DATA LOGGER – USERS MANUAL



Operating in Bluetooth 4.0, with a Nordic N51822 chip, these small devices can collect temperature and humidity data in any given environment and store up to 15000 pieces of data. Using an App on a smartphone equipped with Bluetooth 4.0 (iOs or Android), data can be retrieved, consulted and sent in emails with a few clicks only.

Small in size, light weight, portable and accurate, these devices are ideal for piano environment case studies, monitoring the humidity levels of any instrument or even to monitor the proper functioning of any DamppChaser Piano Life Saver system.

FEATURES AND SPECIFICATIONS

1. Accuracy and stability
2. Built-in sensitive temperature and humidity sensor
3. Real-time display of temperature and humidity
4. Alarms can be set for temperature and/or humidity
5. Keeps history of data extraction
6. Data extractions can be sent in emails directly via the App.

Description	Specification
Signal transmission frequency	2.400 – 2.4835GHz
Protocol	Bluetooth 4.0
Modulation mode	GFSK
Send interval	2S, adjustable
Output power	-4dBm, adjustable
Communication rate	1Mbps
Transmission distance	35 meters, adjustable
Storage	Up to 15000 readings
Logging interval	1 second to 1 hour
Logging capacity	4h with a1s logging interval 600+ days with 1h logging interval
Battery life	Average 300 days, over a year at 1h logging interval
Battery type	CR2450, 550mAh, 3V
Shelf life	12 to 18 month, considering accuracy drift
Net weight	30g
Size	50mm*50mm*20mm
Temperature range	Around -40°C to +125°C (Bluetooth stops working below -30°C and above +70°C)
Humidity range	0 to 100%RH
Temperature accuracy	±0.3°C

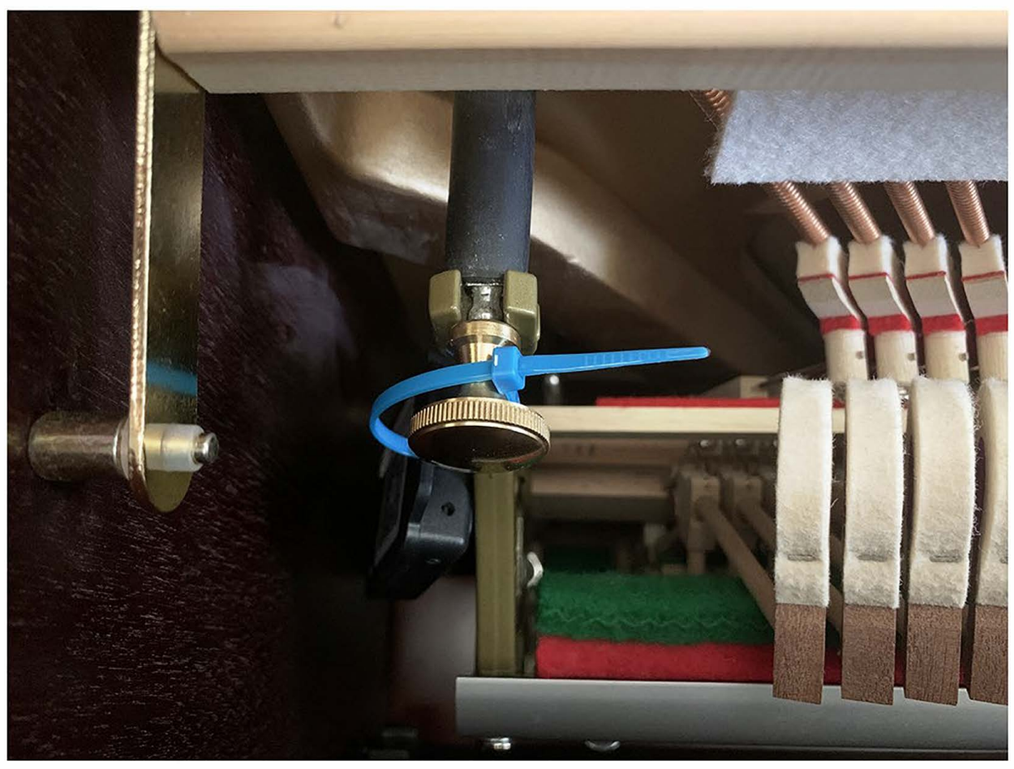
Please keep the device away from metal objects, do not place inside a metal box. Keep device away from water and corrosive objects!

USING THE LOGGER – GENERAL NOTES

Download the app
Search for the "Temp Logger" App on the Apple AppStore or the Android Google Play Store.

Turning the logger on/off
- A long press (5 seconds) on the power button of the data logger will turn it on. A regular green flashing light can then be observed every few seconds.
- When the device is on, a long click on the power button will trigger on a red flashing light, the device is now off.

Positioning the logger in a piano
A/ Upright - Open the top lid of the instrument and place the logger on the left-hand-side or right-hand-side. You can use a piece of string, a small nail, small screw, cable tie... to attach the logger to the side of the piano or the action bracket.
B/ Grand piano - Place the logger flat on its back under the piano, on top of a beam or of the back leg shelf.


Positioning the logger in an upright piano


Positioning the logger under a grand piano

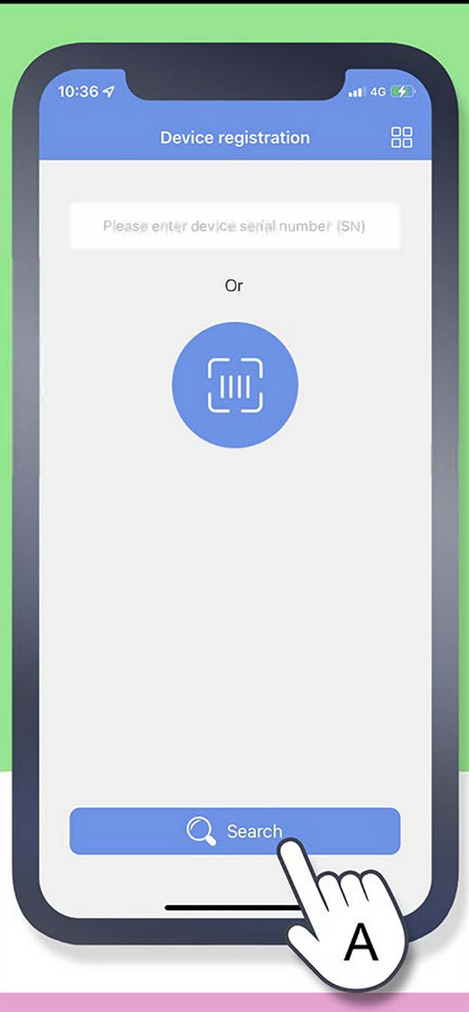
It is important the two vent holes in one corner of the logger are never obstructed!

Battery life
When searching up for the logger in the App, pay attention to the remaining battery life (%). Please contact Jahn Pianoteile when battery life is getting low. The device is sold with a shelf life of 12 to 18 months when data collection interval is set to 1h. Although battery can be replaced, it is the nature of hygrometers to have a shift in accuracy over time (sensor drift).

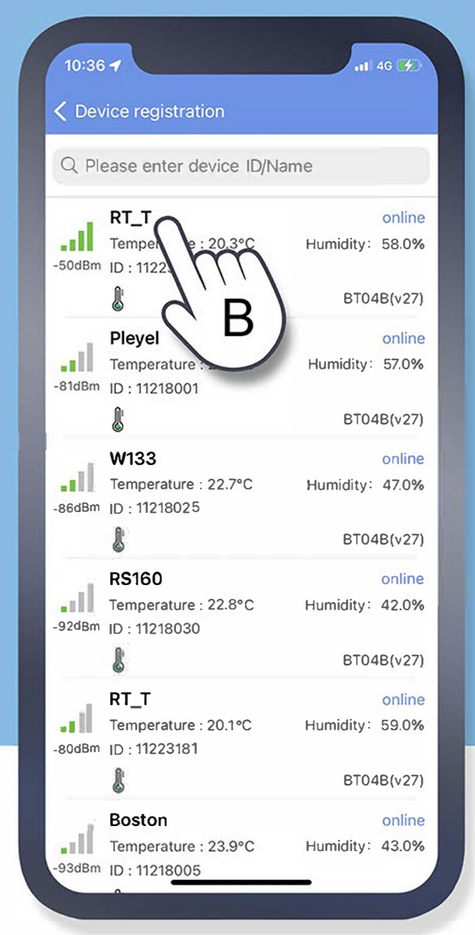
Please note: for all subsequent steps, the logger needs to be turned on, the Bluetooth on your smartphone or tablet needs to be turned on and your smartphone/tablet needs to be in the vicinity of the logger.

SETTING UP A NEW LOGGER

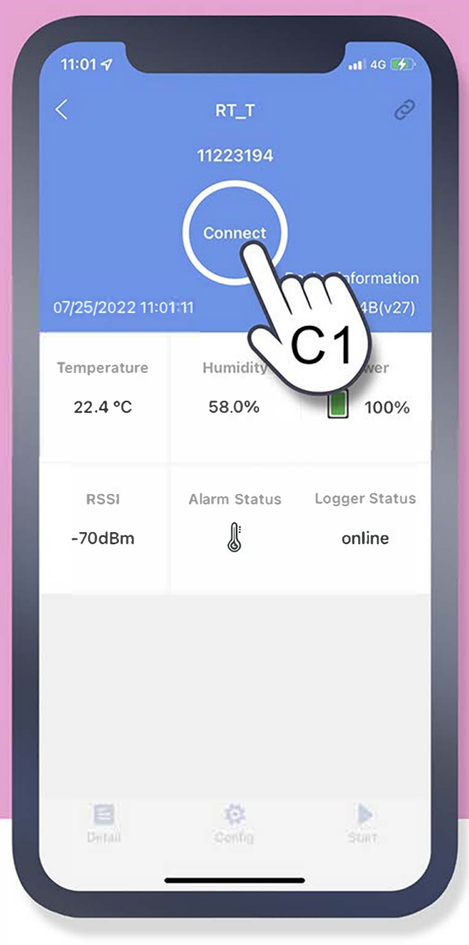
A - Open the App and tap on the search icon (**A**) to search for all loggers in the vicinity.



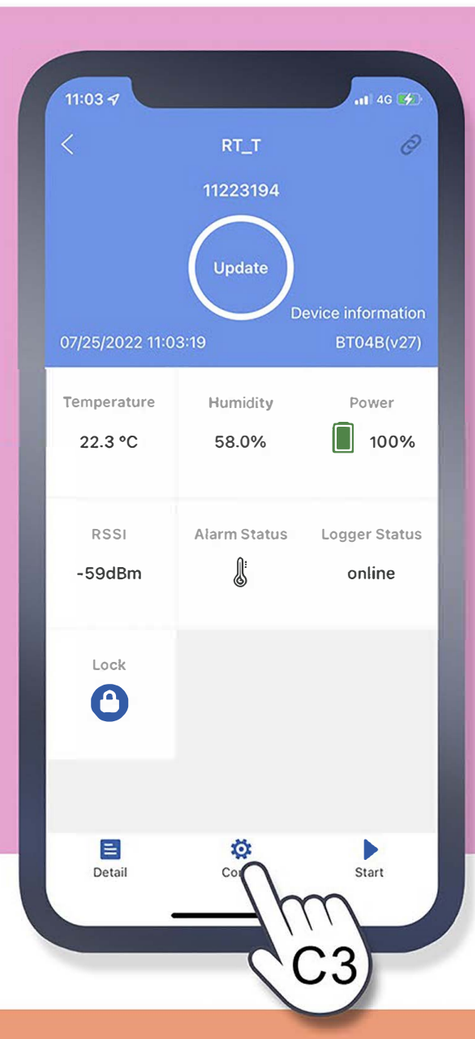
B - Upon waiting for a moment, your logger should appear, tap on it (B) and give it a second to load.



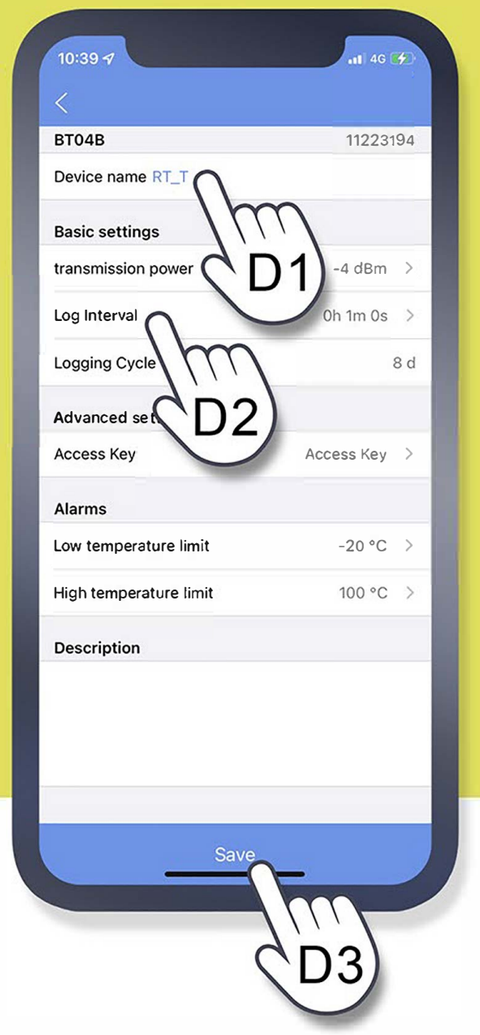
C - Click on the “Connect” button (**C1**), a password will be required (**C2**) (default is six 0: “000000”), click “sure” and let it load up. Then, down the bottom of the screen, click on “config” (**C3**).





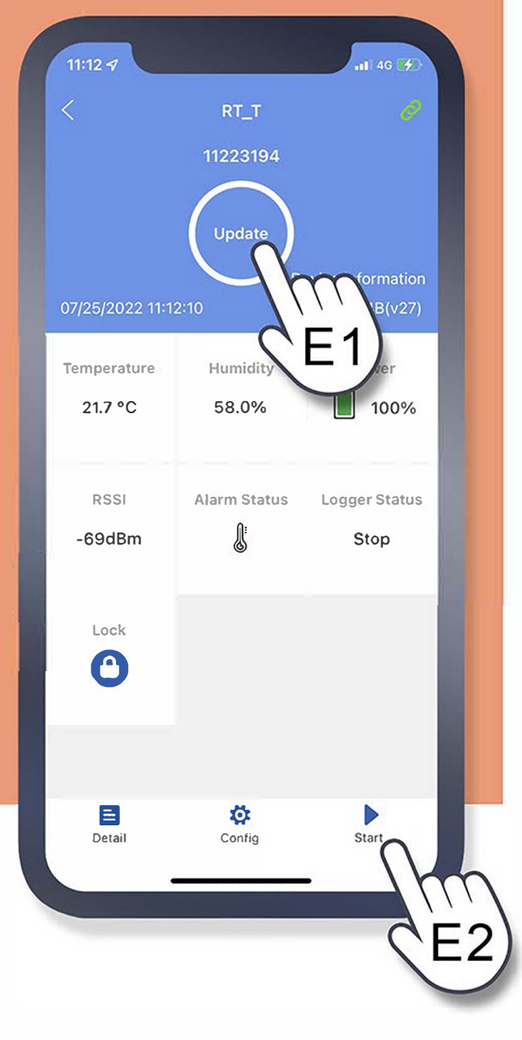


D - You can rename the device here (**D1**) (7 characters maximum). Click on “Log Interval” (**D2**) and set it to 1h. Click on “Save” down the bottom (**D3**).



E - Click on the “Update” button (**E1**), let it load up and then press the “Start” button (**E2**).

!Please note: the logger will not record any data if you don’t press the Play button! Once the button has been pressed, the Logger Status should display “Recording”



☑ Your logger is now set up and will automatically record one sample for each Log Interval period.

ACCESSING THE DATA AND REAL TIME READING

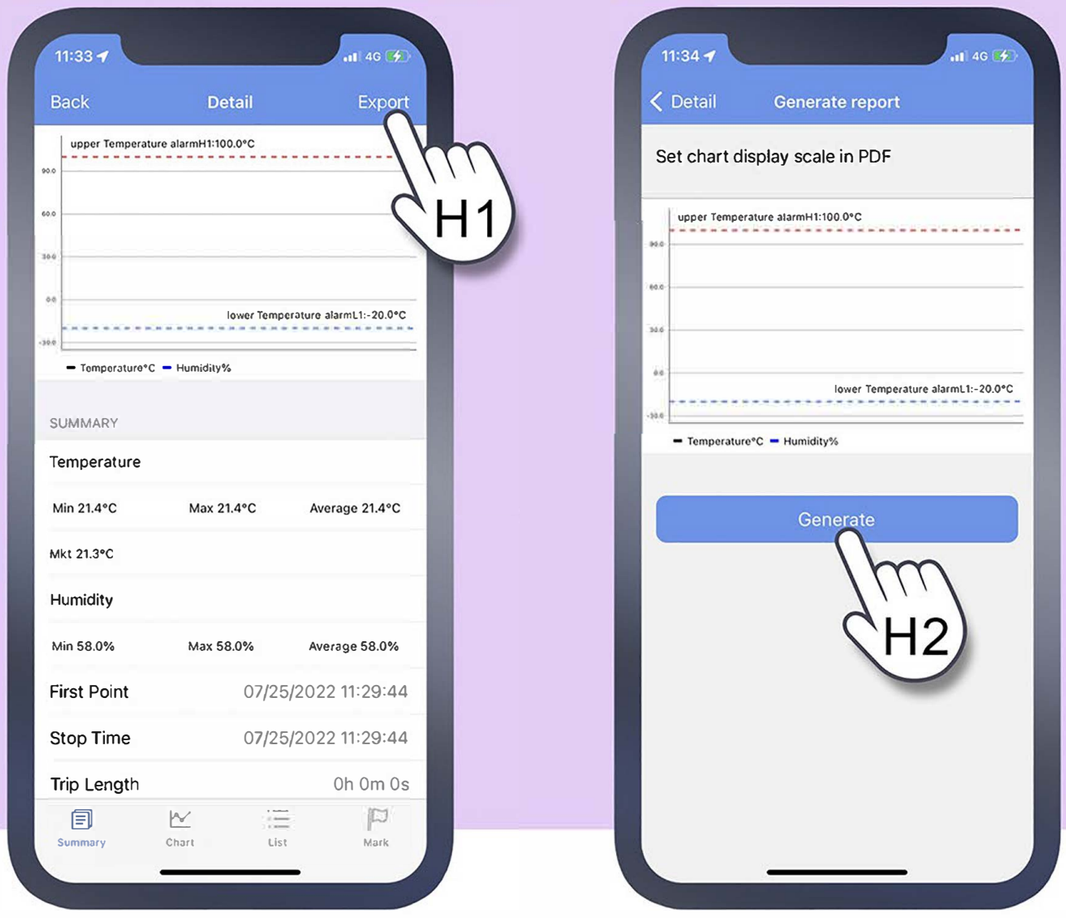
F – To read real time humidity or temperature, follow steps **A** and **B**. The current Temperature and Humidity level will be displayed

G – To access the data log, follow steps **A**, **B**, and **C1**. Now click on the “View Report” Button.
This will give you the Min Temp, Max Temp, Average Temp, Min RH%, Max RH% and Average RH% values since the device started logging data in.
You will also see the date and time the device started logging and the date and time of the latest log, as well as the duration of the current logging period and the number of data entries recorded.

PLEASE NOTE: if your logging interval is set to 1h, then you will have to wait at least one hour before you can access any data.

SENDING DATA IN AN EMAIL

H – To export data and send them in an email, click the Export button **(H1)**, then the Generate button **(H2)**, and select the Application you would like to use to send the data with. The export will attach the report in .PDF and in .CSV.



RESETTING A LOGGER

!If you want to conserve it, make sure you send the data in an email before resetting a logger or you will not be able to retrieve the data at all!

To erase all collected data from your logger and reset it for a new logging period, follow steps **A**, **B**, **C1**, [**H1** and **H2** to collect the data, or “Cancel” to ignore the report], then click on the Stop button (**E2**). All data has been erased. If you want to start logging again, follow the steps from **E2**. The logger is recording on a new file.