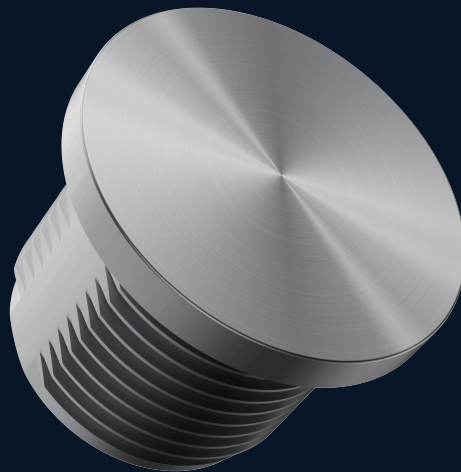


PT PLUS CONFIGURATOR

App manual

Using the PT Plus Configurator: connecting, adjusting a product, programming runs of products, preset files, licensing, troubleshooting.

VERSION 0.9.5 • AUGUST 2026



PART 1 THE APP

- 1 What you need
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PART 2 THE PRODUCT'S FUNCTIONS

- the function reference, defaults included

AUDIENCE

Who this is for

Installers and maintenance staff setting up PT Plus switches, and production staff programming them before they ship. It assumes you know the product. It assumes nothing about the app.

READ THIS FIRST

Your phone sees the RNC USB-UART converter, never the product. The product is on the far end of the converter's wires, with its own power. Nearly every confusion with this app comes from mixing up those two, so the app names them separately, and so does this manual.

PART 1

The app

1. What you need

- **Android phone or tablet**, version 6.0 or newer, and a USB-C cable that carries data. A charge-only cable will not work.
- **RNC USB-UART converter**, plugged into the phone.
- **PT Plus switch** (the programmable piezo switch, called the product throughout), wired to the converter.
- **Power for the product**, 6 to 24 V, from its own supply.

⚠ WARNING

The phone never powers the product. No setting changes this.

An unpowered product is invisible to the app and looks exactly like a wiring fault. When nothing answers, check power first, every time.

Installing

The app is on Google Play, as **PT Plus Configurator**. Install it from there and updates arrive the same way, keeping your licence and settings.

Without a licence

Reading a product, watching it run, browsing settings and using preset files all work. A licence is needed only to write to a product. See section 7.

Nothing changes a product until you write to it. Only Save, Flash and an armed run do that.

2. Two ways of working

The app does two jobs. Knowing which one you are doing explains every screen in it.

Adjusting a product

A product is in front of you. You want to see its settings and change one. That is the **Settings** page, and everything on it is read from that product.

An installer changing a flush cycle on a unit in service.

Programming products

You have a set of values and want products to end up with them. That is the **Flash** page, which writes the whole set and checks every value.

Commissioning an installation, or programming two hundred units before they ship.

Programming one product and programming a hundred is the same job. Only the number of products changes.

Flash Once writes to the product in front of you. **Stay Armed** writes to every product you connect until you stop. Same settings, same check, either way.

One thing to expect

Connecting a product replaces what is on the Settings page, because that page always shows the connected unit. So values typed at the office are gone the moment you plug in on site.

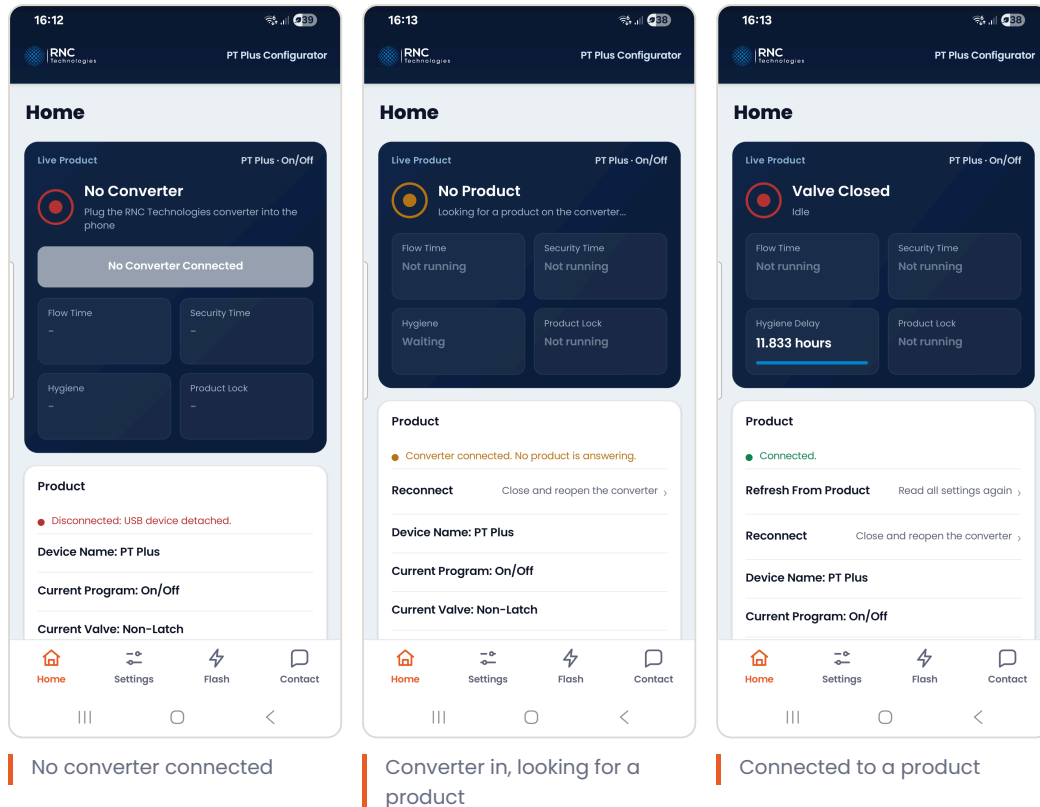
When you want to write values rather than read them, put them in the configuration on the Flash page. It keeps its own copy, it says where it came from, and connecting a product cannot change it. Section 5 covers the three ways to fill it.

3. Connecting

Nothing to press. Plug the converter into the phone and the app opens it, then looks for a product.

Three states

- **No converter connected.** Nothing is plugged into the phone.
- **Looking for a product.** The converter is open, nothing is answering. The app keeps asking, about once a second, so a product is picked up as soon as you connect it.
- **Connected.** A product answered. Its settings are read and the live panel starts.

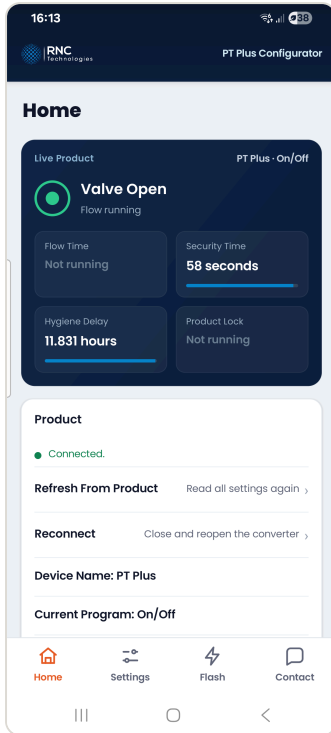


Leave the converter in the phone and swap products on it. Android gives no signal when a product is connected or removed, because the converter never moves, so the app watches the wire itself and notices within about a second.

The Home screen

The dark panel shows what the product is doing now: valve open or closed, the active program and valve type, and the timers counting down. Below it: device name, program, valve type and licence state.

Counters keep ticking between updates, so a still display does not mean a stalled product. If the product stops answering, the values are cleared rather than left showing something untrue.



The live panel with the valve open and timers running

Live display quiet for a minute at a time? Check Standby Sleep Interval. Anything above 0 pauses the live stream while the product is idle. Normal, not a fault.

4. Adjusting a product

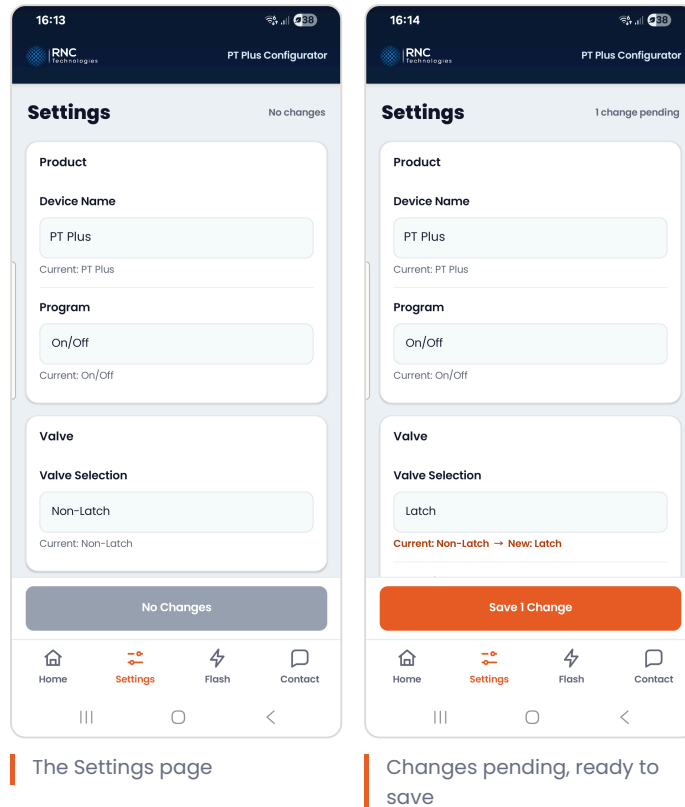
Read, change, save. The app writes only what you changed and checks every value.

Reading

Automatic when a product answers. **Refresh From Product** on Home reads everything again, worth doing if someone else has been at the unit.

Changing and saving

- 1 Open **Settings** and change what you need. Nothing is sent until you save.
- 2 The Save button counts the changes, for example **Save 3 Changes**.
- 3 Press it. Each changed setting is written, read back and compared.
- 4 Green and a short beep means verified. A failure names the setting that did not match.



Save or Flash? Save writes what you changed, for adjusting a unit in service. Flash writes everything, for commissioning.

Units

Times can be entered in milliseconds, seconds, minutes, hours or days. Changing the unit does not convert the number: 12 hours switched to seconds means 12 seconds, and the app counts that as a change.

WARNING

Check Security Time against Flow Time. Security Time is a hard ceiling on how long the output stays active. Set lower than Flow Time, it cuts the cycle short. When water stops early, this is almost always why.

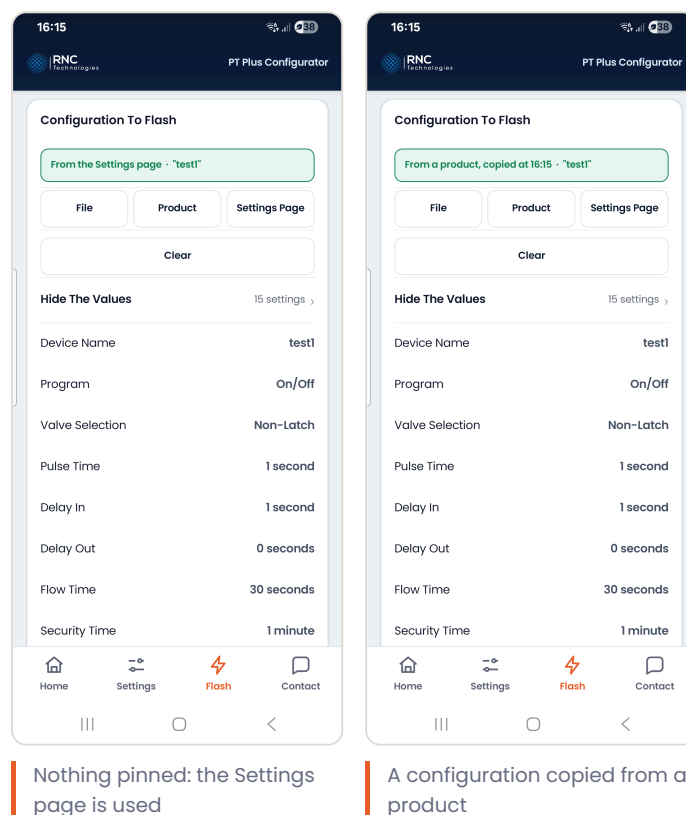
5. Programming products

The Flash page writes a set of settings to products, and checks every value. The configuration keeps its own copy, so connecting a product cannot change it.

Three ways to fill it

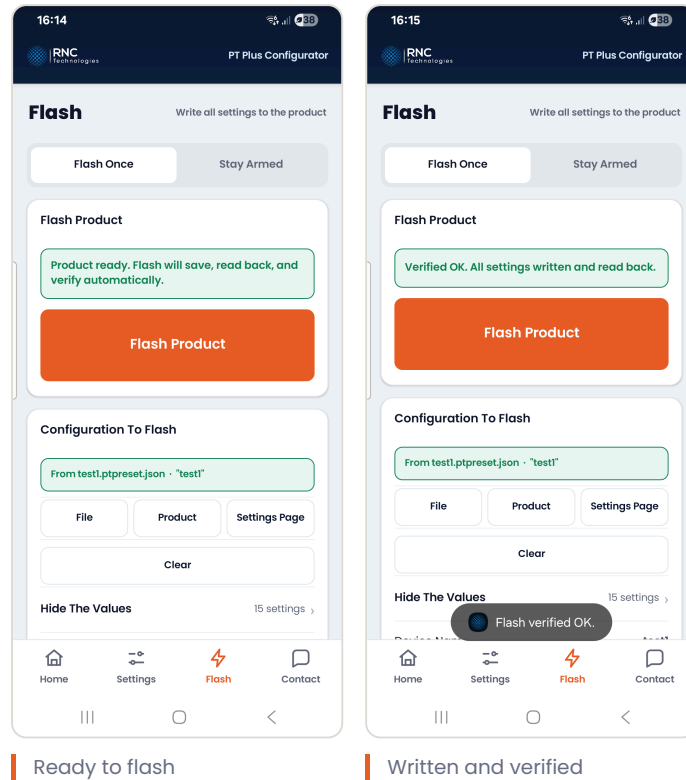
- **File.** A preset exported by the app, or downloaded from the RNC configuration page. How a customer's settings reach production without retyping.
- **Product.** Copy a product that is already set up correctly. How one proven unit becomes the master for a run.
- **Settings Page.** What you typed on Settings. No product needed, so a job can be prepared before you leave.

The card says where it came from, for example *From a product, copied at 09:14*. **Show The Values** lists what will be written. **Clear** goes back to the Settings page.



Flash Once

Writes everything to the connected product and reads it all back. Green and a beep means verified. With nothing answering, the button is greyed out and reads **No Product Connected**. It turns itself back on a second or two after you connect a product.



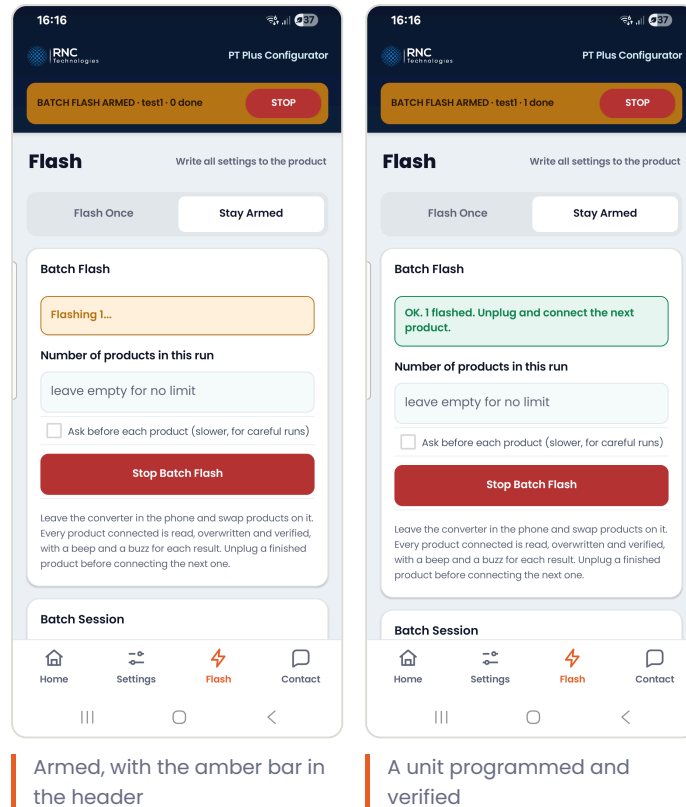
Production runs: Stay Armed

For many products with the same settings. The converter stays in the phone; you swap products on it.

- 1 Fill the configuration as above.
- 2 Switch to **Stay Armed**. Enter the run size if you want the app to count and stop.
- 3 Press **Arm Batch Flash** and confirm. The confirmation names the settings and their source.
- 4 Connect a product. Read, programmed, verified, then a beep and a buzz.
- 5 Unplug, connect the next. No tapping between units.

WARNING

While armed, every product you connect is overwritten immediately, without asking. Unplug any customer product before arming. Stop the run before you put the phone down.



How you know it is armed

An amber bar across the top of every page, with the count and a STOP button. The screen stays awake for the run.

It stops by itself

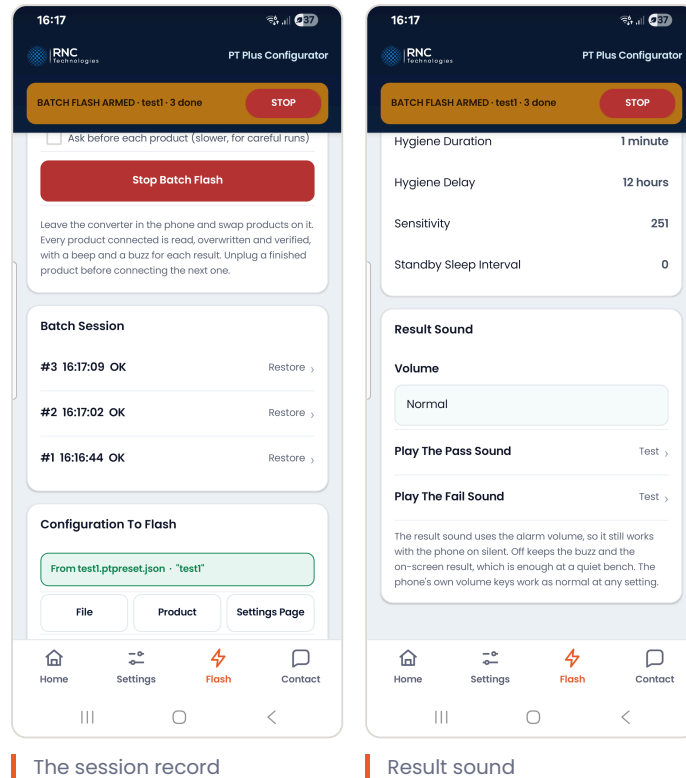
At the run count, when you leave the app, after 15 minutes idle, or if the licence stops being valid. It never survives restarting the app.

Sound

A short double beep for a pass, a longer tone for a failure, a different tone when the run finishes, so nobody has to watch the screen. The **Result Sound** card sets the level: Off, Soft, Normal or Loud, with buttons to hear each at the bench. Off keeps the buzz.

Batch Session

Every product is read before it is overwritten, and its old settings are kept here with the time and result. **Restore** loads a unit's old settings back so they can be written to it again. The list belongs to this session only.



6. Preset files

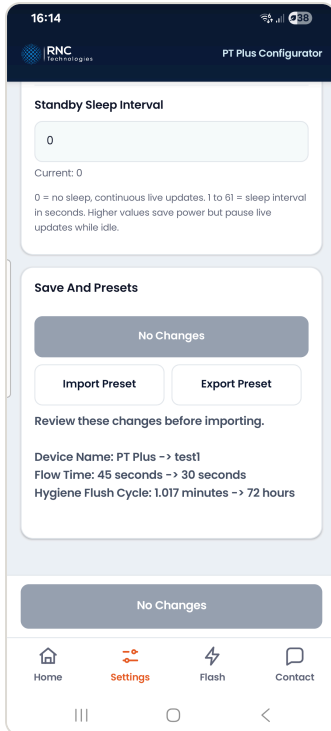
A small file holding one complete set of settings. How settings travel between a desk, a phone and a production bench.

Export Preset on the Settings page saves what is on screen. **Import Preset** loads one back. Both work with nothing connected, so a profile can be built at a desk and emailed to site.

On the Flash page, **File** does the same but uses it as the configuration to write, which is the production route.

The RNC configuration page can also produce these files, so a customer's requested settings can be written straight to their units.

A bad file cannot damage a product. Every preset is checked field by field and a bad one is refused with a list of what is wrong.



Import and export on the Settings page

7. Licensing

Writing to a product needs a licence. Reading, browsing and presets do not.

- 1 **An activation code**, supplied with your order. Contact page, Activate.
- 2 **A free trial**, one per phone. Length and terms are shown before it starts.

Internet is needed once, at activation. After that the app works offline for the whole period. A licence belongs to one phone; if a phone is replaced, RNC releases the code for reuse.

When a licence ends, writing locks and everything else carries on. Products in service are unaffected: they keep running their stored settings whether the app is licensed, expired or uninstalled.

8. If something is wrong

Nearly always one of these.

The app says No converter connected.

Nothing recognisable is plugged into the phone. Check the RNC USB-UART converter is fully seated in the phone's USB-C port, and that you are using a cable that carries data rather than a charge-only cable. A charge-only cable is the single most common cause.

It says Looking for a product and stays there.

The converter is open and talking to the phone, but nothing is answering on the wire. In order of likelihood: the product has no power, the wires between the converter and the product are the wrong way round or not seated, or the product is faulty. Start with power. The phone never powers the product, so a product with no supply of its own is invisible to the app and looks exactly like a wiring fault.

Everything worked, then the product stopped answering.

The app watches the wire continuously and clears the live values when a product stops replying, so this is usually the product having been unplugged. If it was not, check Standby Sleep Interval: anything above 0 pauses the product's live stream while it is idle, which is normal behaviour and not a fault.

A flash failed and named a setting.

The app writes each setting and reads it back. If the value that comes back does not match, the flash stops and names the setting rather than reporting success. Try again first: a single corrupted reply is not unusual on a long cable. If the same setting fails twice, the value is outside what that product accepts, or the connection is unreliable.

Flash Product is greyed out and says No Product Connected.

By design. The app knows nothing is answering and will not offer an action that cannot work. Connect a product to the converter and the button turns itself on within a second or two, with no need to press anything.

Save says Connect to Save.

Settings can be typed at any time, with or without a product. Writing them needs a product. Your edits are kept, so a job can be prepared before you get to site.

The licence has ended.

Programming locks; reading a product, browsing settings and using preset files carry on working. Enter a new activation code on the Contact page. The products already in service are unaffected: they keep running their stored settings whether the app is licensed or not.

A batch run stopped by itself.

It does that deliberately, when the run count is reached, when the app leaves the foreground, after 15 minutes with nothing plugged in, or if the licence stops being valid. Arm it again to continue. It never survives restarting the app.

Sending a log to RNC

Press and hold the version number at the bottom of the Contact page, add a short description and send. The exchange between the app and the product goes to RNC support. Only when you ask, never automatically.

Support

info@rntec.com · [+972 76 530 3666](tel:+972765303666) · rntec.com

PART 2

The product's functions

What each setting does on the PT Plus itself. This part is about the product, not the app: the same functions apply however they are programmed. Ordered as the product's own quick guide orders them, so readers of that document are at home here.

PART 2 · REFERENCE

Function reference

Every setting the app writes, what it does, and its default. The Default column doubles as the factory-defaults annex.

Product

2 SETTINGS

SETTING	RANGE	WHAT IT DOES	DEFAULT
Device Name	Up to 7 characters	A reference stored in the product and carried into any configuration file, so it is clear which unit this is. Useful for identifying units on site, for example by room or position.	–
Program	On/Off, Programmed, Programmed On/Off	Defines how the device responds when a user presses the switch. On/Off : first press opens the output, second press closes it. Flow Time is not used; Security Time is what eventually closes it if nobody does. Programmed : one press runs the output for Flow Time, then auto-closes. Programmed On/Off : runs for Flow Time, and the user can pause and resume within Security Time.	–

Valve

2 SETTINGS

SETTING	RANGE	WHAT IT DOES	DEFAULT
Valve Type	Non-latching or Latching	The type of solenoid valve wired to the device. It determines how the output drives it, so it must match what is actually fitted. Non-latching takes continuous 6 to 24 V for as long as the output is active. Latching takes a short 12 V pulse to open and another to close.	Non-latching
Pulse Time	0 to 9999 ms	The opening and closing pulse length for a latching solenoid valve. Only applies when Valve Type is Latching. Check the valve's own specification, because a wrong pulse can mean the valve does not switch at all.	50 ms

Timing

6 SETTINGS

SETTING	RANGE	WHAT IT DOES	DEFAULT
Delay In	Milliseconds	Detects the initial presence of a user before the piezo activates. In other words, how long a touch must be present before it counts as a press, which is what stops brushes and splashes from triggering the outlet.	20 ms
Delay Out	Milliseconds	Delays the output activation after a press. Rarely used, mostly for specific applications such as toilets.	0 ms
Flow Time	Milliseconds or seconds	Drives the valve for a set duration. Not used in On/Off mode, where the second press closes the output instead.	60 s
Security Time	Milliseconds or seconds	The maximum time the output can be active. A safety backstop against unintentional operation, and the thing that prevents a flood if an outlet is left running.	60 s
Product Lock Time	Milliseconds or seconds	A waiting period between activations, during which the device cannot be triggered again. Useful where people repeatedly press, or to discourage jamming.	0, meaning off
Clean Lock Time	Milliseconds or seconds	Locks the output during cleaning. Unrelated to user activation, and intended for maintenance only.	0, meaning off

Hygiene flush

4 SETTINGS

SETTING	RANGE	WHAT IT DOES	DEFAULT
Flush Cycle	Seconds, hours or days	The interval between automatic flush cycles. Set it to 0 to switch hygiene flushing off entirely.	72 hours
Flush Duration	Milliseconds or seconds	How long the valve stays open when a flush cycle triggers.	60 s
Flush Type	Standard or Smart	Standard runs the flush on a fixed schedule, regardless of use. Smart resets the cycle after each user activation, so a flush only runs after a period of inactivity. An outlet in daily use is therefore never flushed unnecessarily.	Standard
Flush Delay	Seconds or hours	The initial delay before the first flush runs after power-on. Setting it deliberately is how a whole block of outlets can be made to flush at a chosen time of day rather than whenever they happen to have been powered up.	12 hours

Touch and standby

2 SETTINGS

SETTING	RANGE	WHAT IT DOES	DEFAULT
Sensitivity Level	0 to 3000	The force required to activate the PT Plus. The recommended value is 251, with a safe working range of roughly 200 to 500. Outside that range, consult RNC before setting a value.	251
Standby Sleep Interval	0 to 61	0 means no sleep and continuous live updates. 1 to 61 is a sleep interval in seconds: higher values save power but pause the live display while the product is idle. If a product seems to go silent for about a minute, this is the first setting to check.	0