Clack WS1 — Owner's Quick Guide

The 10-minute version of the factory book — the part you'll actually use, in plain English. Print it and keep it at the unit.

1. The bypass — learn this one first

On the back of the valve, where the pipes connect, there's a block with two red arrow handles. That's the bypass (Clack part V3006). The arrows aren't decoration — each arrow points the way the water is flowing.

- Service (normal): inlet arrow points into the valve, outlet arrow points out to the house. Water goes through the softener.
- Bypass: turn both handles a quarter turn until the arrow tips point at each other, into the center. The softener is cut off; the house gets hard water and the unit can't flood anything.

Leaking? Running nonstop? Bypass it first, then think. Stiff handles are normal on a valve nobody's touched in years — open a faucet to drop the pressure, and never force one with a wrench.

2. The clock — after a power outage

The WS1 keeps time on battery for a while after an outage. If the display is flashing the time, it lost track — and a softener with the wrong clock cleans itself in the middle of your morning shower instead of at 2 a.m.

1. Press SET CLOCK.
2. Set the hour with the up/down arrows (watch the AM/PM), press NEXT.
3. Set the minutes, press NEXT. Done.

While you're there, glance at the regeneration time — it should say 2:00 a.m., or whenever nobody in your house uses water.

3. Start a regeneration by hand

- Tonight: press and release REGEN. You'll see “REGEN TODAY” flash; it runs at the normal regeneration time.
- Right now: press and hold REGEN for three seconds. It starts immediately and can't be cancelled — make sure that's what you want.
- No salt in the tank? Fill it and wait at least two hours before regenerating, per the manual.

4. The hardness setting — know your number, then leave it

The hardness number tells the valve how hard your water is, and the valve does the math on how often to clean itself. Yours was set from your actual water test at install — Clearwater city water runs about 14 grains, and wells run all over the map. Your number is written on the settings card at your unit.

- A couple of grains either way is the safe band taught at install. Inside the band, the unit just uses a little more or less salt.
- Way high burns salt for nothing. Way low and your water quietly goes hard.

- Moved, changed water sources, or not sure? Call before you go digging in the settings menus — the deep settings (capacity, salt dose) are installer territory, and one wrong number undoes the rest.

5. Salt — boring, and it runs the whole show

- Use softener salt pellets. Keep the tank covered.
- Check it about once a month. You want salt sitting above the water line in the tank.
- Salt look full but the water's hard? Poke it with a broom handle. If it's a hollow crust — a salt bridge — the tank has been fooling you. That's a known thing in humid Florida garages, not a broken softener.

> **What's NOT in this guide, on purpose**
> Pistons, seal packs, board programming — the inside of the valve is not in this quick guide. Not because it's secret: because a wrong turn in there costs you a valve. The one exception, on Aqua Pro installs: hands-on Clack owners get the advanced seal cage lesson free, in person, on install day — taught at your unit. See the Seal Cage Swap lesson sheet.

The full official manuals (free)

- WS1 & WS1.25 Drawings and Service Manual — everything, including the bypass valve section (48 pages, Clack Corporation).
- WS1 & WS1.25 Operation and Instruction Manual (CS board version) — programming and displays (20 pages).
- Clack Quick Guide, form V3115-01 — Clack's one-page sheet: bypass diagram, clock, hardness (1 page).

All three are linked from the Clack page in the manuals library at aquapro.services. One honest note: Clack writes these books for installers, not owners — the front page literally says so. That's why this guide exists.

On an Aqua Pro install and lost your settings card? Call or text (727) 342-0091 — your settings are on file. Not our install and want this taught at your unit, hands-on? Ask about the Know Your System house call.