

K-BUS® Colour Touch Panel 3.5”

User manual-Ver. 1.2

CHTF-35/01.1

CHTF-35/01.2.21

CHTF-35/01.2.22

CHTF-35/01.2.24

KNX/EIB Intelligent Installation Systems



Contents

1. Introduction	3
2. Technical Parameters	4
3. Dimensional Diagram and Circuit Diagram	5
3.1 CHTF-35/01.1	5
3.1.1 Dimensional Diagram	5
3.1.2 Circuit Diagram	6
3.2 CHTF-35/01.2.XY	6
3.2.1 Dimensional Diagram	6
3.2.2 Circuit Diagram	7
4. Project Design and Applications	8
5. Configuration Software Setting Description	9
6. Operation Interface and Icon	9
6.1 Main Control Interface	9
6.2 Intelligent Scene Mode	10
6.3 Time Setting & Time Switch Setting Menu	10
6.3.1 Time Setting Interface	11
6.3.2 Time Switch	11
6.4 Screen saver Clock Interface	12
6.5 Program Updating Interface	12
7. Functions & Applications	13
7.1 Switching and Dimming	13
7.2 Shutters/blinds Control	14
7.3 Scenes Control	15
7.4 Customized Value Sending	16
7.5 Temperature Control	16

1. Introduction

The Colour Touch Panel 3.5” (hereinafter referred to as TFT) is used to display status and control various devices in the EIB/KNX system. When you touch some graphic button in the TFT operation system, the TFT will execute a predefined function, such as switch lighting, scene control or blinds/shutter control etc. The TFT can display frame via LCD and make warning tone compare with common button panel, and the users can operation the TFT system easily and clearly via interactive interface.

This manual provides detailed technical information about the TFT for users as well as assembly and programming details, and explains how to use the TFT by the application examples.

The TFT is connected to the bus via the EIB connection terminals and need a 30V DC additional supply voltage, to assign physical address and configure the software parameter settings, and update the data directly through an SD card.

The TFT functions are summarized as following:

1. Capacitive touch screen, TFT colour display;
2. Switching, scenes, dimming, curtains control, intelligent scene control and other control functions
3. Time and date display
4. Screen-saver options: clock, electronic photo album, gradient black or do not use
5. Configure the database through the PC software, and update data directly via an SD card
6. Customizing the setting of the main interfaces.

Note : For CHTF-35/01.1 and CHTF-35/01.2.XY, Their main difference is the size and appearance. (X- surface material, Y- housing color)

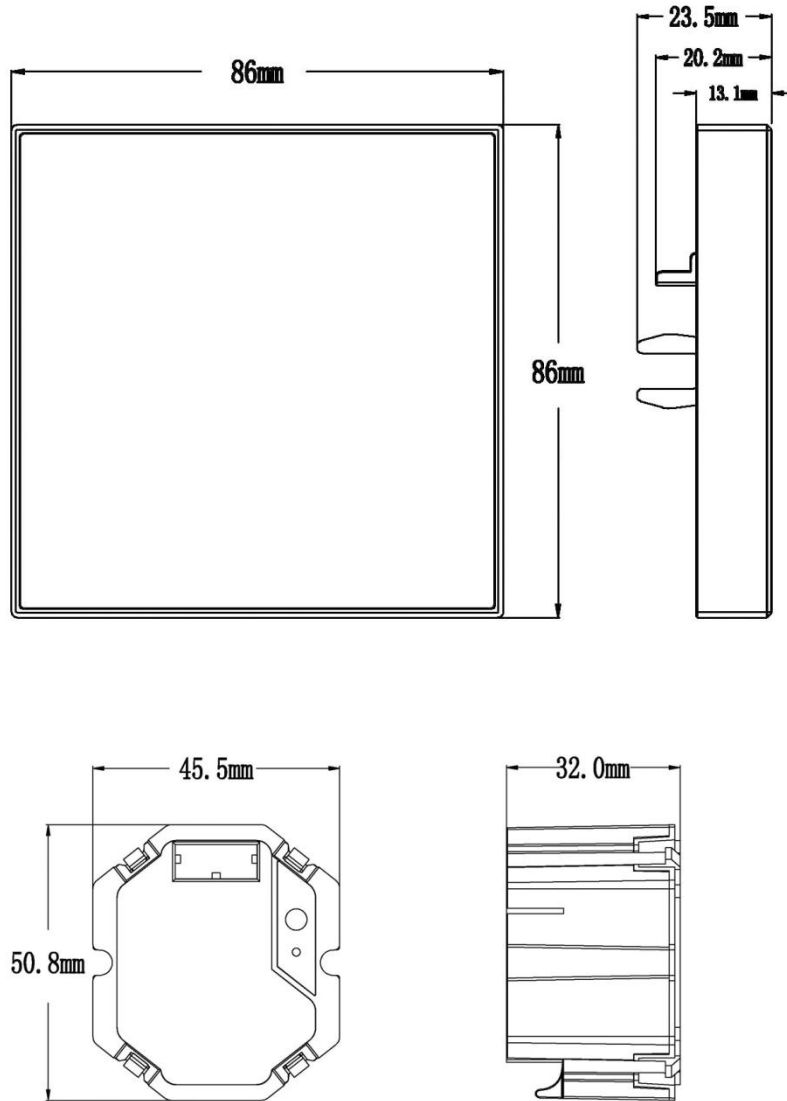
2. Technical Parameters

Power Supply	Operating Voltage	21-30V DC, powered from BUS
	Auxiliary power supply	20-30V DC
	Bus Current	<12mA
	Bus Power Consumption	<360mW
	Auxiliary Power Consumption	<6W
Connections	EIB / KNX	Via bus connection terminal(black/red)
	Auxiliary power supply	Via bus connection terminal (gray /yellow)
	Cable cross-section	Single core 0.2—6.0mm ² Multi core 0.2—4mm ²
Operating and Indicating	Red LED and Programming button	For assignment of the physical address
	Green LED flashing	Indicate the device running normally
	Display screen reset button	Restart TFT display system
Temperature	Operation	-5 °C ... + 45 °C
	Storage	- 25 °C ... + 55 °C
	Transport	- 25 °C ... + 70 °C
Environment	Humidity	<93%, except for dewing
Design	Embedded installation	
Installation	Standard 86-box; wall-mounted	
Dimensions	86*86mm	
Weight	0.25KG	

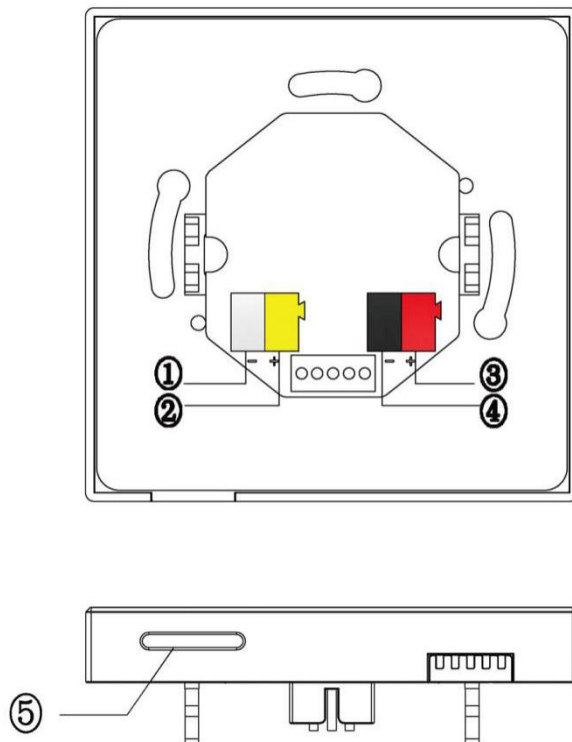
3. Dimensional Diagram and Circuit Diagram

3.1 CHTF-35/01.1

3.1.1 Dimensional Diagram



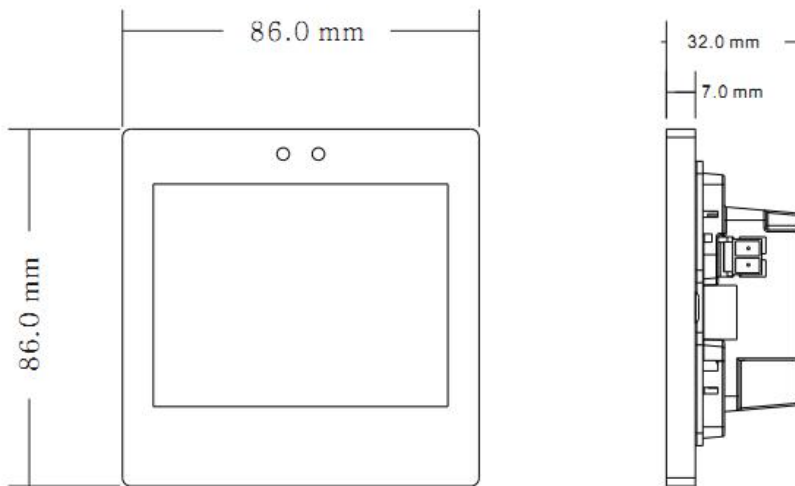
3.1.2 Circuit Diagram



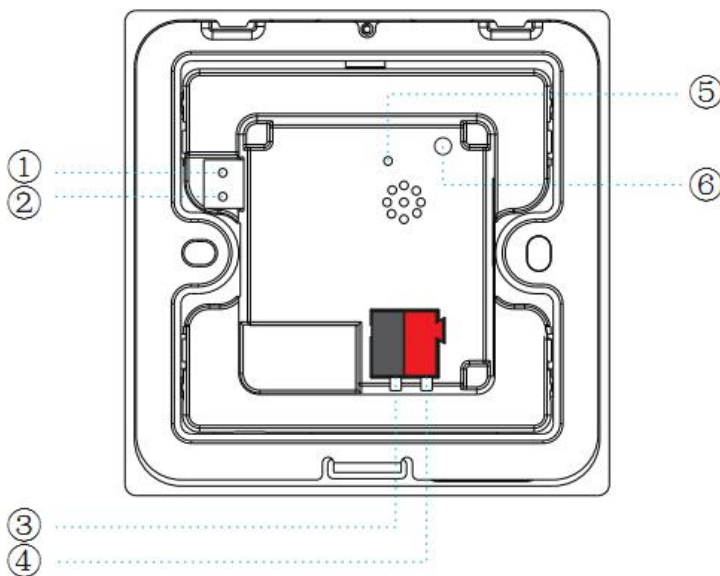
- ① and ②: auxiliary power supply connection terminals
- ③ and ④: KNX/EIB Bus connection terminals
- ⑤: SD card slot

3.2 CHTF-35/01.2.XY

3.2.1 Dimensional Diagram



3.2.2 Circuit Diagram



① and ②: auxiliary power supply connection terminals

③ and ④: KNX/EIB Bus connection terminals

⑤: Programming LED

⑥: Programming button

4. Project Design and Applications

Features Overview:

TFT main interface can be configured according to the users' needs, unrestricted buttons, and max. 10 pages of icons can be configured.

Switching and Dimming

The functions can be used for switching and dimming the lighting devices, the dimming and switching has feedback status value. Its dimming way uses absolute dimming.

Shutters/blinds Control

The function can be used for movement/lamella adjustment of a blind or a shutter, and the quantity of devices under control depends on the user.

Scenes Control

The function is used for recalling and storing a scene, and the quantity of devices under control depends on the user.

Customized Value Sending

The function can be used for sending values of different data type. A group values can be send to bus via an operation, which include three values that may be different data type. Sending interval can be configured according to user needs.

Intelligent Scene

User can configure via PC software scene values for different time periods, 24 hours can be divided into max. 24 time periods, thus user can call different scenes in different time periods.

HVAC

HVAC is used to control indoor temperature. It adjusts the room temperature according to the measured temperature from the bus ,as well as the usage and the requirement of the room.

5. Configuration Software Setting Description

Reference the Introduction of Configure Software for the Touch Panel.

6. Operation Interface and Icon

6.1 Main Control Interface



The main interface shows time and date, page name and functional buttons. Slide down the screen, there will be a key scene screen, click on the upper right corner setting button, you can modify the date and time, and on/off timer.

Switching pages by sliding around.

6.2 Intelligent Scene Mode



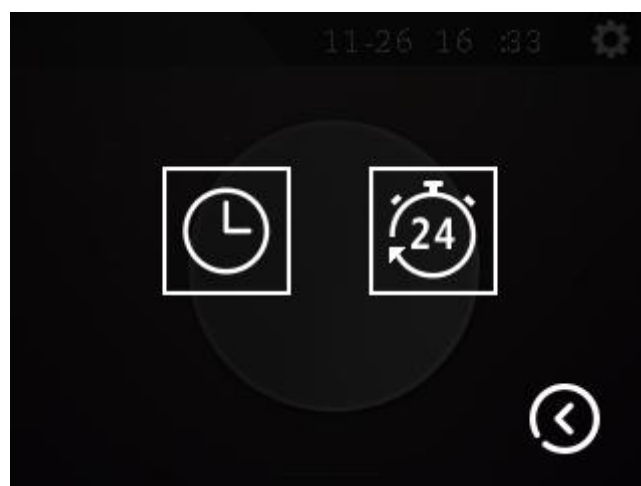
By sliding down from the main interface, it enters the intelligent scene interface; the main interface displays time and date, the name of scene, and the time setting button.

User can send in different scenarios in pre-set time period, to achieve the purpose of calling different scenarios for different time.

User can exit Intelligent Scene interface by sliding the screen up, and return to the main interface.

6.3 Time Setting & Time Switch Setting Menu

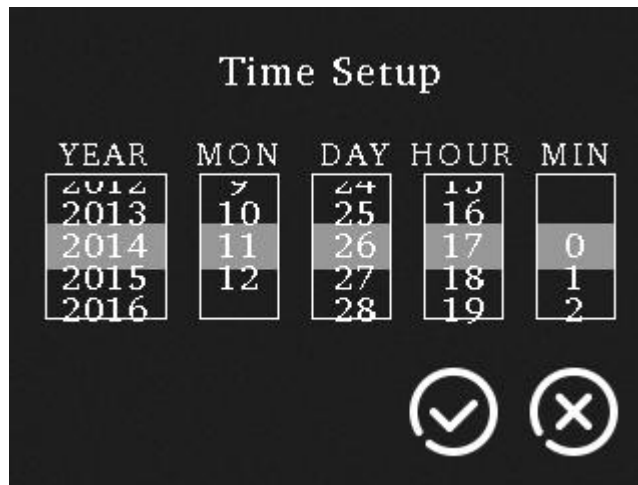
Click the time setting button in the upper right corner of the intelligent scene interface , and to enter time setting interface, as shown below:



The left icon is used to set the current time and date, the right icon is used to set the timer switch.

6.3.1 Time Setting Interface

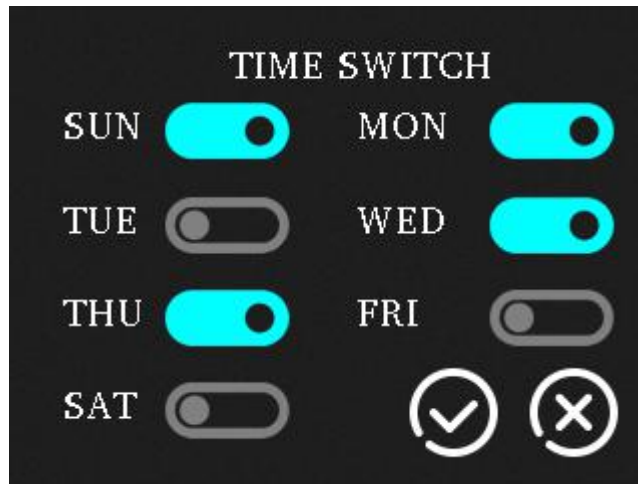
To set the current time and date, as shown below:



6.3.2 Time Switch

Clicking the icon can enable or disable the day timing function of weekly timer.

It is valid for day mode and week mode.



6.4 Screen saver Clock Interface



6.5 Program Updating Interface

When user inserts the SD card with project file into the slot, it will prompt, as shown below:



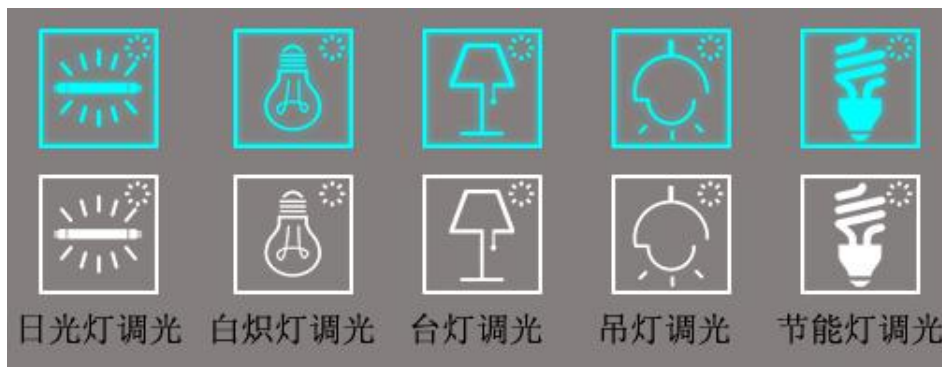
7. Functions & Applications

7.1 Switching and Dimming

1. Icon



Without dimming icon



With dimming icon

2. Operation Interface

Short press the button to send the switching telegram

Long press the button for dimming (according to the parameters setting)

See the figure as follows,



7.2 Shutters/blinds Control

1、Icon



2、Operation Interface

Short press the curtain button to enter its secondary interface, showing as follows,



Depending on the configuration of the software parameters, in blinds/curtains mode, two or three buttons can be configured.

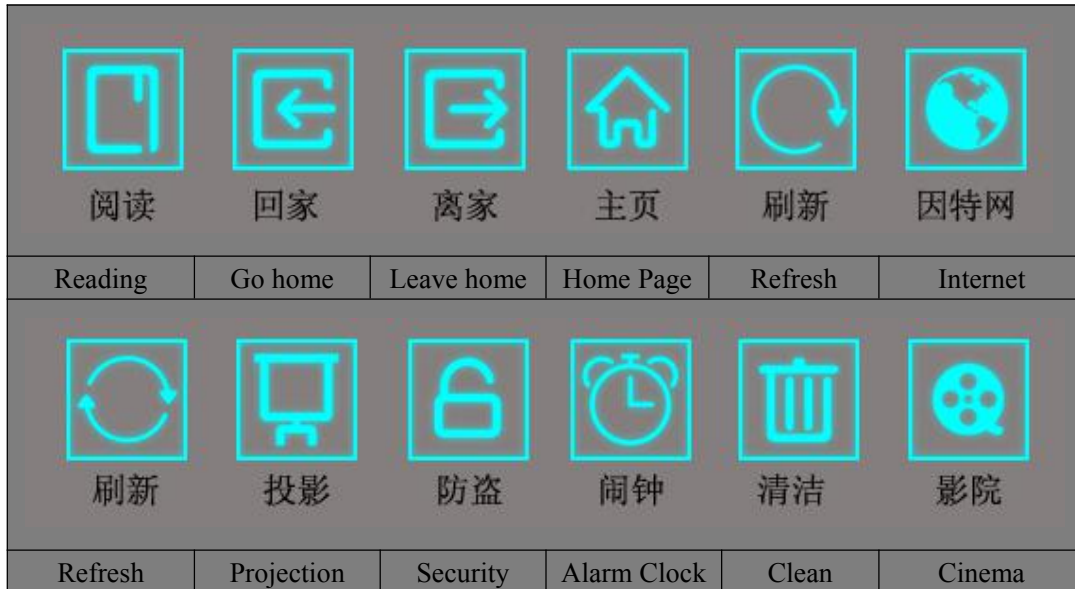
General, two or three buttons are suitable for the blinds, if two buttons, move up or down the blinds via a short operation, and adjust slats or stop move via a long operation; if three buttons, stop move can be carried out via a single button. For curtains, commonly used three buttons, all open, close or stop the curtain

are carried out via short operation.

Click the bottom right button to return to a main interface.

7.3 Scenes Control

1. Icon



2. Operation Interface

Short-press to call scenes














Long press to enter the secondary interfaces, asking whether to save the scene (depending on the parameter settings), showing as the below figure,



Click on the button of showing effect picture, return to the main interface.

7.4 Customized Value Sending

1.Icon

						
配置	设置	调节设置1	调节设置2	解锁	通用灯	发射器
Configuration	Setting	Adjustable Settings 1	Adjustable Settings 2	unlock	lamp	emitter
						
红外发射	网络电视	传感器1	传感器2	空调	通用开关	
IR emission	web TV	Sensor 1	Sensor 2	AC	Switch	

2.Functions



Click the button to send a group of different types of data telegrams. (According to the parameters setting)

7.5 Temperature Control


1. Icon



The top row:  humidity,  cooling,  heating,  speed and speed status display;

The middle row:  Indoor/outdoor temperature switch,  temperature display

The bottom row:  comfortable mode,  standby mode,  night mode,  protection

mode;  setting temperature for the current operation mode via long operation, and enable or disable the auto

control mode via short operation.  displaying set temperature value for the operation mode.

2. Functions

Humidity: by bus telegram to update values.

Heating/Cooling: configure temperature control system through the configuration software. If set as heating/cooling system, user can click to switch between heating and cooling. When click the icon, the set temperature of the current operation mode, heat/cool status and stop control telegram will be sent to the bus. The heat and cool also be switched via the bus.

Speed: Long press its icon to enter the fan speed setting interface. After setting, the new value will be updated in the interface. Short-press to switch to OFF, AUTO (if you enable the fan speed automatic mode in the parameter).

Indoor/outdoor Temperature: the indoor/outdoor temperature can be obtained via the bus. Click the icon to switch to display indoor or outdoor temperature, and users can set automatic switching time in the configuration software. The indoor temperature is also obtained via a temperature sensor integrated within the panel, and can set a correction value via the parameter.

Working Modes: user can switch the current mode by clicking the icon. When clicking the icon, the current operation mode and its set temperature will be sent to the bus. The operation mode can be also updated via the bus.

Temperature Setting: long-press it to set the current mode temperature range of 5 to 40 degrees Celsius, short-press it to enable or disable the auto control mode.