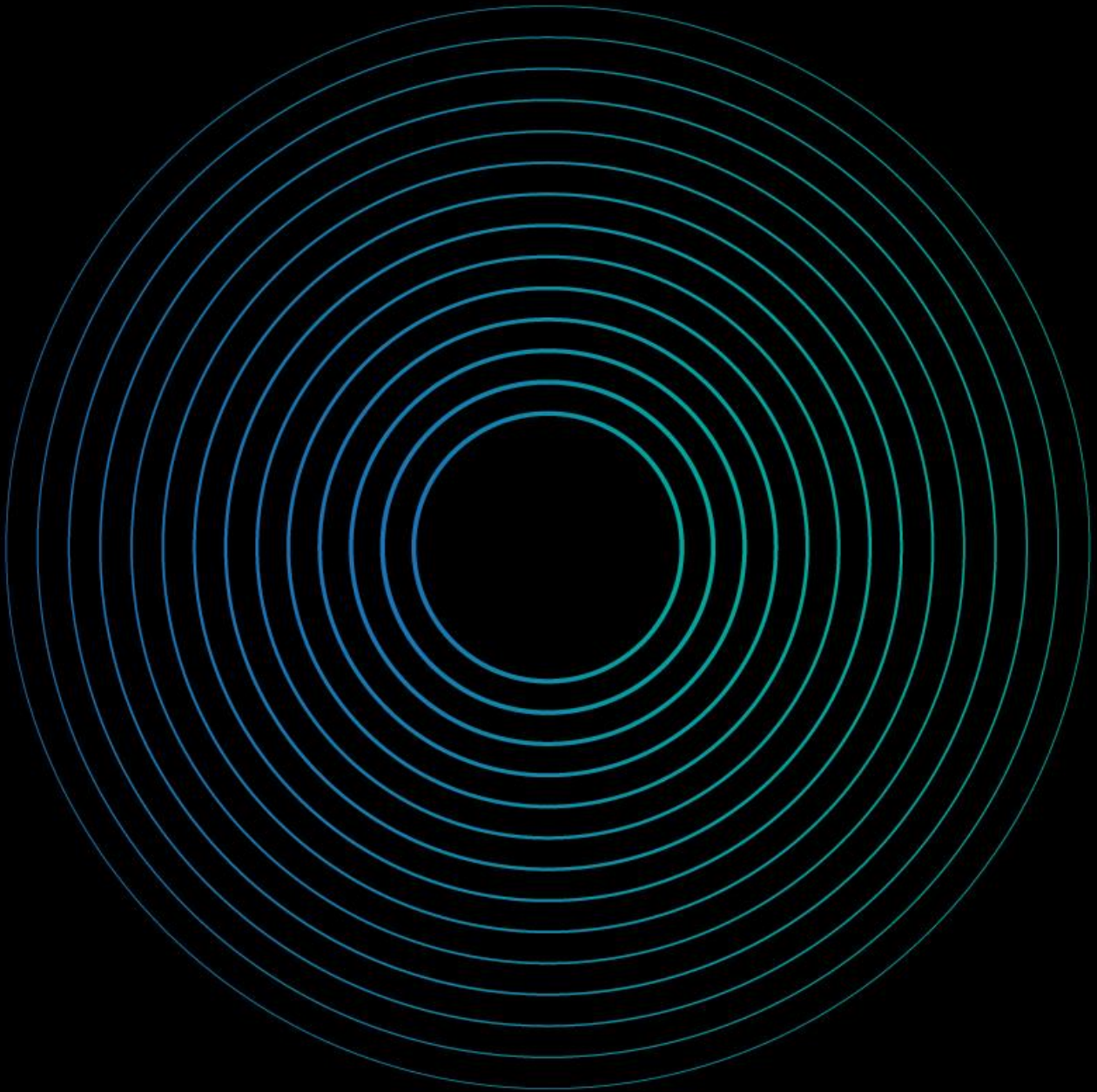


RNC
Technologies

Quick Guide



**PiezoTouch
Plus**

Date: **February 09, 2026**
Approved by: **Roi Ben Chitrit**

Software version: **24.001**
Device: **PTX-XX-PDC**

1. Introduction & Technical Specifications

The PiezoTouch Plus software terminal allows you to fully configure the functionality of your sanitary installation. With this tool you can adjust settings such as run times, sensitivity and automatic hygiene flushes.

Before you begin, please take note of the following critical specifications and important points:

⚠ IMPORTANT: Note the Time Units

The software uses different time units for different functions. Confusing them will result in incorrect operation (e.g. a tap that opens for only a fraction of a second).

- **Milliseconds (ms):** Used for precision settings such as *Delay In* and *Pulse Time*, but also frequently for the *Flow Time* (e.g. 60,000 ms = 60 seconds).
- **Seconds (s):** Often used for longer intervals such as the *Hygiene Flush Cycle*.
- Always check the unit in the 'Current Values' column before changing a value.

Electrical Specifications

- **Voltage:** The system operates on a DC power supply of 6V to 24V.
- **Current:** The maximum current load is 1 Ampere (1A). Ensure that your power supply and connected valve do not exceed this limit.

Solenoid Valve Compatibility

The PiezoTouch Plus is universally applicable and can drive two types of valves. You must select the correct type in the software:

1. **Non-Latching:** For valves that require continuous power to remain open. The output provides a continuous 6V-24V pulse.
2. **Latching:** For valves that operate with a short pulse to open and close. The output provides a 6-24V pulse.

Note: Setting the correct Pulse Time is essential for latching valves.

2. PiezoTouch Software Interface

The screenshot displays the 'PIEZO TOUCH USER INTERFACE' for RNC Technologies. The interface is organized into several panels:

- Top Left Panel:** Includes fields for 'PORT NAME' (set to COM3) and 'BAUD RATE' (set to 115200), with an 'OPEN PORT' button. Below are 'UART STATUS' (with an 'OPEN UART' button), 'DEVICE NAME' (set to PTouch), and 'PRODUCT' (set to On/Off).
- Top Middle Panel:** Contains a grid of time settings: 'DELAY IN' (20), 'DELAY OUT' (1000), 'FLOW TIME' (3000), 'SECURITY TIME' (350000), and 'PRODUCT LOCK' (0). Each has a 'SAVE' button. A 'CLEAN OFF' button is also present.
- Top Right Panel:** Features 'OUTPUT ACTIVE LED', 'OUTPUT STANDBY LED', 'OUTPUT' (set to NOT ACTIVE), 'STANDBY CYCLE', and 'ACTIVE CYCLE'.
- Bottom Left Panel:** Shows 'OUTPUT FUNCTION' (0050), 'HYGIENE FLUSH TYPE' (SMART OFF), and 'HYGIENE DELAY' (10).
- Bottom Middle Panel:** Includes 'SENSITIVITY LEVEL' (0168), 'HYGIENE FLUSH CYCLE' (0), and 'HYGIENE DURATION' (6000).
- Bottom Right Panel:** Contains status indicators for 'USER NOT DETECTED', 'OUTPUT NOT ACTIVE', and 'PRODUCT NOT LOCKED'.

3. System Requirements and Connection

Hardware

Windows PC, PiezoTouch Plus device (PTX-XX-PDC), UART-USB converter, USB cable, Power supply (6V-24V DC, max 1A).

Software

Download the software via this link:

https://rncotec.com/wp-content/uploads/2025/02/PiezoTouch-Plus-Software_26_Feb_25.zip

Connection Steps

1. **Power:** Connect the power supply (6V-24V) to the PiezoTouch Plus device.
2. **Physical Connection:**
 - Connect the USB cable to the PC.
 - Connect the other end of the USB cable to the UART-USB converter.
 - Connect the converter to the connector of the PiezoTouch Plus device.
3. **Launch:** Open the PiezoTouch Plus software on your PC
4. **Port Setting:**
 - Click on the Port Name dropdown menu.
 - Select the correct COM port (e.g. COM3 or COM4). Tip: If unsure, unplug the USB and see which COM port disappears from the list.
 - Select Baud Rate (115200).
 - Click Open (Button turns green = Connected).
5. **UART:** If the button does not turn green, click **Open** under "Connect UART"

4. Product Type Selection

Choose the desired operation from the "Select Product" dropdown menu. This determines how the device responds to touch.

Product Type	Operation and Behaviour	Relevant Timers
On/Off	On/Off Switch 1st touch: Valve opens. 2nd touch: Valve closes. If not closed manually, the valve closes automatically after the <i>Security Time</i>	Security Time (Max. run time) Flow Time & Delay Out are not used
Programmed	Time-controlled Touch: Valve opens for the full duration of the set Flow Time. The valve closes automatically after completion	Flow Time (Desired run time) Security Time (Safety stop in case of failure) Delay Out is not used
Programmed On/Off	Start/Pause 1st touch: Start water flow 2nd touch: Pauses the Flow Time 3rd touch: Resumes the Flow Time The user must consume the total Flow Time within the Security Time limit	Flow Time (Total run time) Security Time (Max. time incl. pauses) Delay Out is not used

5. Valve Selection and Setting

Select the correct type of solenoid valve.

An incorrect selection may damage the valve.

- **Non-Latching:** For valves that require continuous power (6V-24V) to remain open.
- **Latching:** For latching valves that operate with a short pulse (6-24V).

Note: For Latching valves you must enter the Pulse Time (e.g. 50ms). Consult your valve's specifications.

6. Programmer Functions Explained

Adjust the values in the white fields and click **Save** to send them to the device.

Sensor Functions	Description
Delay In	Wait time <i>before</i> activation
Delay Out	Delays the actual activation of the valve after the user has pressed. <ul style="list-style-type: none">◦ Purpose: Prevents immediate activation, specifically intended for applications such as toilets.◦ Note: Not typically used
Flow Time	The time the valve remains open (in <i>Programmed</i> mode). In <i>On/Off</i> mode this is ignored.
Security Time	The maximum time water may flow. This is a safety measure against flooding in case of faults or blockages
Product Lock Time	A mandatory waiting period <i>after</i> use, during which the device cannot be activated again
Clean Lock Time	This temporarily locks the device completely (for cleaning maintenance). Not normally used in this type of application.
Sensitivity Level	The sensitivity of the piezo surface. Drag the slider and click Save . Do not set below 150 or to maximum without consultation.

7. Hygiene Flush

Provides automatic flushing during extended periods of inactivity.

Hygiene Flush Cycle

Interval between flushes (e.g. 72 hours). **Set to 0 to disable.**

Hygiene Flush Duration

How long the flush lasts.

Hygiene Flush Type

- *Standard:* Flushes at fixed intervals.
- *Smart:* Resets the timer after each use by a person (prevents unnecessary flushing).

Hygiene Flush Delay

Start delay. Ensures the cycle only starts after X hours (e.g. at night) following power connection

Annex: Default Values

Function	Value	Base Unit
Delay In	20	milliseconds
Delay Out	0	milliseconds
Flow Time	60,000 (60 seconds)	milliseconds
Security Time	60,000 (60 seconds)	milliseconds
Product Lock Time	0	milliseconds
Clean Lock Time	0	milliseconds
Sensitivity Level	251	N/A
Hygiene Flush Cycle	259,200 (72 hours)	seconds
Hygiene Flush Duration	60,000 (60 seconds)	milliseconds
Hygiene Flush Type	Smart Off (standard)	N/A
Hygiene Flush Delay	43,200 (12 hours)	seconds
Output Function	50	Milliseconds
Valve Selector	Non-Latch	N/A