



User Manual

UbiQ-230T

Hardware Manual V1.01

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Chapter 1

UbiQ-230T 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

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.

1.2.1 Specification

Table 1.1: 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	8-28 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
Environment	LED Indicator	7 red LEDs indicators for each control buttons
	Working Temperature	0~40° C (32° ~104° F)
	Operating Humidity	0%~90% Relative Humidity

1.2.2 Connectors

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

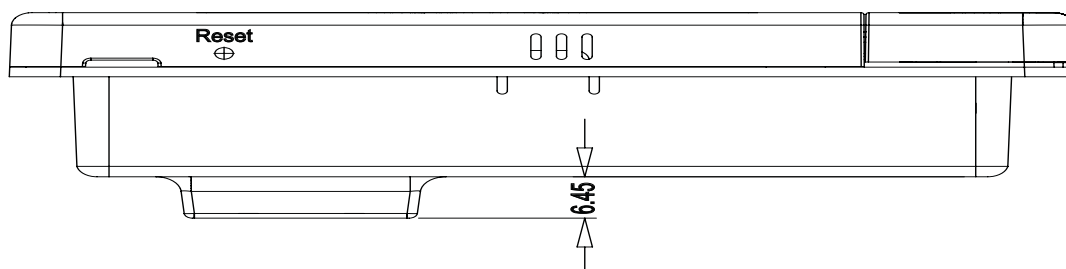


Figure 1.1 H/W reset button and Speaker holes of the UbiQ-230T from bottom view

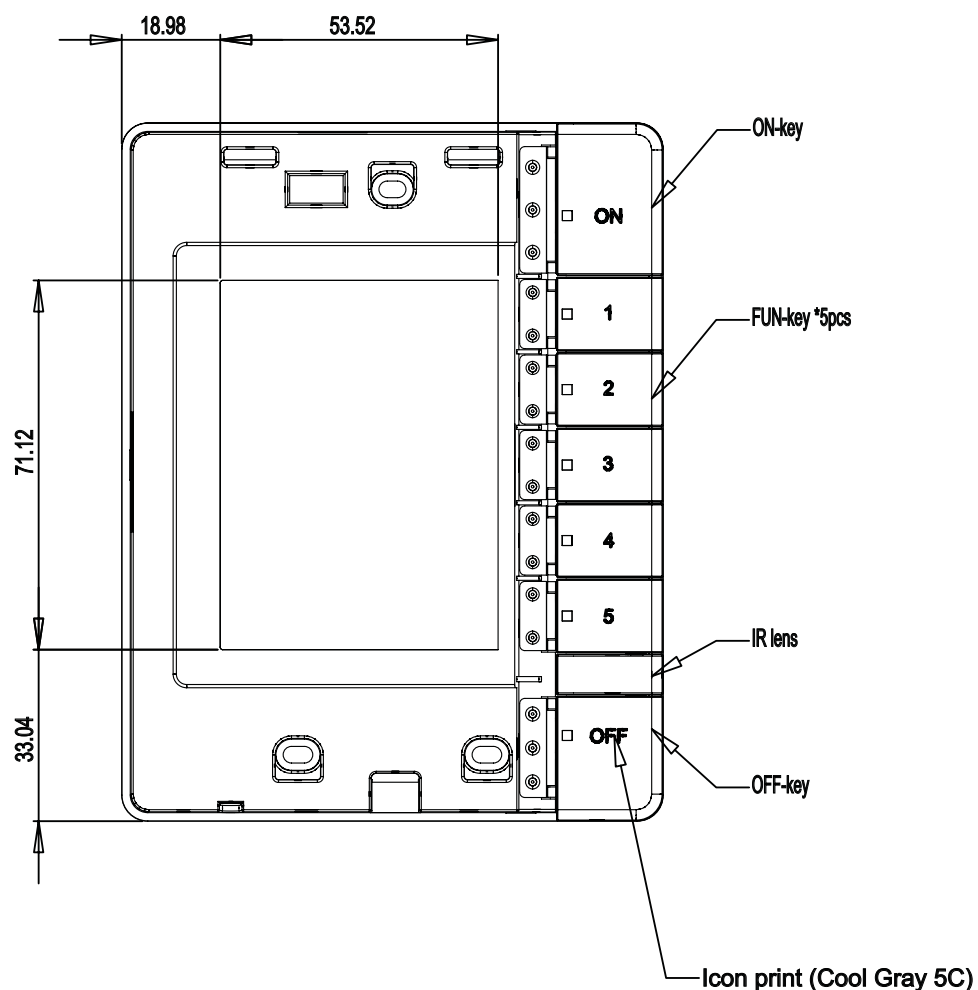


Figure 1.2 COM1 connector of the UbiQ-230T from frame panel

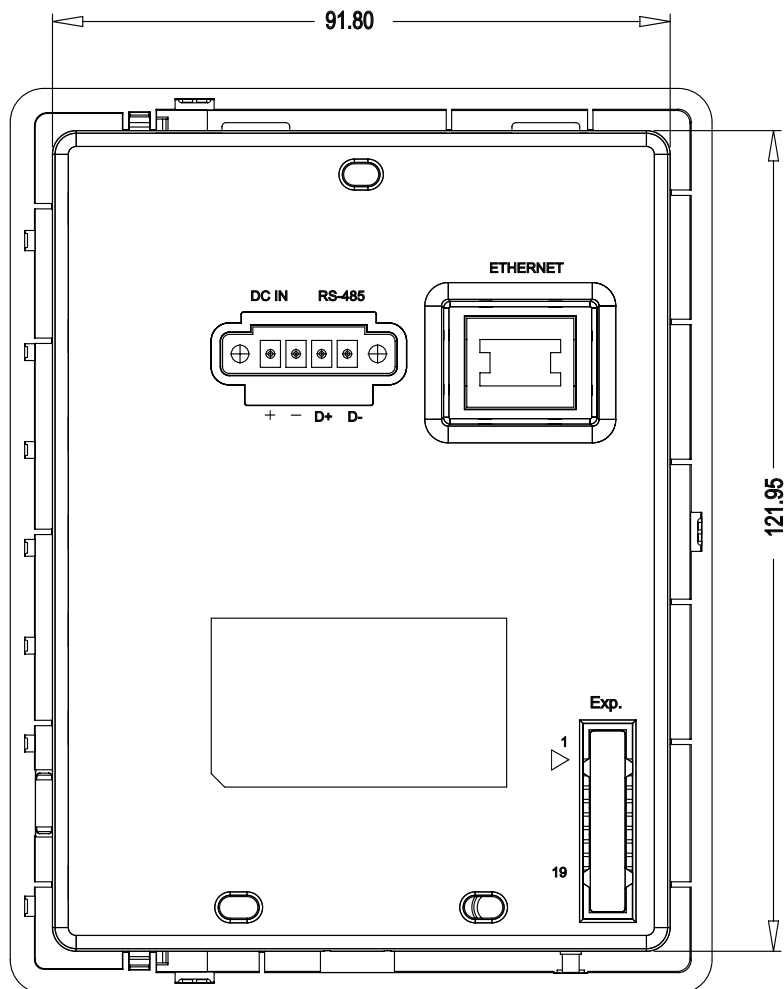


Figure 1.3 Phoenix connector, RJ-45 and expansion port of the UbiQ-230T from component side

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	8~28 Vdc Power Input
2	GND
3	RS-485_D+
4	RS-485_D-
4P 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			

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