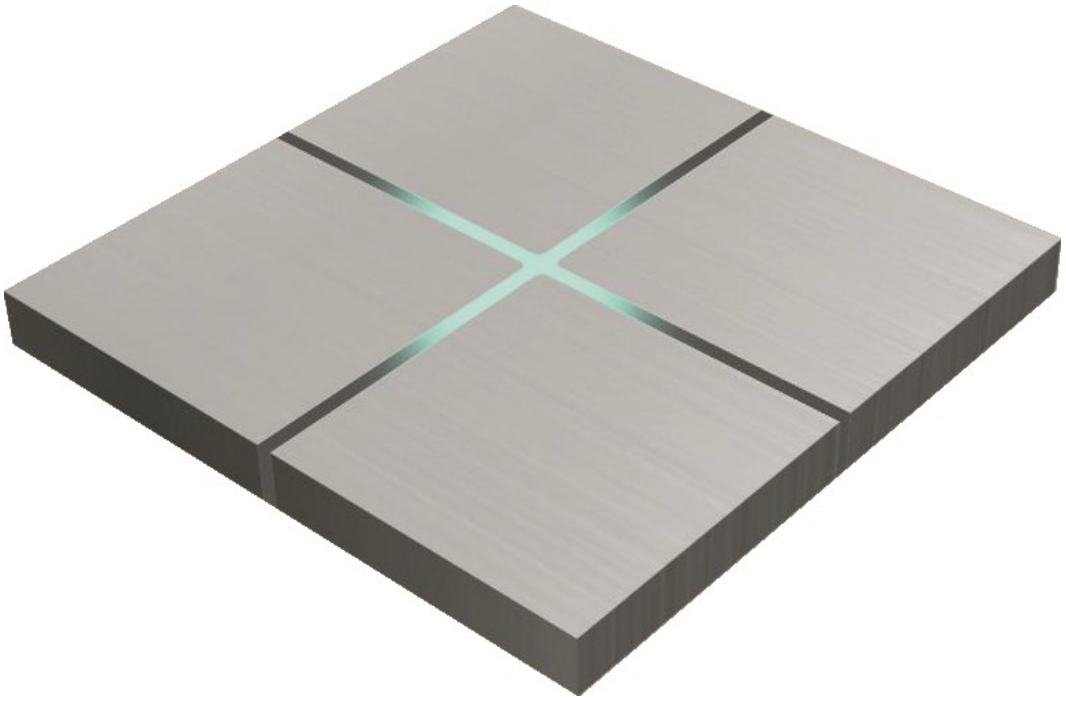
Light Control

Light Control -KNX Metal Touch Panel 4-Fold User Manual



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Light Control

Copyright Clarify

Version

Version No.	Release Date	Description
V1.0	March 28th, 2018	1st Release

Notice

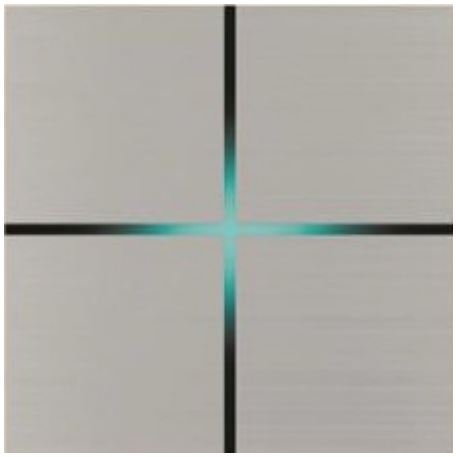
1. Please read this user manual carefully before using the product.
2. This product is used in indoor environment and installed in electrical control box.
3. Please install this product in a dry and ventilated place.
4. Before power on, please confirm the input voltage according to the manual; after 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 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 Metal Touch Panel

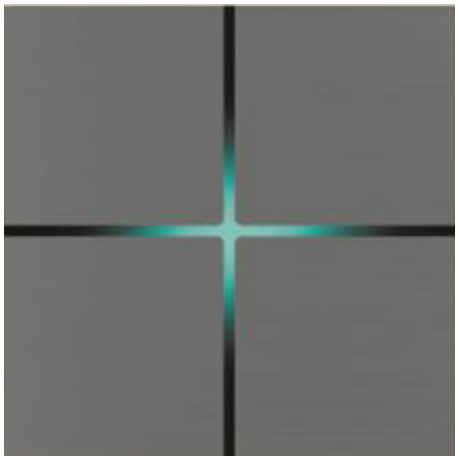
1.1 Light Control Electrical Parameters of Metal Panel

Supply way	KNX-Bus Feed	DC 21V…31V
	Supply current	< 15mA
	Power consumption	< 0.5W
	Channel	4-fold
	Rated current	12mA
mechanical characteristic	Fingerless toughened glass panel	1.5mm/80boxes；
	Alloy chrome plated frame	1.5mm/80boxes；
	Standard KNX Control Line Definition, Installation Mode of BCU Inner Box	80boxes/86boxes Optional；
Lifetime	ON-OFF operation life Electrical life：>10 years	Unlimited
External connections	KNX-TP1	Twin cable comply meet KNX standard are required
	Auxiliary terminal	
Operating and display element	Push button and corresponding indicator	LED
	switch position	LED
	tone	Configurable；
Enclosure	IP61	EN60529
Safety class	II	EN61140
Insulated isolation	Overvoltage	EN60664-1 III
	Power grid pollution	EN60664-1 2
KNX safety voltage	SELV	24V DC
Temperature range	Operation	-5℃…+45℃（3K5series）
	Storage	-25℃…+55℃
	Transport	-30℃…+70℃
Ambient conditions	Maximum humidity	95%
Mechanical parameters	volume	80 X 80 X 10)；(86 X 80 X 10);(86 X 86 X 33)
	Weight	0.03kg
	Installation	80/86
Appearance	Silvery ,gray ,black	Color code：PANTONE BLACK 6C
Approvals	KNX EN50090-1\-2	

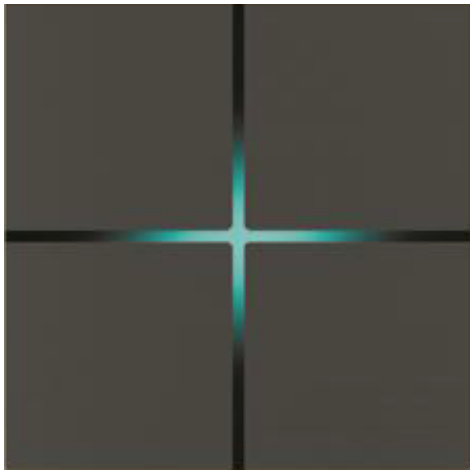
1.2 **Product Appearance**



Silvery



Gray



Black

2 Overview Function

This booklet provides all the details for the SATION Touch panel, including the installation and programming details. For easy installation,, the product of this series comply with International Installation Standard, mounted on 80mm or 86mm concealed wall socket.

LC-PBBZ04W-TP product is used for controlling various KNX actuators,eg.
——Panel controller
——Light modulator
——Function Unit needs human-computer interface

Through the KNX bus and other equipment, it is installed as the control system of building electrical equipment.

The system can be debugged conveniently by using ETS, an engineering debugging tool

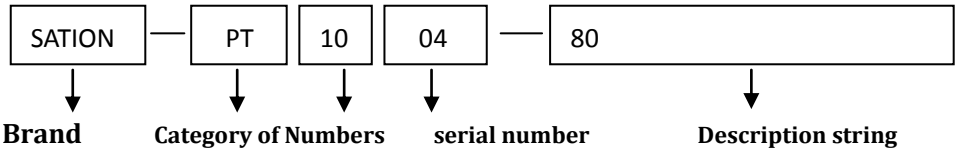
2.1Product Specific Function Description

SATION Touch Series panel controllers can choose single key (gesture recognition) 4-key common specifications and other personalized models, connect to the system network using KNX bus terminals, and control various KNX actuator devices without additional power supply. Distribution of physical addresses and setting of parameters are accomplished by engineering design tool software ETS with VD3/VD4 files (version ETS 3 v1.3 or more). If ETS 4/5 software is used, VD4 files need to be installed.
This panel controller was used as artificial control interface for indoor electrical equipment. Every button controls the function corresponding to the goal node, every way is with equipment on/off status indication

Touch panel can work as two modes below.
Channel grouped function
——Dimming: edge switch, short/long keystroke dimming.
——Shutters: The short keystroke (Stop/Blinds Adjustment), The long keystroke(Shutter Down/up)
——Switch: edge control

Channel unique function
——Switch：edge control, short/long keystroke control ,edge reversal.
——Scene: Saving function, select different scene
——One Button Dimming: The long keystroke addresses the communication object "Dimming on/off".
——One Button Shutter: The long keystroke performs up- and down- movement of the shutter. The short keystroke performs adjust the blinds and stops a running movement of the shutter.
The upper two models are support blocking object, object and/or logical operation ,as well as behavior of power up/ behavior of power down on the device.

2.2Model Naming Rules and Model List :



Model List: （The grey model is a non-main model and needs to be ordered）

Model	PT1014
Channel	4
Status indicator	1
supply	KNX-BUS
consumption <	0.5W
Bus interface	KNX-BUS
IP level	IP61

3 Technical Performance and Size, Connection Diagram

3.1 Application Data

SATION panel controller is a modular installation equipment according to the national standard design requirements, which is convenient to install on the wall boxes reserved for building walls. Connect to EIB/KNX system through BCU unit in wall box.

The panel is assembled with standard components in the wallbox through a connector with no less than 5 bull pull-in force. A convenient disassembly structure design enables users to directly replace the key indication graphics or text on site, thus realizing the personalized application of keys.

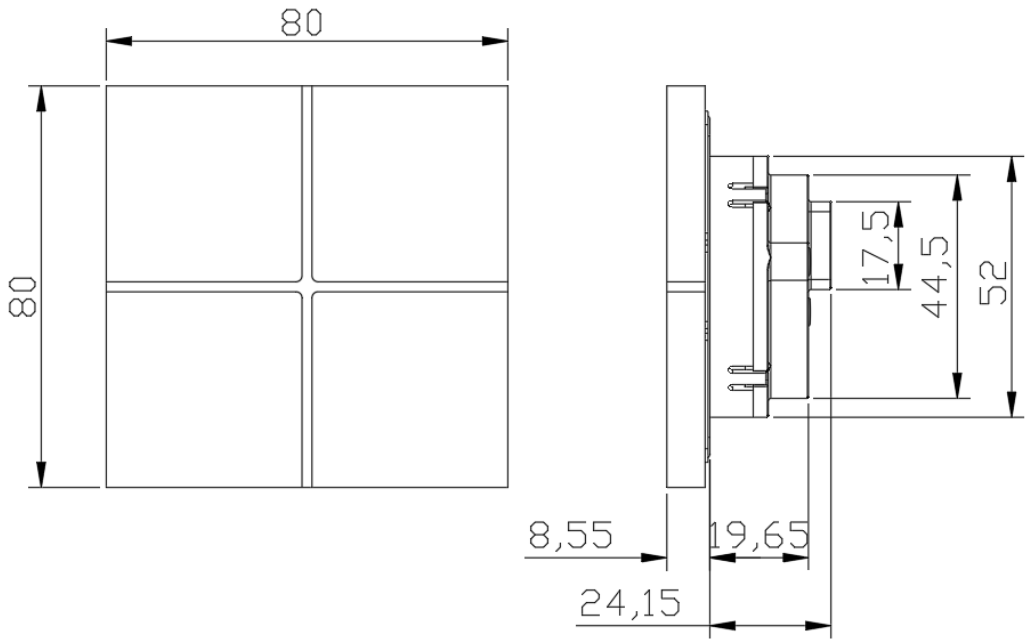
At present, panel color can be provided: pure black, ivory white, sapphire, golden yellow four colors；

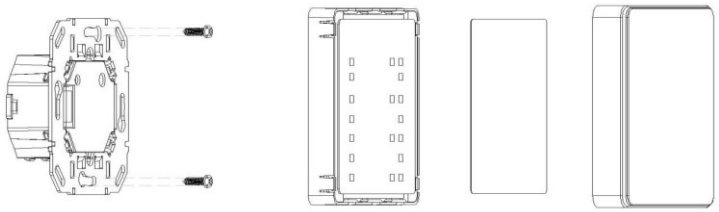
Power supply - working voltage 21... 31 V DC, bus provided;

—EIB / KNX Static current consumption < 15 mA
—EIB / KNX Power consumption Max. 500mW
Switching Performance (Contacts)
—Maximum electrostatic discharge：4kv/10 times per minute
—Maximum electrostatic air discharge：8kv/10 times per minute
—Maximum response time：500ms
Service life：
—Mechanical life is unlimited
—Electrical life is IEC 60 947-4-1, 10-year shelf life
Connect :
—EIB / KNX Bus connection terminal (diameter 0.8mm)
Operations and instructions:
—Key Assignment Physical Address, Programming；
—The application layer of LED scintillation indicator device on BCU works normally.
—
—Controlled Target Disconnection: Dimmer Indicator
Shell:
—Panel IP61 ； BCU IP50 ; BasisEN60529
Safety Level:
—II ； Basis EN61140
temperature range:
——Operation -5 °C ... + 45 °C
———Storage-25… + 55 °C
—Transport – 30 °C ... + 70 °C
environment condition:
—Humidity < 93%, except dew
Weight： Not more than 0.25kg；

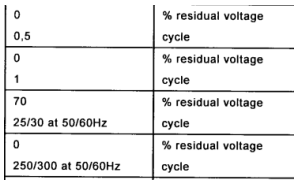
3.2 Dimension Diagram and Application Connection Diagram

3.2.1 LC-PBBZ04W





5.1 LC-PBBZ04W series panel electromagnetic compatibility(CE) standards in the chart below:

items	NO	Require level	Performance	Remarks
ESD (EN61000-4-2)	EN61000-6-1	Contact 4KV/ Air 8KV	B	
RS (EN61000-4-3)		80MHz-2GHz: 3V/m 2G-2.7GHz: 1V/m	A	
EFT (EN61000-4-4)		±1KV	B	
SURGE (EN61000-4-5)		L-N ±1KV L-PE ±2KV	B	
C/S (EN61000-4-6)		3V	A	
M/F (EN61000-4-8)		3V/m	A	
DIPS (EN61000-4-11)			B &C	
Conducted interference	EN61000-6-3	66dB(μV) - 56 dB(μV) QP 56dB(μV) - 46 dB(μV) AV	A	0.15MHz-0.5MHz
		56 dB(μV) QP 46 dB(μV) AV	A	0.5MHz-5MHz
		60dB(μV) QP 50dB(μV) AV	A	5MHz-30MHz
Radiated interference		40 dB(μV/m)	A	30MHz-230MHz
		47 dB(μV/m)	A	230MHz-1000MHz
Harmonic current	EN61000-3-2		A	
Voltage fluctuation	EN61000-3-3		B	

Remark 1：The above standard level requirement from KNX standard 4-2 roll.

Remark 2：Performance A：Do not allowed errors ; Performance B：Allowing errors.

5. 2 LC-PBBZ04W series panel safety specification (CE) standard in the chart below.：

Items	NO	Require level	performance	Remarks
	EN60947-3			
Insulation strength test	√	2	--	
Inflaming retarding test	√	2	--	
Temperature rise test	√	2	A	
Corrosion resisting test	√	2	A	
Electrical life test	√	2	A	
On-off volume control test	√	2	A	
Normal operation test	√	2	A	