



Bluetooth & USB Console Application Manual

USB setup utility

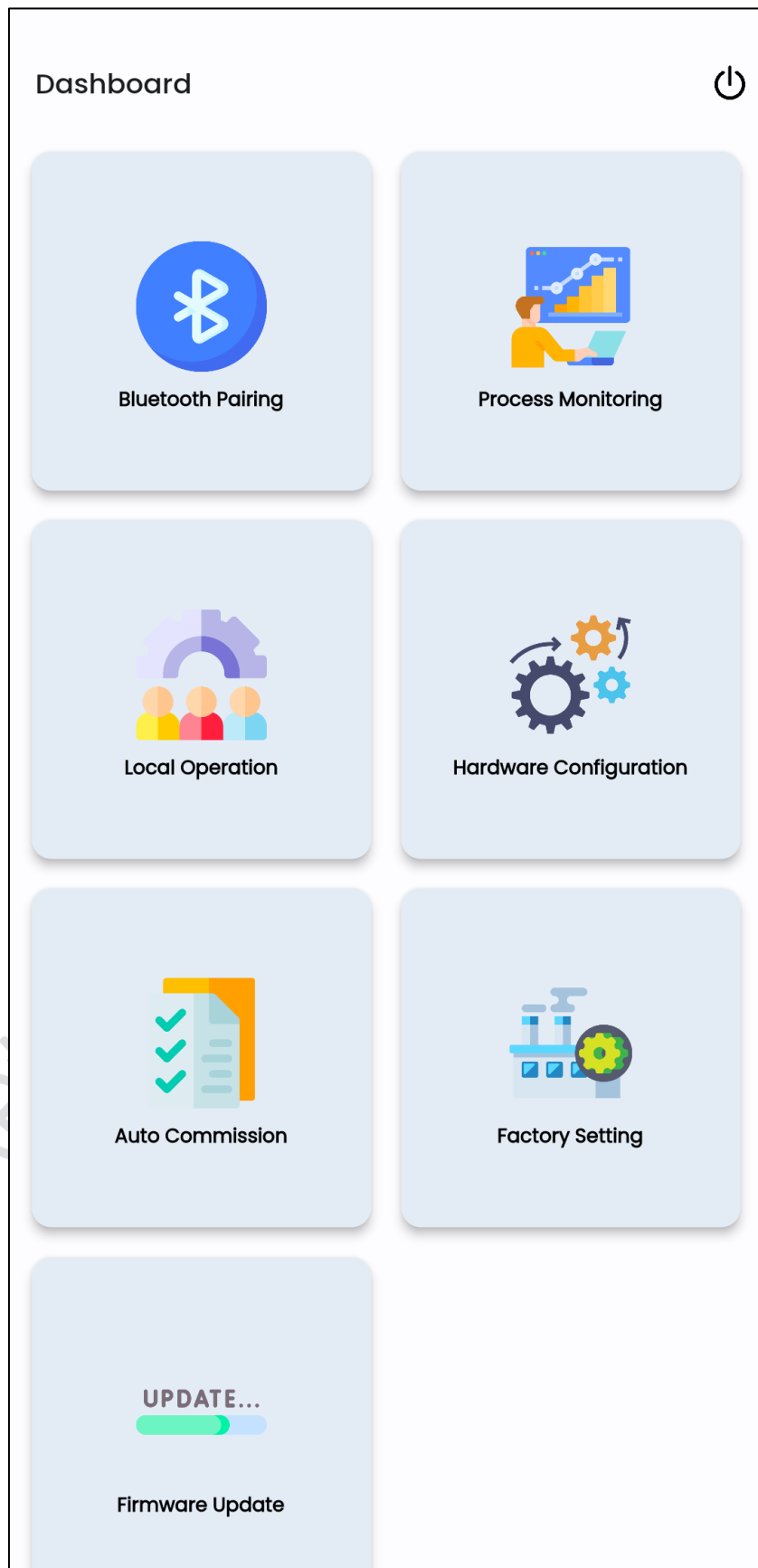
This utility is useful serial port terminal created for internal use only, to send the commands to the embedded devices.

Features:

1. Complete support with android devices through usb port
2. All basic/advanced commands to the devices.
3. Easy to use.
4. Auto detect ports and set baud rate.

User Interface

1. Dashboard



1. **Bluetooth Pairing:** *Work in process.*

2. **Process Monitoring:**

Visual representation of INTG data.

3. **Local Operation:**

Visual representation with updated values and set the sub-chak modes (Auto, manual, test) similarly operates the operations (flow, pos, open/close)

4. **Hardware Configuration:**

General settings (date-time, site-name, interval, firmware) and IO status detailing commands with advanced values.

5. **Factory Setting:**

Set the factory reset to the Analog Input (Inlet PT, Outlet PT).

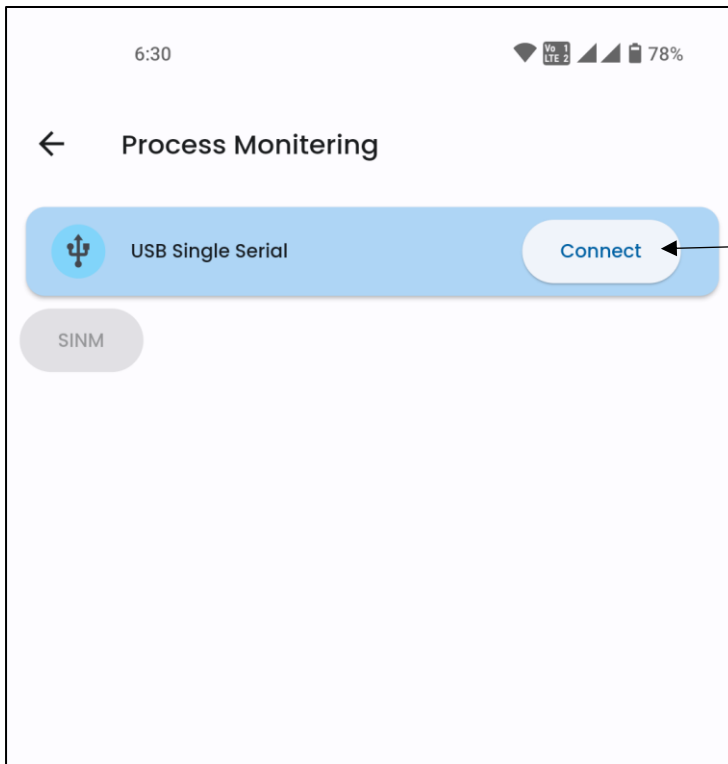
6. **Auto Commission:**

Check the communication with LoRa and PT valve test.

7. **Firmware Update:** *Work in process.*

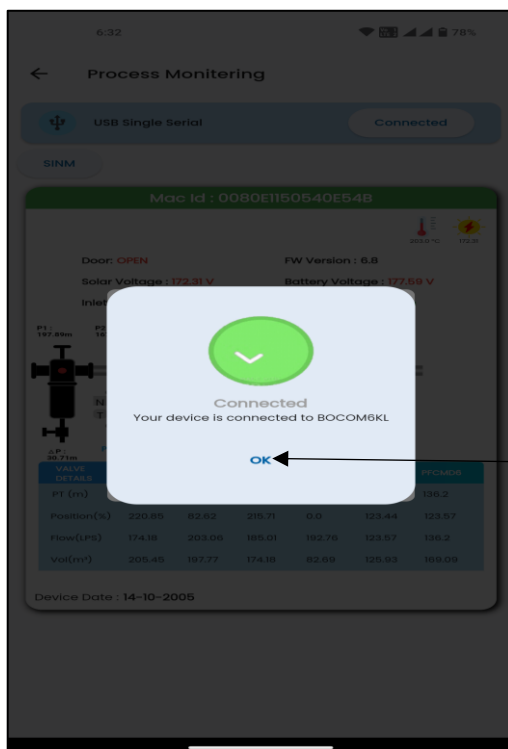
➤ Process Monitoring

Click on Connect button to connect with device.

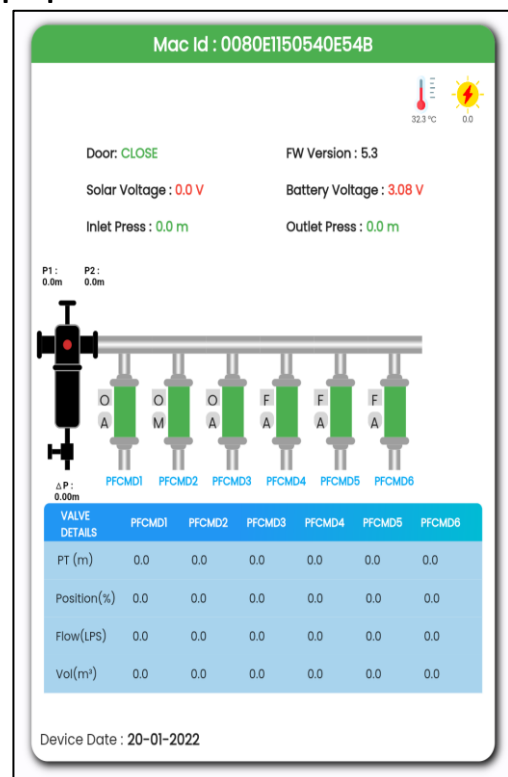


Click on the connect button and then click on SINM to identify the controller type.

Enable (SINM) button to get the site name and connections status and press OK. If the device is unable to send the proper response, then you will get the retry pop-up window.



Click on OK to get the INTG data from the device

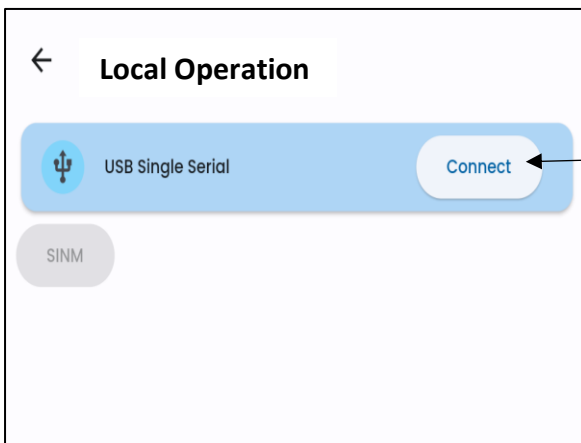


We get the Connected device details.

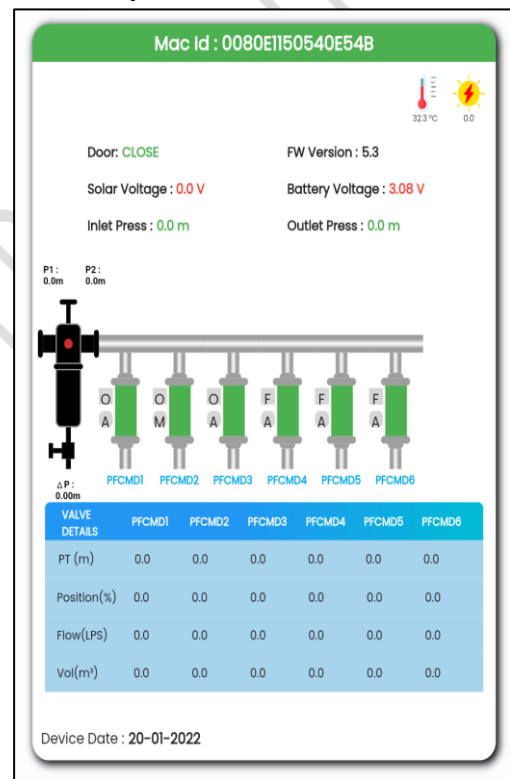
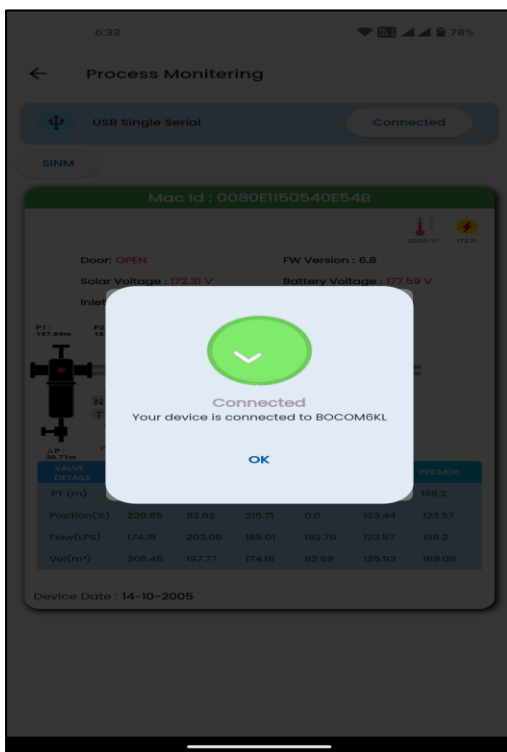
Info.: if you think the fetched data is not proper then you can refresh the page by pulling the page down.

➤ Local Operations

Click on Connect button to connect with device.

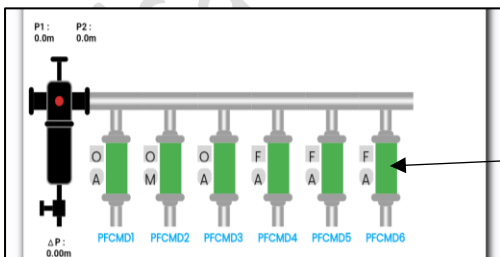


Enable (SINM) button to get the site name and connections status and press OK.

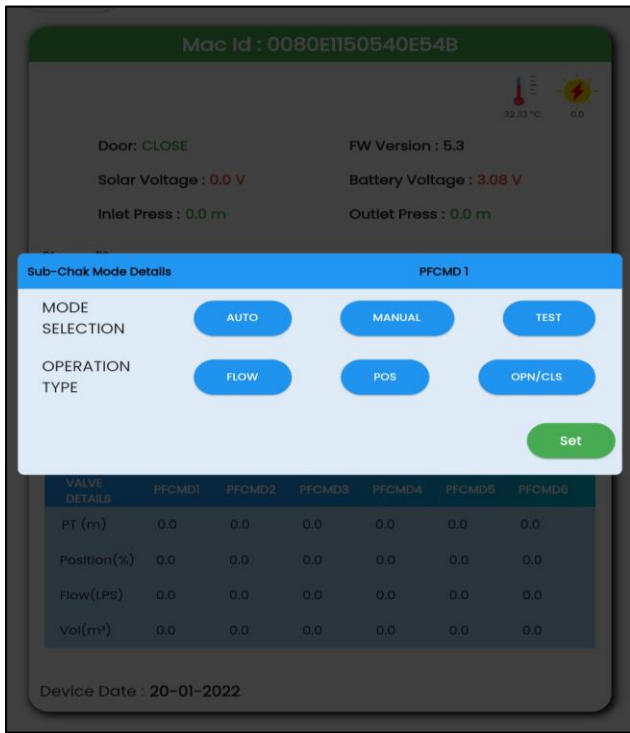


We get the Connected device details.

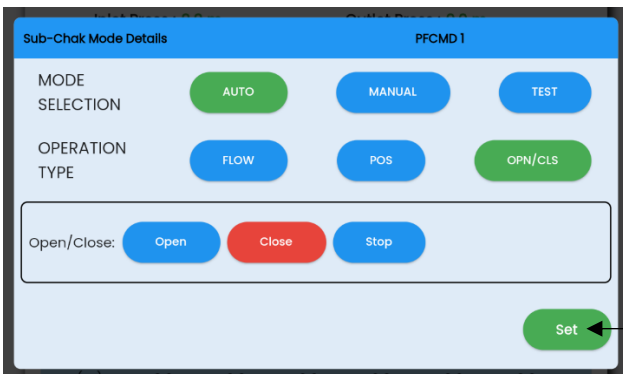
Info.: if you think the fetched data is not proper then you can refresh the page by pulling the page down.



Click on PFCMD Show Pop-up to set mode.



On this pop-up window you are able to set the PFCMD modes to Auto, Manual, Test and Flow, Position, Open/Close.



After selecting the modes click on set button to send the command to the controller.

info.: After sending the command successfully it will show a pop that says command sent successfully else it will show Command reserved ended.

➤ Hardware Configuration

1. General Setting

← HARDWARE CONFIGURATION

General Settings IO STATUS

USB Single Serial Connected

Datetime : 2022/01/20 01:57:10 Get Set

Site Name : Get Set

IO Interval : Get Set

Firmware Version : Get

Pocket Response Clear

CONSOLE_COMMAND_RECIEVED
PACKET FORMAT MATCHED
BOCOM6KL DTS 2022 1 20 1 57 10
>

Click on get button the fetch the data from the controller

Click on set button to send command to controller

Press get and get Date-time of device and for set enter date-time and press set button


2. IO Status

←

HARDWARE CONFIGURATION

General Settings

IO STATUS

 USB Single Serial

Connected

INTG

Datetime : 20-01-2022 Temprature : 32.39 °C

Battery Voltage : 3.08 V Solar Voltage : 0.0 V

AI 1 : 0.0 AI 2 : 0.0

Packet Indication : INTG POS Fail : 0

Firmware Version : 5.3 PT Fail : 0

PFCMD 1

Flow : 0.0 m³ Outlet PT : 0.0

Postion : 0.0 % Daily Volume : 0.0

Run Time 0.0

PFCMD 2

Flow : 0.0 m³ Outlet PT : 0.0

Postion : 0.0 Daily Volume : 0.0

Run Time 0.0

PFCMD 3

Flow : 0.0 m³ Outlet PT : 0.0

Postion : 0.0 Daily Volume : 0.0

Run Time 0.0

After Connecting to the controller hit on the INTG button to fetch the data of the controller and it will show you the converted output on the screen

On click of INTG Button get full data of intg in converted from.

➤ Factory Setting

Factory Setting have 3 tab to show these are as follow.

- General Settings
- IO Configuration
- Operation Mode

1. General Settings

← Factory Setting

General Settings IO Configuration Operation Mode

USB Single Serial
Unknown Manufacturer Connected

Get All

Datetime : Get Set

Site Name : Get Set

IO Interval : Get Set

Firmware Version : Get

Alarm En/Ds : Get Set

Set All

Pocket Response Clear

Click on Get All button to fetch all the showing Information from the controller device one by one

Click on Set All button to send the setting commands to the device at same time this will take some time.

Press get and get Date-time of device and for set enter date-time and press set button this page is same as General Setting page of Hardware Configuration so you can refer that also for this page.

If the any command gets interrupted or devices is not able to fetch the data, then you can click on the get button again.

2 .IO Configuration

The screenshot shows the 'Factory Setting' interface with three tabs: 'General Settings', 'IO Configuration' (selected), and 'Operation Mode'. Under 'IO Configuration', it displays 'USB Single Serial' with 'Unknown Manufacturer'. A blue 'Connect' button is visible on the right side of the page.

Click on connect to connect to the controller and it will enable SINM button to fetch controller type.

When you connect to controller then it will show you SINM button to get the controller type.

The screenshot shows the 'Factory Setting' interface after a successful connection. The 'IO Configuration' tab is active, displaying 'CP2102 USB to UART Bridge Controller' by 'Silicon Labs' with a 'Connected' status. A blue 'SINM' button is highlighted. Below it, there are input fields for 'DI:' and a 'Get' button. Further down, under 'Analog Input Status', there are sections for 'INLET PT 1', 'INLET PT 2', 'OUTLET PT 1', and 'OUTLET PT 2'. Each section contains fields for 'Actual Value', 'Actual Count', 'Range' (Min/Max), and 'Raw Count' (Min/Max), along with 'Get' and 'Set' buttons.

Click on connect to connect to the controller and it will enable SINM button to fetch controller type.

On this get button you will get the Door Status of the controller

In this page you can perform advance operation on the node/ controller, you can change the inlet PT, outlet PT and solenoid values of the controller by sending command by clicking set button.

3. Operation Mode

← Factory Setting

General Settings IO Configuration **Operation Mode**

CP2102 USB to UART Bridge Controller Connected

SINM

PFCMD 1

PFCMD OPERATION MODE MANUAL Set

CONTROL MODE Flow Control Set

Flow Set Point : _____ (lps)

Sustaining Pressure : _____ (m)

Reducing Pressure : _____ (m)

IRRIGATION Enable Set

EMERGENCY STOP Disable Set

Click on connect to connect to the controller and it will enable SINM button to fetch controller type.


Using this dropdown, you can change the PFCMD numbers to perform operation on the selected

In this page you are allowed to set the PFCMD in to manual mode, Flow Control Mode and you can set the Irrigation enable and Emergency stop Disable by click on submit button. And in single PFCMD you don't have the dropdown to change the PFCMD.

➤ Auto Commissioning

←

Auto Commistioing



CP2102 USB to UART Bridge Controller

Connected

SINM

Lora Communication :
Battery Voltage :
Solar Voltage :
Door 1 :
Door 2 :

Ok
3.16
0.0
OPEN
OPEN

INTG

Accept

PT Valve Test

Before Inlet PT

mA

bar

OK

Not Ok

After Inlet PT

mA

Bar

OK

Not Ok

Outlet PT

PFCMD1

mA

bar

OK

Not Ok

PFCMD2

mA

Bar

OK

Not Ok

PFCMD3

mA

Bar

OK

Not Ok

PFCMD4

mA

Bar

OK

Not Ok

Click on connect to connect to the controller and it will enable SINM button to fetch controller type.

Click on Accept button to proceed the process, after accepting you will get the PT values and other values from the device

After getting the values you can ether select OK or Not Ok

←

Auto Commistioing

CP2102 USB to UART Bridge Controller

Connected

SINM

PFCMD 3

OPEN

%

OK

NOT OK

CLOSE

%

OK

NOT OK

PFCMD 4

OPEN

%

OK

NOT OK

CLOSE

%

OK

NOT OK

PFCMD 5

OPEN

%

OK

NOT OK

CLOSE

%

OK

NOT OK

PFCMD 6

OPEN

%

OK

NOT OK

CLOSE

%

OK

NOT OK

Submit

After getting all the values from the device and after accepting the values but click on ok or not ok then you are allowed to submit the data in the form of PDF for this you will get a pop-up form.

← Auto Commistioing

CP2102 USB to UART Bridge Controller Connected

SINM

Enter Details

Device Name
BOCOM6

Site Name
SAISANKET

Node No
210

Cancel Submit

OPEN NOT OK

CLOSE NOT OK

OPEN NOT OK

CLOSE % OK NOT OK

In his pop-up form you have to input the Device Name, Site Name and Node Number of the controller to generate the PDF.

PDF Saved

The PDF was saved successfully.

OK

PFCMD 5

After filling all the fields and clicking on submit button you will get this pop-up that says PDF is Saved else it will show error message.