

HTA-810PE/PM

HTA-820PE/PM

Time & Attendance Recorder Hardware Manual

Version 1.1



HUNDURE

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Revision History

Version	Description
V1.0	First Edition
V1.1	Manual format revision

Chapter 1 Product Overview

1.1 Package Contents

			
Controller x 1	Base x 1	Adaptor x 1 (Option)	DC Jack Converter x 1 Hex key wrench x 1 Screw x 4

	
Cable x 1	Quick Start Guide x 1

1.2 Features

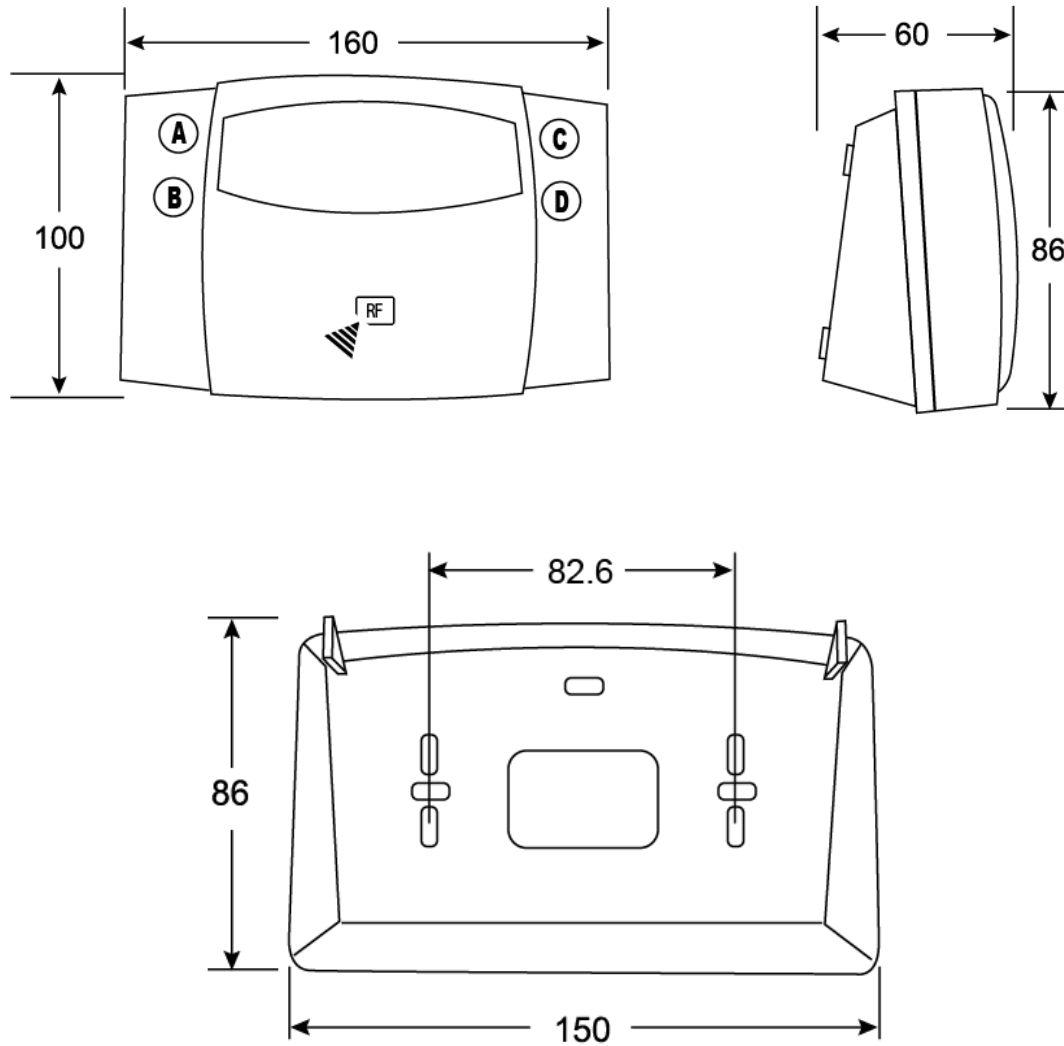
- Simple, reliable & easily installed, first time set up in 3 minutes.
- Suitable for chains and enterprises.
- Cope with seasonal time change - daylight saving control.
- Follows your usual practice – auto or manual clock in / clock out. (HTA-820)
- Dynamic control of memory up to 8000 cardholders (max, HTA-820),
- 8200 transaction data. (HTA-810/820)
- Visual LED for display of time, card number, communication mode, swiped card indication.
- 16 shift schedule for HTA-820.
- 32 sets siren output.
- Auto scheduling for data collection, time synchronization, valid card download.
- Invalid & re-swiped cards off-the-record saves memory capacity.
- Memory full warning.
- At least 60 days data storage in case of power outage.
- RTC (Real Time Clock) ensures accurate time regardless of power outage.
- Watchdog function ensures device free from halting.

1.3 Specifications

MODE	HTA-810	HTA-820
Processor	8 Bit	
Memory	256K	
Output Ports	1 Relay (Bell)	
Cardholders/Events	8,200 (Events) (max.)	8,000 / 8,200
LED Indicator	Visual LED for display of time, Swiped card indication(last 4 digits), COMM. x 1	
Keypad	x	Duty switch by A, B, C, D
Real Time Clock	Yes	
Beep Tone	Buzzer	
ID Setting	IP tool setting	
Read Format & Range	Bar Code Type: Resolution: 0.15mm; Scanning Speed: 100~1000mm/sec Magnetic Type: ISO3554 Standard Track 1 or 2 or 3; Scanning Speed: 3~40ips 125 KHz (EM Compatible): 8~10 CM (max.) 13.56 MHz (MIFARE® Compatible): 5 CM (max.)	
Power Input	DC 12V / 1A	
Current Consumption	250mA (max.)	
Comm. Interface	RS-485	
Comm. Baud Rate	1,200/2,400/4,800/9,600/19,200 bps-N-8-1	
Operating Temp.	-10° C ~ 55° C / 14° F ~ 131° F	
Relative Humidity	20% ~ 80% (Non-condensing)	
Dimension	160mm(L) x 100mm (W) x 40mm (H) (excluding base)	
Weight (Device)	300g	

Chapter 2 Physical Dimension

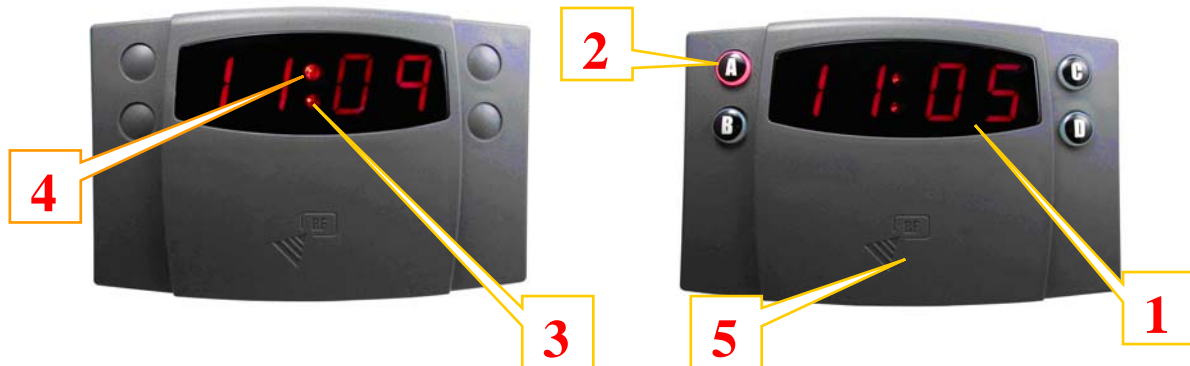
2.1 Dimension



Scale:mm

2.2 Appearance Introduction

HTA-810/820 Front View

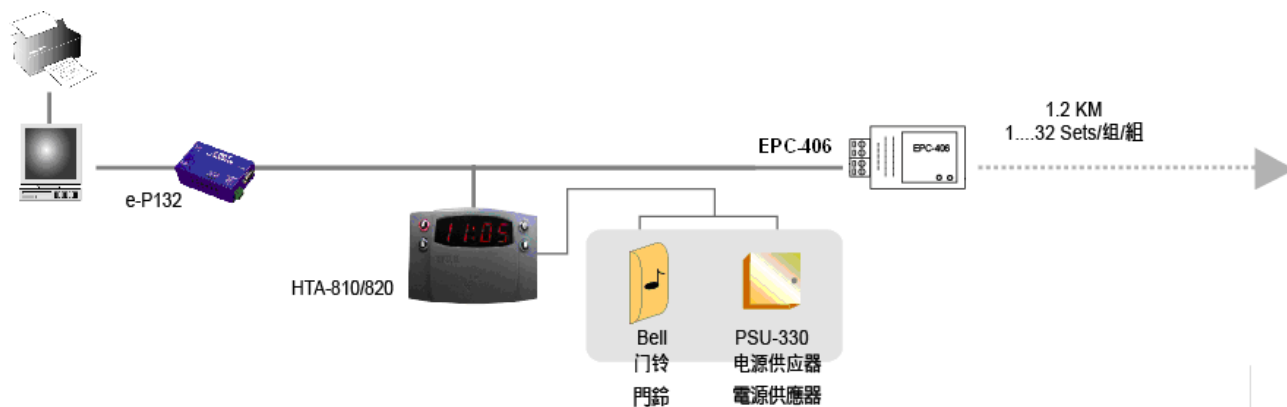


1	Time/ Message Display	Visual LED to show time, last 4 digits of the card number or error message.
2	Shift Key(for manual clock in/clock out)	A, B, C, D (4 keys for HTA-820)
3	Communication LED	Red LED blinks upon receipt of data from PC; Green LED blinks upon trasmission of data to PC.
4	Swipe Card Indication LED	Green LED blinks upon swipe of valid card; Red LED blinks when invalid card is swiped.
5	Card Sensor Area ⁽¹⁾	Card sensor

Note 1: This area is card-swiping slot for magnetic models (HTA-810M/HTA-820M) or barcode models(HTA-810B/HTA820B).

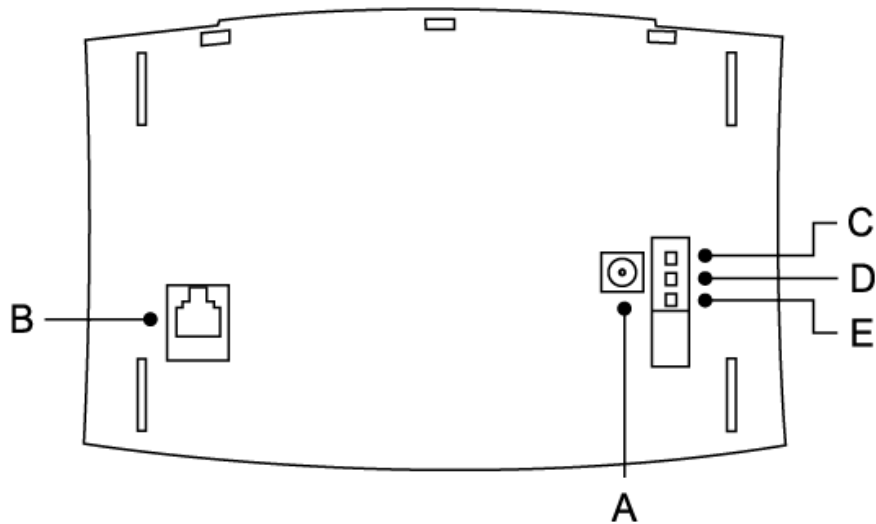
Chapter 3 System Configuration & Wire Connections

3.1 System Configuration



3.2 Wire Connections

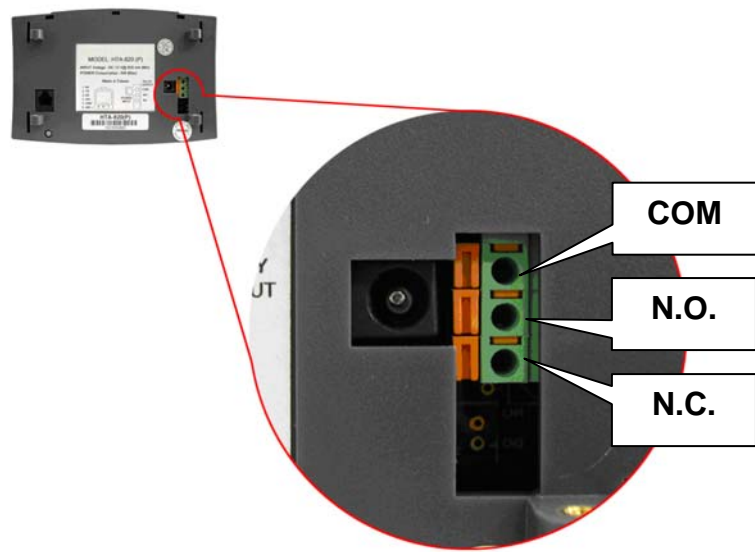
3.2.1 Controller Terminal Introduction



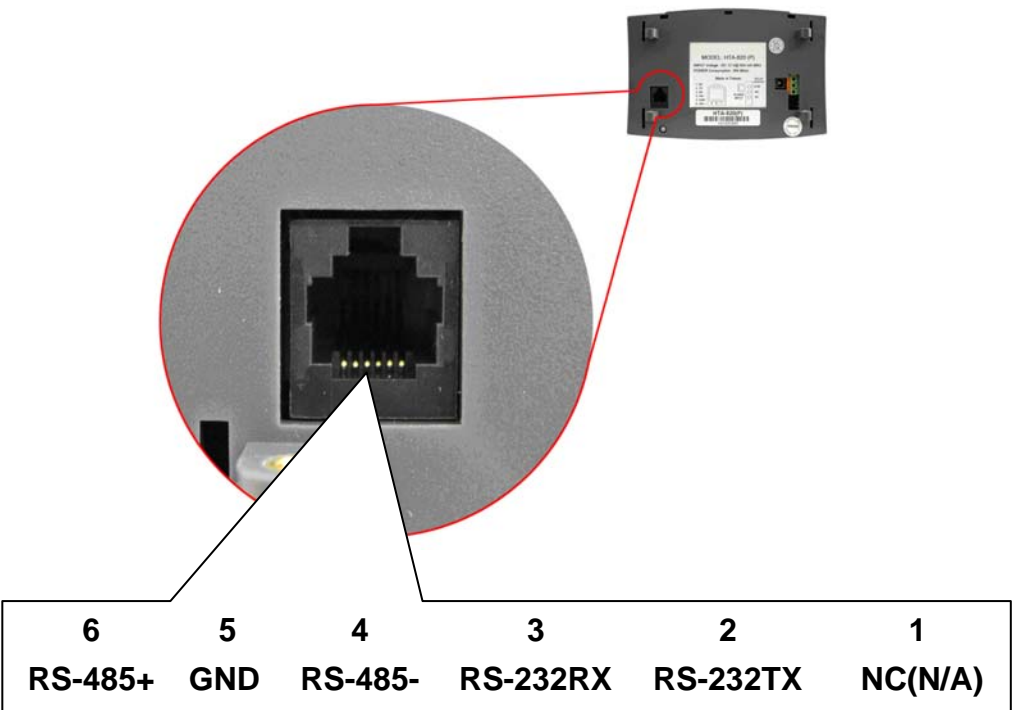
	Description
A	DC 12V Input
B	Communication
C	Siren Relay Output “COM”
D	Siren Relay Output “NO”
E	Siren Relay Output “NC”

- COM: Common contact NC:Normally closed NO:Normally open.

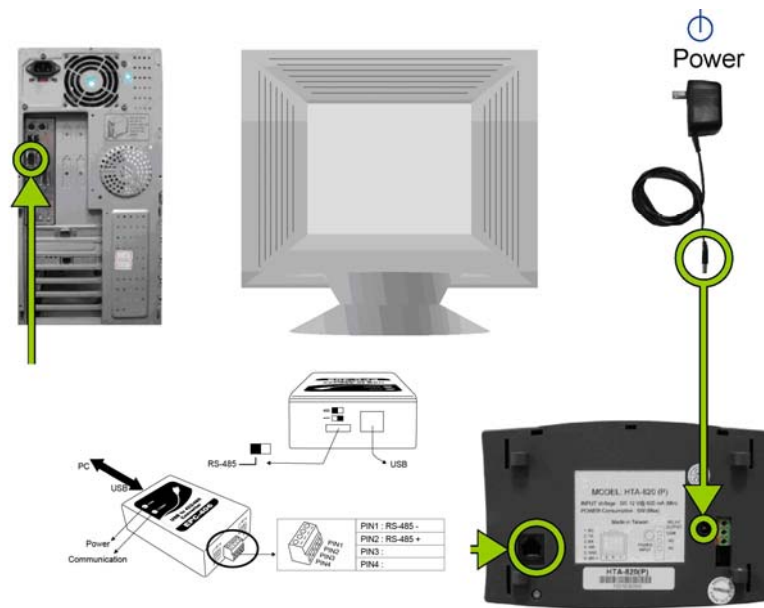
3.2.2 Siren/Alarm Connection



3.2.3 RS232/RS485 Communication Port



3.2.3.1 RS485 Wiring Connection



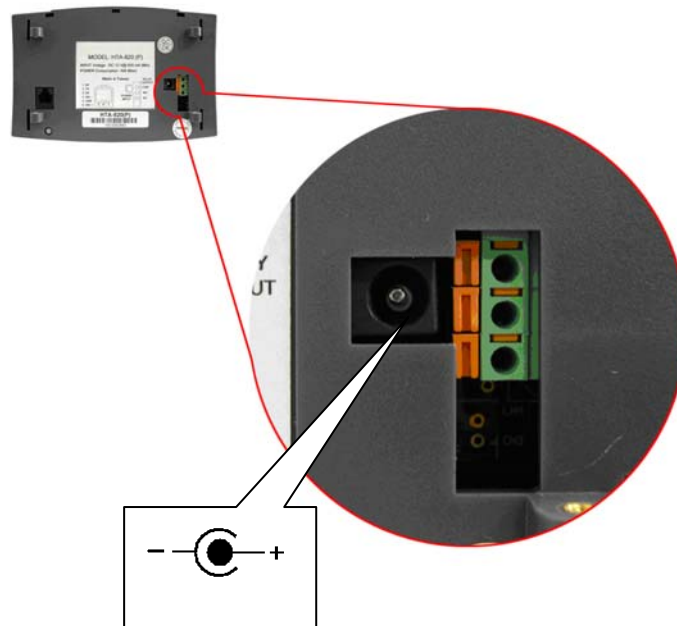
Note: Assign different IDs for each HTA-810/820 recorder when there are more than one recorders in the network.

- Default ID is “1”
- Set your ID with our software.

3.2.3.2 RS-232 Wiring Connection



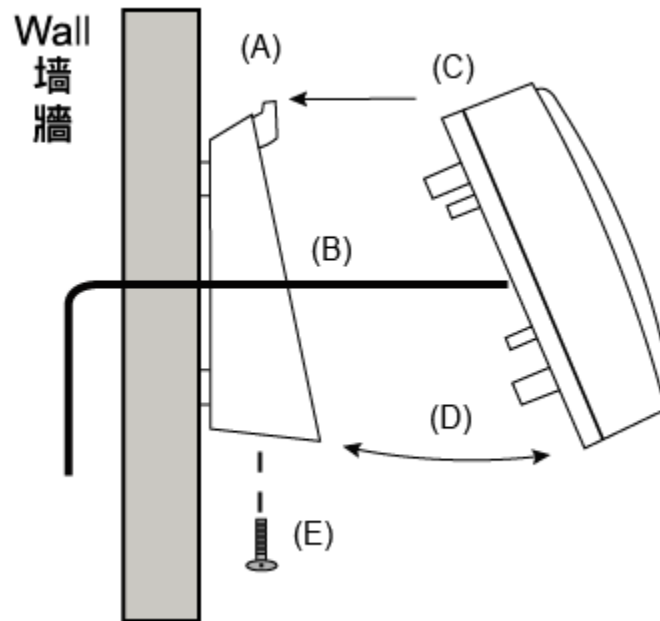
3.2.4 Power Supply Connection









Turn to the back side of HTA-810/820 and connect DC12V/1A power to the power jack connector.

Chapter 4 Installation Guide

- (A). Mount the base onto the wall or other desired location.
- (B). Connect the wires in accordance with the wiring instruction below.
- (C). Install the controller upper cover to the back base.
- (D). Make sure the back base and the controller upper cover guides are aligned.
- (E). Using the hex key wrench, fasten the screw onto the bottom of controller.



Chapter 5 Testing

1.All LEDs are lit when first powered on.	 <p>(All LEDs are lit.)</p>
2.Then, the device displays its NODE ID.	 <p>(NODE ID: 2)</p>
3.The device displays its firmware version.	 <p>(Firmware Version: 1.8)</p>
4.The device displays communication baud rate.	 <p>(Baud Rate: 9600 bps)</p>
5.The device displays "Time" for ready mode.	 <p>(Ready Mode)</p>
6.When user swipes the card, the device shows the last 4 digits of the card number.	 <p>(Swipe card, displaying last 4 digits.)</p>

Chapter 6 Troubleshooting

Q: No LED Display when the device is turned on.

A: Please make sure DC12V power is correctly connected. (Check both the voltage and the polarity.)

Q: Unable to communicate.

A: 1.If the communication mode is RS-485, please check if NODE ID is correctly set.
 2.Please check if the software COM PORT setting (COM PORT number) is correct.
 3.Please check if communication baud rate is correctly set.
 4.Please check the communication LED-red LED blinks upon receipt of data from PC and green LED blinks upon transmission of data to PC.

Q: There is no response after swiping cards.

A: 1.Please check if the card is correct and compatible with the type of purchased HTA-810/820.
 2.Please make sure the card is encoded.
 3.Make sure the card is swiped over card sensor area.
 4.Make sure the right side of the card is used.

Q: There is a response after swiping card, but "Err" or "bad code" appears.

A: Please refer to Appendix 1 for the Error codes descriptions. Contact your dealer if you find bad codes.

Appendix

Appendix1: Error Message Codes

Error Code	Description
Err0	Cannot save invalid card
Err1	Re-swipe of card within a limited time prohibited.
Err2	Card number contains non-numeric character under compression mode.
Err3	Cannot overwrite, memory full.
Err4	Memory buffer 100% full.
Bad0	Flash configuration area damage
Bad1	Flash valid card area damage
Bad2	Flash swiped card area damage
Bad3	SRAM damage
Bad4	Bad sector area damage
Bad5	Flash erase fail (EF)
Bad6	Flash fail
Bad7	Flash fail

When version is V3.03 afterward, Kindly refer to follow figure.

Error Code	Description
Err0	Cannot save invalid card
Err1	Re-swipe of card within a limited time prohibited
Err2	Card number contains non-numeric character under compression mode.
Err3	Cannot overwrite, memory full
Full	Memory buffer 90% full
Err A~d	Retrieve Invalid Code

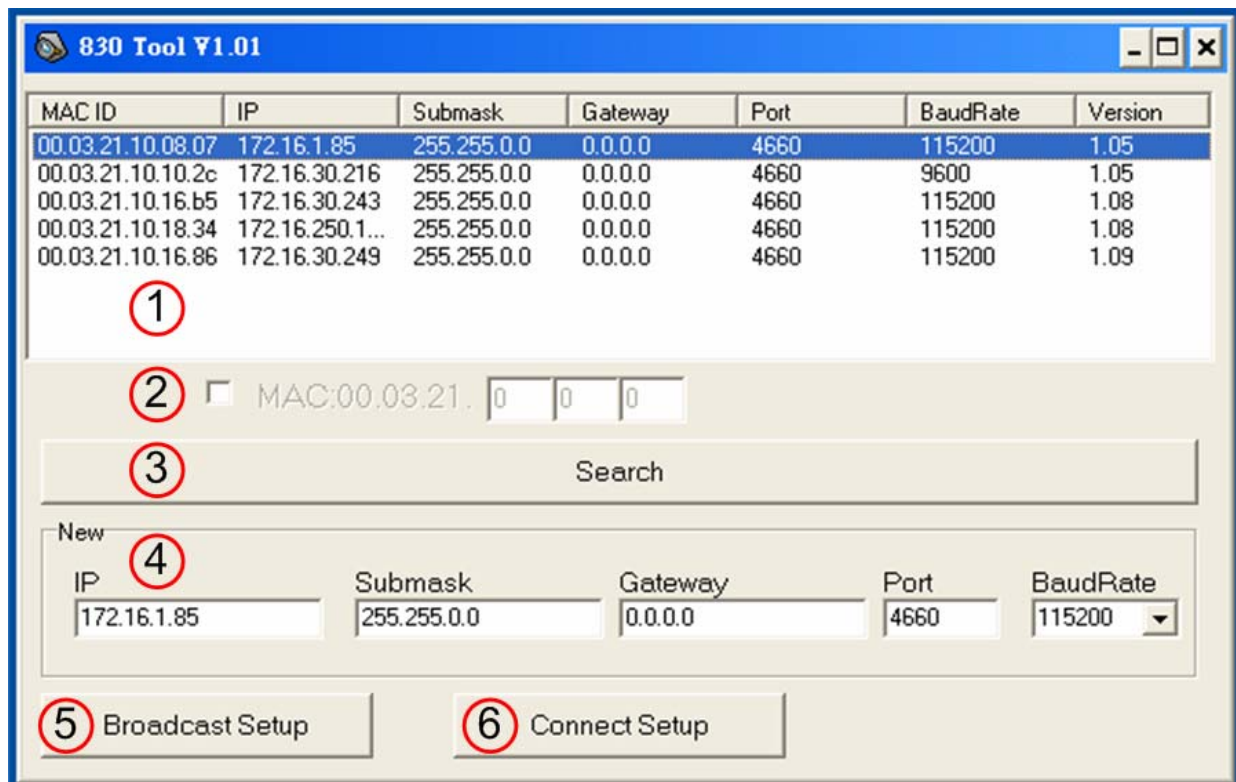
Appendix2: Set Controller IP by Tool

A 、 Overview :

HTA-830 Tool.exe is a program that automatically locates TCP/IP based controller as well as modify the device's IP address. This program is application to TCP/IP device and does not require installation. Double click on the programs to execute.

This program used broadcast search and connection method. And the terminal's firewall should be shut down in order to locate the devices.

B 、 Workspace Description :



- ① Device List – Found devices are listed in this area. The following parameters are also included in the listing:

- MAC ID (Media Access Control Identification): It serves as unique identifier of the device connected over the network. This fixed identification number is set from the factory and is not allowed to be modified.

- IP (Internet Protocol Address): Default is 172.16.250.100. IP address should be unique. Kindly differentiate the devices using their MAC ID on the initial search.
- Submask (Subnet Mask): Default is 255.255.0.0
- Gateway: Default is 0.0.0.0
- Port: Communication port, default is 4660.
- BaudRate: Communication baudrate. Different device supports different baudrate. Kindly check its manual individually.

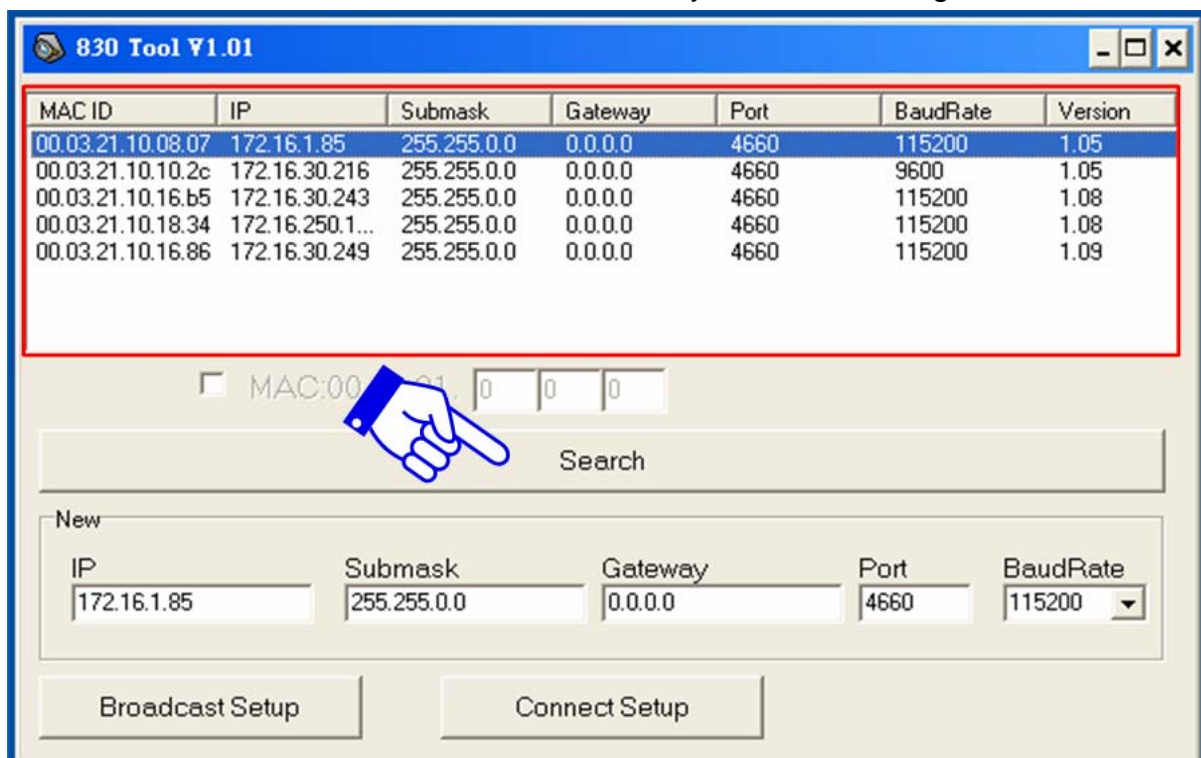
- ② Function reserved
- ③ Search Button: Click this button to search all the devices connected over the network.
- ④ New settings area: Modifies device's IP address, Submask, Gateway, Port and BaudRate.
- ⑤ Broadcast Setup: This button will set new parameters to a device via broadcast method.
- ⑥ Connect Setup: This button is connecting with a device and sets its new parameters.

C、 Operation Procedure :

C-1 Shut down firewall

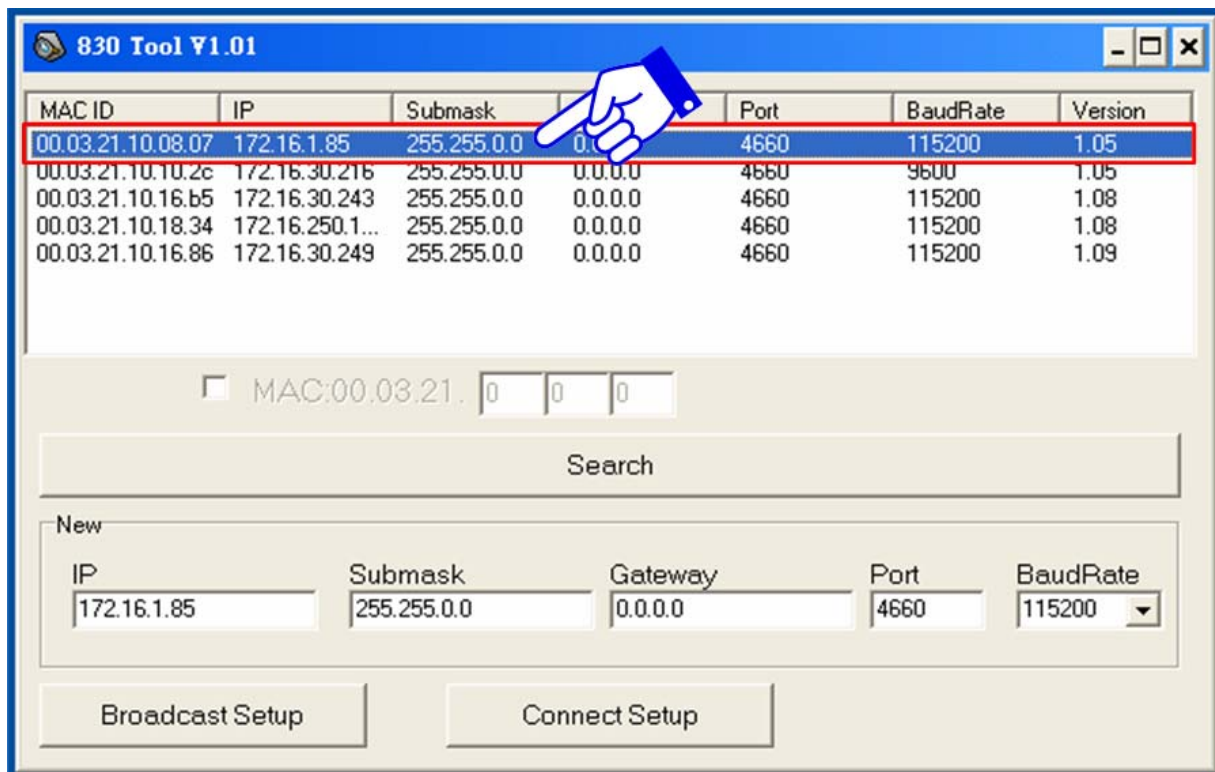
C-2 Double click HTA830Tools.exe to execute program.

C-3 Click on "Search" button to locate the devices over the network. Returned results will be shown in the device list area. Kindly refer to follow figure :



- If found devices have the same IP addresses, kindly differentiate each using their MAC ID ◦

C-4 Select a device as shown below:



C-5 Current settings of the selected device will be displayed in the "New" settings area. To modify it, overwrite the parameters :

MAC ID	IP	Submask	Gateway	Port	BaudRate	Version
00.03.21.10.08.07	172.16.1.85	255.255.0.0	0.0.0.0	4660	115200	1.05
00.03.21.10.10.2c	172.16.30.216	255.255.0.0	0.0.0.0	4660	9600	1.05
00.03.21.10.16.b5	172.16.30.243	255.255.0.0	0.0.0.0	4660	115200	1.08
00.03.21.10.18.34	172.16.250.1...	255.255.0.0	0.0.0.0	4660	115200	1.08
00.03.21.10.16.86	172.16.30.249	255.255.0.0	0.0.0.0	4660	115200	1.09

☐ MAC:00.03.21.

Search

New

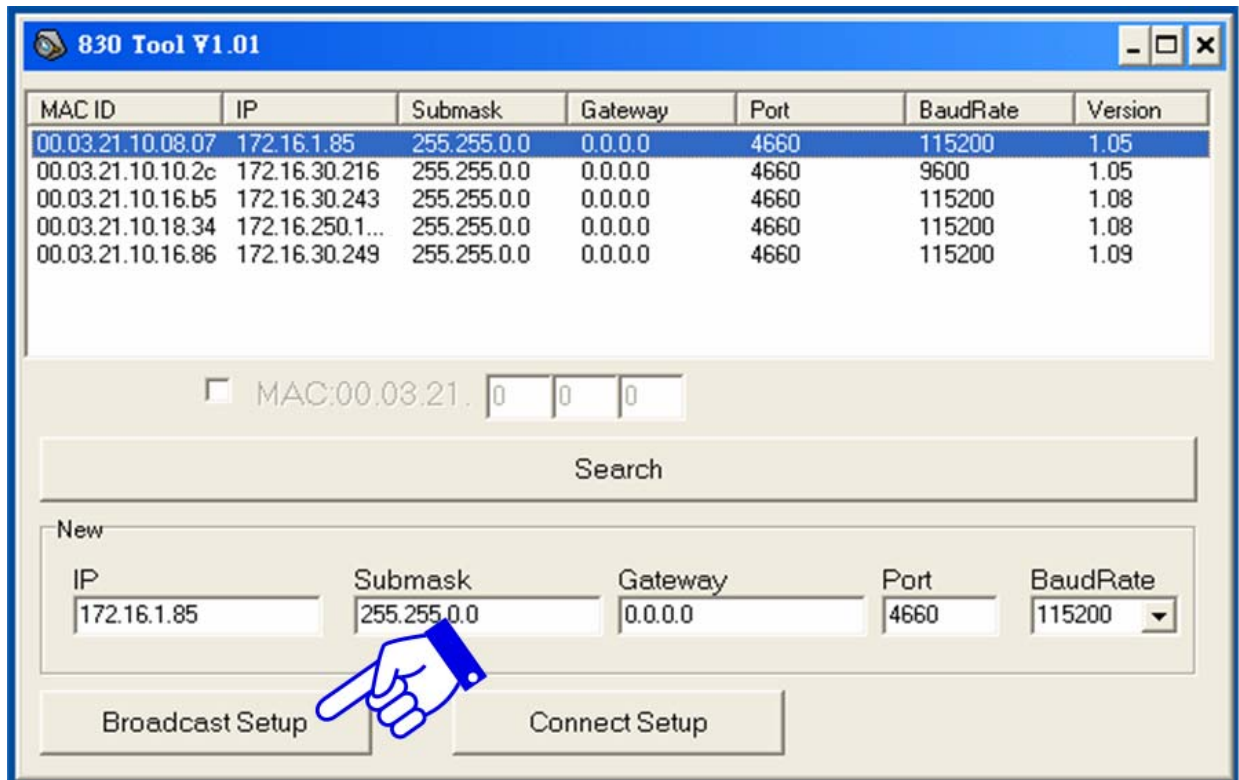
IP: Submask: Gateway: Port: BaudRate:

Broadcast Setup Connect Setup

- IP : New IP address
- Submask : Sub Mask
- Gateway : Modification is not required if the devices are connected on the same network.
- Port : Default is 4660 or user-defined port.
- BaudRate : Definition by different devices.

Kindly inquire the necessary information about the network environment from your IT personnel. All parameter settings should be the same with the system in order to establish connection with the devices.

C-6 Verify the new parameters before pressing the “Broadcast Setup” button. :



- “Broadcast Setup” is applicable when devices are connected under the same network. However, if the program and device belong to different network or if connection cannot be established due to network barriers, kindly use “Connect Setup” button to set the parameters.◦

C-7 Upon completion of the settings, the device will automatically restart and temporarily disconnects from the network. Kindly wait for 10-20 sec. before searching the device again. Check if the parameters are correct and successfully modified.

ONE YEAR LIMITED WARRANTY

We warrants this product against defect in material or workmanship for 1 year from the date of purchase. If such a defect is discovered within this warranty limitation, contact your dealer for repair or replacement of your unit.

When returning the product, you must ship the product in its original packaging or packaging that gives an equal degree of protection. This warranty becomes invalid if the factory-supplied serial number has been removed or altered on the product.

This warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence or modification of any part of the product. This warranty does not cover damage due to improper operation or maintenance, connection to improper equipment, or attempted repair by anyone other than.

In no event shall manufacturer's liability exceed the price paid for the product from direct, indirect, special, incidental, or consequential, damages resulting from the use of the product, its accompanying software, or it's documentation. Hundure makes no warranty or representation expressed, implied, or statutory, with respect to its products, contents of use of this documentation and all accompanying software, and specially disclaims its quality, performance, merchantability or fitness for any particular purpose. Hundure reserves the right to revise or update its product, software or documentation without obligation to notify any individual or entity.

TECHNICAL SUPPORT

For technical questions regarding your product, please email our service and support team at

overseas@hundure.com