

# Intelligent Control Terminal Of 86 Screen User Manual



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## Trademark

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KNX and ETS are registered trademarks of KNX Association.

## Notice

1. Please carefully read this manual before using the product.
2. This product is used in indoor environment and installed in electrical control box.
3. Please install this product in a dry and ventilated place.
4. Before power on, please confirm the input voltage according to the manual;after power on,please confirm the normal output voltage before connecting to the control bus.
5. Please make sure the secure shell is in good condition, if the shell is damaged,please stop using to avoid accident.
- 6.This product is NOT a toy, please make sure it is out of children's touch.
- 7.Only be suitable for EIB/KNX system bus.
- 8.Others:

The below sign indicates this product can't be dealt as ordinary family rubbish,in order to avoid the possible environment and human health harm caused by the electrical waste, this product must follow recovery processing.Please contact the local recycling department after this product is scrapped, to make sure it can go as the right waste processing procedure.



# 1 Function Overview

The 86 screen intelligent control terminal is a 4-inch capacitive touch control terminal developed by Zhuhai Sation Technology Co., Ltd., which is mainly used in the field of home and building automation control complying with KNX standard.

The main interface of the product is designed in the style of mobile phone, which is small and flexible, easy to operate and rich in application scenarios. No matter at home, hotel, enterprise or shopping mall, this product is your ideal choice.

The product supports up to 30 controls with the following main functions:

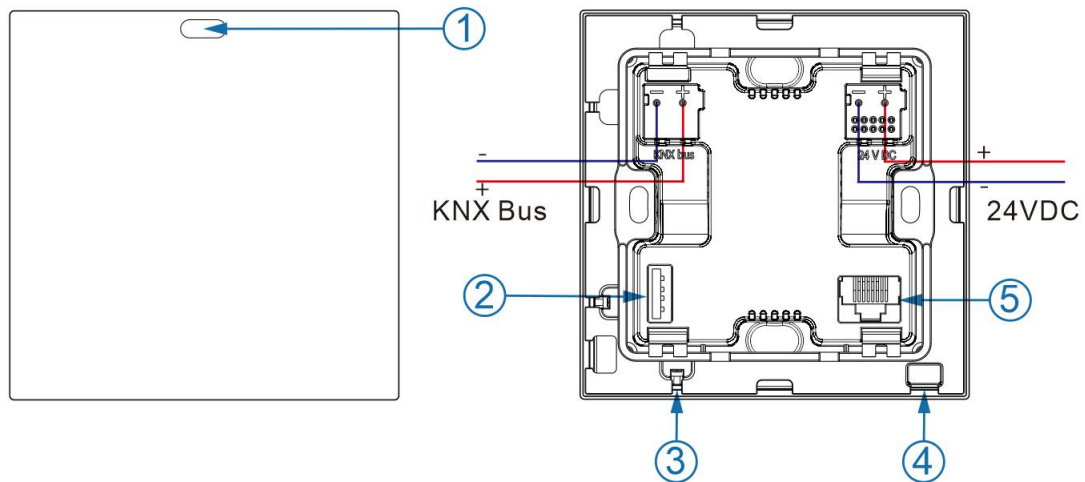
1. Precise operation of air conditioning, dimming, shutter, fresh air system, fan coil room thermostat, and other equipment.
2. Custom Scene.
3. Background music playing.
4. Air quality monitoring.
5. 8 groups of simple timers, 8 groups of custom timer control devices on / off.
6. Laser distance measurement, proximity sensing function.
7. Temperature and humidity detection.
8. Illumination detection, automatic adjustment of backlight brightness.
9. Child lock password protection.
10. Chinese English switching display.
11. Custom theme and background pictures.
12. Ethernet connection. (not installed in current version)

## 2 Technical Parameter

Color	Ivory / wisdom black
Touch screen	Capacitance screen
visible area	72 * 72mm
Resolving power	720 *720
Product size	86*86*21mm
processor	NXP i.MX RT1052
Main frequency	528MHz
Interface	KNX、USB、Wired network
Temperature detection range	-25 to 55°C
Humidity detection range	0 to 100 %RH
Indoor illumination detection range	0 to 83000Lux
Laser range	0 to 2m
KNX Current consumption	2mA(@30VDC)
Current consumption of auxiliary power	75mA(@24VDC)

## 3 System Functions

### 3.1 Wiring diagram



Picture 1 wiring diagram

- ① Location of proximity sensor, illuminance sensor and programming indicator light.
- ② USB interface.
- ③ Key position. (short press programming, long press reset)
- ④ Location of temperature and humidity sensor.
- ⑤ Ethernet interface.


### 3.2 Switch Page


Slide left and right to switch pages. The first page supports up to 6 controls, the second page supports up to 12 controls, and the third page supports up to 12 controls. The number and type of controls are configured through ETS software. The first page is the main page, as shown in Figure 2.



图 2 主页面

### 3.3 Parameter Setting

Click the settings icon at the top left of the main page  Enter the setting interface , As shown in Figure 3. Click the return icon at the top left of the setting

interface  Exit the setting interface.

**1. Screen out time**

The user selects the screen out time of 30sec / 1min / 5min / 10min through the pull-down list. The product enters the screen protection display temperature and humidity first, and then the screen is off. Close to wake up to the screen saver state, touch the screen saver to display the interface before screen out.

**2. Brightness**

The user can manually adjust the brightness by sliding the slider, and select the check box to automatically adjust the brightness.

**3. Switch language**

Users can select the system language from the drop-down list. Currently, Chinese and English are supported.

**4. Change password**

Check the change password, and enter the interface where the password is required. Change the password according to the prompt.


**5. Version information**

Learn about product version information.




Picture 3 Setup interface

### 3.4 Refresh

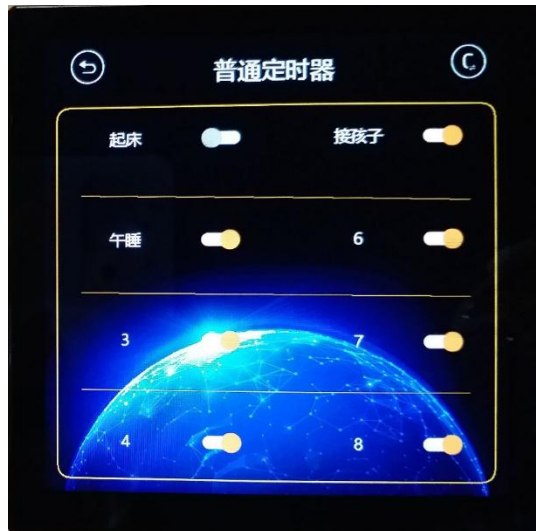
Click the refresh icon in the main page of Figure 2  Synchronizes the state of the device and the scene.

### 3.5 Time And Date

The time and date are displayed directly above the main page. Click the time and date display area of the main page to enter the normal timer interface, As shown in Figure

4. Click the upper left corner to return to the icon  Exit the normal timer interface and return to the main page. The normal timer interface supports the setting of up to 8 timers. Timers configured as activated by ETS configuration tool will be displayed on the page. Meanwhile, the timing time and the value to be sent will also be configured in ETS, Then

click the switch button behind a timer , Switch the corresponding timer on / off.



Picture 4 Common timer interface




Click the switch icon in the upper right corner of Figure 4  Click the switch icon in the upper right corner of Figure 4 to switch to the custom timer page, as shown in

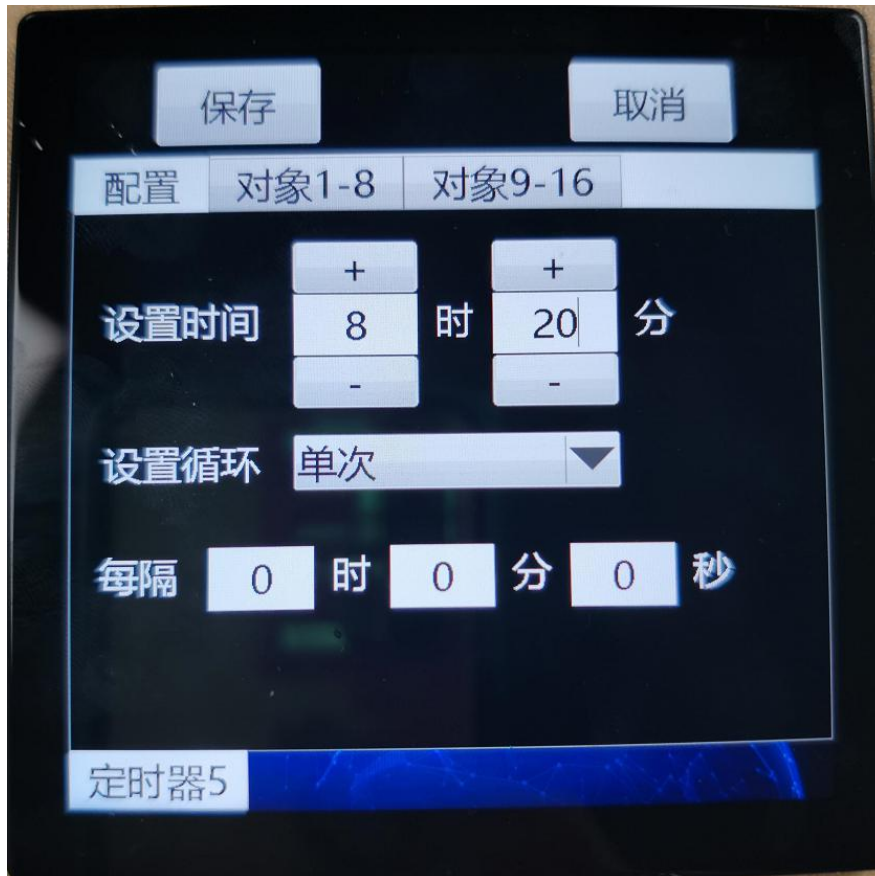
Figure 5. Click the custom timer interface switch Icon  Switch back to the normal timer interface.



Picture 5 Custom timer page

The user-defined timer can support up to 8 groups. Click the switch button behind a timer , switch the corresponding timer on / off. Click the name of timer (timer 1-timer 8) to enter the configuration page of corresponding timer, as shown in Figure 6 below.

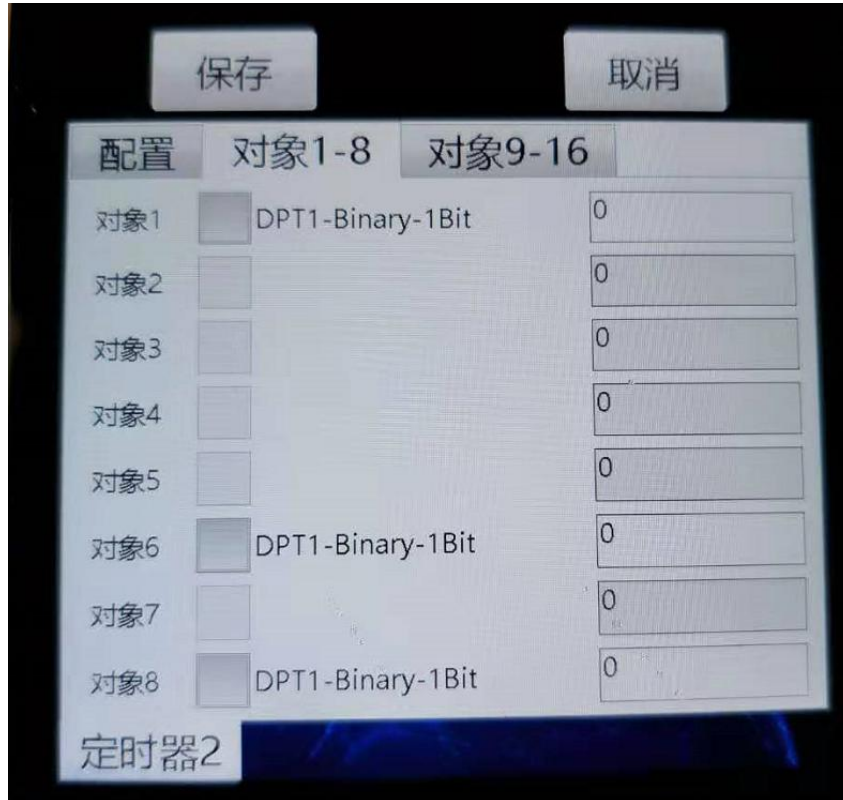




Picture 6 Custom timer configuration page

### Custom timer configuration method:

- ① Set a time at the set time.
- ② In the set cycle drop-down list, you can select how to repeat at a certain time. You can select single non repeat / daily repeat / workday repeat (Monday to Friday) / rest day repeat (Saturday and Sunday) / customize.
- ③ If you choose custom, you need to set how often to cycle below.
- ④ After setting the timing, click the "object 1-8" or "object 9-16" tab to enter the object selection page, as shown in Figure 7 below.
- ⑤ Check the object to be controlled and click the corresponding edit box to edit the sent value.
- ⑥ Click Save to finish timer configuration.



Picture 7 Custom timer object selection page

### 3. Proximity induction

When the graphic screen is off, someone walks to a certain distance in front of the screen and wakes up the screen saver. The farthest distance is 2 meters. Modifying the distance parameter of proximity sensor in ETS configuration tool can adjust the proximity sensing distance.

## 4 Application Functions

### 4.1 Shutter

#### Shutter operation function



Refresh icon in the upper right corner the current device status can be synchronized. Other pages have the same icon function. the three buttons in the middle are to close the curtain, pause and open the curtain.

### Roller shutter operation function

The middle slider can control the position of the roller shutter.

### Shutter operation function

The upper slider can control the position of the shutter.

The lower slider controls the shutter blade angle.

## 4.2 Dimming

### Single step dimming function

The switch icon in the upper right corner controls the on / off status of the device. Other pages have the same icon functions. The switch needs to be turned on before controlling the device.

The progress bar in the lower left corner shows the current device brightness.

The slider selects the percentage to be increased or decreased on the current brightness, and then click the OK button to adjust the brightness.

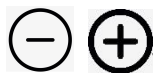
### Percentage dimming function

The progress bar in the lower left corner shows the current device brightness.

The slider adjusts the brightness of the device in real time, and the adjusted value is displayed on the progress bar at the lower right corner.

## 4.3 Air Conditioning Operation Function

Room temperature shows the temperature returned by the temperature sensor



Two icons control the setting temperature of the air conditioner

Click the wind speed icon to switch between five wind speeds.(high, medium, low, off, auto)

Click the mode icon to open the corresponding mode.(refrigeration, heating, dehumidification, ventilation, automatic)

## 4.4 Fan Coil Thermostant Operation Function

Room temperature shows the temperature returned by the temperature sensor



Two icons control the set temperature of the wind disk

Click the wind speed icon to switch between five wind speeds (high, medium, low, off, auto) Click the cooling or heating icon to open the corresponding functions. There are

four modes of cooling and heating functions (comfort, night, protection, standby)

## 4.5 Floor Heating Equipment Operation Function

Room temperature shows the temperature returned by the temperature sensor



Two icons control the setting temperature of the floor heating



Floor heating switch icon, can manually control the floor heating switch, click to switch to off state.



## 4.6 Fresh Air System Operation Function

Room temperature shows the temperature returned by the temperature sensor.

Click the wind speed icon to switch between four wind speeds.(high, medium, low, off)

The fresh air system provides four customized modes, which can be configured by the user in the ETS configuration tool.

## 4.7 Air quality function

Temperature is the value returned by the temperature sensor.

Humidity is the value returned by the humidity sensor.

Air quality index (AQI) the index calculated according to six pollutants: fine particles, inhalable particles, sulfur dioxide, nitrogen dioxide, ozone, carbon monoxide, etc.

PM2.5 is the content of particles with diameter of 2.5 μ m or less in the air.

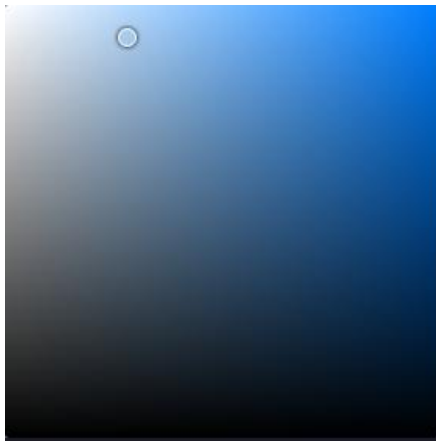
CO2 CO2 concentration.

Concentration of VOC harmful to human body.

## 4.8 RGB Dimming Function

Suitable for color dimming equipment with RGB three channels.

First, click the color selection bar on the right to select the reference color, and the palette in the center of the screen will generate the corresponding gradient color, which can be adjusted according to the reference color on the palette.



palette



Color bar

After the color is selected, if the "real time synchronization" selection box at the bottom left is checked, the dimming is automatically completed. If it is not checked, you need to click the "send" button at the bottom right to dimming.

In addition, if you know the RGB value of the desired color, you can enter the corresponding value in the red, green and blue selection boxes above, and then click send to complete dimming, which is more accurate.

#### RGBW Dimming Function

Suitable for color dimming equipment with four channels of RGBW.

First, click the color selection bar on the right to select the reference color, and then click the color palette in the center of the screen to generate the corresponding gradient color. You can fine tune according to the reference color in the color palette, and finally modify the white scale in the gray scale adjustment bar on the right.

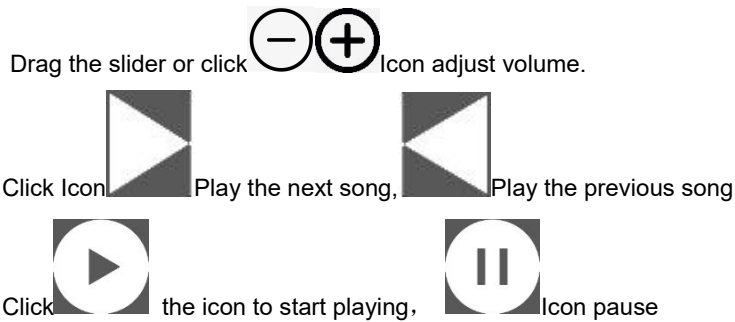



Gray adjustment bar


After the color is selected, if the "real time synchronization" selection box at the bottom left is checked, the dimming is automatically completed. If it is not checked, you need to click the "send" button at the bottom right to dimming.

In addition, if you know the RGB value of the desired color, you can enter the corresponding value in the red, green, blue and white selection boxes above, and then click send to complete dimming, which is more accurate.

## 4.9 Background Music Function



Click the cycle mode icon in the lower left corner  , Switch among four loop modes (sequential play, list play, single loop, random play)

Click the music source icon in the lower left corner  Switch the playing source of music.  
Users can configure the music source in ETS configuration tool.

## 5 Expansion Function

### 5.1 Background Change

Prepare a 720 \* 720 pixel PNG image

Use the official BmpCvtDemo software provided by EMWIN to open the picture and select File - > Save as.

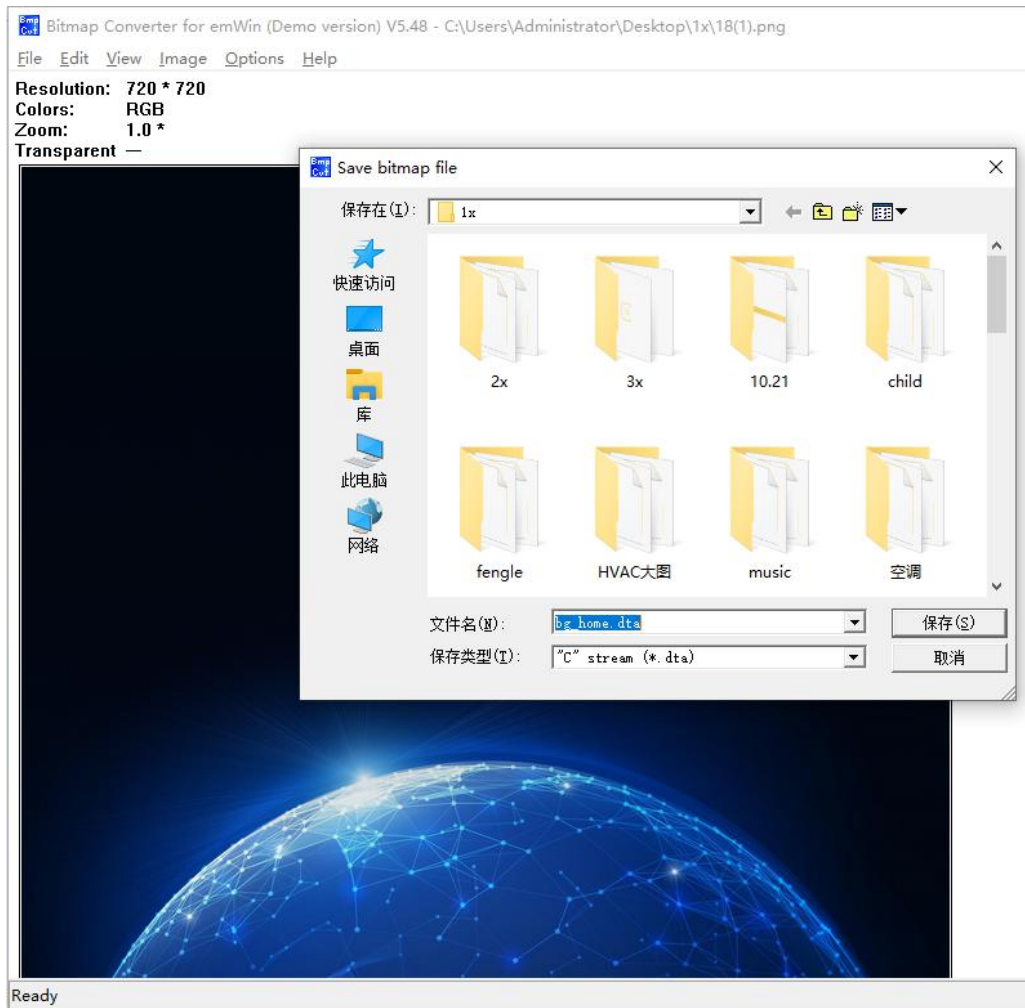
The file name is "BG home. DTA"

Save type selection "C" stream (\*. DTA)

Select "true color with alpha" in the pop-up color options

Replace the original U disk with the X: / sation / pictures / BG home.dta file

If you use JPG or other formats of pictures, the picture color will be distorted in theBmpCvtDemo software (blue channel and red channel exchange). Select "true color with alpha, R / b swayed, alpha inverted" in the pop-up color option when saving to restore the original color.



Use BmpCvtDemo software to convert PNG format picture to DTA format

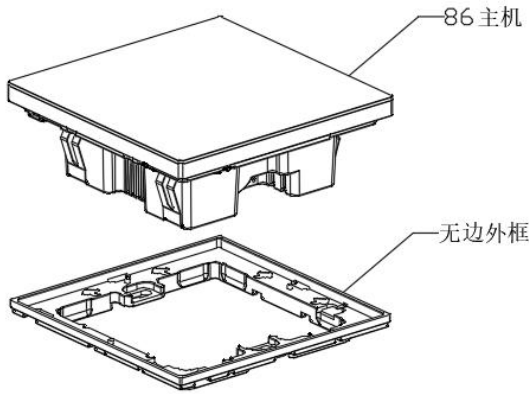
## 5.2 Change Theme

Delete X: / sation / pictures folder in USB flash disk.

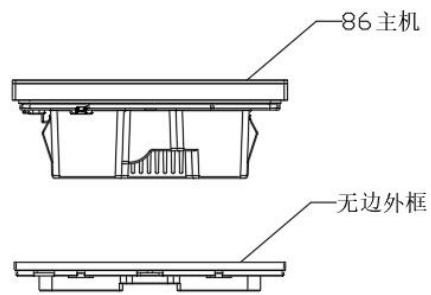
Extract the theme package provided by the manufacturer to the X: / sation / directory.

## 6 Installation Information

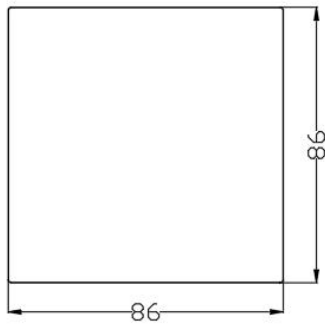
The outer frame is installed on the 86 cassette, and then the 86 screen host is buckled on the outer frame. The installation diagram is as follows.



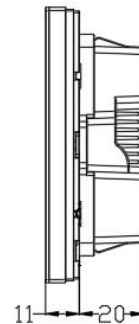
一、安装侧视图



二、安装左视图



三、安装主视图



四、安装左视图

## 7 Contact Us

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