

# SJT-PROG Software Programmer User Manual

## 1. Function

SJT-PROG software programmer is an upgrade tool for our product. It can be used for integrated controller, hall call board, COP board, car top board, car command board and etc (For detail model, please refer to our after sale service). The programmer is smart and handiness. With APP and Wechat program, it can perform remote synchronization and upgrade for the site.

## 2. Appearance and Port

### 2.1 Appearance

The appearance is shown in following photo:



Fig 2.1 Product Photo

### 2.1 Port and indicator

#### 2.1.1 Port description

The ports at two side of programmer are program port. One is Mini USB port for integrated controller. The other 2.54-6P port is for hall call board and COP board.



Fig 2.2 Program Port for LOP & COP



**Fig 2.3 Program Port of integrated controller**

Program Cable for integrated controller:



Program Cable for LOP & COP board 1: For 7 pin port product



Program Cable for LOP & COP board 2: For 5 pin port product



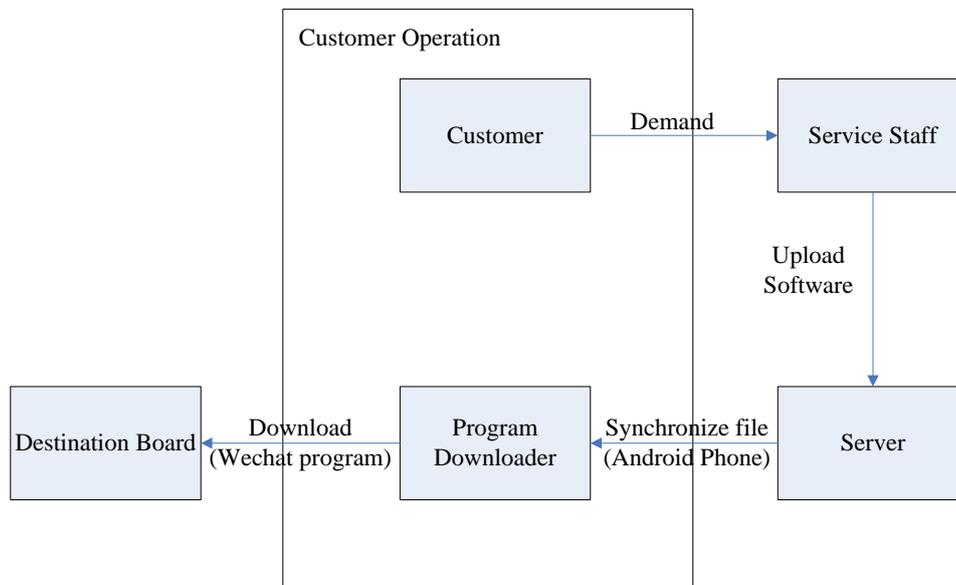
### 2.1.2 Indicator

In front of the product, there are B indicator and W indicator. Both are double color indicator (red and green). The meaning of indicator is as following:

Indicator	Status	Meaning
B LED	Red, slow flicker	Waiting for Bluetooth connection
	Red, light on	Bluetooth fail (while connecting)/Programming fail (while downloading)
	Green, light on	Bluetooth succeed (while connecting) /Programming succeed (while downloading)
	Green, flicker	Programming
W LED	Red, slow flicker	Waiting for WIFI connection
	Red, light on	WIFI connection fail
	Green, light on	WIFI connection succeed

### 3. Usage

This downloader is an off-line program tool. The working process is as following:



**Fig 3.1 Working Process**

- ① **【Requirement】** Customers contact with our engineer and provide product model & usage count & function requirement.
- ② **【Upload】** Our engineer will upload software to server according to actual requirement.
- ③ **【Synchronization】** Site engineer uses “Program Assistant” APP to download program into downloader.
- ④ **【Programming】** Site engineer uses wechat program “Bluelight Programmer” to do

programming.

For Synchronization and programming, engineer should operate as following description.

### 3.1 Synchronization

This function is for transmitting software to programmer through smart phone. The software file will be stored in programmer, so that it can do off-line programming.

Before synchronization, please contact with our after sale service, provide model of target board and related information. After the software file is uploaded to the server, customer can use “Program Assistant” APP to synchronize file.

#### 3.1.1 Program Assistant APP

For synchronization, we need “Program Assistant”.

① Please use Android smart phone to install program assistant APK.  
② After installation, open APP. If it asks for authority, please agree. Otherwise, it cannot work.

③ Before the first time of use, please provide your name & company & contact & device ID to our service staff for getting permission. After getting permission, it will show red check mark in “Device Authority”, then APP can work.

**Note: Device ID can be got by clicking exclamation mark at top right corner of APP, then click “Copy MAC” to copy ID and send to our staff by Wechat or other instant messaging software.**

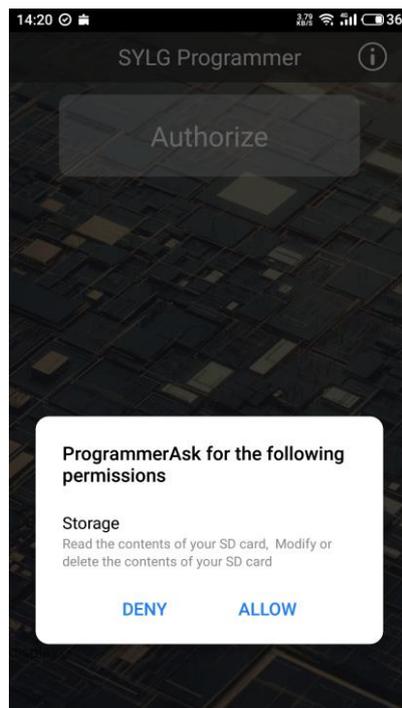


Fig 3.2 Program Assistant Installation

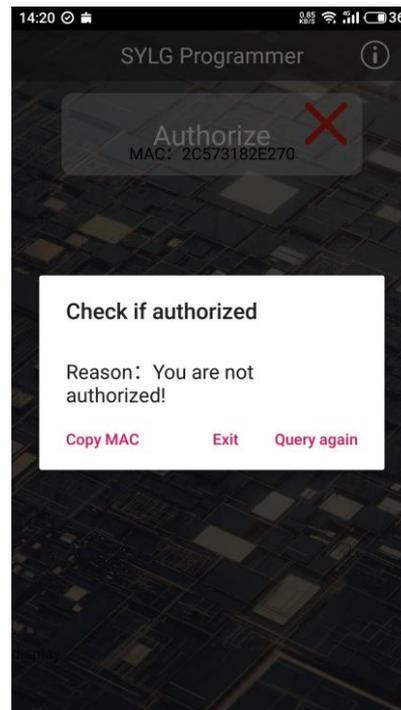


Fig 3.3 Authority Application

### 3.1.2 Programmer Connection

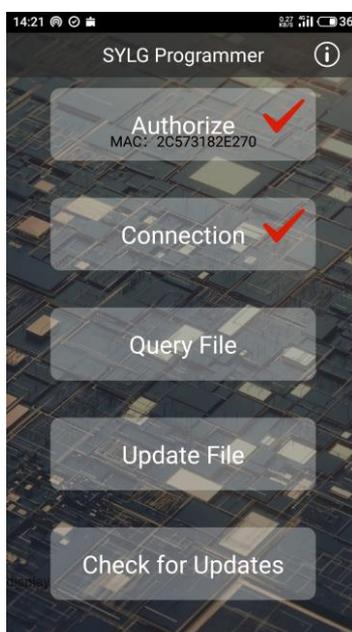
While using, please download software file firstly (download file into programmer).

① Use smart phone with authorized Program Assistant APP, set hotspot in the phone. Set Network ID as “PROG” and password as “888888888”.

② After start hotspot, open Program Assistant APP.

③ Keep SJT-PROG Programmer near to smart phone, power on programmer. Or connect programming port to target board, use target board to power on programmer. Or connect 5V power (such as battery) from USB port to get power.

④ After power on programmer, Indicator B will flicker red light. After 10 sec, B will keep red light and W will flicker red light which means programmer is searching WIFI connection. If W indicator turns to Green, it means WIFI connect successfully. Then, “Test connection” will have red check mark to indicate connection succeed.



**Fig 3.4 Programmer connect successfully**

### 3.1.3 Query File

Click “Query File” to inquire information of software stored in downloader, including software name and residual times.

### 3.1.4 Delete File

Tick related files in file list, click “Delete”. After Click “Confirm”, the selected file will be deleted.

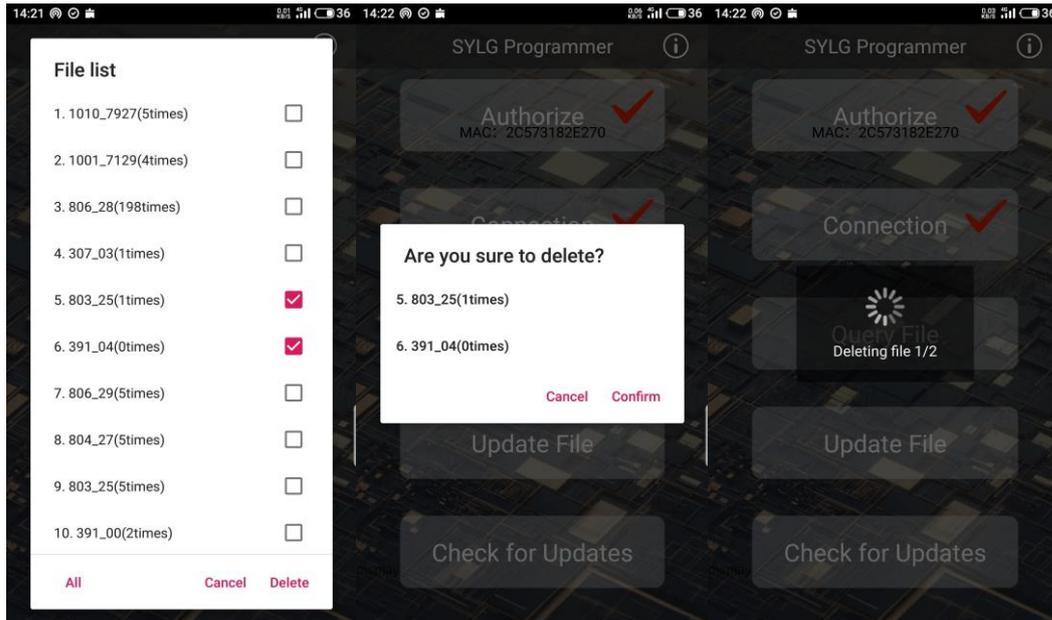


Fig 3.5 Delete File

### 3.1.5 File Synchronization

Click “Check for upgrades” for file synchronization. After our staff upload successfully, customer clicks “check for upgrades”, then can see file names and residual times.

Click program file and select saving location (If selecting a location with saved file, that saved file will be deleted), then click “Sync” to start. After the progress get to 100%, synchronization completes.

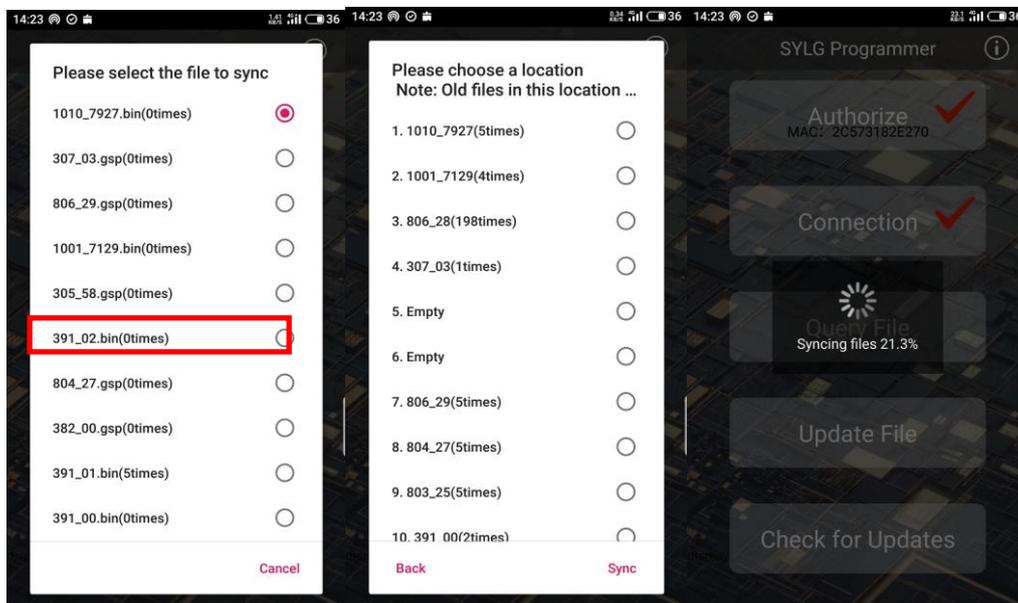


Fig 3.6 File Synchronization

### 3.2 Program Download

Downloader with successful synchronized program file can be used to upgrade destination board offline through “蓝光编程器” Wechat program.

### 3.2.1 Wechat Program Register

First time to use, please search “蓝光编程器” in Wechat program searching interface. Click “Click to copy”, supply **copied information (opened) & customer name & contact & company** name to our service staff for register through Wechat or other instant messaging software. After register, customer can use Wechat program.

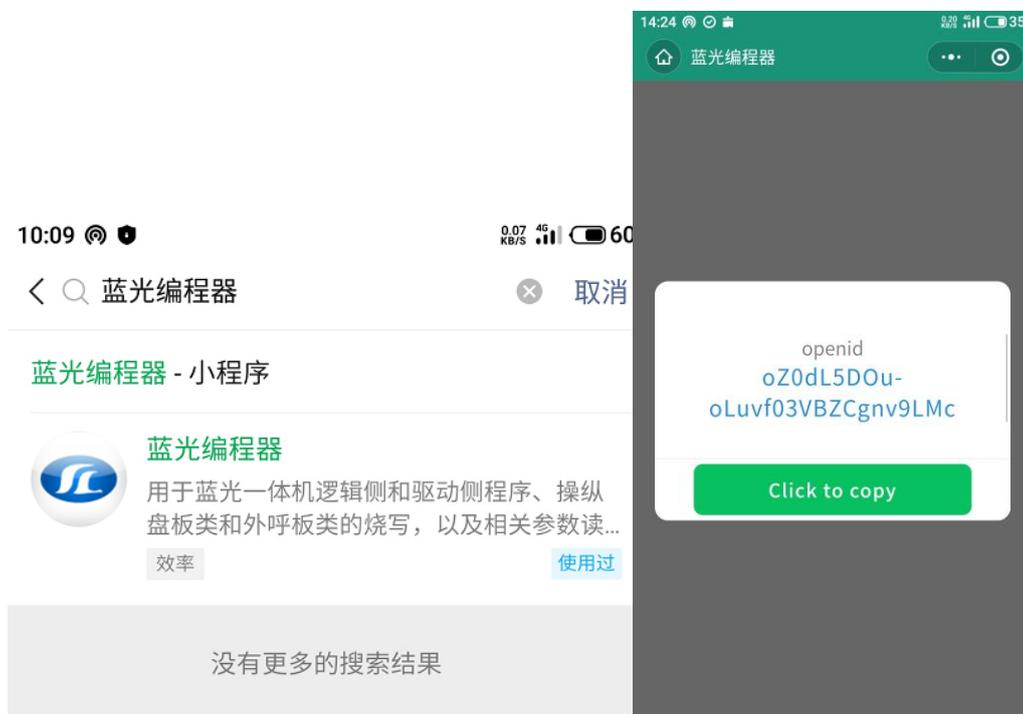


Fig 3.7 Search program

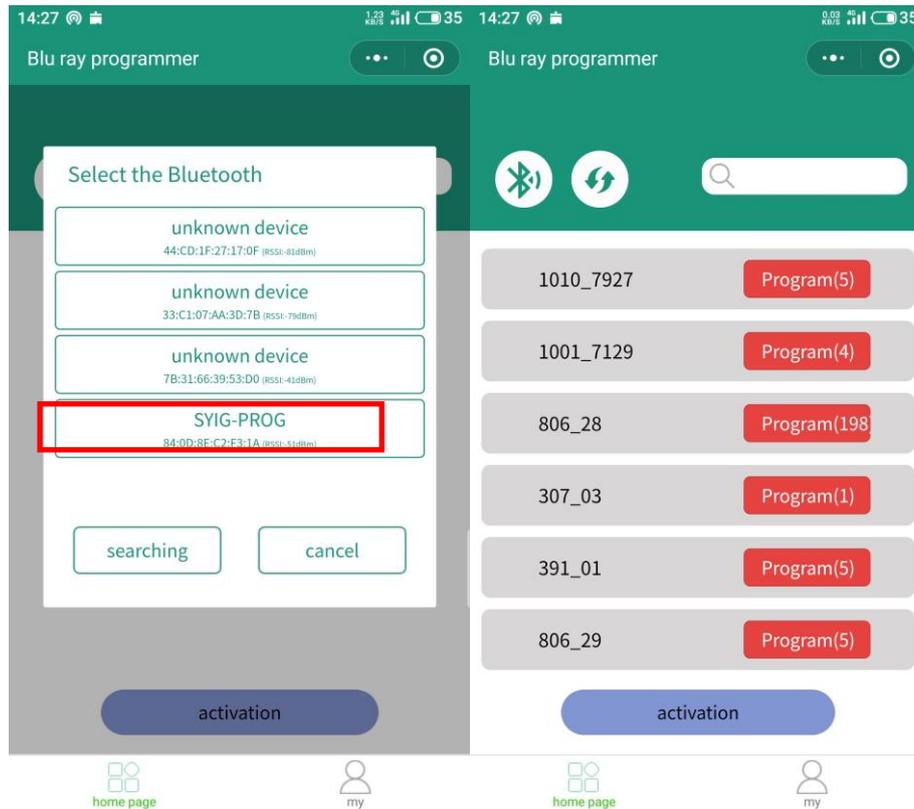
Fig 3.8 Register information

### 3.2.2 Program Download

- ① After register, connect downloader to destination board.  
If destination board is integrated main board, please power off the board, short S1 and S3 jumper, then use USB cable to connect downloader to USB port of main board.  
If destination board is hall call board or cop board or car top board, please use related pins of P port. Connect to P port and keep the contact between pins and board.
- ② After hardware connection, destination board will supply power to downloader, LED B will flicker.
- ③ Open wechat program, click Bluetooth symbol, click “Searching”, find “SYLG-PROG” and select it.
- ④ If the buzzer in downloader sound for one time and LED B turn to green light, means connection succeed. If it shows “Overtime” or LED B turn to red light, means downloader has disconnected to destination board. Then please repeat step ②~④ after power on until success.

Note: The connection time of Bluetooth is 10 sec. After overtime, it will enter Synchronization Assistant WIFI connection progress. So we suggest to open wechat

program before Bluetooth connection. After downloader power on, connect Bluetooth symbol to connect. If overtime, power off downloader and power on again to connect.



**Fig 3.9 Bluetooth connection**

⑤Click “Program” after the software number you want to download to perform download. At this moment, LED B should show flicker green light, means downloading. Don’t do other operation at this moment until LED B turn to continuous green light and buzzer sound for one time. Wechat program will show “Successful writing” and residual times will minus one. If LED B show continuous red light and buzzer sound for two times, wechat program shows “Writing fail”, it means download fail. If wechat program shows “No enough times”, please apply for more program times and synchronize again.

**Note:**

1. Backup parameters of integrated controller through operator or Bluetooth module before downloading, to avoid parameters lost.
2. Short S1 and S3 jumper before downloading integrated main board. If download logic program, turn SK-1 DIP switch to OFF. If download drive program, turn SK-1 DIP switch to ON, and power on main board again.
3. The download speed for hall call board and COP board is fast, about few seconds. The download speed for integrated main board may take several minutes. While downloading, please don’t do other operation to the downloader and phone until succeed.

4. If the main board is under duplex or group control, please disconnect duplex/group plug and download. Otherwise, download will fail.

### 3.2.3 Activation (Unlock)

After downloading program to integrated controller, it need activation before normal working.

①After downloading, remove jumper on S1 and S3, and Reset main board. Then, the segment on main board will show “E-98” or “E-99” error code, means controller need activation.

②Connect wechat program as step ②~④ in 3.2.2. After connection, click “activation”. Wechat program will show “Decryption succeeded”. “E-98” or “E-99” will disappear, means activation succeeds.

③Restore saved parameter back to integrated controller with operator or Bluetooth module.

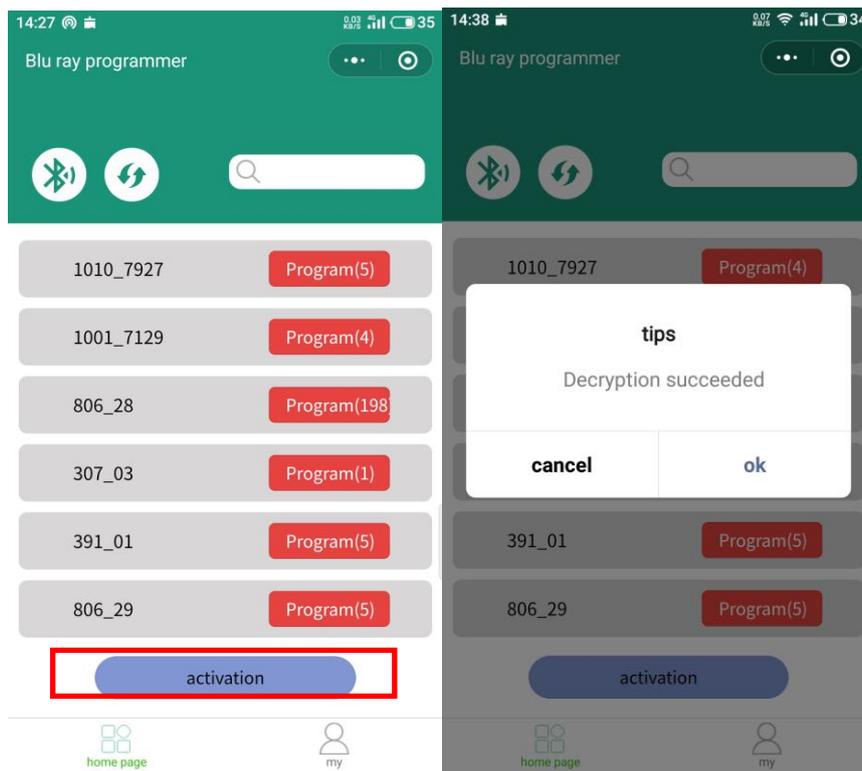


Fig 3.10 Program Activation