

Automatic mode quick guide conanair

Ver. 0.0.1

May.27, 2022

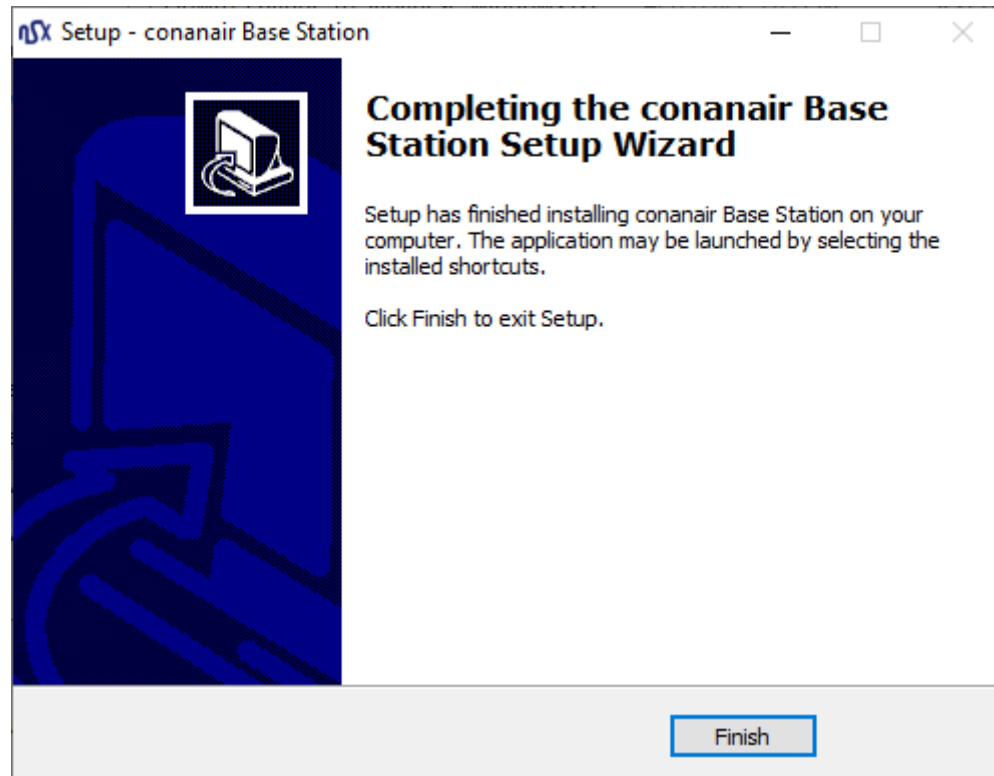
NSXe Co. LTD

Initial set-up procedure of automatic mode

- 1) Install the base station application on your PC
- 2) Edit the configuration files
- 3) Launch conanair(Put in batteries and connect to a PC with a browser)
- 4) Switch to automatic mode
- 5) Create an authentication key and download it to your PC
- 6) Move the authentication key to the specified PC folder
- 7) Connect conanair to a Wi-Fi access point
- 8) Connect your PC to a Wi-Fi access point
- 9) Start the base station application on your PC

1) Install the base station application on your PC

Launch cna_base_setup_2_0_3.exe in the Base_Station_installer folder on the supplied CD



2) Edit the configuration files with an editor

The configuration files (sample) are in the installed base station folder by default, the folder is located in C: ¥ conanair ¥ Auto ¥ cna_base ¥ CAIR_ROOT ¥ sample .conf, so copy the file to C: ¥ conanair ¥ Auto ¥ cna_base ¥ CAIR_ROOT and open them with a text editor.

[Refer to the sticker on the side of the main body for the SSID of the connair]



- CAIR_ROOT/tags.conf

Tag Name [arbitrary], ID [SSID of conanair]

- conanair-1,can_fa3c5e ← Required! [This is an example]
- CAIR_ROOT/schedule.conf [Available by default]
#Sample
*, daily, 10:00, 15:00, , , , , , , ← This line starting with * is applied to all conanairs and is **necessary!**

conanair-1, daily, 10:00, , , , , , , ,

- CAIR_ROOT/app_root.conf [Available by default]
Sample app_root file
APP_ROOT, APP_ROOT ← You can change the location of the saved folder
DATA_GEN, 3 ← This number refers to the number of data files saved
DATA_SYNC, 3 ← You can turn off and on data saving control(1=on, 0=off)

.....

Configuration file example

ID / Tag association File

File name and location: CAIR_ROOT / tags.conf

Writing rules

Field 1: Tag name

Field 2: ID

Measurement schedule setting file

File name and location: CAIR_ROOT / schedule.conf

Field 1: Tag name

Field 2: Schedule type

Fields 3-12: Schedule

**The shortest measurement
interval is 30 minutes**

The time is 24 hours

"Mon1 09:30" is 9:30 on the first Monday.

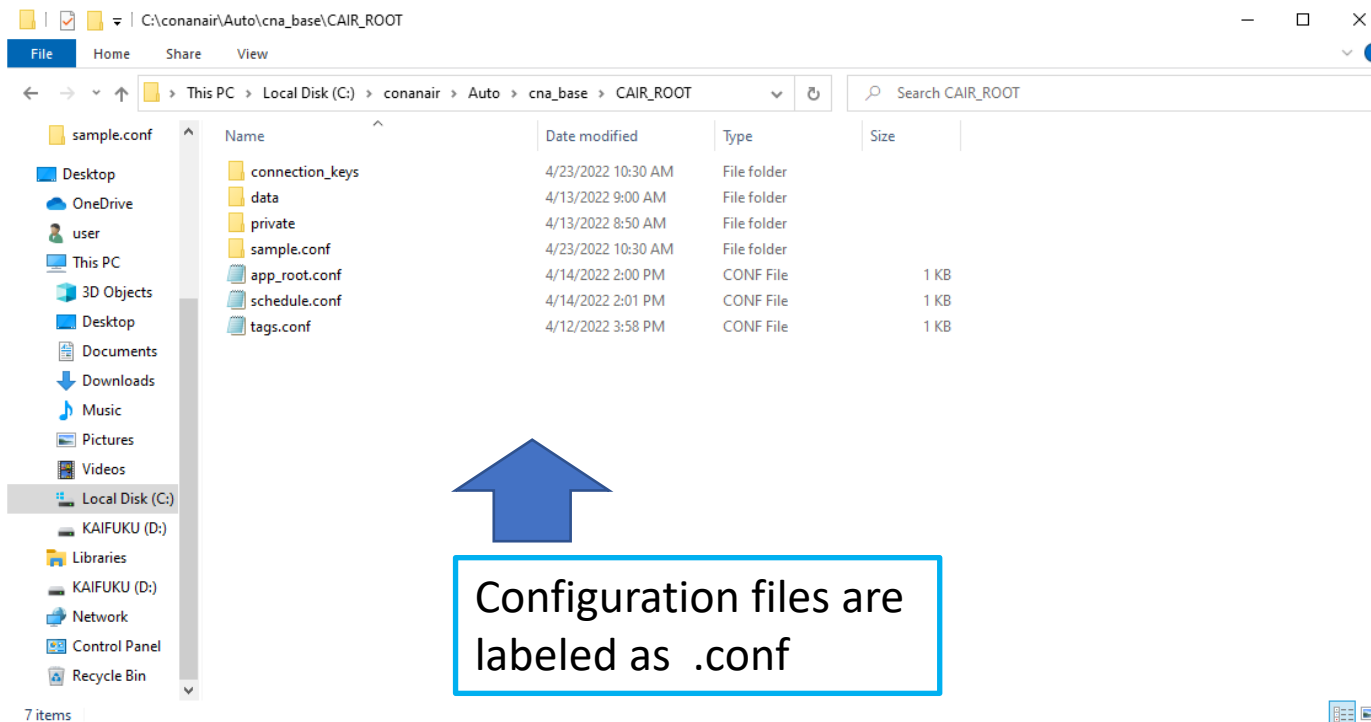
"Monthly, 05 09:30" is 9:30 on Monday of the Month

Please refer to the manual for details such as:

[conanair automatic mode interface specifications]

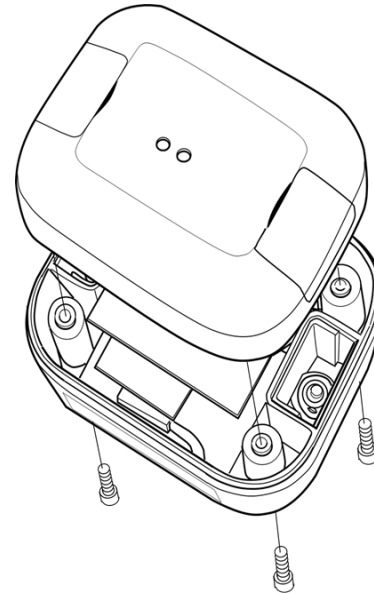
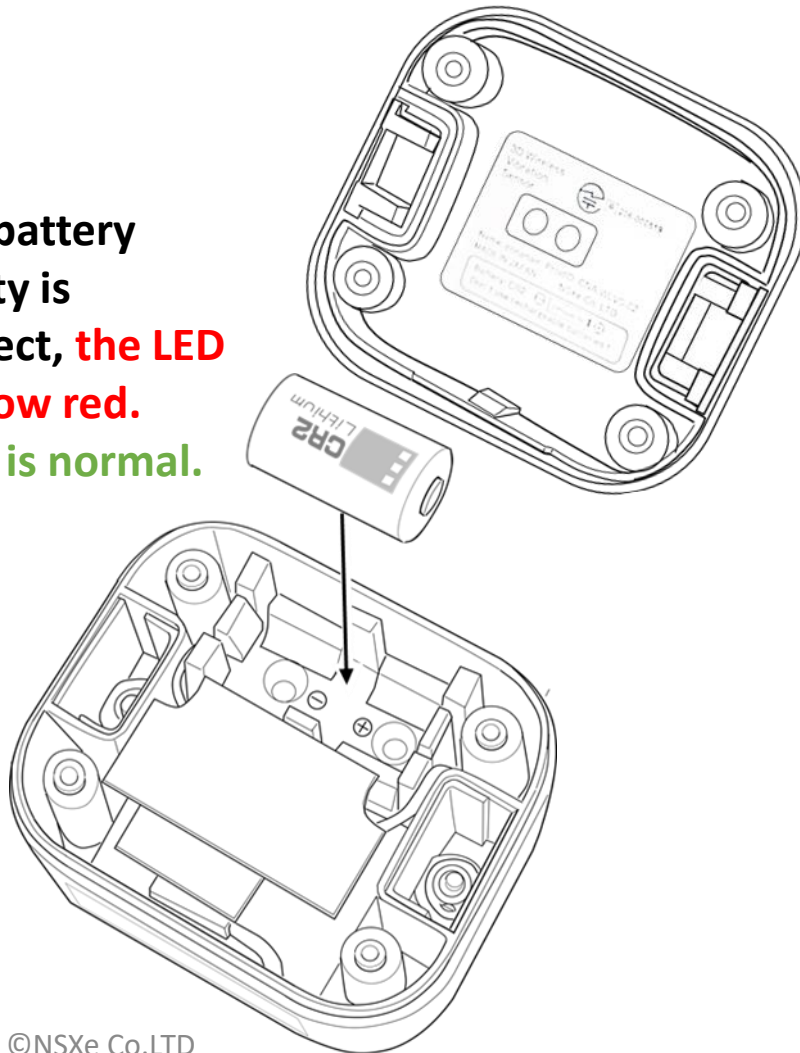
Save the configuration files in the CAIR_ROOT folder

Three sample configuration files are located in the sample_conf folder, so copy them to CAIR_ROOT, edit them, and use them.



3) Insert the battery in the conanair

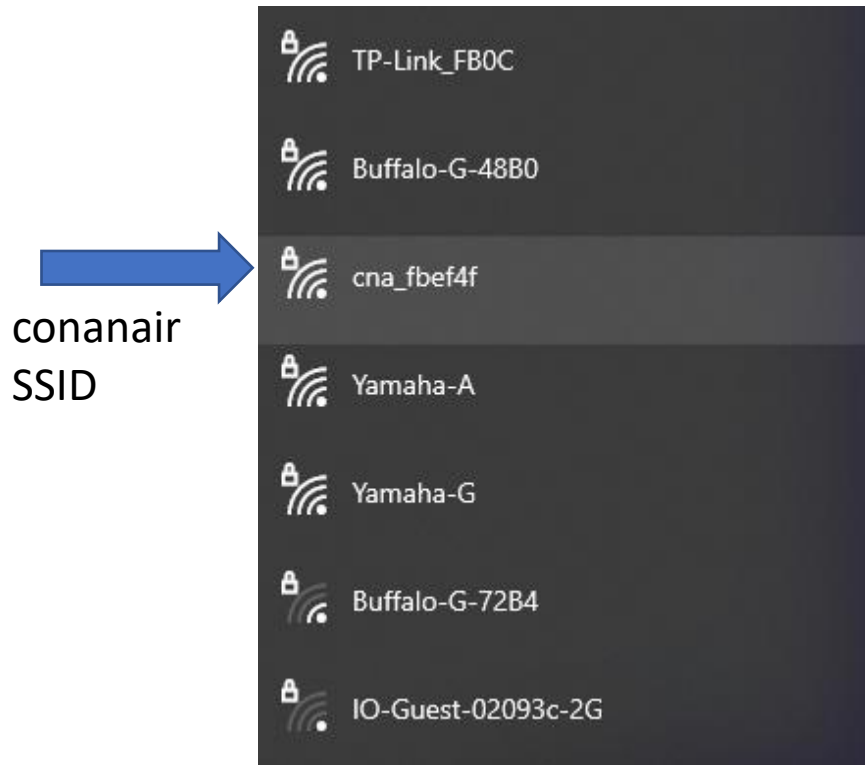
If the battery
polarity is
incorrect, the LED
will glow red.
Green is normal.



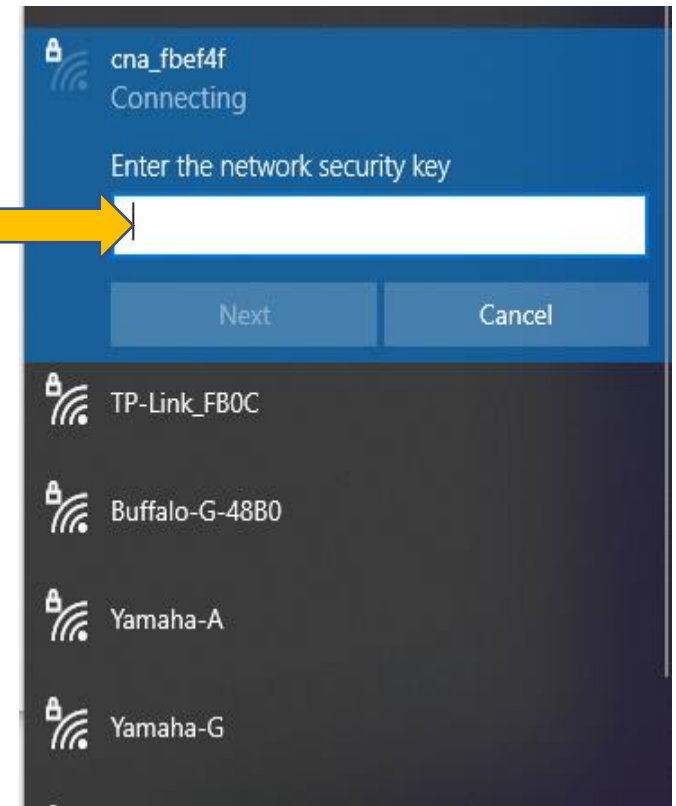
The battery is a CR2 lithium
battery. **Never put in a
rechargeable type, it will break
because the voltage is too high!**

Connect to the conanair via Wi-Fi on your PC

Connect to the conanair with Wi-Fi



KEY:
19920112



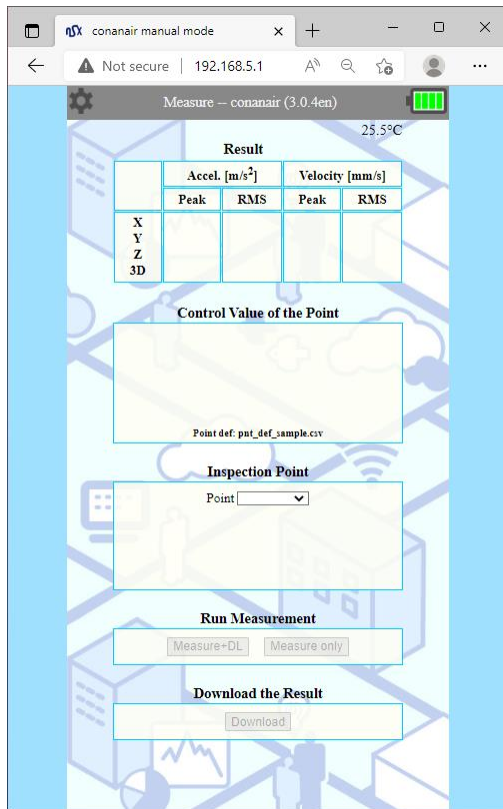
At this time, the LED blinks green

**After connection, the LED will blink
green and red alternately**

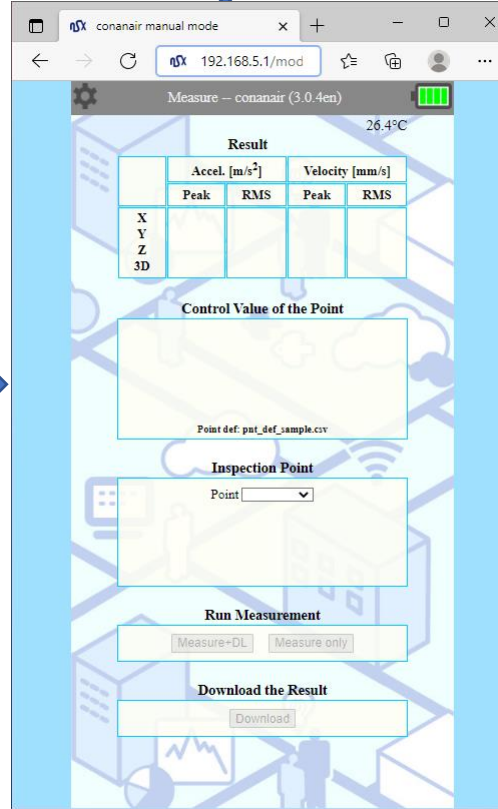
4) Switch from the initial state (default state) to the automatic mode

Recommended browser is Google Chrome or Microsoft Edge (Windows 10)

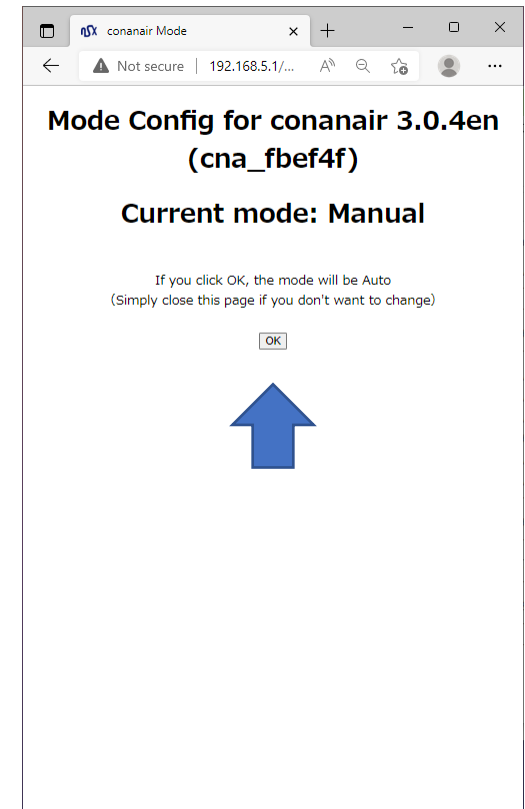
Connect to 192.168.5.1



Factory state

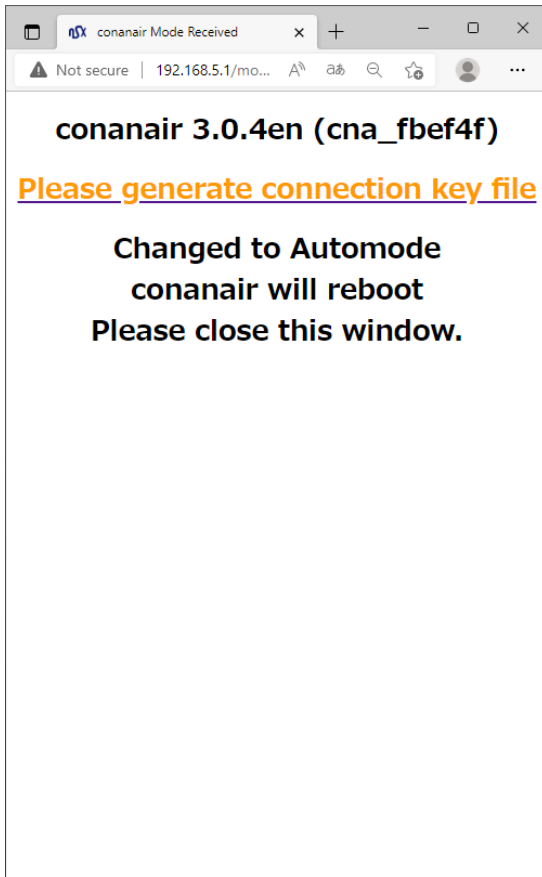


Switch to automatic mode
at 192.168.5.1/mode

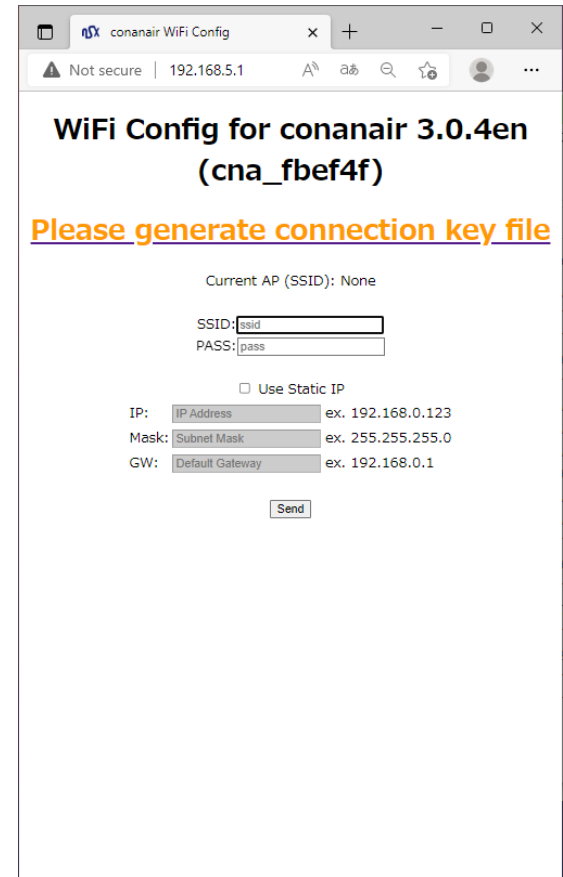


Click OK to switch to
automatic mode

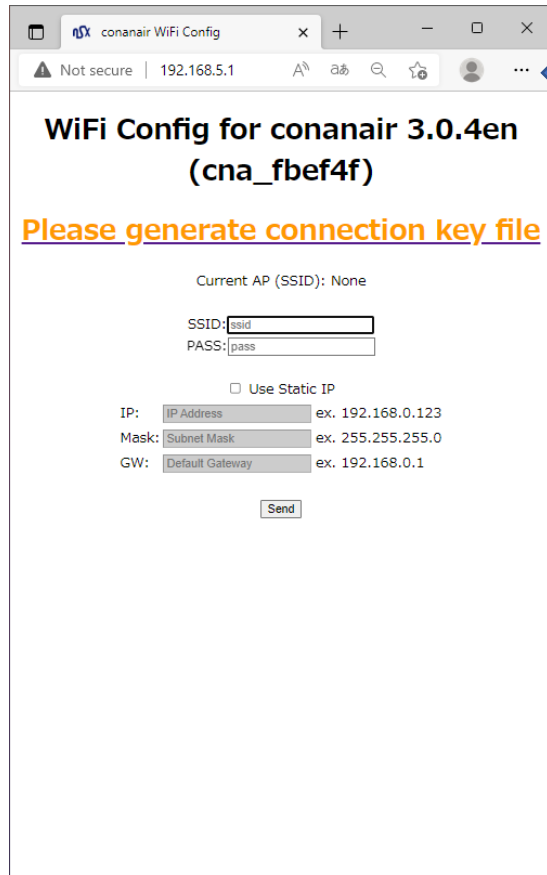
Reconnect to 192.168.5.1



① Close once
and connect to
192.168.5.1
again



5) Create an authentication key (required only for the first time)



WiFi Config for conanair 3.0.4en
(cna_fbef4f)

Please generate connection key file

Current AP (SSID): None

SSID:

PASS:

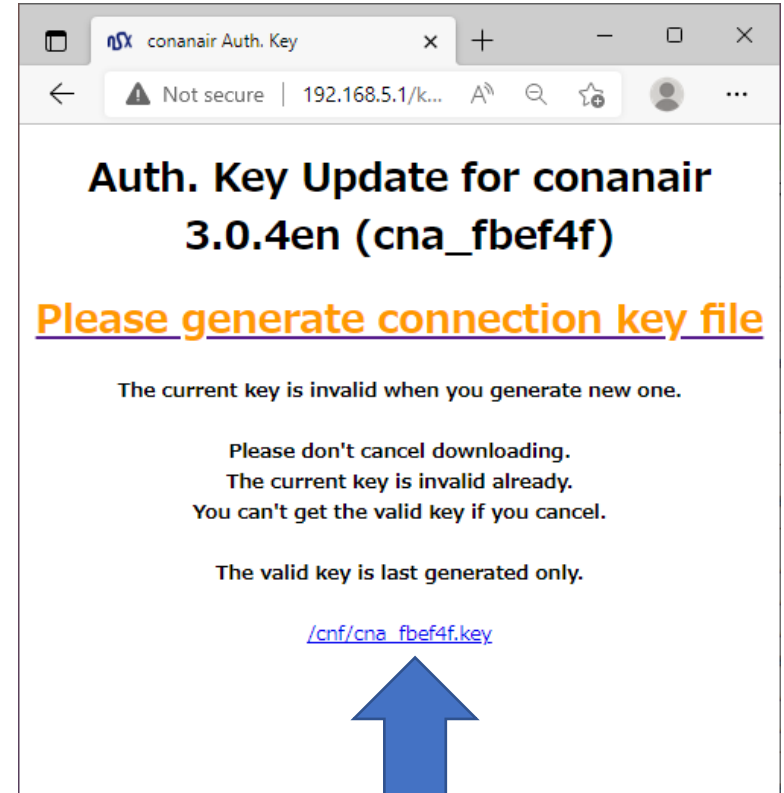
☐ Use Static IP

IP: ex. 192.168.0.123

Mask: ex. 255.255.255.0

GW: ex. 192.168.0.1

① Close once and
reconnect to
192.168.5.1



Auth. Key Update for conanair
3.0.4en (cna_fbef4f)

Please generate connection key file

The current key is invalid when you generate new one.

Please don't cancel downloading.
The current key is invalid already.
You can't get the valid key if you cancel.

The valid key is last generated only.

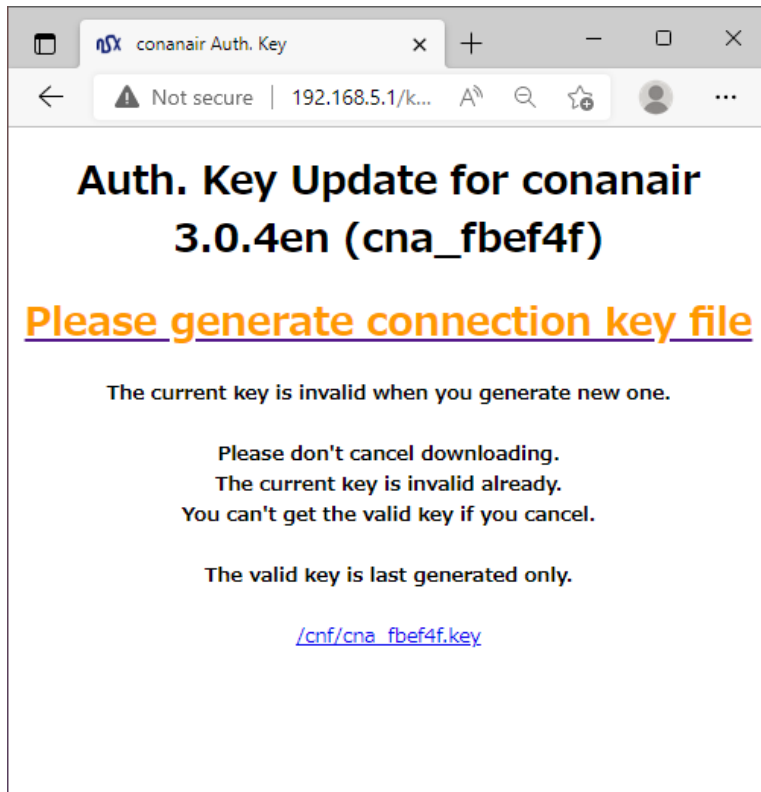
/cnf/cna_fbef4f.key

Click the link above to create
an authentication key

Switched to automatic mode

<Caution> If this screen does not appear, enter the
following in the URL input <http://192.168.5.1/key>

Download the authentication key

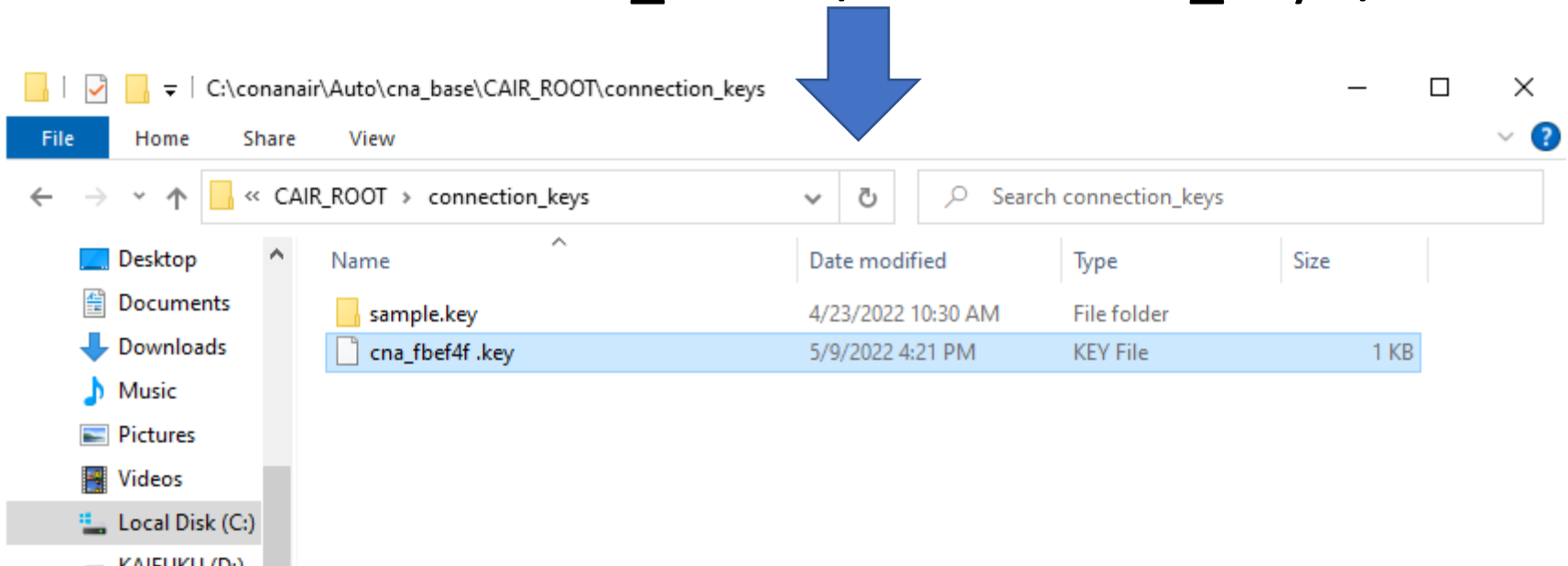


Saved in the download folder
on your PC

Downloaded authentication key file

6) Save the authentication key in the designated folder

- Authentication key file name: cna_*****.key
- Save location: CAIR_ROOT / connection_keys /



Note: CAIR_ROOT is under the folder where you first installed the application.

7) Connect to the Wi-Fi access point

Make sure your Wi-Fi access point is ready

① Return to 192.168.5.1

WiFi Config for conanair 3.0.4en
(cna_fbef4f)

Current AP (SSID): None

SSID:
PASS:

☐ Use Static IP

IP: ex. 192.168.0.123
Mask: ex. 255.255.255.0
GW: ex. 192.168.0.1

If you want to use static IP address, check this box and enter the information below.

② Enter the SSID and PASS, and click the Send button when the Wi-Fi access point is ready.

conanair 3.0.4en (cna_fbef4f)

SSID: TP-Link_FB0C
PASS: *****

Input received. Will try to connect as STA.

Please close this window.

No need to enter IP address for DHCP

The SSID and PASS will be those of the Wi-Fi access point you use. For static IP addresses, GW is the router's static IP address. If you are not using a router, use a dummy address.

Before clicking the Send button, the LED is blinking green and red alternately.

Now the conanair is connected to the Wi-Fi Access Point instead of directly to the PC.

Please connect to the Wi-Fi Access Point to receive data from the conanair.

Note:

If the Wi-Fi access point has a WPS button, press the WPS button without entering the SSID and PASS.

If the Wi-Fi connection fails

- If the Wi-Fi connection fails

After the green LED flashes for a while, **the green and red LEDs will flash alternately at high speed.**

[Check the SSID and PASS, make sure they are correct, and try again]

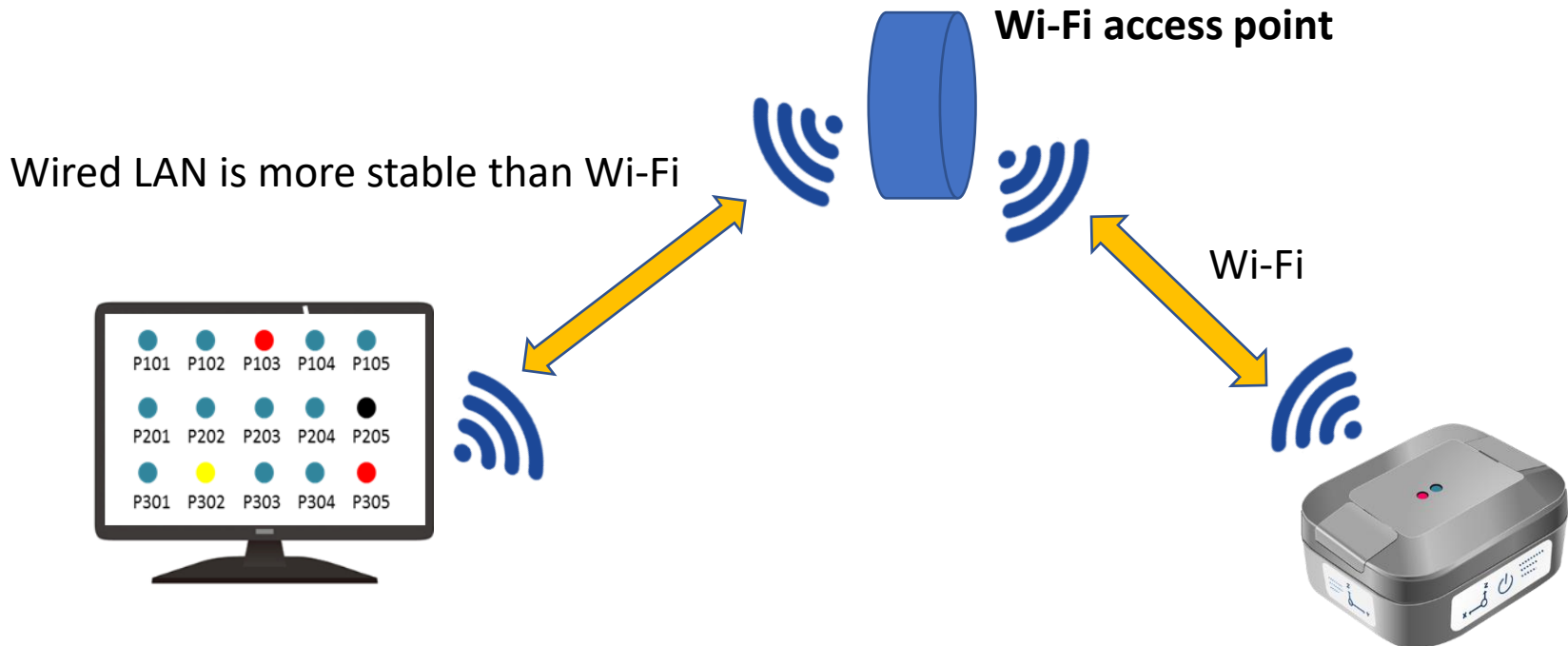
- If the Wi-Fi connection is successful:

After the green LED blinks for a while, the green and red LEDs will blink about 10 times simultaneously while taking measurement, then the green LED will turn on while sending the data and it will turn off when it finishes.

→ This process will repeat several times while calibrating.

8) Connect your PC to a Wi-Fi access point

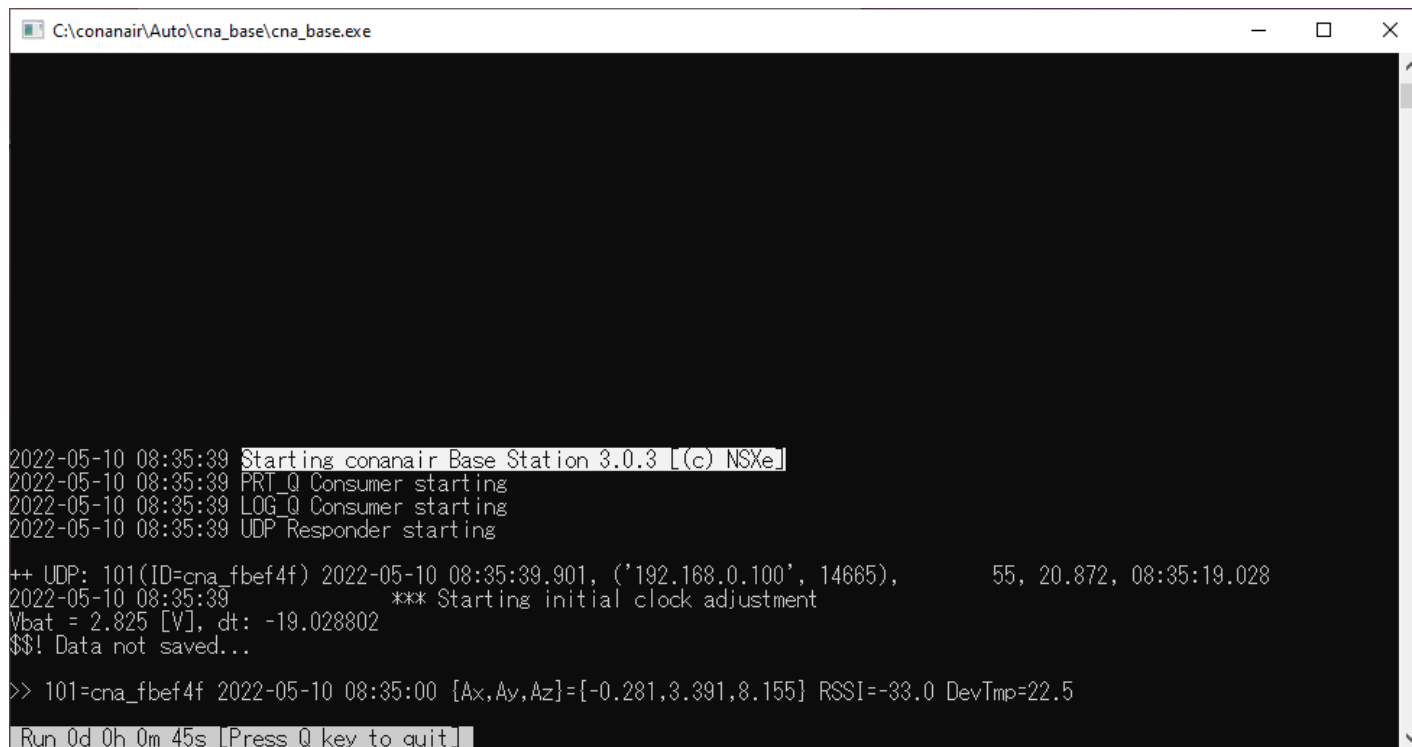
- Connect your PC to the Wi-Fi access point to which conanair is connected.



9) Start the base station application

Double-click the installed base station application icon to start it

When started, a command prompt window opens



```
C:\conanair\Auto\cna_base\cna_base.exe

2022-05-10 08:35:39 Starting conanair Base Station 3.0.3 [(c) NSXe]
2022-05-10 08:35:39 PRT_Q Consumer starting
2022-05-10 08:35:39 LOG_Q Consumer starting
2022-05-10 08:35:39 UDP Responder starting

++ UDP: 101(ID=cna_fbef4f) 2022-05-10 08:35:39.901, ('192.168.0.100', 14665),      55, 20.872, 08:35:19.028
2022-05-10 08:35:39      *** Starting initial clock adjustment
Vbat = 2.825 [V], dt: -19.028802
$$! Data not saved...

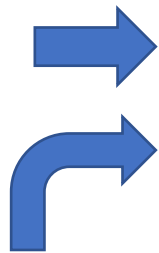
>> 101=cna_fbef4f 2022-05-10 08:35:00 [Ax,Ay,Az]=[-0.281,3.391,8.155] RSSI=-33.0 DevTmp=22.5

Run 0d 0h 0m 45s [Press Q key to quit]
```

The base station application must be running at all times.

Automatic execution

First
communication
confirmation:
**During calibration
data is not saved**



```
C:\conanair\Auto\cna_base\cna_base.exe

2022-05-10 08:35:39 Starting conanair Base Station 3.0.3 [(c) NSXe]
2022-05-10 08:35:39 PRT_Q Consumer starting
2022-05-10 08:35:39 LOG_Q Consumer starting
2022-05-10 08:35:39 UDP Responder starting

++ UDP: 101(ID=cna_fbef4f) 2022-05-10 08:35:39.901, ('192.168.0.100', 14665), 55, 20.872, 08:35:19.028
2022-05-10 08:35:39 *** Starting initial clock adjustment
Vbat = 2.825 [V], dt: -19.028802
$$$! Data not saved...

>> 101=cna_fbef4f 2022-05-10 08:35:00 [Ax,Ay,Az]=[-0.281,3.391,8.155] RSSI=-33.0 DevTmp=22.5

++ UDP: 101(ID=cna_fbef4f) 2022-05-10 08:38:35.721, ('192.168.0.100', 14665), 56, 16.589, 08:38:19.133
$$$ TCP: 101(ID=cna_fbef4f) now=2022-05-10 08:40:00, next=2022-05-10 08:45:00, Vbat = 2.837 [V], dt: 100.866997
$$$! 2nd.Init: Data not saved...

>> 101=cna_fbef4f 2022-05-10 08:40:00 [Ax,Ay,Az]=[-0.278,3.406,8.154] RSSI=-43.0 DevTmp=21.5

Run 0d 0h 3m 13s [Press Q key to quit]
```

Automatic execution has started.
The measurement data is saved in /
can_bts / CAIR_ROOT / data.
Data will be saved after the first
measurement at the scheduled time.

Please refer to the manual for details.

Automatic measurement data will be saved after the scheduled measurement

```
C:\conanair\Auto\cna_base\cna_base.exe

>> 101=cna_fbef4f 2022-05-10 08:35:00 [Ax,Ay,Az]=[-0.281,3.391,8.155] RSSI=-33.0 DevTmp=22.5
++ UDP: 101(ID=cna_fbef4f) 2022-05-10 08:38:35.721, ('192.168.0.100', 14665), 56, 16.589, 08:38:19.133
$$ TCP: 101(ID=cna_fbef4f) now=2022-05-10 08:40:00, next=2022-05-10 08:45:00, Vbat = 2.837 [V], dt: 100.866997
$$$! 2nd.Init: Data not saved...

>> 101=cna_fbef4f 2022-05-10 08:40:00 [Ax,Ay,Az]=[-0.278,3.406,8.154] RSSI=-43.0 DevTmp=21.5
++ UDP: 101(ID=cna_fbef4f) 2022-05-10 08:40:15.762, ('192.168.0.100', 14665), 57, 16.584, 08:39:59.178
$$ TCP: 101(ID=cna_fbef4f) now=2022-05-10 08:40:00, next=2022-05-10 08:45:00, Vbat = 2.841 [V], dt: 0.821775

>> 101=cna_fbef4f 2022-05-10 08:40:00 [Ax,Ay,Az]=[-0.278,3.406,8.162] RSSI=-41.0 DevTmp=21.0
# 2022-05-10 08:40:36 Data Management start
# 2022-05-10 08:40:36 Data Management complete [Files: 3->3/0, Elapsed: 0.031 s]
# 2022-05-10 08:40:36 Data Management start (+plus_cna)
# 2022-05-10 08:40:36 Data Management complete [Files: 3->3/0, Elapsed: 0.016 s]
++ UDP: 101(ID=cna_fbef4f) 2022-05-10 08:45:18.977, ('192.168.0.100', 14665), 58, 16.579, 08:45:02.398
$$ TCP: 101(ID=cna_fbef4f) now=2022-05-10 08:45:00, next=2022-05-10 08:50:00, Vbat = 2.848 [V], dt: -2.398325

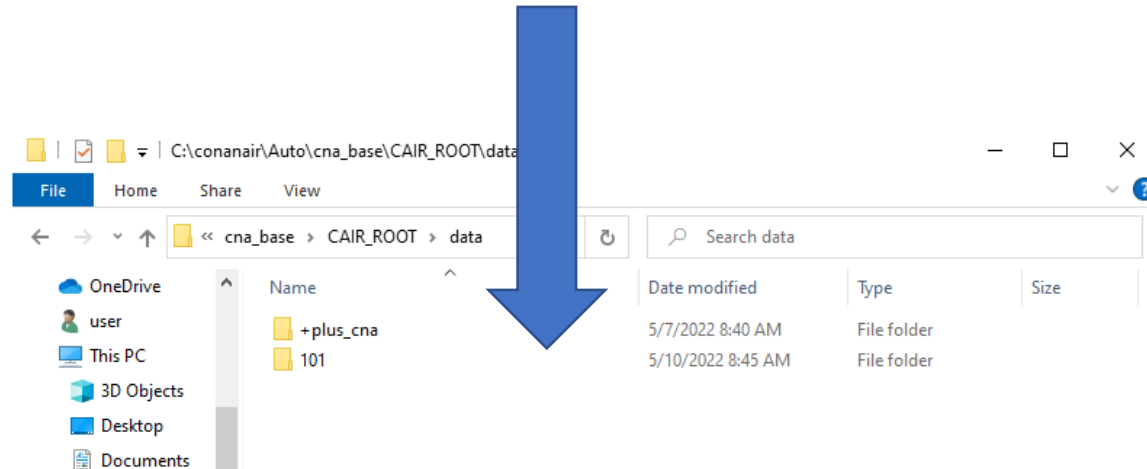
>> 101=cna_fbef4f 2022-05-10 08:45:00 [Ax,Ay,Az]=[-0.280,3.409,8.174] RSSI=-36.0 DevTmp=20.0
*** 2022-05-10 08:45:22 conanair Base Station App. 3.0.3 [(c) NSXe] is up and running for 0d 0h 9m 43s
# 2022-05-10 08:45:37 Data Management start
# 2022-05-10 08:45:37 Data Management complete [Files: 4->4/0, Elapsed: 0.031 s]
# 2022-05-10 08:45:37 Data Management start (+plus_cna)
# 2022-05-10 08:45:37 Data Management complete [Files: 4->4/0, Elapsed: 0.016 s]
Run 0d 0h 10m 0s [Press Q key to quit]
```

The measurement data by automatic execution is saved in / can_bts / CAIR_ROOT / data.

Note: The minimum measurement interval is 30 minutes

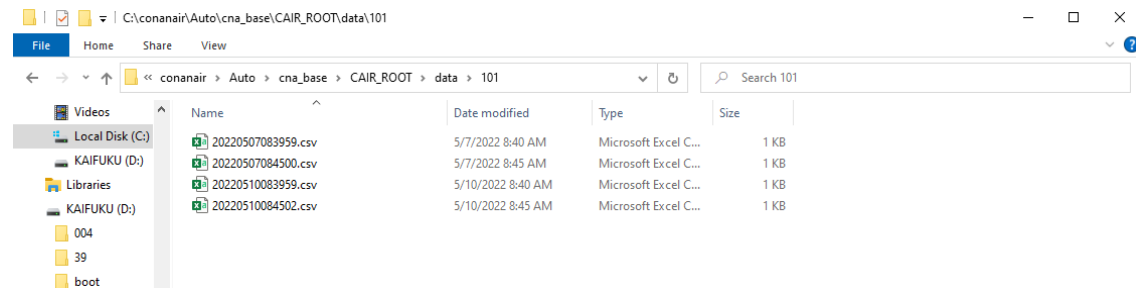
Saved under CHAIR_ROOT / data

C:\conanair\Auto\cna_base\CHAIR_ROOT\data



A folder with the Tag name will be created

One measurement record in one CSV file



When you want to exit the base station application

- Enter [Q] from the keyboard in the base station application
- Close the command prompt window

Change measurement schedule

- Edit CAIR_ROOT / schedule.conf
- Schedule changes are automatically updated at the next measurement timing according to the previous schedule.
- If you want to forcibly change the schedule, reset the conanair by touching the switch with a magnet.

Please refer to the manual for details.

How to change to manual mode

- Reset the conanair by touching the switch with a magnet, the green LED will turn on for a few seconds. (if the light doesn't turn on, wait for a while, or touch the switch with a magnet for at least 3 seconds.)
- Double tap the conanair (tap twice) while the first green LED is on. Then the green LED will blink once.
- Double tap conanair (tap twice) the green LED will blink twice. Then double tap the conanair (tap twice) and green LED will blink 3 times
- Now you can connect to conanair from your PC via Wi-Fi and connect to 192.168.5.1 with your browser.
- You can change to manual mode at 192.168.5.1/mode in your browser.

Please refer to the manual for details.