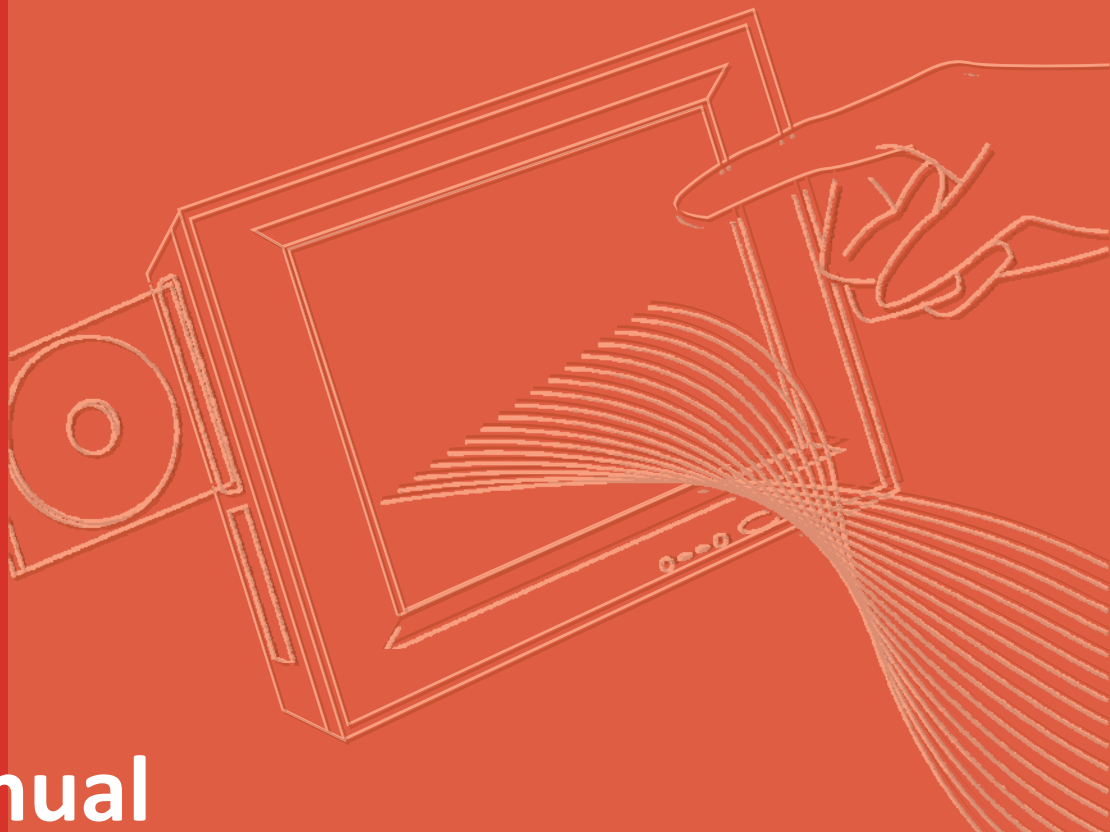




User's Manual

UbiQ-SM30

User's Manual V0.01a

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Chapter 1

UbiQ-SM30 Hardware Functionality

This details hardware's specification and functionality in the UbiQ-230T Scenario Control

1.1 Introduction

This manual will detail hardware specification and functionality in the UbiQ-230T Scenario Control.

1.2 H/W Specification

1. UbiQ-230T is 200MHz ARM-based platform with 18-bit QVGA TFT LCD and 4-wire resistive touchscreen panel. The H/W specification is as below table.
2. UbiQ-150 is multi channel controller. Including control systems, dry connect and trigger device in the system. The H/W specification is as below table.

1.2.1 UbiQ-230T Specification

Table 1.1: UbiQ-230T Specification		
UbiQ-230T		
Kernel part	CPU	ARM9 CPU 200 MHz
	System memory	16MB Flash for Bootloader, O/S and AP 32MB SDRAM
	RTC	CPU internal and External I2C RTC Controller
	Power Input	12 VDC, Max. 500mA
	OS	Microsoft® Windows® CE.NET 5.0
I/O ports	Serial Ports	Two RS-232 ports and one RS-485 w/ AFC -COM1 Transceiver RS-232 for debugging -COM2 Transceiver RS-232 for expansion -COM3 RS-485 w/ AFC for scenario control
	Ethernet	10/100 BASE-T Ethernet Port
	USB Port	USB Host Port for debugging
System Part	Display	3.5" 18-bit QVGA TFT color LCD panel
	Touchscreen	4-wire resistive touchscreen panel
	Inverter	White-LED backlight
	Audio	AC'97 Stereo Audio w/ 1W Speaker
	CIR	CIR receive for remote control
	H/W Reset	H/W reset push button
	Control Button	7 push buttons; 5 for scenario controls, 1 for welcome mode and 1 for away mode
	LED Indicator	7 red LEDs indicators for each control buttons
Environment	Working Temperature	0~40° C (32° ~104° F)
	Operating Humidity	0%~90% Relative Humidity

1.2.2 UbiQ-230Tinterface

This section locates connectors of UbiQ-230T and describes their functionality. About the detail pin assignment, please refer to below.

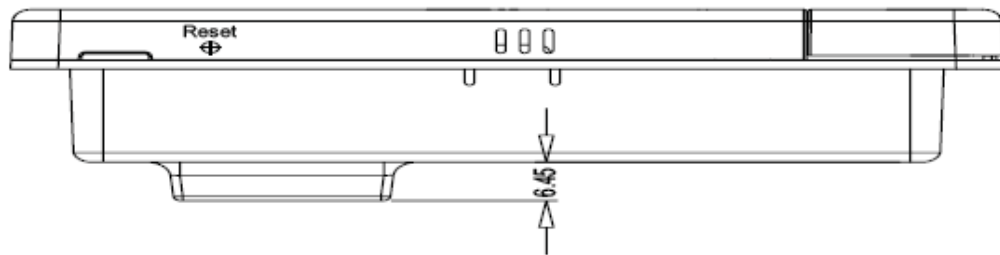


Figure 1.1 UbiQ-230T H/W reset button and Speaker holes of the UbiQ-230T from bottom

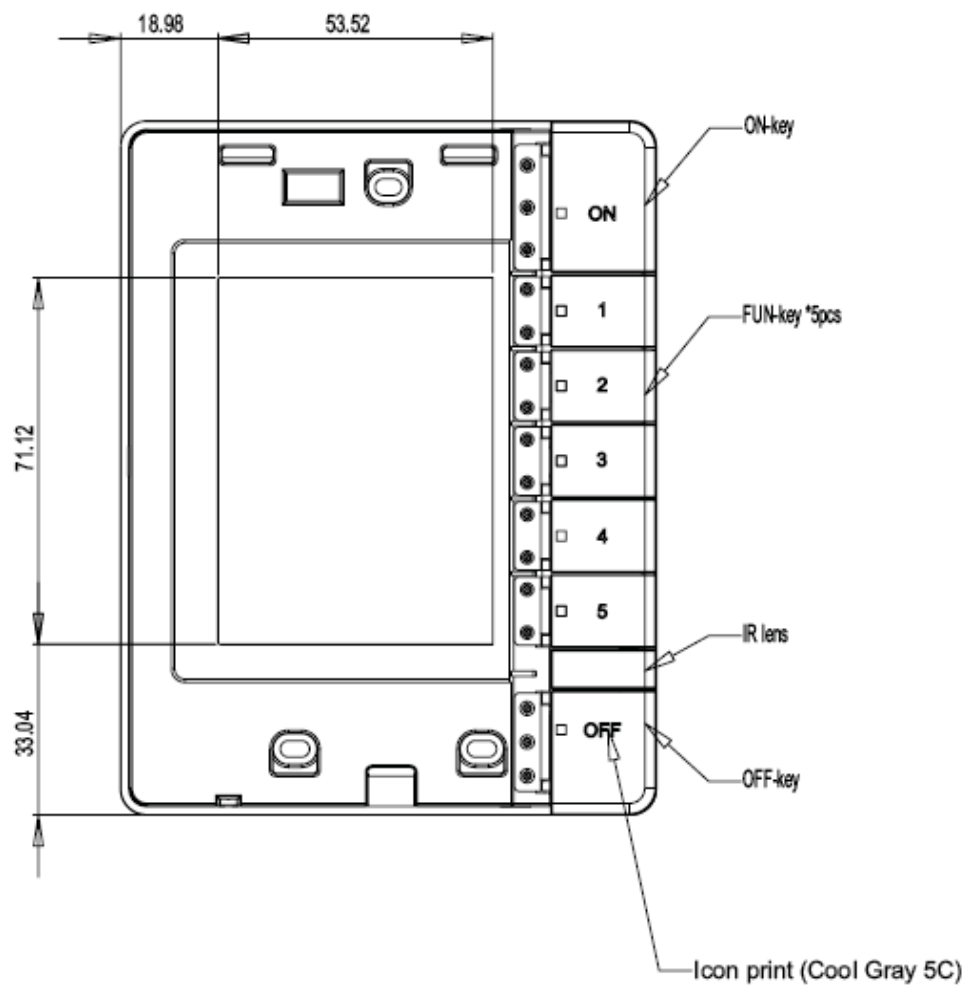


Figure1.2 UbiQ-230T COM1 connector of the UbiQ-230T from frame panel

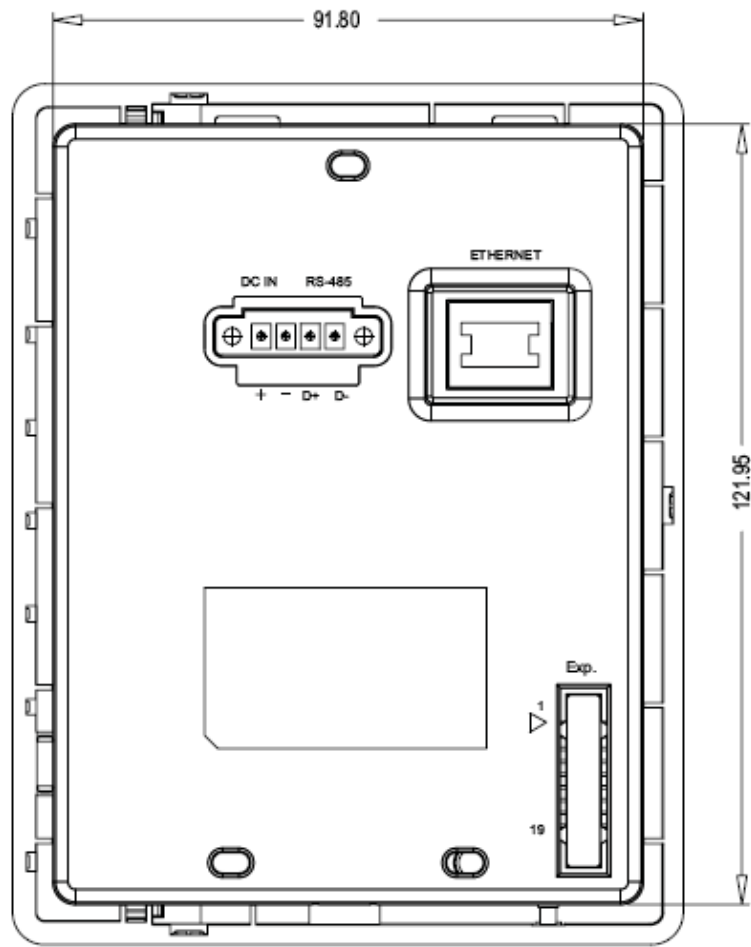


Figure 1.3 Phoenix connector, RJ-45 and expansion port of the UbiQ-230T from component side

Table 1.2: Connector Description

Connector Type	Function
RJ-45	10/100 Base-T Ethernet Connector
4P phoenix Connector	2-pin for DC power input, range from 8~28Vdc 2-pin for RS-485 scenario control
2X5 pin header	1X RS-232 for message debugging and 1XUSB host port for debugging
2X10 pin header	1X RS-232 for expansion function

1.2.2.1 Connectors' pin definition

Pin	Function
1	N/A
2	COM1_RXD
3	COM1_TXD
4	USB_VCC
5	GND
6	USB_D-
7	N/A
8	USB_D+
9	+3.3 V
10	GND
2 x 5 pin header	

Pin	Function
1	12 VDC Power Input
2	GND
3	RS-485_D+
4	RS-485_D-
phoenix connector	

Pin	Function	Pin	function
1	N/A	2	COM1_RXD
3	COM2_TXD	4	N/A
5	GND	6	N/A
7	N/A	8	N/A
9	N/A	10	GND
11	N/A	12	N/A
13	N/A	14	+3.3 V
15	N/A	16	N/A
17	N/A	18	N/A
19	N/A	20	+5 V
2 x 10 pin header			

1.2.2 UbiQ-150 Specification

Table 1.3: UbiQ-150L-Mx-211 Specification

UbiQ-150L-Mx-211		
Output	Power output	8 CHs 110~220VAC / 5A
	Relay output	8CHs 110~220V / 8A
	DC output	8CHs 0~10VDC / 100mA
	Dry contact output	8CHs (Dry contact)
	Dry contact input	8CHs (Dry contact)
	DC power output	2CHs 12VDC / 1A
	Operation protocol	Advantech / DMX-512 Protocol
Input	Serial	1Ch UbiQ Net port (include 12VDC / DMX-512)
	Power	110~240 VAC/ 20A
Environment	Working Temperature	0~40°C (32°~104°F)
	Operating Humidity	0%~90% Relative Humidity

Table 1.4: UbiQ-150M-Mx-111 Specification

UbiQ-150M-Mx-111		
Output	Power output	8CHs 110~220VAC / 5A
	Relay output	8CHs 110~220V / 8A
	DC output	8CHs 0~10VDC / 100mA
	Dry contact output	8CHs (Dry contact)
	DC power output	2CHs12VDC / 1A
	Operation protocol	Advantech / DMX-512 Protocol
Input	Serial	1Ch UbiQ Net port (include 12VDC / DMX-512)
	Power	110~240 VAC/ 20A
Environment	Working Temperature	0~40°C (32°~104°F)
	Operating Humidity	0%~90% Relative Humidity

Table 1.5: UbiQ-150M-Sx-200specification

UbiQ-150M-Sx-200		
Output	Power output	8CHs 110~220VAC / 5A
	DC output	8CHs 0~10VDC / 100mA
	DC power output	2CHs12VDC / 1A
	Operation protocol	Advantech / DMX-512 Protocol
Input	Serial	1Ch UbiQ Net port (include 12VDC / DMX-512)
	Power	110~240 VAC/ 20A
Environment	Working Temperature	0~40°C (32°~104°F)
	Operating Humidity	0%~90% Relative Humidity

Table 1.6: UbiQ-150M-Sx-020 Specification

UbiQ-150M-Sx-020		
Output	Relay output	16CHs 110~220V / 8A
	DC power output	2CHs12VDC / 1A
	Operation protocol	Advantech / DMX-512 Protocol
Input	Serial	1Ch UbiQ Net port (include 12VDC / DMX-512)
	Power	110~240 VAC/ 20A
Environment	Working Temperature	0~40°C (32°~104°F)
	Operating Humidity	0%~90% Relative Humidity

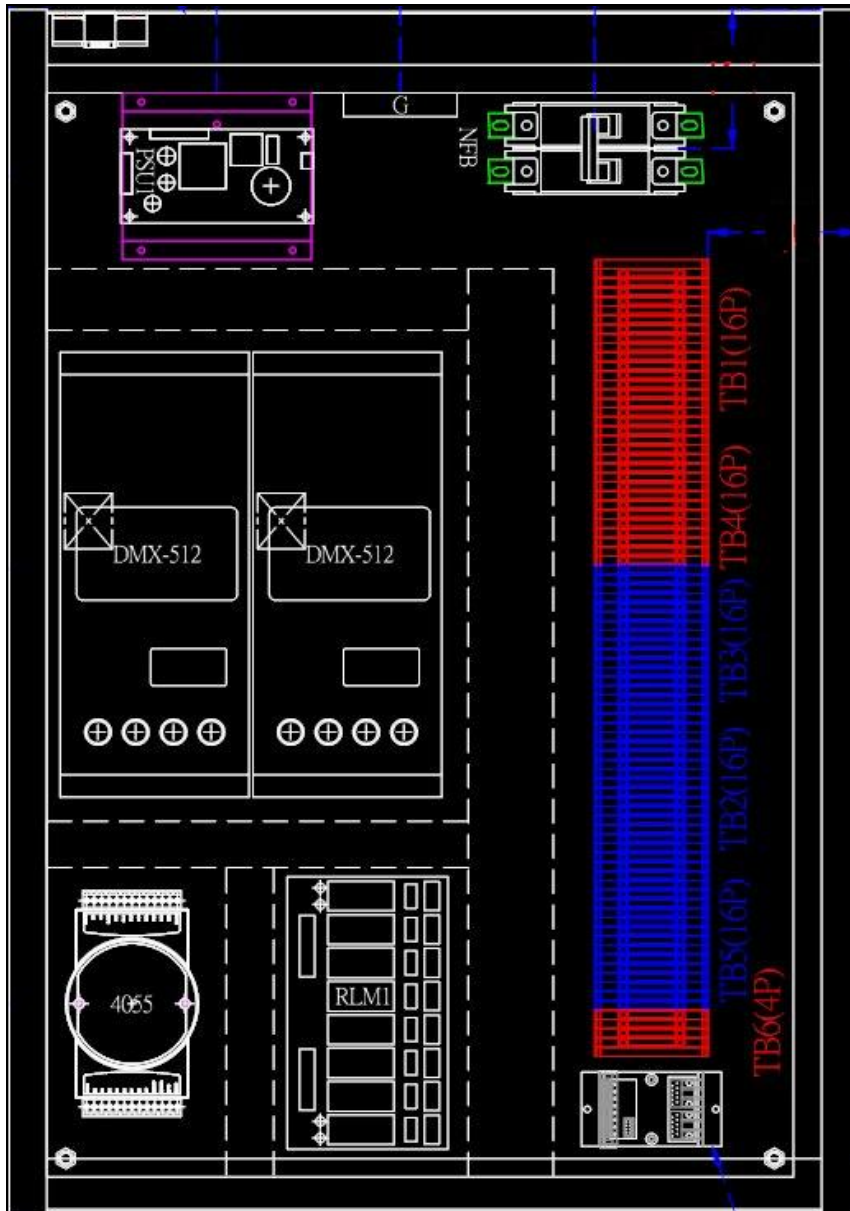
Table 1.7: UbiQ-150M-Sx-002 Specification

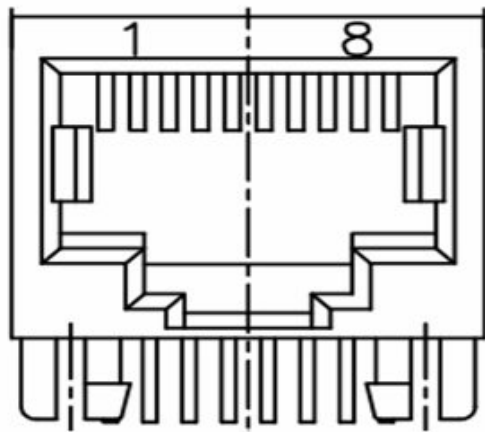
UbiQ-150M-Sx-002		
Output port	Dry contact output	8CHs (Dry contact)
	DC power output	2CHs12VDC / 1A
	Operation protocol	Advantech / DMX-512 Protocol
Input port	Serial	1Ch UbiQ Net port (include 12VDC / DMX-512)
	Power	110~240 VAC/ 20A
Environment	Working Temperature	0~40°C (32°~104°F)
	Operating Humidity	0%~90% Relative Humidity

1.2.3 UbiQ-150 Interface

This sub chapter to detail description with UbiQ-150 connect and functionality. Relate detail pin and placement please read below contents.

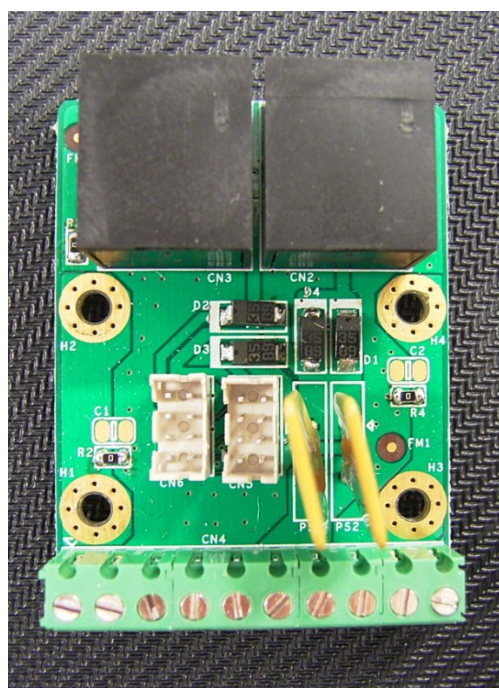
Figure 1.4: UbiQ-150L-M211connect specification.



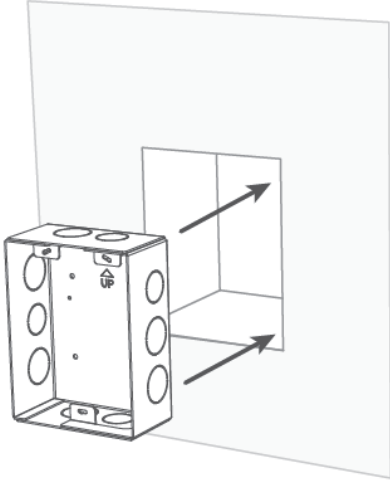
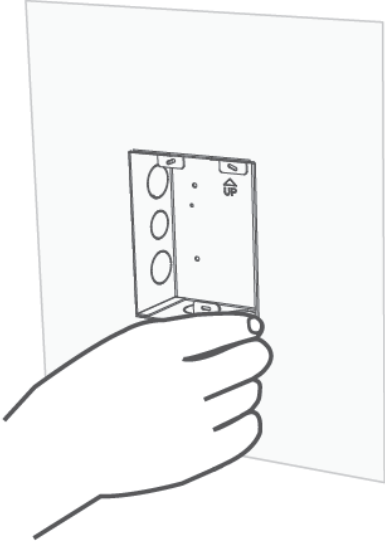
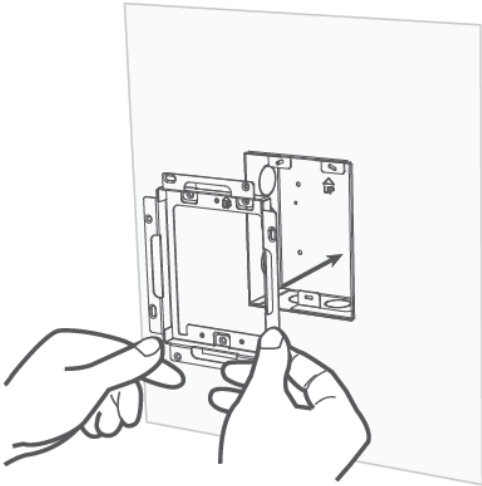
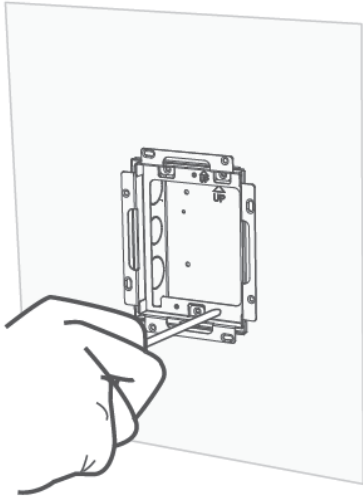


Recommended Cable : **Shielded Cat5**

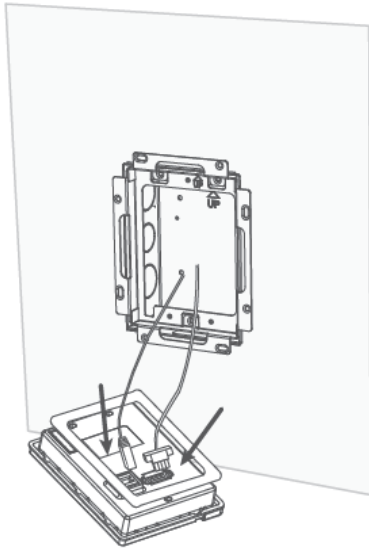
Pin No	Signal Name	Wire Color	
1	DMX-512 D+	White/Orange	
2	DMX-512 D-	Orange	
3	RS-485 D+	White/Green	
4	+V12_IN	Blue	
5	+V12_IN	White/Blue	
6	RS-485 D-	Green	
7	Ground	White/Brown	
8	Ground		
Drain	Shield	Drain	



1.3.1 UbiQ-230T Installation guide

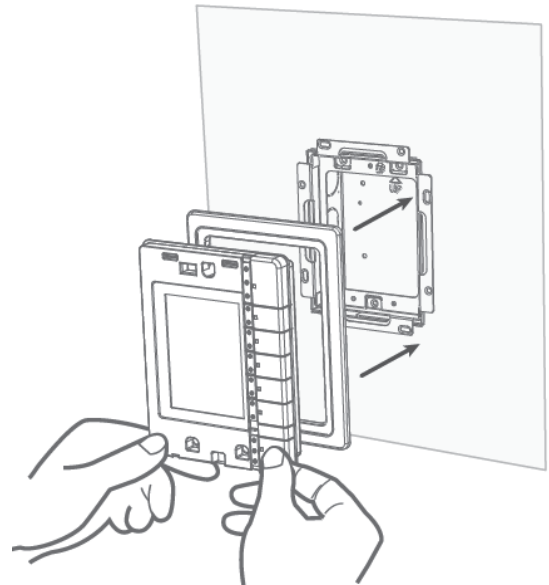
Step1 	Step2 
Install Wall box in the wall.	Wall box must parallel with wall surface
Step3 	Step4 
Install UbiQ-230T bracket on the wall box.	Use screw to fix bracket and wall box.

Step5



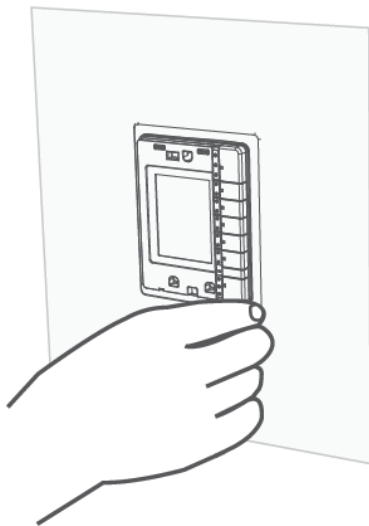
Connect UbiQ-230T to power and LAN.

Step6



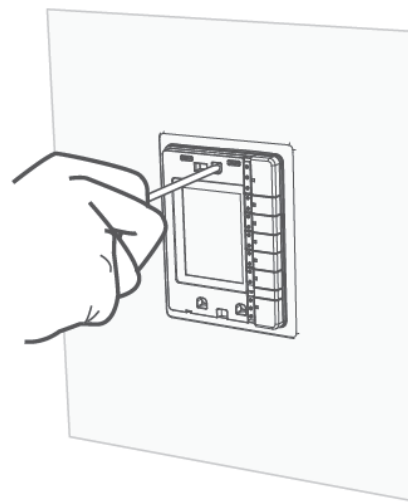
Install UbiQ-230R ring.

Step7



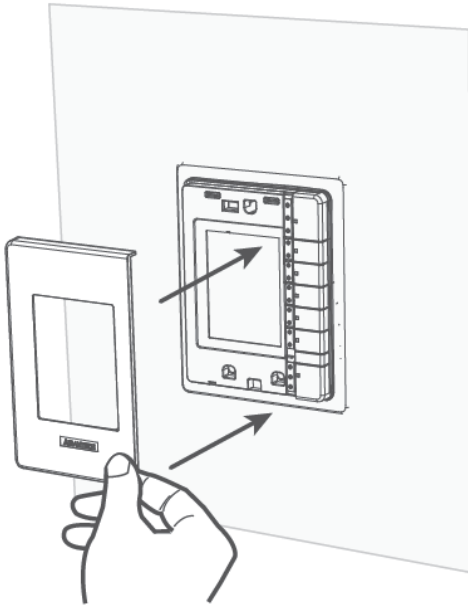
Push UbiQ-230T in the wall box.

Step8



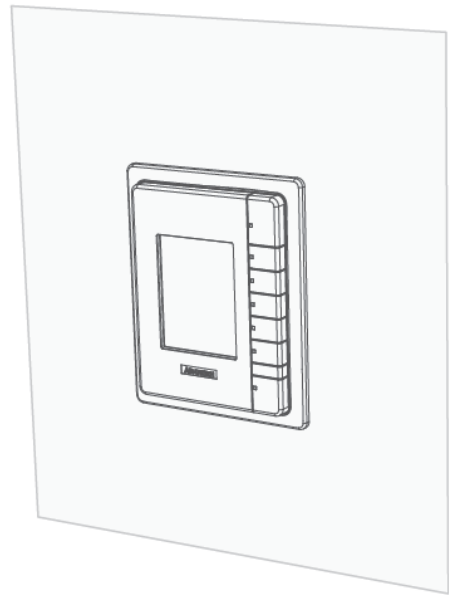
Use screw driver to fix UbiQ-230T in the wall.

Step9



Push UbiQ-230T front bezel.

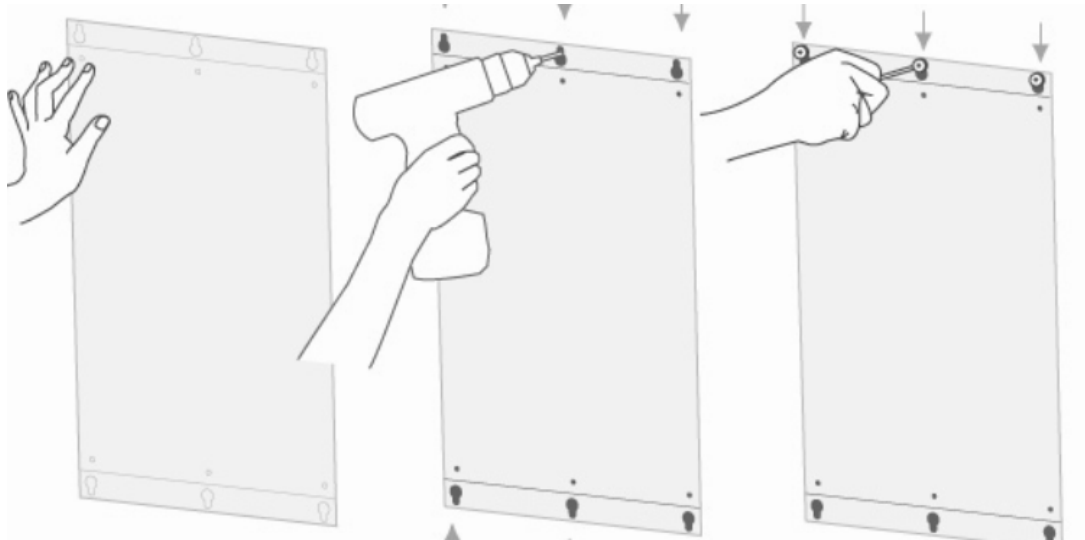
Step10



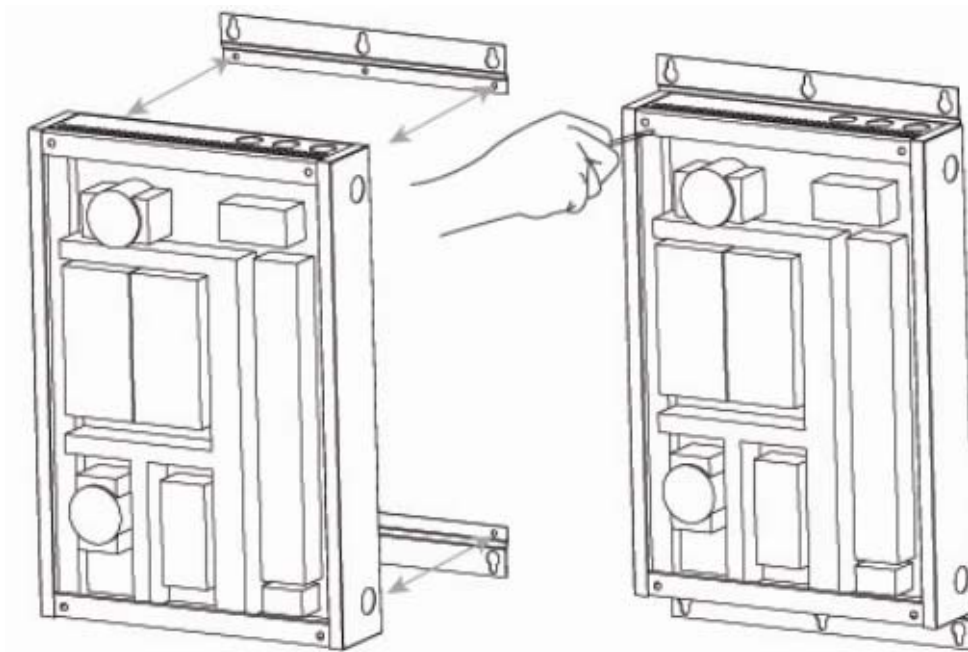
Finish installtion

1.3.2 UbiQ-150 Installation Guide

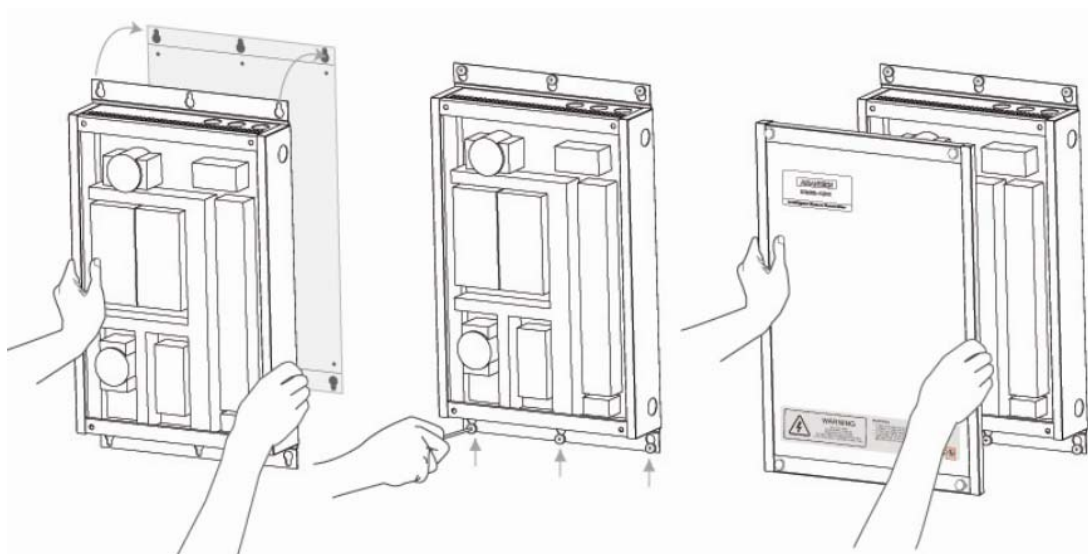
Step1



Step2



Step3



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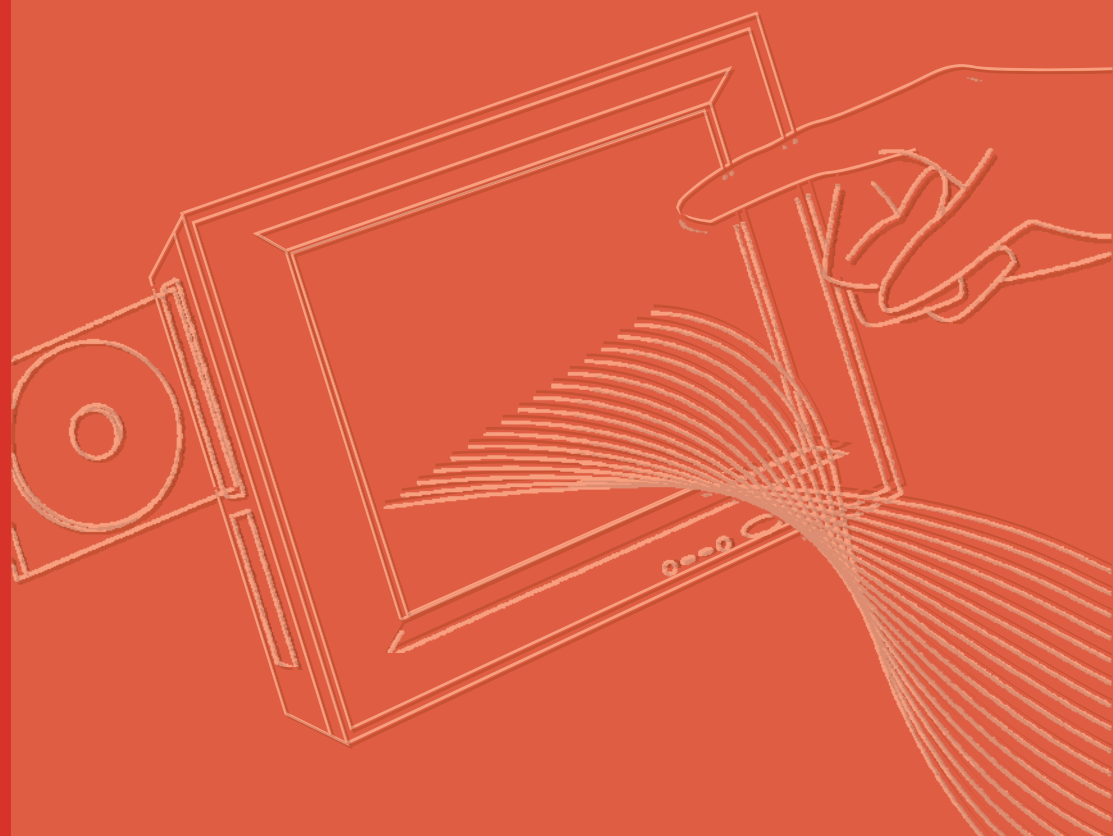
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用户手册



UbiQ-SM30

使用手册 V0.01a

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第 1 章

UbiQ-SM30 硬件功能

本章详细说明了 UbiQ-230T 情景控制系统
的硬件规格和功能。

1.1 介绍

本手册将详细说明 UbiQ- SM30 情景控制系统的硬件规格和功能。

1.2 硬件规格

1.UbiQ-230T 是 200MHz 的 ARM 平台，具有 16 位 TFT 液晶显示器和 4 线电阻式触摸屏面板。硬件规格如下表所列。

2.UbiQ-150 是多回路控制装置,内包含多回路控制系统与干接点促控装置。硬件规格如下表所列。

1.2.1 UbiQ-230T 规格

表 1.1: UbiQ-230T 规格

UbiQ-230T		
核心部件	CPU	ARM9 CPU。200 MHz
	系统内存	16MB 闪存，用于启动器、操作系统和应用程序 32MB SDRAM
	RTC	CPU 内部和外部 I2C RTC 控制器
	电源输入	12 VDC，最大 500mA
	操作系统	Microsoft® Windows® CE.NET 5.0
输入/输出埠	串口	2 个 RS-232 埠和 1 个 RS-485（带 AFC）埠 -COM1 收发器 RS-232，用于调试 -COM2 收发器 RS-232，用于扩展 -COM3 RS-485（带 AFC），用于情景控制
	以太网	10/100 BASE-T 以太网端口
	USB 埠	USB 主埠，用于调试
	显示器	3.5" 16 位 TFT 彩色液晶面板
系统部件	触摸屏	4 线电阻式触摸屏面板
	逆变器	白色 LED 背光
	音讯	AC'97 立体声音讯，带 1W 的扬声器
	CIR	CIR 遥控接收
	硬件复位	硬件复位按钮
	控制按钮	7 个按钮；5 个用于情景控制，1 个用于欢迎模式， 1 个用于离开模式
	LED 指示器	7 个红色 LED 指示器，用于每个控制按钮
工作环境	工作温度	0~40°C（32°~104°F）
	工作湿度	0%~90%相对湿度

1.2.2 UbiQ-230T 界面

本节说明 UbiQ-230T 的接口的位置及其功能。有关详细的线脚布置，请参阅下文。

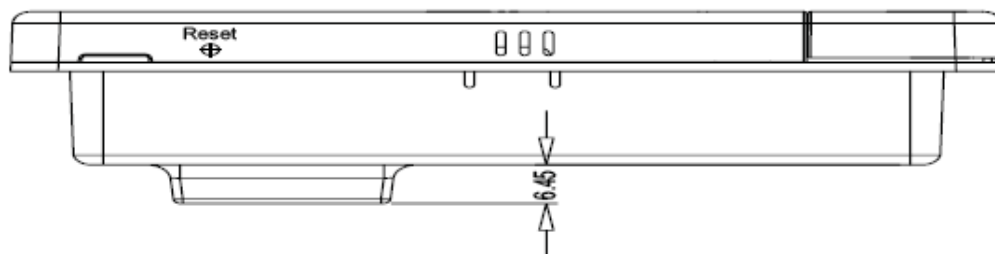


图 1.1 UbiQ-230T 的硬件复位键和扬声器孔，从底侧观察

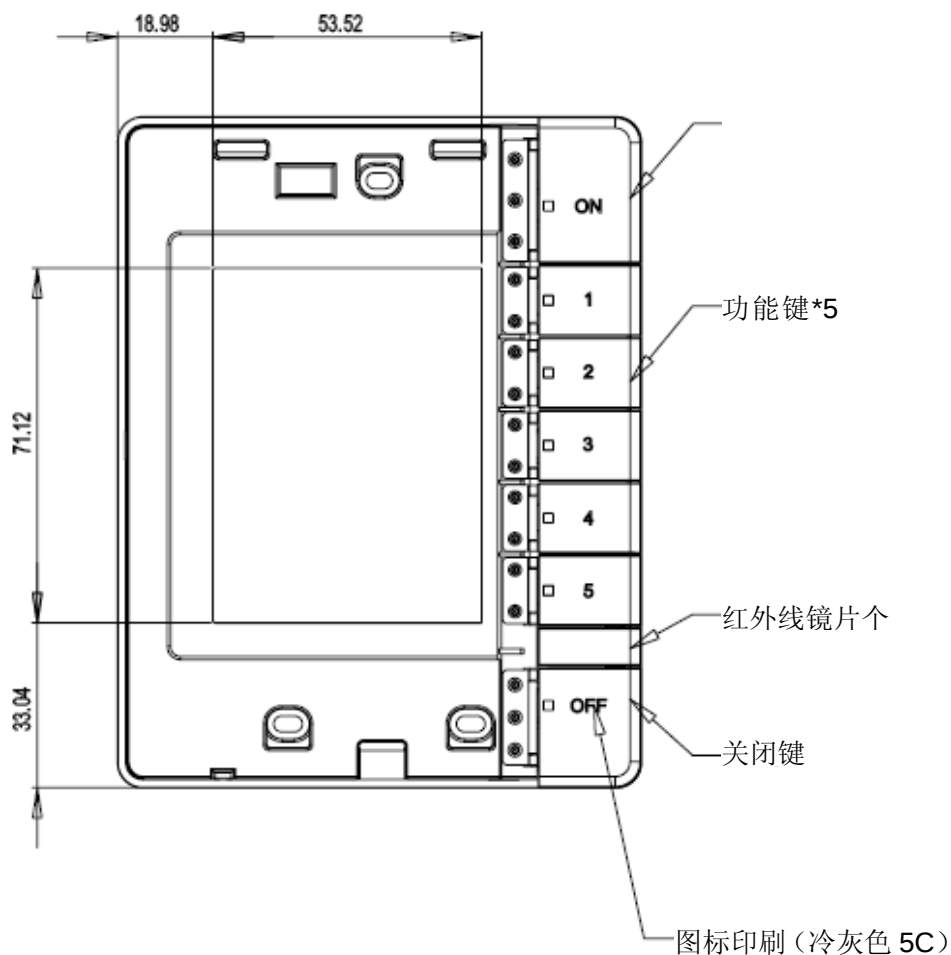


图 1.2 UbiQ-230T 的 COM1 界面，从框板一侧观察

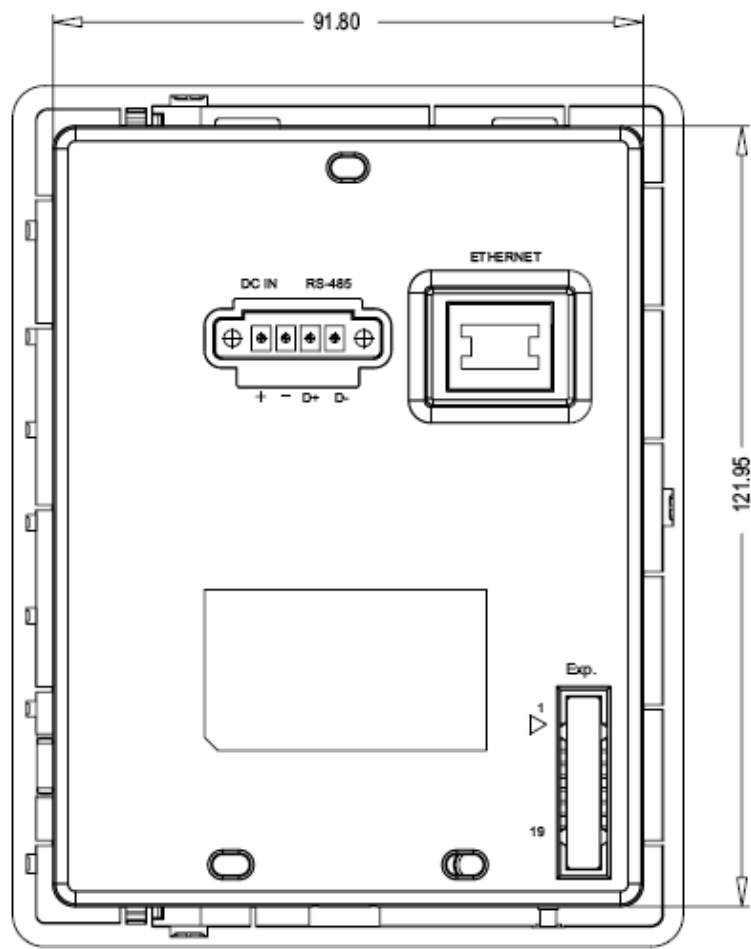


图 1.3 UbiQ-230T 的 Phoenix 接口、RJ-45 和扩展端口，从组件一侧观察

表 1.2: 接口说明

接口类型	功能
RJ-45	10/100 Base-T 以太网接口
4 针 Phoenix 界面	2 针用于直流电输入，8~28VDC 2 针用于 RS-485 情景控制系统
2 个 5 针界面	1 个 RS-232 用于信息调试，1 个 USB 主埠用于调试
2 个 10 针界面	1 个 RS-232 用于扩展功能

1.2.2.1 接口引脚定义

引脚	功能
1	不适用
2	COM1_RXD
3	COM1_TXD
4	USB_VCC
5	GND
6	USB_D-
7	不适用
8	USB_D+
9	+3.3 V
10	GND
2 个 5 针界面	

引脚	功能
1	8~28 VDC 电源输入
2	GND
3	RS-485_D+
4	RS-485_D-
4 针 Phoenix 界面	

引脚	功能	引脚	功能
1	不适用	2	COM1_RXD
3	COM2_TXD	4	不适用
5	GND	6	不适用
7	不适用	8	不适用
9	不适用	10	GND
11	不适用	12	不适用
13	不适用	14	+3.3 V
15	不适用	16	不适用
17	不适用	18	不适用
19	不适用	20	+5 V
2 个 10 针界面			

1.2.2 UbiQ-150 规格

表 1.2: UbiQ-150L-Mx-211 规格

UbiQ-150L-Mx-211		
	电源输出	8 回路 110~220VAC / 5A
	继电器输出	8 回路 110~220V / 8A
	调整输出	8 回路 0~10VDC / 100mA
	干接点输出	8 回路 (Dry contact)
	干接点输入	8 回路 (Dry contact)
	电源输出	2 回路 12VDC / 1A
输入埠	操作系统输入	Advantech / DMX-512 Protocol
	串口	1 个 UbiQ Net 埠 (内含 12VDC / DMX-512)
	电源	110~240 VAC/ 20A
工作环境	工作温度	0~40°C (32°~104°F)
	工作湿度	0%~90%相对湿度

表 1.3: UbiQ-150M-Mx-111 规格

UbiQ-150M-Mx-111		
输出埠	电源输出	8 回路 110~220VAC / 5A
	继电器输出	8 回路 110~220V / 8A
	调整输出	8 回路 0~10VDC / 100mA
	干接点输出	8 回路 (Dry contact)
	电源输出	2 回路 12VDC / 1A
	操作系统输入	Advantech / DMX-512 Protocol
输入埠	串口	1 个 UbiQ Net 埠 (内含 12VDC / DMX-512)
	电源	110~240 VAC/ 20A
工作环境	工作温度	0~40°C (32°~104°F)
	工作湿度	0%~90%相对湿度

表 1.4: UbiQ-150M-Sx-200 规格

UbiQ-150M-Sx-200		
输出埠	电源输出	8 回路 110~220VAC / 5A
	调整输出	8 回路 0~10VDC / 100mA
	电源输出	2 回路 12VDC / 1A
	操作系统输入	Advantech / DMX-512 Protocol
输入埠	串口	1 个 UbiQ Net 埠 (内含 12VDC / DMX-512)
	电源	110~240 VAC/ 20A
工作环境	工作温度	0~40°C (32°~104°F)
	工作湿度	0%~90%相对湿度

表 1.5: UbiQ-150M-Sx-020 规格

UbiQ-150M-Sx-020		
输出埠	继电器输出	16 回路 110~220V / 8A
	电源输出	2 回路 12VDC / 1A
	操作系统输入	Advantech / DMX-512 Protocol
输入埠	串口	1 个 UbiQ Net 埠 (内含 12VDC / DMX-512)
	电源	110~240 VAC/ 20A
工作环境	工作温度	0~40°C (32°~104°F)
	工作湿度	0%~90%相对湿度

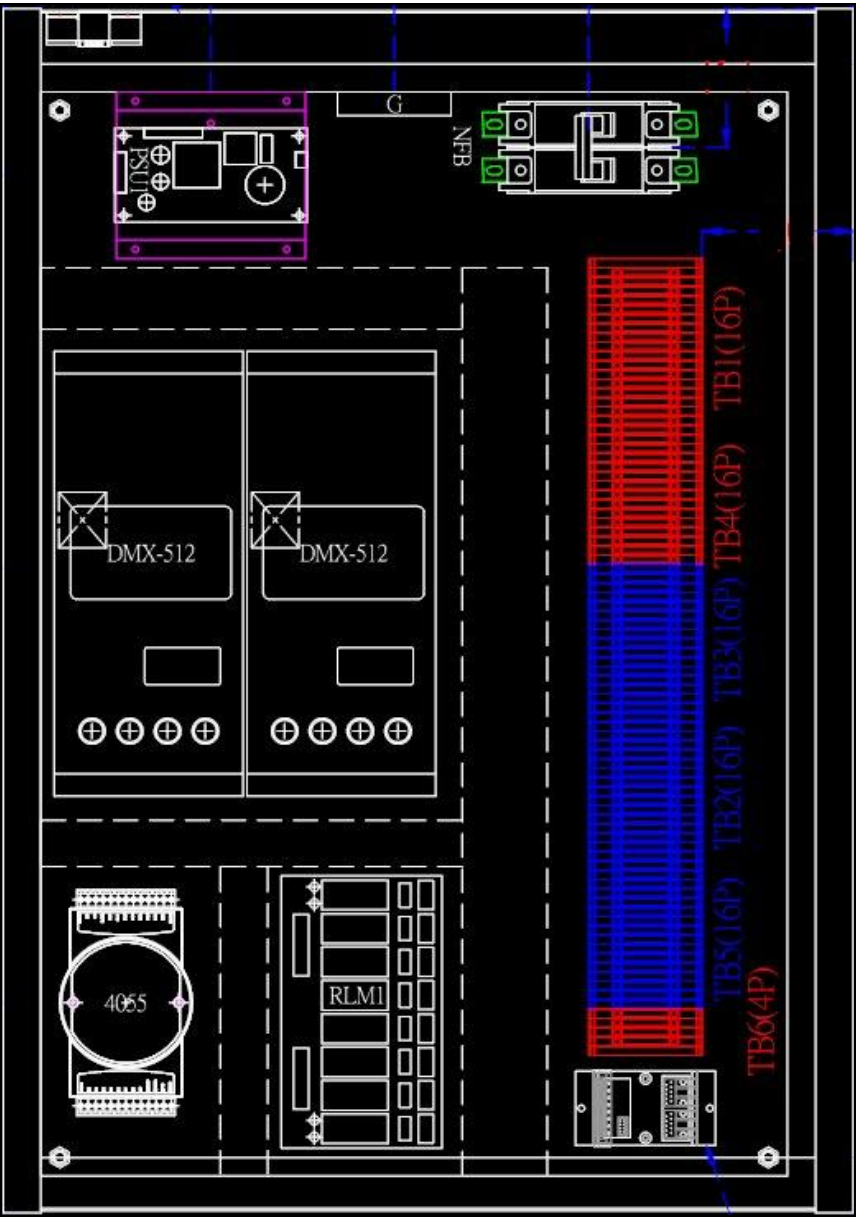
表 1.6: UbiQ-150M-Sx-002 规格

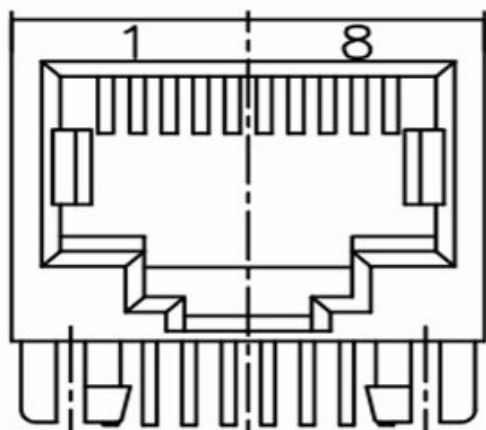
UbiQ-150M-Sx-002		
输出埠	干接点输出	8 回路 (Dry contact)
	电源输出	2 回路 12VDC / 1A
	操作系统输入	Advantech / DMX-512 Protocol
输入埠	串口	1 个 UbiQ Net 埠 (内含 12VDC / DMX-512)
	电源	110~240 VAC/ 20A
工作环境	工作温度	0~40°C (32°~104°F)
	工作湿度	0%~90%相对湿度

1.2.3 UbiQ-150 界面

本节说明 UbiQ-150 的接口的位置及其功能。有关详细的线脚布置。请参阅下文。

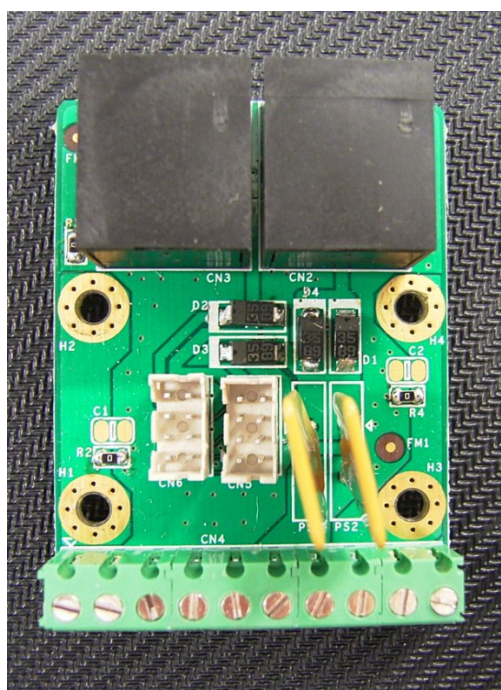
图 1.4: UbiQ-150L-M211 接线规格





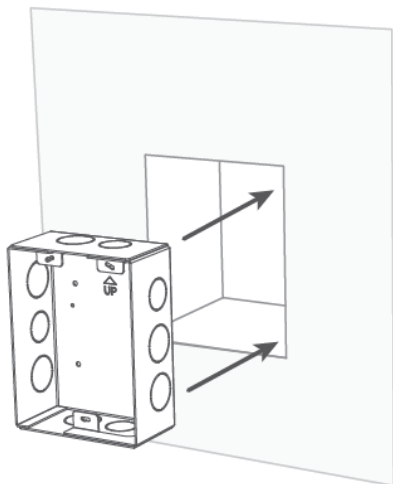
Recommended Cable : **Shielded Cat5**

Pin No	Signal Name	Wire Color	
1	DMX-512 D+	White/Orange	
2	DMX-512 D-	Orange	
3	RS-485 D+	White/Green	
4	+V12_IN	Blue	
5	+V12_IN	White/Blue	
6	RS-485 D-	Green	
7	Ground	White/Brown	
8	Ground		
Drain	Shield	Drain	



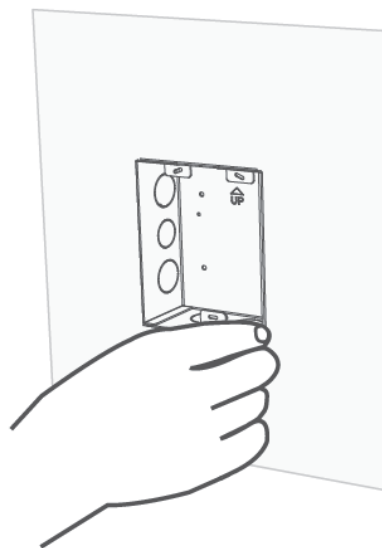
1.3.1 UbiQ-230T 安裝施工方法

Step1



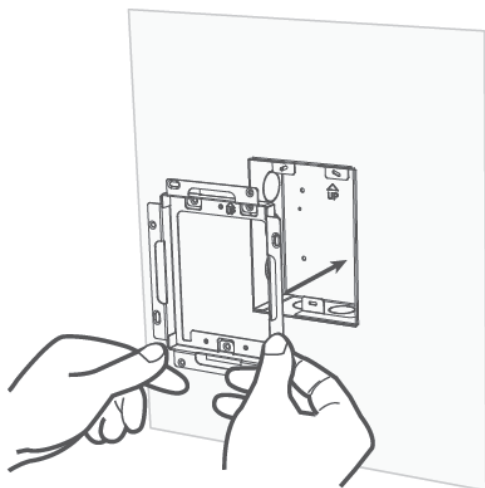
安裝預埋盒

Step2



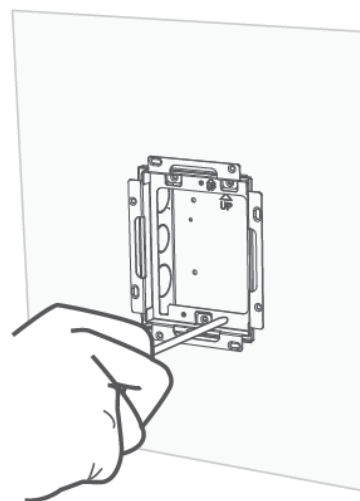
預埋盒需與牆面平行

Step3



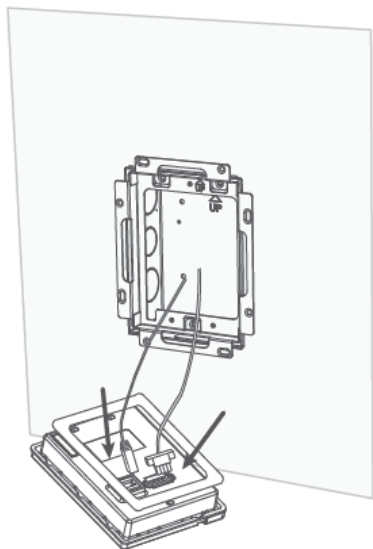
安裝UBIQ 230T 支架

Step4



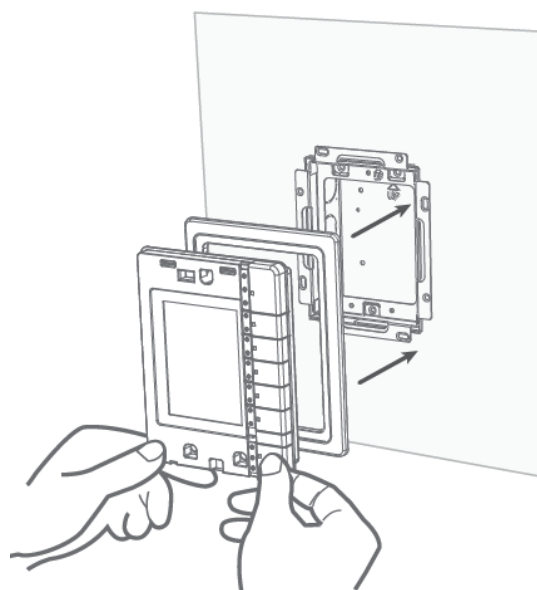
將UBIQ 230T支架鎖附預埋盒

Step5



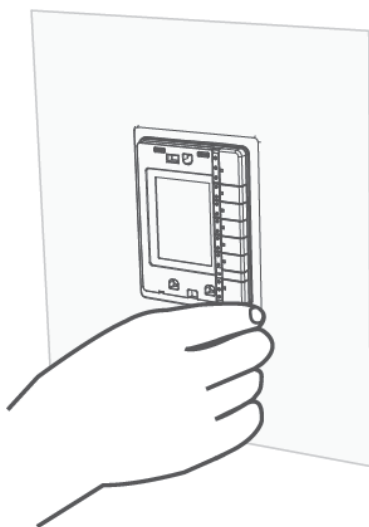
固定鳳凰接頭與RJ-45接頭於
UBIQ 230T

Step6



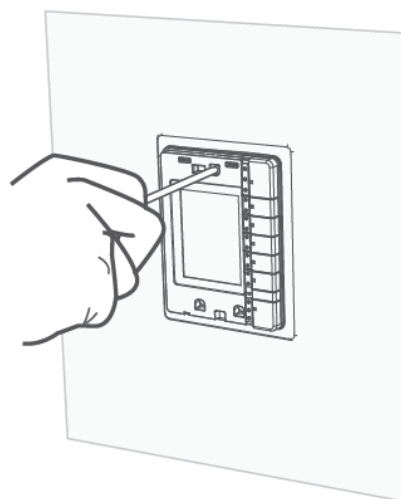
安裝飾框與UBIQ 230T

Step7



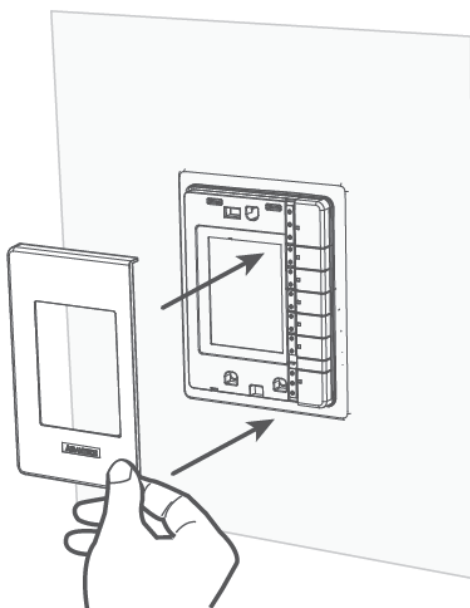
將UBIQ 230T放入預埋盒

Step8



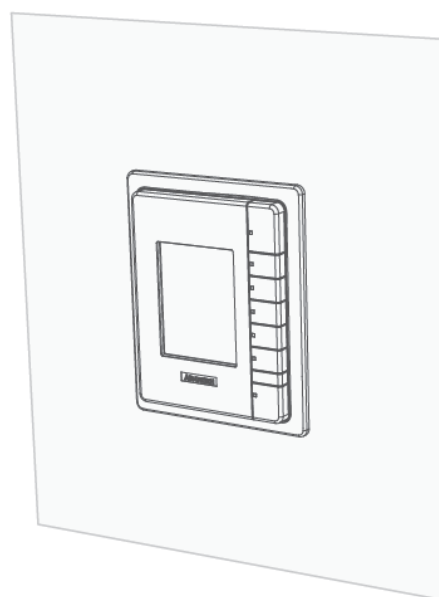
將UBIQ 230T 鎖附於支架

Step9



放入前面框

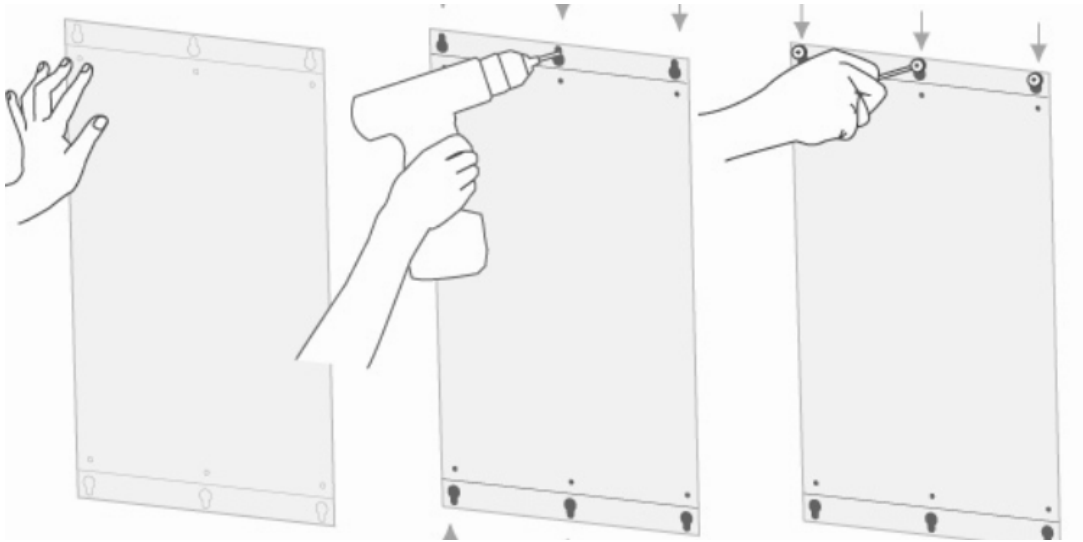
Step10



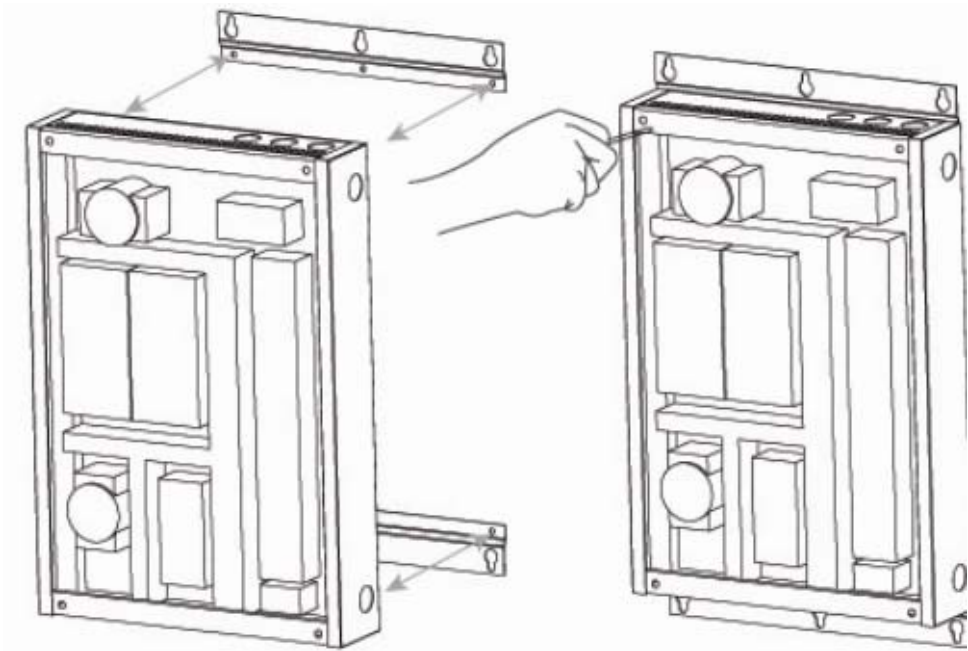
完成安裝

1.3.2 UbiQ-150 安装施工方法

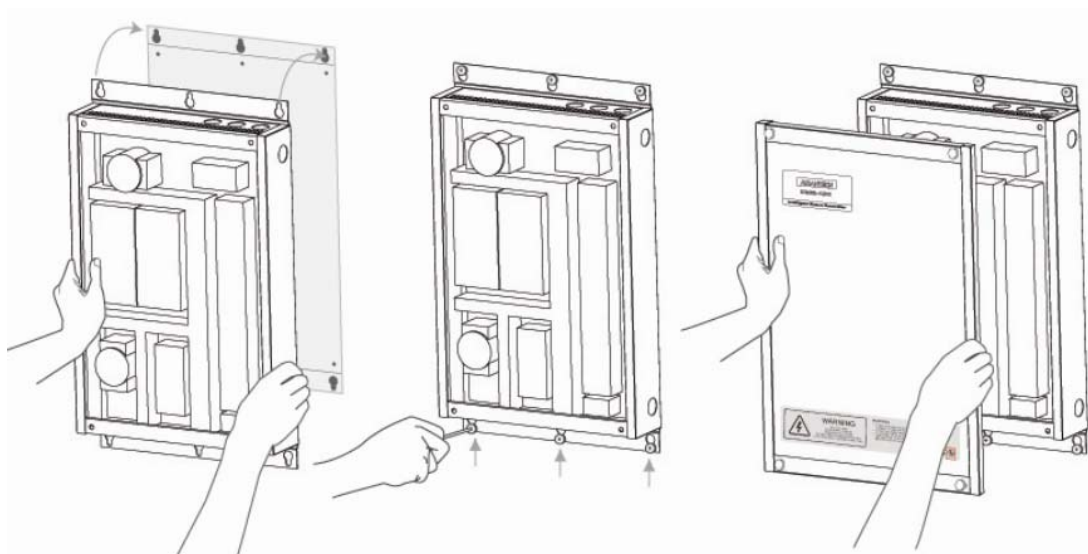
Step1



Step2



Step3





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