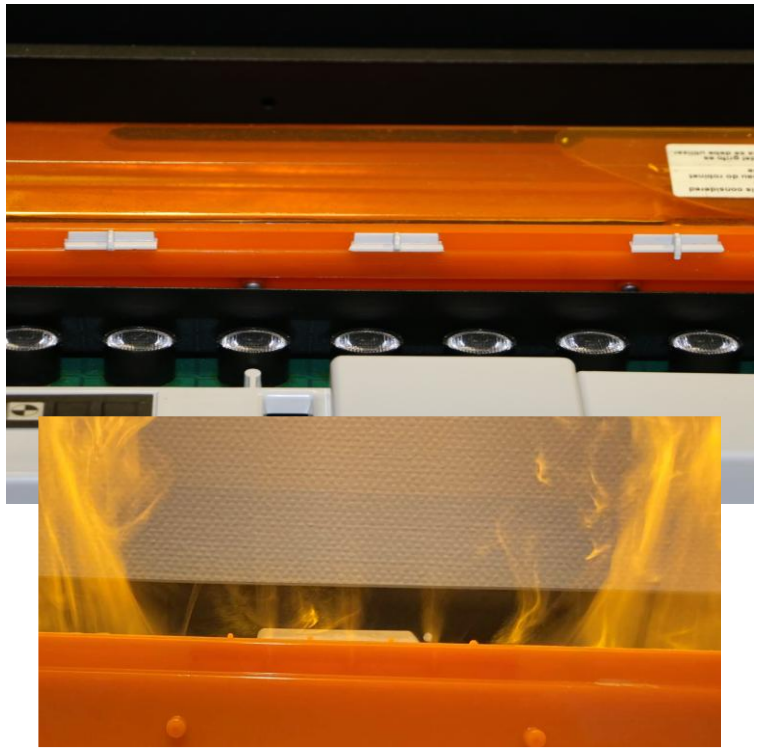
- Hard water can cause limescale buildup in product, decreasing the mist production, and putting “white dust” into the air
- Water over 80 mg/L (4.7 grain per gallon) should be treated with central filtration or softening, or using the optional inline filters
- Filter replacement schedule depends on use and hardness
- Softer water reduces maintenance frequency
- **Do not use distilled water or the transducer will think the sump is empty! Reverse Osmosis water works well.**

- All parts of the Optimyst Cassette that come into direct contact with water are equipped with a special antimicrobial silver ion technology.
- This technology proactively inhibits/interferes with the growth of bacteria/microbes and remains active throughout the life of the product, providing long-lasting protection.
- Proven to reduce bacterial growth by up to 99.99%.

Environmental Factors & Condensation

Best Practices

- Inadequate ventilation increases condensation on glass or media beds
- Draft disturbances distort flame pattern
- White dust from hard water can sometimes mimic fog in a room
- Solutions: strategic blocker positioning, fan speed adjustment (typically lower), remove second transducer

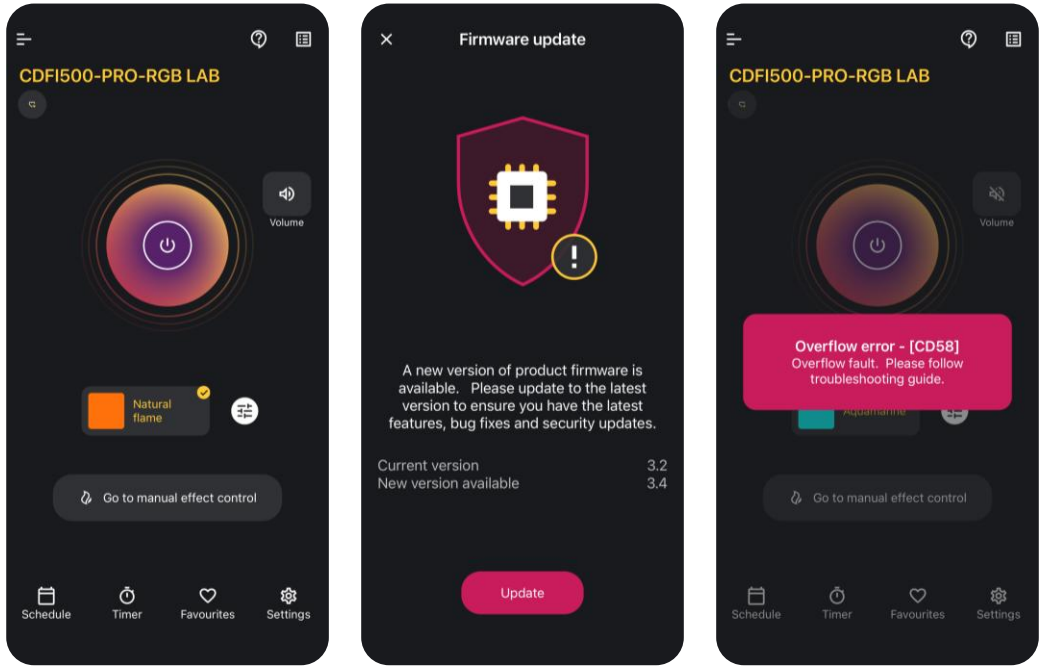


Safety

Built-in safety and redundancy

- Redundant valve systems with primary mechanical valve and solenoid fill valve
- Mesh filter to capture debris that might affect solenoid valve
- Absorption valve to detect any leaks and shut off water supply
- Overflow sensor closes the primary mechanical valve (CD58)
- Timed filling closes the solenoid fill valve and mechanical valve if filling takes longer than 30s – this reduces impact of a potential leak in plumbing (CD56)
- Timer detects if water level changes from maximum to minimum in less than 5 minutes, and closes solenoid fill valve and mechanical valve – this reduces impact of a potential leak in water tank (CD57)

Flame Connect App

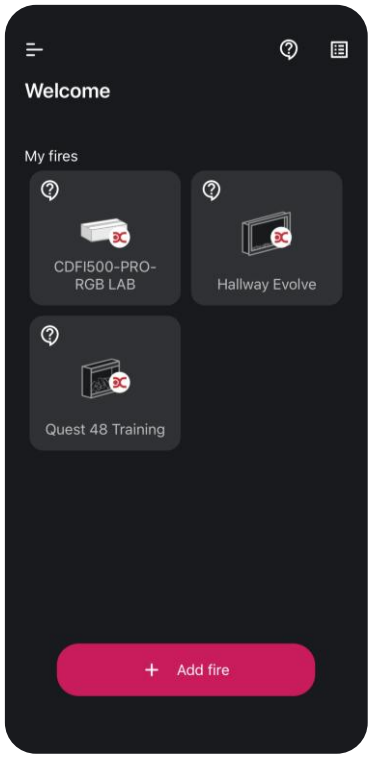


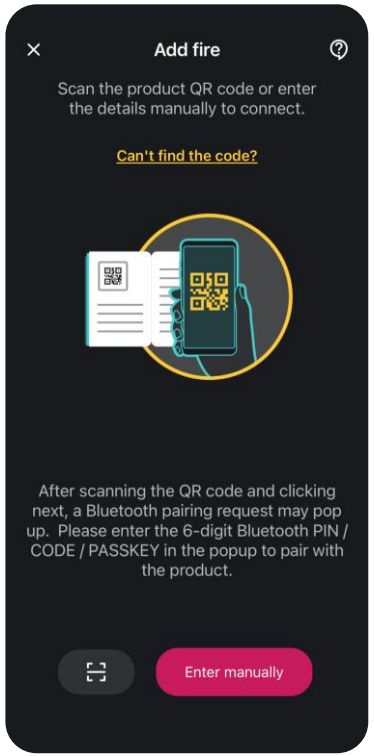
Full Control and Diagnostics

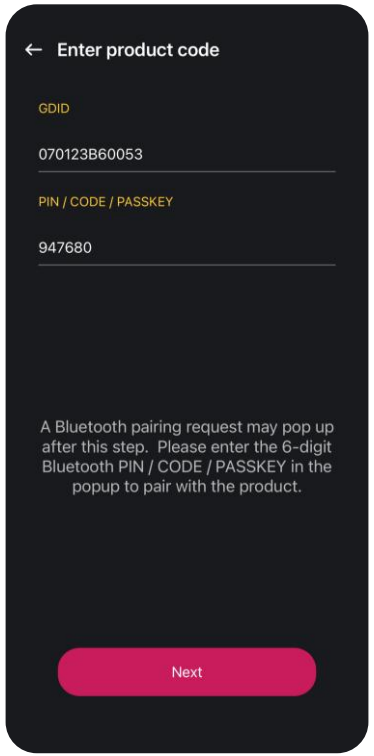
- Full RGB control (colors, themes, brightness)
- Software updates delivered via app
- Individual control of each Cassette in multi-unit setups (not linked). The remote will control all units within range at the same time, but the app can control them individually.
- Remote control disabled when app is active
- UI Tether contains the Bluetooth module for remote and app
- Full diagnostics displayed in app
- 7 Day programmable timer

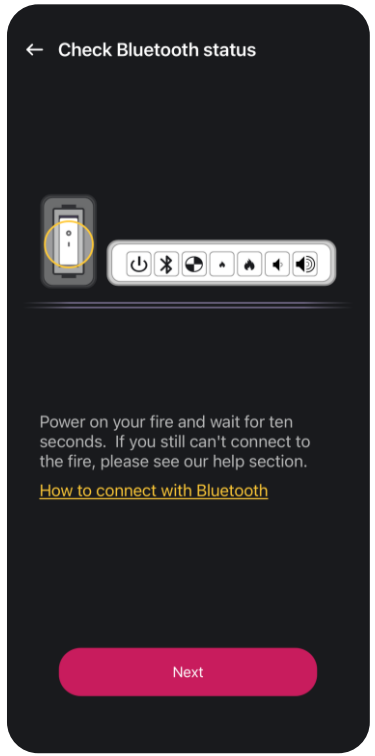
Flame Connect App – Adding a Fire

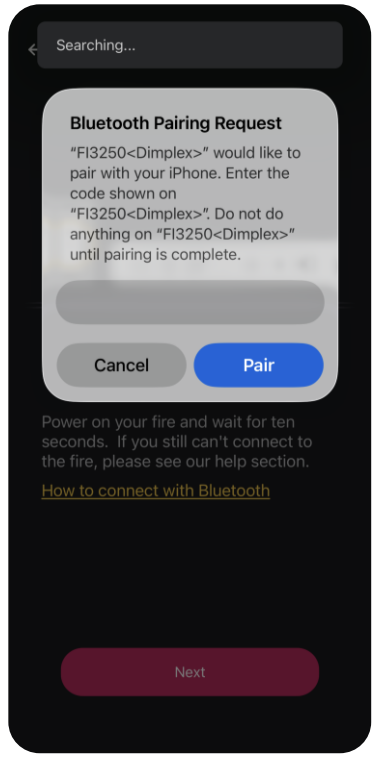
After creating a Flame Connect account in the app











Manual & Remote Controls

On-board: Power Switch, Standby, Bluetooth, Test Mode, Flame Intensity, Volume Control, Color Theme

Remote: Standby, Flame Intensity, Color Theme, Timer, Volume Control, Flame Brightness

Note: 45-second warm-up period for mist generation

Maintenance Requirements

Some intervals will vary based on use and water quality

Monthly:

- Clean sump, top cover, transducers, water tank, and water filter using soap and water, do not use abrasive cleaners
- Rinse and dry air filter

Annually (Hard-Plumbed):

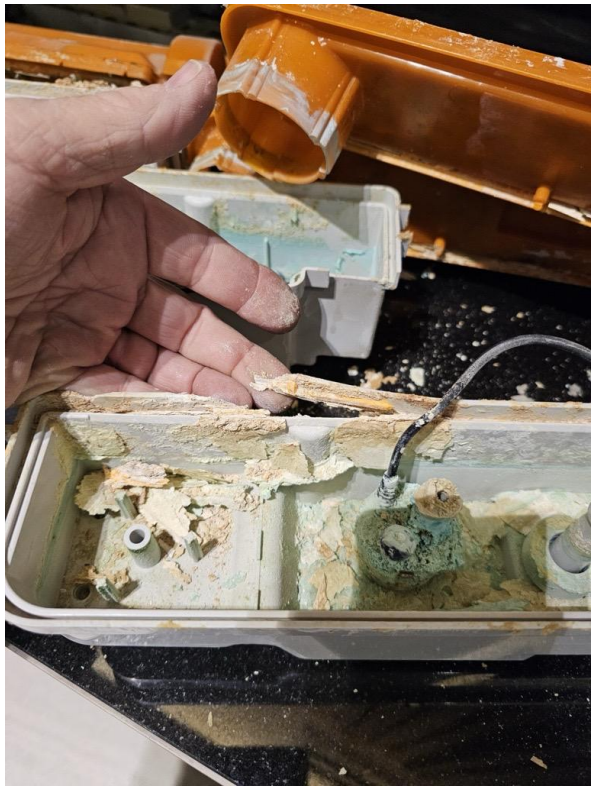
- Replace inline filter
- Check plumbing connections

General:

- Scale buildup affects mist and sensor function

What Can Possibly Go Wrong?

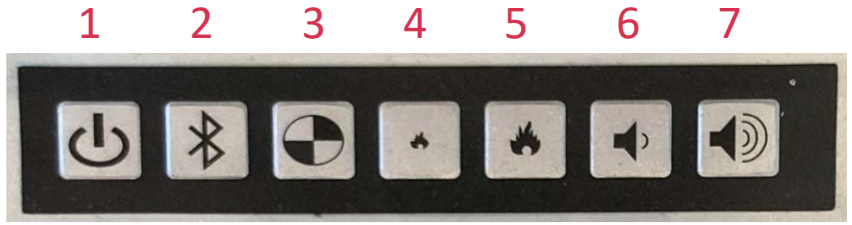
When maintenance is not performed



Troubleshooting: Test Mode

Use test mode to isolate problem sources

First turn the unit on by toggling the switch to ON (I), you will hear 1 beep.



Press Button 3 - Test mode activated, 1 beep.

Press Button 7 - 24V system is turned on, brief light flash.
NOTE: This is critical to do this step first to turn the 24V system on to allow the rest of the tests to be performed.

Press Button 6 - Speaker activated, sound should be audible.
Press Button 6 again to turn off the speaker.

Press Button 5 - Fan activated, check fan is working.
Press Button 5 again to turn off the fan.

Press Button 4 - Transducers activated, check transducer(s) are working.
Press Button 4 again to turn off the transducer(s).

Press Button 3 - Mechanical valve and solenoid valve open, listen for valves opening.
Press Button 3 again to close both valves.

Press Button 2 - Heating element on, check if it becomes warm.
Press Button 2 again to turn off element.

Press Button 1 - LED log set on, check if log set LEDs turn on.
Press Button 1 again to turn off the log set LEDs.

Troubleshooting: Common Error Codes

Error codes shown in the Flame Connect app

App Error Code	Error	Unit Indication	Cause	Solution
CD51	Low water detection	LEDs blink 2 times every 8s	Water not filling	- Check all valves - Check absorption valve pill - Check for blockages - Check float sensors
CD56	Filling time exceeded	LEDs blink 4 times every 8s	Water took too long to fill	- Check for water leaks - Ensure water pressure good - Ensure valves open all the way - Ensure filters not plugged - Ensure water supply does not have too many branches
CD57	Water consumed too quickly	LEDs blink 3 times every 8s	Water went from max to min level within 5 minutes	- Check for water leaking from sump - Check float sensors - Check if unit is level
CD58	Overflow detection	LEDs blink 1 time every 8s	Overflow float sensor activated	- Check float sensors - Check solenoid for debris preventing full closure
CD40	Comms link failure	1 beep, then product will not operate	UI tether not communicating with controls	- Check if UI tether disconnected - Check for damaged wires on UI tether

Troubleshooting: Quick Checks

Low Flame:

- Check air inlet
- Clean transducer & air filter
- Check for drafts

No Mist:

- Verify water level
- Check transducer function
- Inspect fan intake
- Check reed sensors

Mist But No Light:

- LED strips faulty or not connected

Light But No Mist:

- Check water level
- Check transducer operation
- Look for blockages around fan intake

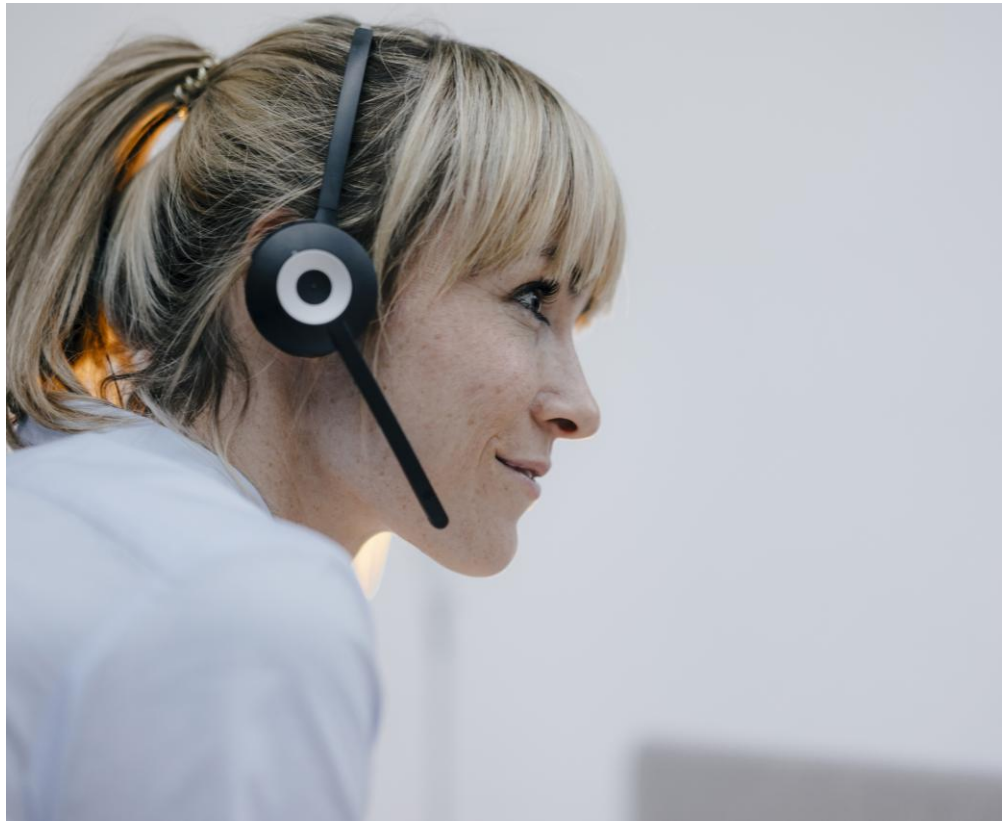
Troubleshooting: Multi-Unit (Linked)

Steps to ensure linked units are working correctly

1. Make sure that only the primary unit, typically the leftmost unit, has the UI tether connected. All other linked units should have the UI tether disconnected!
2. Make sure the rotary dial on the primary unit is set to 0. All other units will have the rotary position incremental (1, 2, 3…).
3. Turn power switch off on primary unit. Ensure all other units have power on. Switch power back to primary unit.
4. If the above steps fail to solve the issue, test each unit individually. Unplug the linking wire to test. Look for poor connection of linking wire or damage.
5. Rebuild the chain in sequence.

Dealer Tips for Reducing Callbacks

- **ALWAYS** educate customers about air inlet requirements
- Advise monthly cleaning (more so in hard water regions)
- Encourage Flame Connect App use
- Confirm water hardness before installation and treat/filter water appropriately
- Take advantage of Dimplex Customer Service!

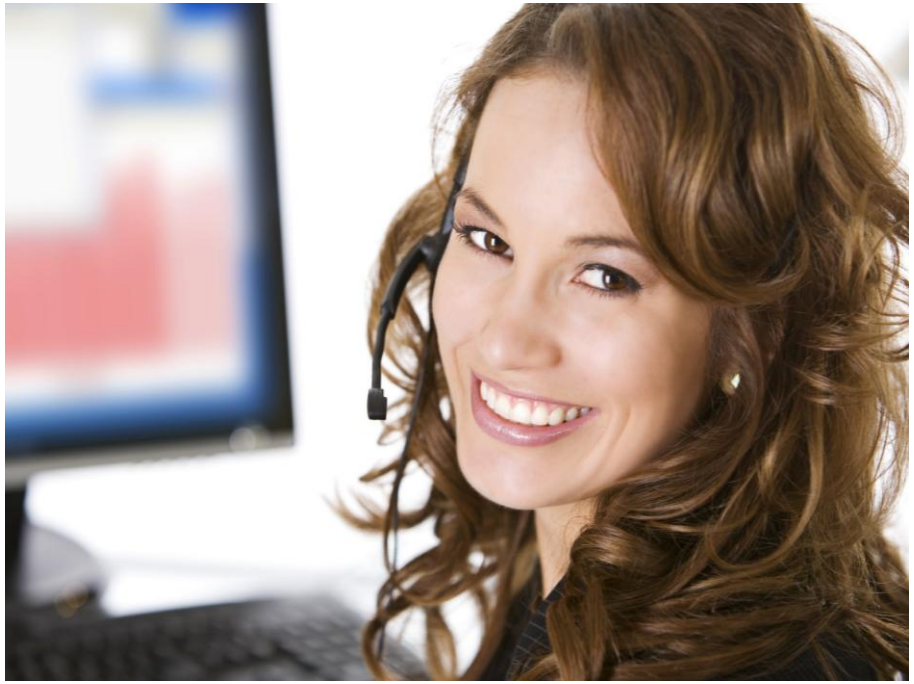


Dimplex Support at a Glance

Enhanced Service & Technical Support

We've made updates designed to improve speed, accuracy, and resolution:

- A 2nd-Level Escalation Team for complex issues, mainly newly launched products
  - **Get In Touch:** 1-888-346-7539 (ask for the 2nd-Level team for advanced assistance)
- Dedicated Optimyst Specialist within 2nd-Level Escalation Team - ***ask for Chad at the same number!***
- Faster, more precise troubleshooting through close collaboration with QA, Engineering, and Management



Online Support Options: dimplex.com/en-us/customer-service

Dimplex Support at a Glance

Servicing Dealer Program

Boost your revenue while delivering exceptional customer support:

- Competitive labor rates (paid via EFT/ACH or account credit)
- Direct service work orders as an authorized servicing dealer
- Strengthen customer relationships with Dimplex-backed support

SIGN UP *serviceadmin@glendimplexamericas.com*

Upcoming Support Initiatives for Dealers

Simplified Service

- On-demand manuals and troubleshooting tools available on www.dimplex.com

Quick Reference Tools

- 1-page quick reference guides with handy information from this training session
    - Key info, error codes and instant fixes

Install with confidence

- Step by step install, maintenance and service videos
- Best practices and tips and tricks

Ongoing training materials

- Virtual training sessions
- Continuous product updates and expert support

Sell more, Faster

- Plus, ready to use marketing assets designed to help convert sales

Thank You!

Any Questions?