A-52xx DCS User Manual


V1.12 Edit: 2019.12.5

● Android APP Quick Start

The A-52 WiFi series controller had installed an initial program in it. You can use the smart phone to communicate with it directly.

Operation Video:http://www.szatc.com/uploads/download_file/A52QuickStart.mp4.

1. You can download it from the below web link:

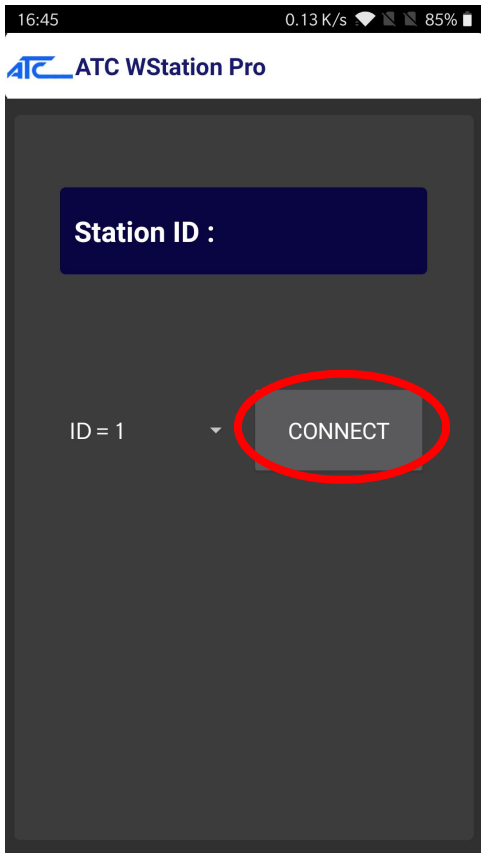http://www.szatc.com/uploads/download_file/ATCWStationPro.zip

2. Power on the A 52 WiFi series controller, and turn the back switch to the Normal mode.
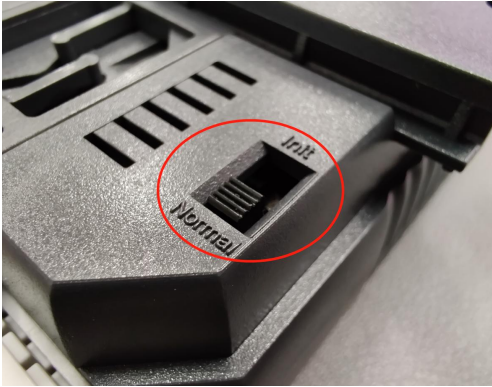
3. Use the smart phone WIFI Signal setup menu to search the controller's WiFi signal. The controller's initial WiFi SSID name is "52WIFI".
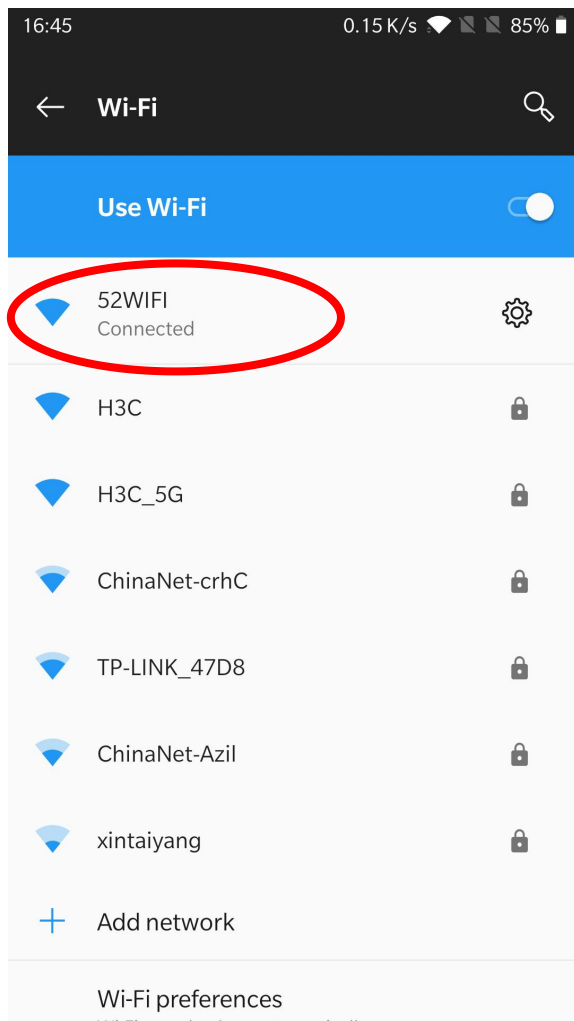
4. Click the "ATC WStation Pro" APP, and press the Connect button.

5. WStation Pro Main menu.
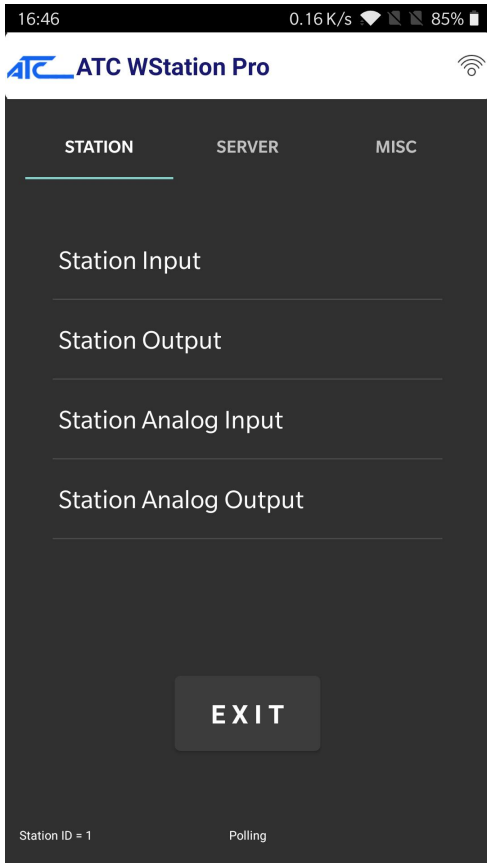
6. Click the Station Input to control the A-52 WiFi series controller's output. The I0, I1, I2, I3 button can control the controller's DO0, DO1, DO2, DO3. And the controller will show (trigger) the related graph on the LCM screen.

7. Click the Station Input I4 button can start the controller's Stop Watch function. The controller's LCM will also show the stop watch time value.

8. Press the Return button back to the main menu, and switch to the Station Analog Input. Adjust the AI0 or AI1 bar, the controller's LCM will show the current analog value. Adjust the bar value to 0 to escape the controller's LCM.
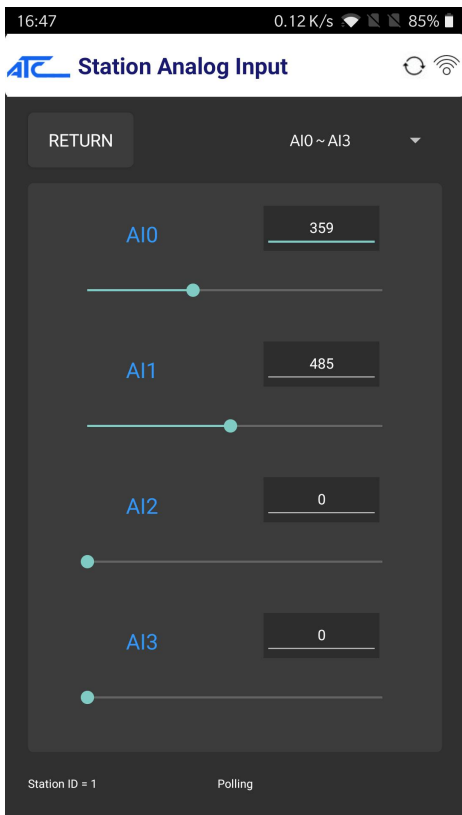
9. Complete the quick operation.

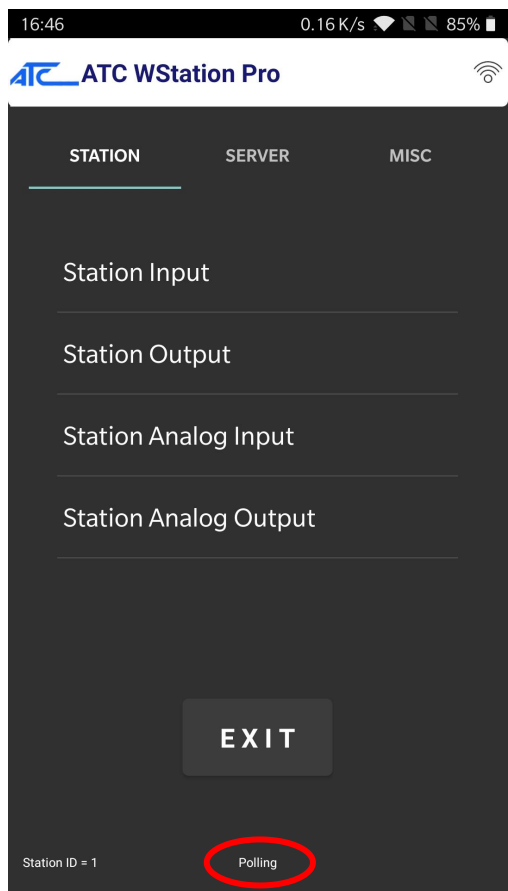Note: If the APP's bottom appearing "Polling", it means the smart phone is correct to communicating with the A-52 WiFi controller. If the APP's bottom appearing "Receive Error!", it means the smart phone is can't communicate with the A-52 WiFi controller. Please follow the step2 step 4 to check the setting.

- **A-52 series WiF i controller Display and ATP 2 (text panel) menu structure**

Depend on controller's switch status (Init/Normal), the display will show below figure, and can via button to complete below setting.

Note: at Init mode, press ESC more than 3 Sec can modify the parameter, when complete press OK more than 3 Sec to store the setting.

Program menu
Edit..
Password
Msg Config..

Init mode
Program..
Setup..
Diagnostic..
WiFi Setup

OK →
← ESC

Setup menu
LCD..
Menu Lang
Clock..

Normal mode
Current Date
Current Time

←ESC→

Monitor..
I/O Status..
Force I/O..
Setup..
System inf.

Diagnostic menu
Module info
Com_Port

WiFi Setup menu
Device Mode
Network
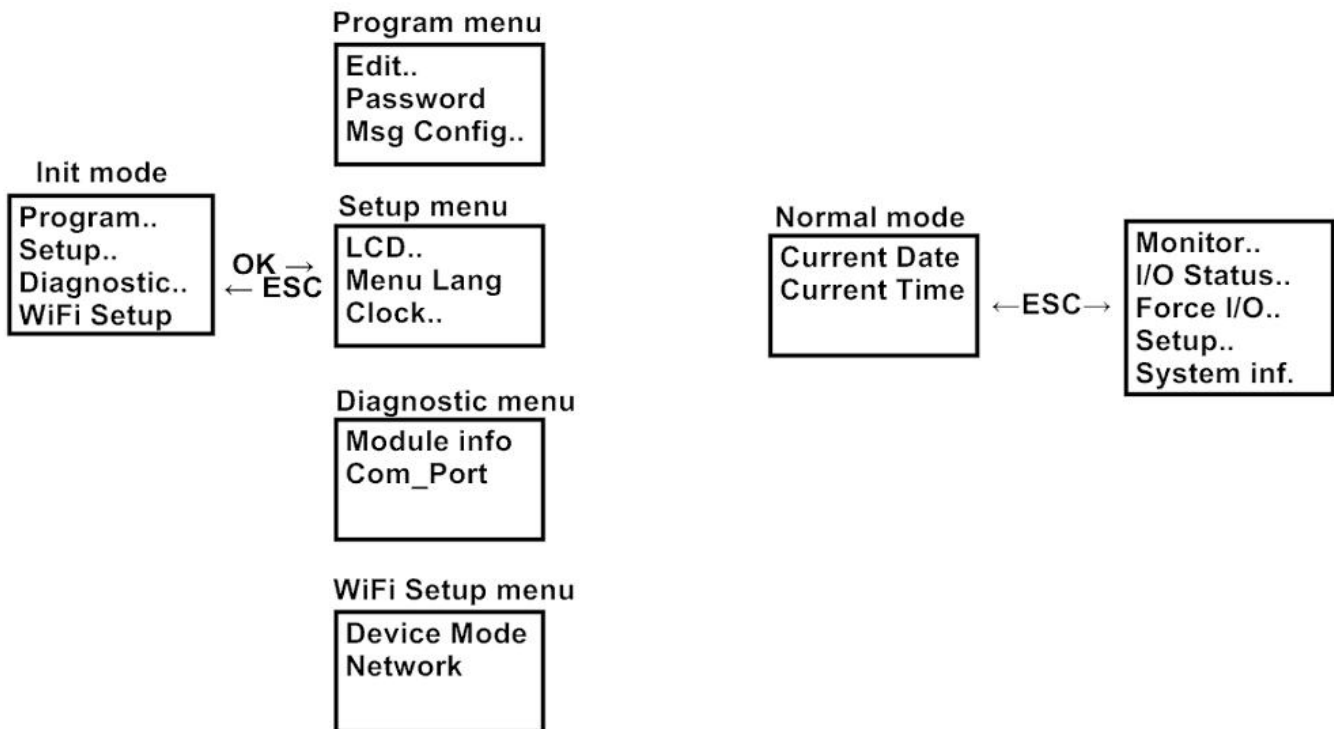
Quick Start:

If would like to modify the program parameter

1. Turn controller switch to Init mode.

2. Choose Program -> Edit -> Edit Program

3. Display will show related block parameter, can use ▲UP or ▼DOWN button to select the block, and

   press OK more than 3 Sec to modify.

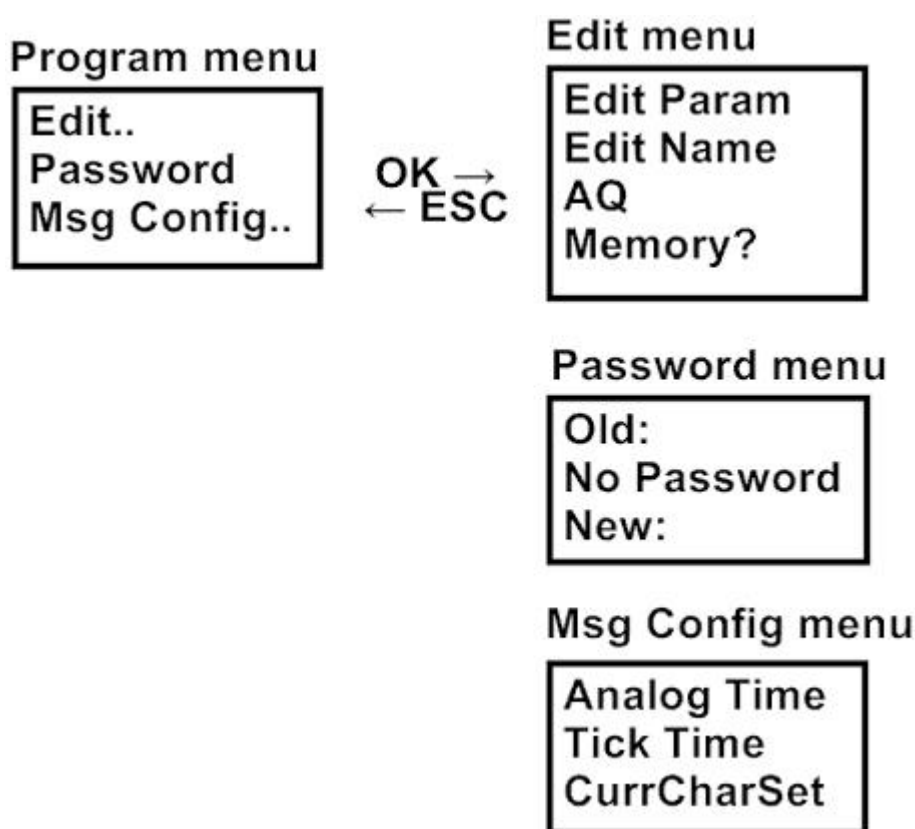4. When complete press OK more than 3 Sec to store the setting.

If would like to monitor controller's IO status

1. Turn controller switch to Normal mode.

2. Display will show current time. Press ESC.

3. If choosing Monitor, can monitor all blocks' status and parameters.

If choosing I/O status, can monitor Input, Output and Flag's status. In the figure, D is mean Digital, A is mean Analog

1. Init mode

1.1 Program menu

```
Program menu          Edit menu
┌─────────────┐       ┌─────────────┐
│ Edit..      │       │ Edit Param  │
│ Password    │  OK → │ Edit Name   │
│ Msg Config..│  ← ESC│ AQ          │
└─────────────┘       │ Memory?     │
                      └─────────────┘

                      Password menu
                      ┌─────────────┐
                      │ Old:        │
                      │ No Password │
                      │ New:        │
                      └─────────────┘

                      Msg Config menu
                      ┌─────────────┐
                      │ Analog Time │
                      │ Tick Time   │
                      │ CurrCharSet │
                      └─────────────┘
```

1.1.1 Edit menu

In the Edit menu, you can edit the parameter as above graph.

Edit Param: It will show all blocks No and parameter, you can use the ▲ ▼ button to choose the block you would like to edit. When choose the block, click the OK button to edit it, ESC button to switch. When complete, press ESC more than 3 second to save it.

Edit Name: It can name the block.

AQ: This setting is use for the controller's switch turn to Init mode, the controller's AQ output will hold on designate status.

AQ in Stop

Defined: range 00.00-10.00

Last: the last data

AQ Type: default or 4-20 mA

Memory?:You can detect how many block capacity can use in the controller.

1.1.2 Password menu

A program password with up to 8 alphabetical characters can be assigned to protect the circuit program on the controller.You can use the Password menu to change the current password.
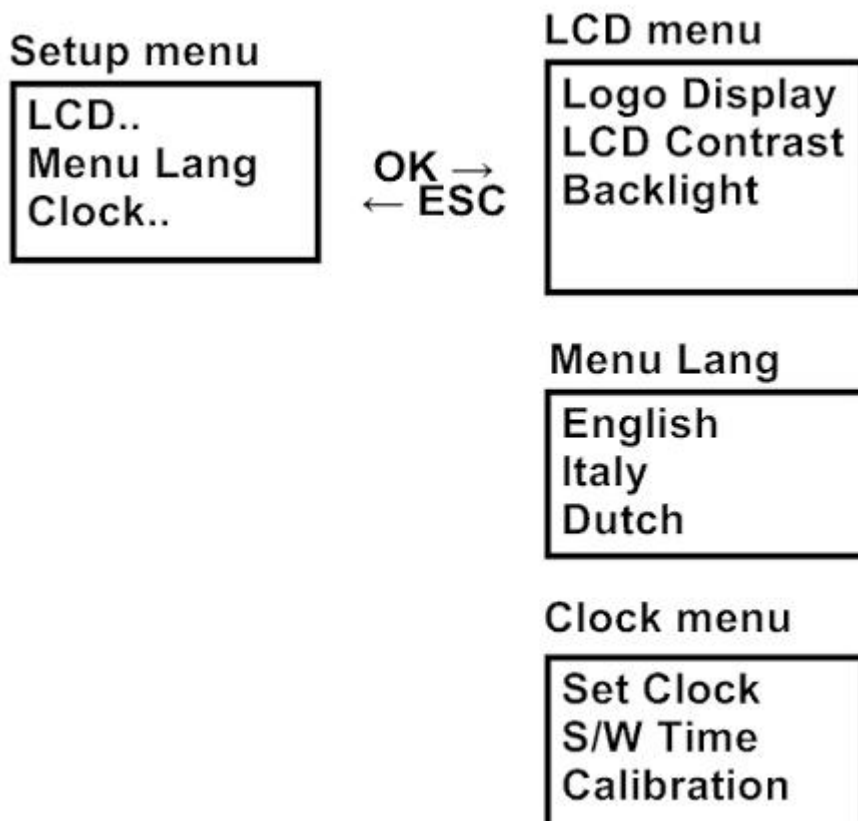
1.1.3 Msg Config

This menu can edit the Message Text's block display time. You can edit the Analog Time, Tick Time and CurrCharSet in this menu.

Analog Time: the initial value is 100 ms.

Tick Time: the initial value is 1000 ms (1 Sec).

Current Character set: CharSet1 or CharSet2.

1.2 Setup menu

1.2.1 LCD menu

Logo Display: You can set up the Logo Display time when the controller power on.

LCD Contrast: You can adjust the controller's LCD contrast in this menu.

Backlight: You can turn on/off the controller's backlight in this menu.

1.2.2 Menu Lang

The controller offer English, Italian, Dutch, Spanish, French, Chinese Big5, Chinese, German, Turkish and Russian Language menu options.
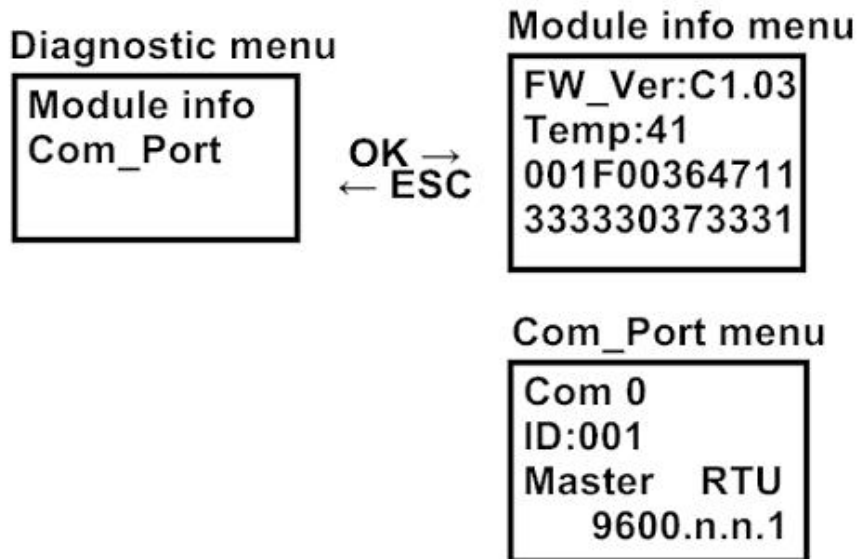
1.2.3 Clock

Set Clock: You can set the current date and time in this menu.

S/W Time: Set Up the Summer/Winter time.

Calibration: Set the Real Time Clock (RTC) calibration value. (Sec/Week)
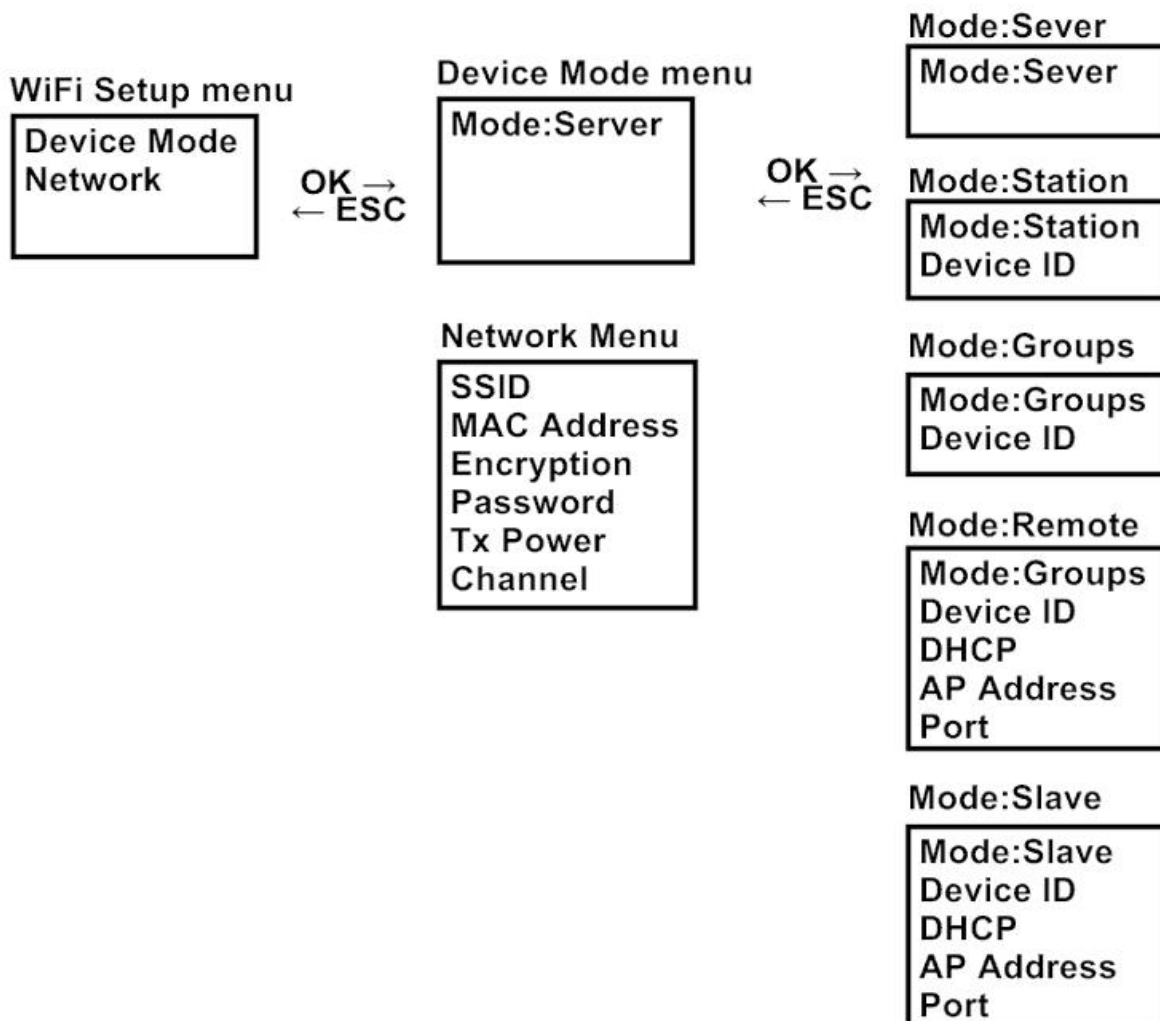
1.3 Diagnostic menu

Diagnostic menu

| Module info |
| Com_Port |

OK →
← ESC

Module info menu

| FW_Ver:C1.03 |
| Temp:41 |
| 001F00364711 |
| 333330373331 |

Com_Port menu

| Com 0 |
| ID:001 |
| Master   RTU |
| 9600.n.n.1 |

1.3.1 Module info: You can detect the controller's firmware version, temperature and series number, the value just read only.

1.3.2 Com_Port: You can detect the controller's com port parameters. The parameters just read only. Or you can use the ATC Editor software to edit it.

1.4 WiFi Setup menu

WiFi Setup menu

| Device Mode |
| Network |

OK →
← ESC

Device Mode menu

| Mode:Server |

OK →
← ESC

Network Menu

| SSID |
| MAC Address |
| Encryption |
| Password |
| Tx Power |
| Channel |

Mode:Sever

| Mode:Sever |

Mode:Station

| Mode:Station |
| Device ID |

Mode:Groups

| Mode:Groups |
| Device ID |

Mode:Remote

| Mode:Groups |
| Device ID |
| DHCP |
| AP Address |
| Port |

Mode:Slave

| Mode:Slave |
| Device ID |
| DHCP |
| AP Address |
| Port |

1.4.1Device Mode: The A-52 WiFi series controller offers several operate mode option. You can choose the operate mode to meet your demand.

Server: It's the regular controller mode, which can communicate to the Station & Groups mode and A-3288 transmitter. And also can connect to WiFi smart phone &tablet PC directly without WiFi AP router. One Server mode controller can communicate to maximum 7 units Station, Groups & WiFi smart phone (Can combine on demand). Note: In Server mode, the device can't communicate with the WiFi AP router.

Station: In this mode, the device will set to Extend IO Module. It means the Server device will read & write the Station device.Note: In Station mode, the device can't communicate with the WiFi AP router.

Device ID: range 1-7. You must set the Device ID for different value to communicate with the Server device for avoiding ID conflict.

Groups: It's the regular controller mode. And can let the data exchange with the Server device. Note: In Groups mode, the device can't communicate with the WiFi AP router.

Device ID: range 1-7. You must set the Device ID for different value to communicate with the Server device for avoiding ID conflict.

Remote: In this mode, the device will set to WiFi Remote IO Module. It can communicate with the WiFi AP router, but can't communicate with the Server device. The performance is as same as the ATC A-1 series Remote IO Module.

Device ID: range 1-255. You must set the Device ID for different value to communicate with the WiFi AP router for avoiding ID conflict.

DHCP:You can set DHCP ON for auto set IP address and Port. Off to edit the IP Address and Port on demand.

IP Address: Edit the IP address.

Port: Edit the port.

Remote Mode Address Mapping	
DI	07001~07032
DO	07257~07272
AI	47001~47008
AO	47065~47068

Slave: In this mode, the device will set to regular controller function. It can communicate with the WiFi AP router, but can't communicate with the Server device. The Slave mode can over the WiFi AP router to communicate other SCADA, OPC or controller.

Device ID: range 1-255. You must set the Device ID for different value to communicate with the WiFi AP router for avoiding ID conflict.

DHCP: You can set DHCP ON for auto set IP address and Port. Off to edit the IP Address and Port on demand.

IP Address: Edit the IP address.

Port: Edit the port.

1.4.2 Network

SSID: In the Server mode, you can name the Sever mode's SSID. In the Station & Groups mode, you must type the Server item's SSID. In the Remote & Slave mode, you must type the WiFi AP router's SSID.

MAC Address: It's the controller's isolate value, read only.

Encryption: The initial setting is Off. You can set ON over WPA2.

Password: type the Server item or WiFi AP router's password.

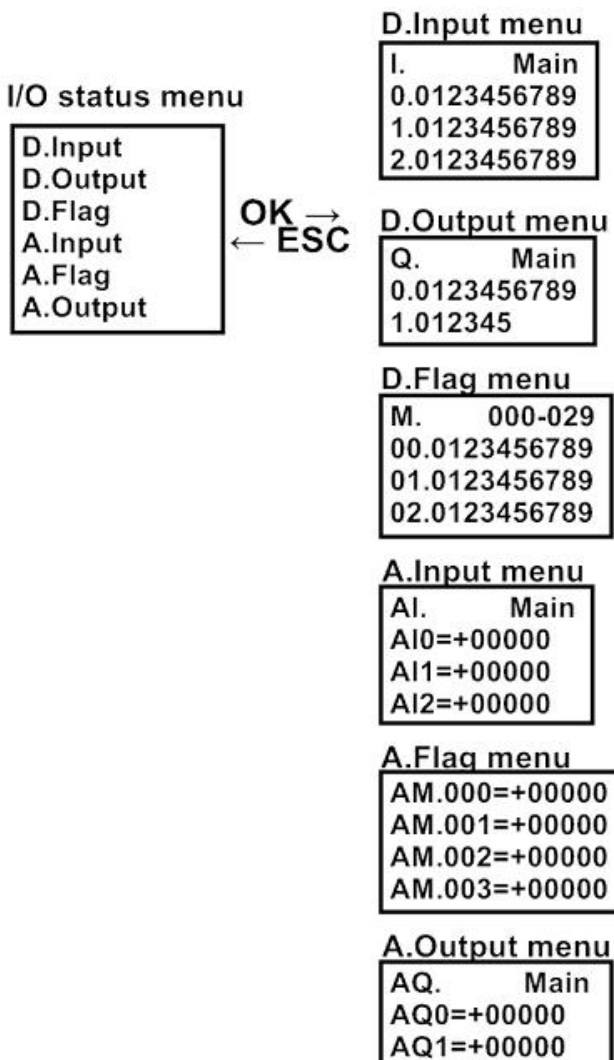**TX Power**: Range 1-12, the initial setting is 0 (Auto).

Channel: Range 1-14, the initial setting is 0 (Auto).
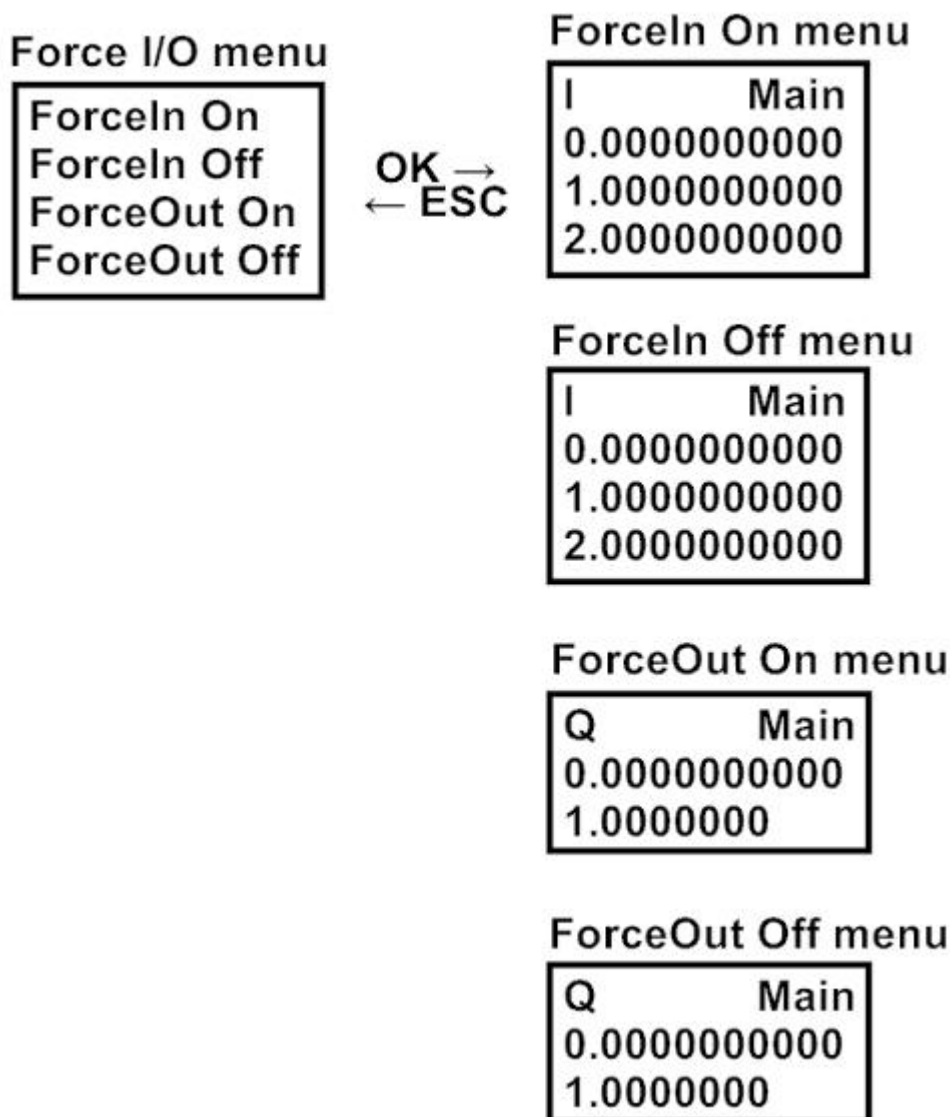
2. Normal mode

2.1 Monitor

The Controller's Display will show related block parameter, can use ▲UP or ▼DOWN button to select the block. Also can press OK more than 3 Sec to edit the parameters.

2.2 I/O Status

```
I/O status menu

D.Input
D.Output
D.Flag        OK →
A.Input       ← ESC
A.Flag
A.Output
```

```
D.Input menu
I.           Main
0.0123456789
1.0123456789
2.0123456789
```

```
D.Output menu
Q.           Main
0.0123456789
1.012345
```

```
D.Flag menu
M.        000-029
00.0123456789
01.0123456789
02.0123456789
```

```
A.Input menu
AI.          Main
AI0=+00000
AI1=+00000
AI2=+00000
```

```
A.Flag menu
AM.000=+00000
AM.001=+00000
AM.002=+00000
AM.003=+00000
```

```
A.Output menu
AQ.          Main
AQ0=+00000
AQ1=+00000
```

2.2.1 D. Input: You can read the Digital Input status.

2.2.2 D. Output: You can read the Digital Output status.

2.2.3 D. Flag: You can read the Digital Flag (M) status.

2.2.4 A. Input: You can read the Analog Input status.

2.2.5 A. Flag: You can read the Analog Flag (AM) status.

2.2.6 A. Output: You can read the Analog Output status.

2.3 Force I/O

Force I/O menu

| ForceIn On |
| ForceIn Off |
| ForceOut On |
| ForceOut Off |

OK →
← ESC

ForceIn On menu

| I   Main |
| 0.0000000000 |
| 1.0000000000 |
| 2.0000000000 |

ForceIn Off menu

| I   Main |
| 0.0000000000 |
| 1.0000000000 |
| 2.0000000000 |

ForceOut On menu

| Q   Main |
| 0.0000000000 |
| 1.0000000 |

ForceOut Off menu

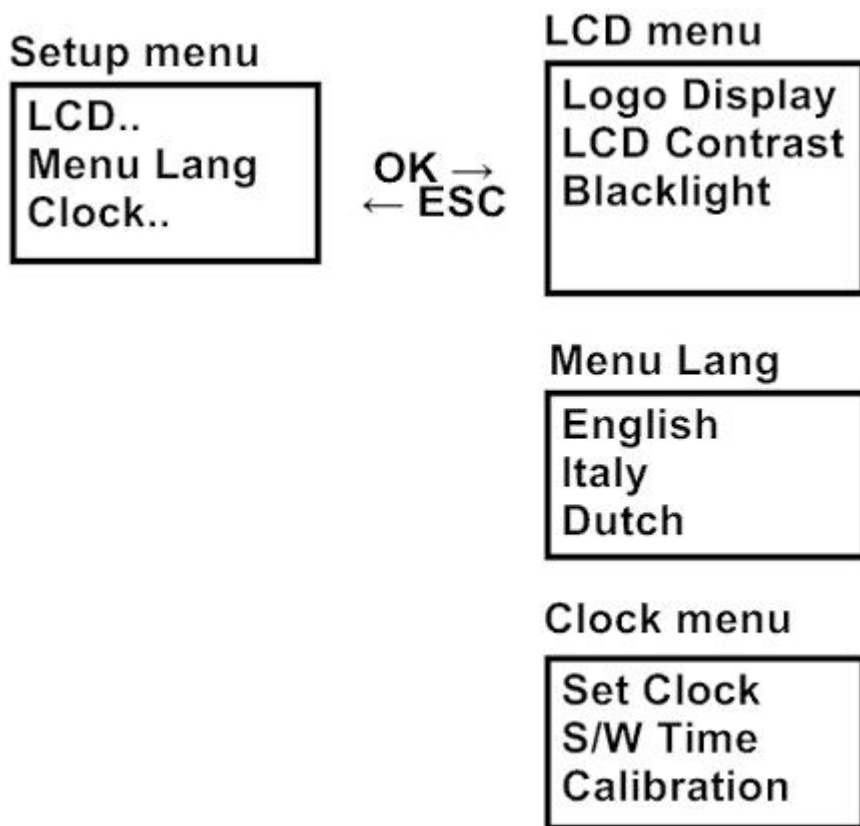| Q   Main |
| 0.0000000000 |
| 1.0000000 |

2.3.1 Force In On: You can Force On Input in this menu. Press OK more than 3 Sec to edit it. ESC & OK to choose the IOs,▲or ▼to change the status. When complete setting, press OK more than 3 Sec to save it.

2.3.2 Force In Off: You can Force Off Input in this menu. Press OK more than 3 Sec to edit it. ESC & OK to choose the IOs,▲or ▼to change the status. When complete setting, press OK more than 3 Sec to save it.

2.3.3 Force Out On: You can Force On Output in this menu. Press OK more than 3 Sec to edit it. ESC & OK to choose the IOs,▲or ▼to change the status. When complete setting, press OK more than 3 Sec to save it.

2.3.4 Force Out Off: You can Force Off Output in this menu. Press OK more than 3 Sec to edit it. ESC & OK to choose the IOs,▲or ▼to change the status. When complete setting, press OK more than 3 Sec to save it.

2.4 Setup

```
Setup menu          LCD menu
┌─────────────┐     ┌─────────────────┐
│ LCD..       │     │ Logo Display    │
│ Menu Lang   │ OK→ │ LCD Contrast    │
│ Clock..     │ ←ESC│ Blacklight      │
└─────────────┘     └─────────────────┘

                    Menu Lang
                    ┌─────────────┐
                    │ English     │
                    │ Italy       │
                    │ Dutch       │
                    └─────────────┘

                    Clock menu
                    ┌─────────────┐
                    │ Set Clock   │
                    │ S/W Time    │
                    │ Calibration │
                    └─────────────┘
```

2.4.1 LCD menu

Logo Display: You can set up the Logo Display time when the controller power on.

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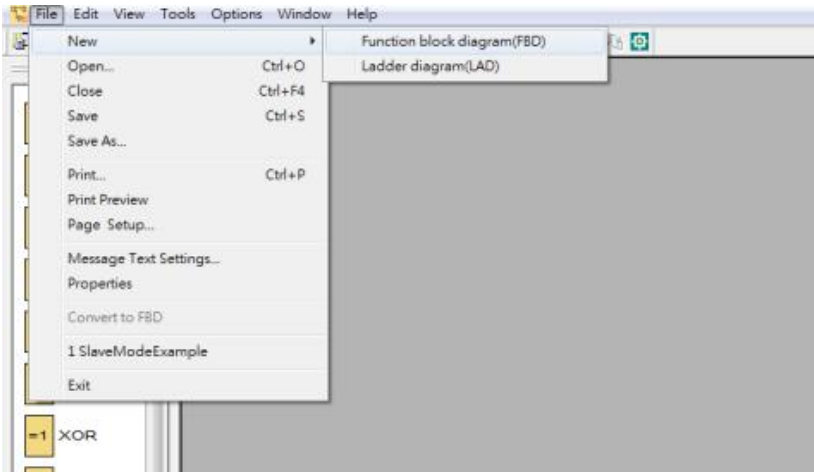
2.5 System inf.

You can read the device information on this menu. The information involves IP Address, MAC Address, SSID, Device Mode, Device ID, Port.
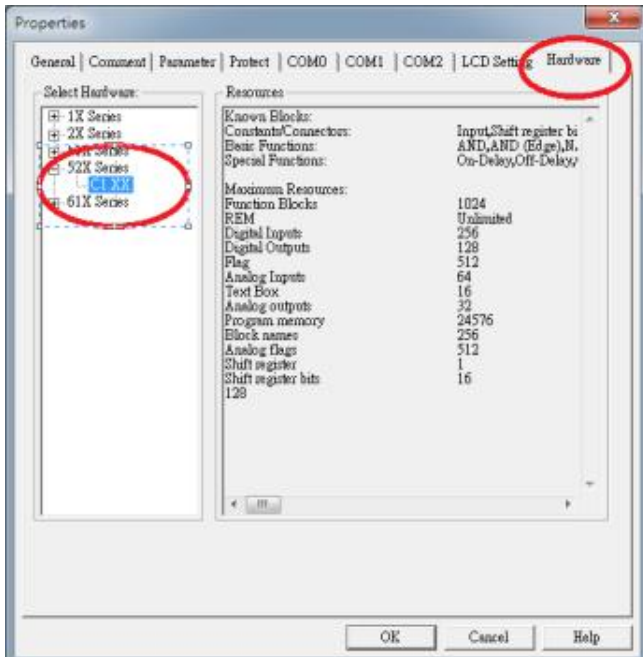
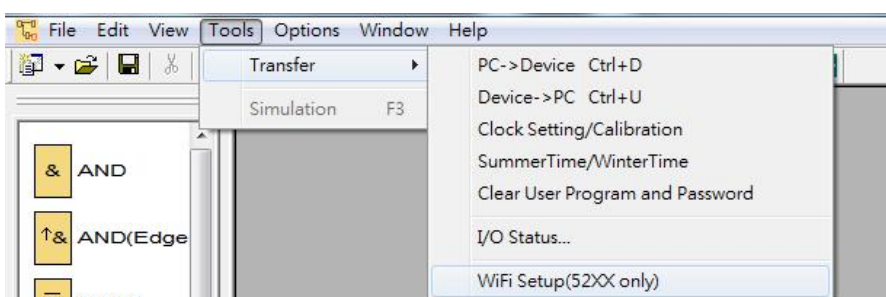## 3. ATC Editor Quick Setup

ATC Editor download web link: http://www.szatc.com/download/category/controller-io-module-software

3.1 Open a new program file

3.2 Choose the hardware as the 52series

3.3 Choose the WiFi Setup

3.4 Finished the WiFi Setup

Contact us

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NOTES:ATC company has been move to Foshan on March 29.2019

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