



GTD368-4SR



GTD368-4SW



GTD368-6SR



GTD368-6SW



GTD368-4SG



GTD368-4SB



GTD368-6SG



GTD368-6SB



Double-sided Display

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1. Introduction

NTP (Network Time Protocol) is a highly-precise and convenient way to transfer time via the network. NTP time source is available for free on the Internet, or can be bought for independent use.

POE (Power Over Ethernet) utilizes the technology that delivers DC power to Ethernet connected devices. POE enables data and power transfer simultaneously through one standard network cable, which makes the deployment of network equipment more cost-effective.

GTD368 of GlobalTime brings together all the advantages of PoE technology and real-time synchronized system to the market: get precise time source from the Internet, and receive data and power over the same set of wires, which guarantees high precision and low cost. Moreover, GTD368 double-sided display is available. With an extra screen(rather than an extra GTD368 device), the double-sided display effect is achieved. This innovation facilitates installation and reduces costs.

2. Technical Specification

Accuracy	+/- approximately 20 milliseconds		
Operating Temperature	-10°C to 60°C		
Viewing Distance	50 meters		
Operating Humidity	90% maximum, non-condensing		
Installation options	Surface, Pendant, Cantilever		
Certifications	CE/FCC		
Power Supply	IEEE 802.3af Compliant, less than 13watts, Power over Ethernet(PoE)		
	DC power adapter		
Network interface	10M RJ45		
Warranty	One year		
Display Face	4-digit/ 6-digit, 7-segment LEDs		
MTBF	50 thousand hours		
4-digit Single-sided		4-digit Double-sided	
Dimensions	302mm×157mm×60mm	Dimensions	302mm×157mm×80mm

Cabinet	high-strength black plastic	Cabinet	high-strength black plastic
Weight	0.7kg	Weight	1.2kg
6-digit Single-sided		6-digit Double-sided	
Dimensions	427mm×157mm×60mm	Dimensions	427mm×157mm×80mm
Cabinet	high-strength black plastic	Cabinet	high-strength black plastic
Weight	0.9kg	Weight	1.55kg

3. Installation

3.1 Packing List

- Single-sided: One device of GTD368
Double-sided: One device of GTD368, one display screen, a set of pendant connector

3.2 Power Supply

- 1) If the local network supports PoE, One network cable is needed.
2) If not, power adapter is available.

3.3 Configuration Button

One red control button for you to realize following configuration:

A. Time format

In the state of time display, press the button for 3 seconds, the screen will display 12 or 24;
Loose the button and then press again, it will switch between 12 and 24. The configuration
will take effect in 5 seconds after loosing the button, and the screen will display time
accordingly.

B. Re-boot

Press the button for 3 seconds, when screen displays 12 or 24, press the button two times in a
row, the clock will display E5, then the clock will reboot.

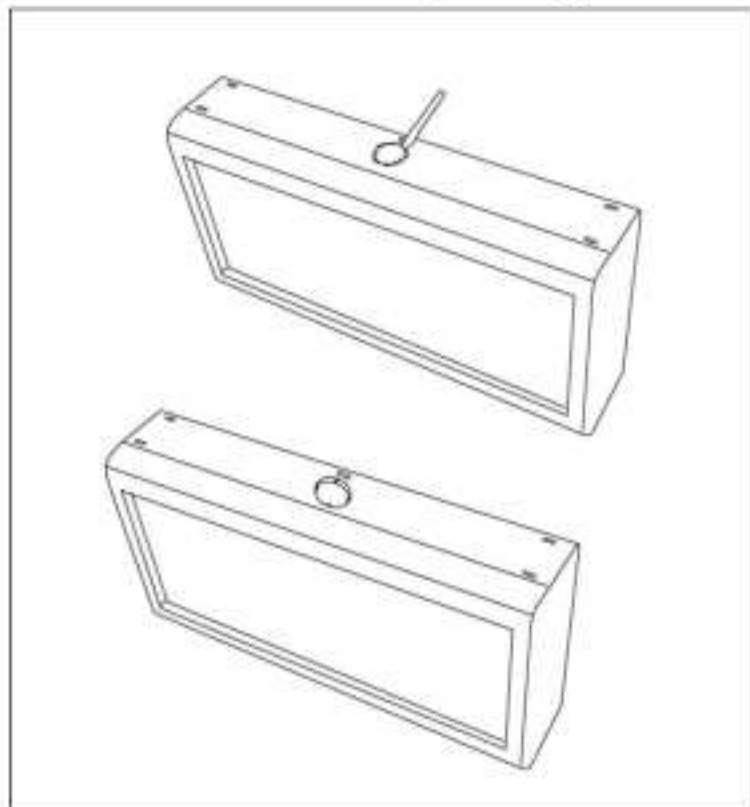
C. Time zone

In the same state, press the button for 6 seconds, the screen will display the present time zone.
One press one time zone added, till it reaches +14:00, then switch to -12:00 and mount to UTC
time.

3.4 Installation Instructions of Double-sided clock

The detailed installation instructions are shown as below.

a. Remove the hole on the top of the single-sided clock.

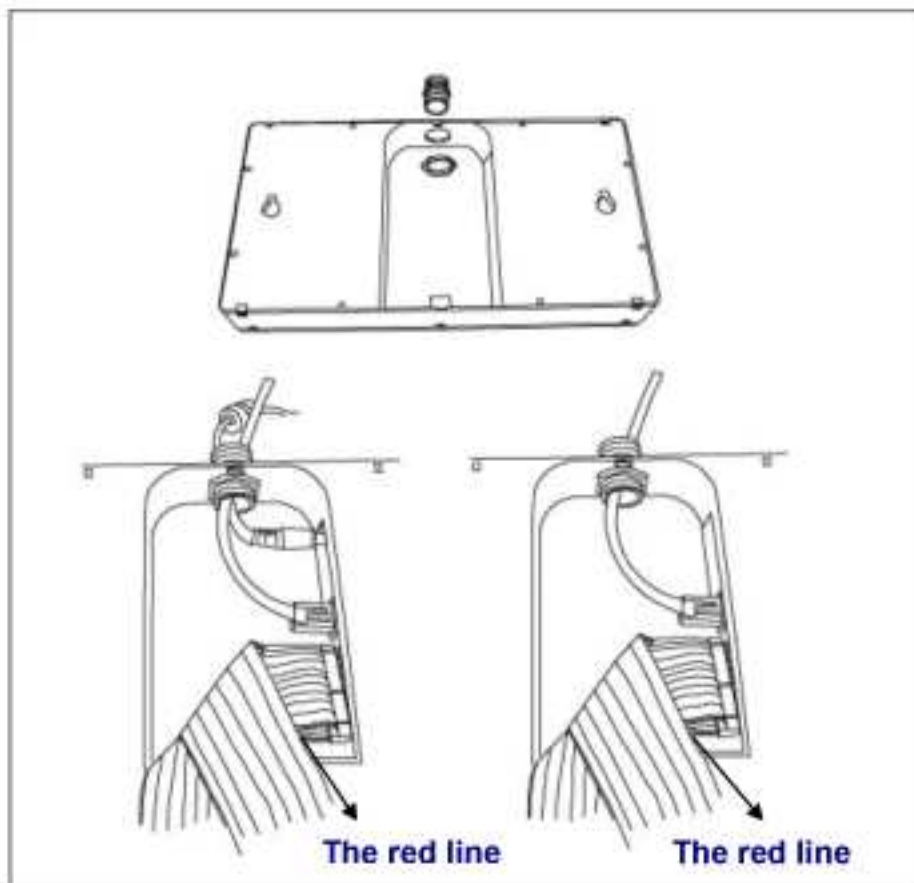


b. Install the metal accessories, then make the network cable go through the hole. Meanwhile, connect the multiple connector with another screen, as shown in the picture below.

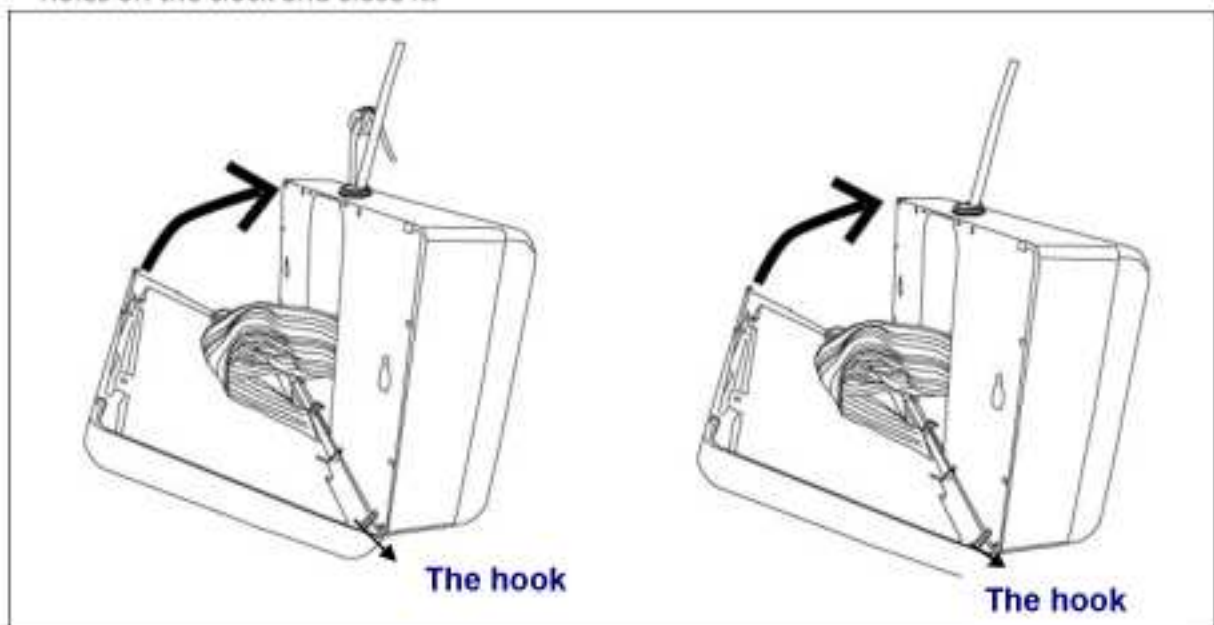
Note:

(1) The GlobalTime digital clock can be powered by two ways. One is PoE while another is adapter. You may select any one as you like. With PoE available, only one network cable is needed. Otherwise, both the network cable and an adapter are necessary.

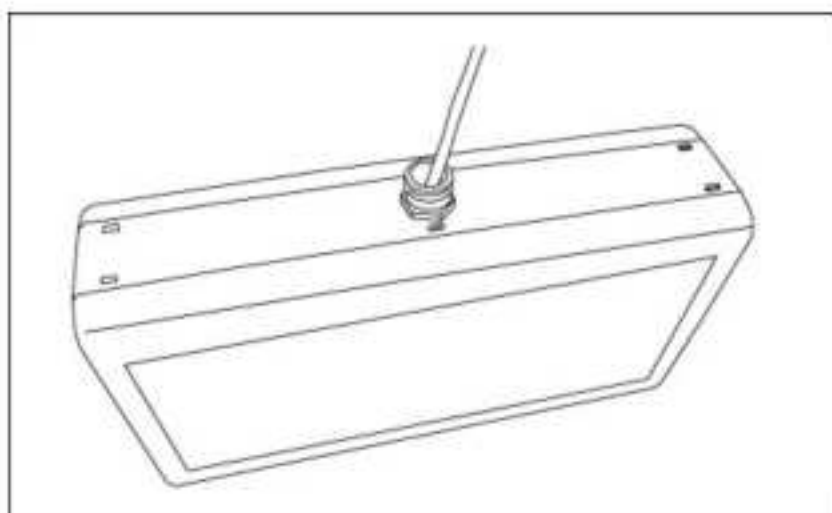
(2) When connecting the multiple connector with another screen, please pay attention to the red line. It can not be put to the opposite direction.



c. There are three plastic hooks on the rear of the clock. Put the hooks into the corresponding holes on the clock and close it.



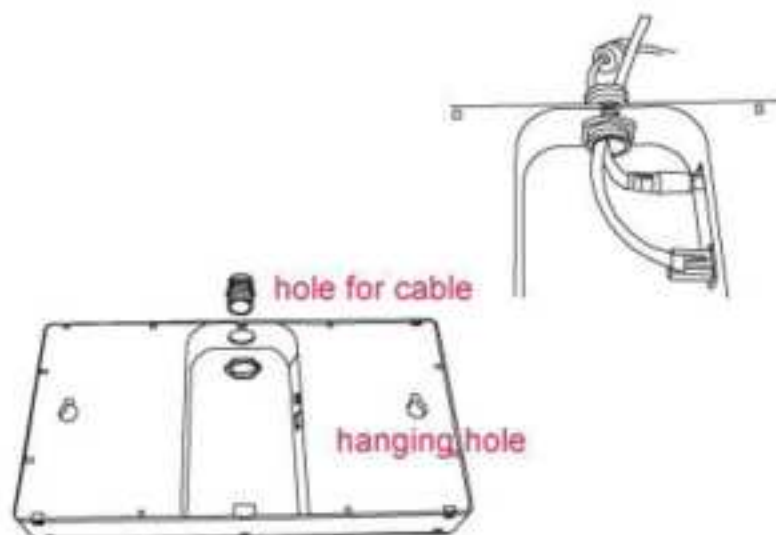
d. After the installation being finished the double-sided clock will just like what is shown below:



Note: In case you would like to separate the screen and the single-sided clock, please use special tools since the plastic hooks may not bear rough force. Any damage in that case is on the user's account.

3.5 Wall Mounting

Only screws are needed. See the picture below:



There is 248 millimeters between the two hanging holes on the clock rear. The diameter of the cantilever screw head should be within 6-12 millimeters, and the diameter of the screw stem less than 6 millimeters. Work will be done by hanging the clock on the screws.

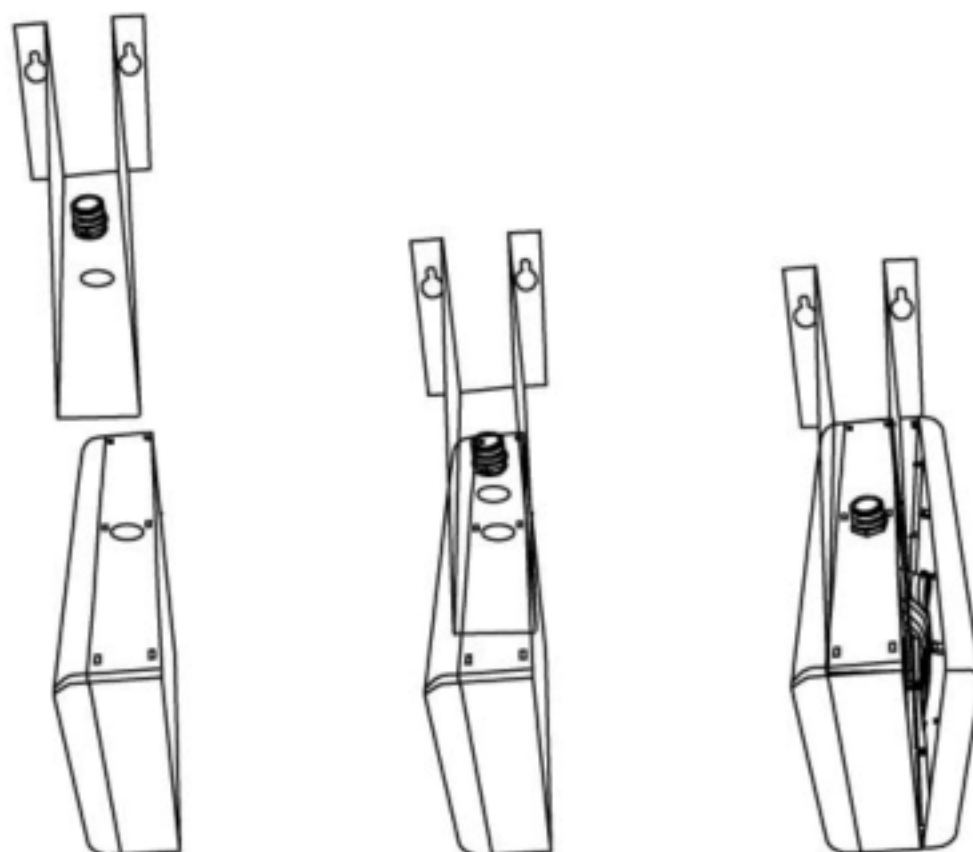
If the wall is newly decorated, please make sure that the cable required has been led out from where the clock screen is to be installed; If not, we suggest leading in the cable through the hole above the clock screen, and connect with the corresponding port.

3.6 Cantilever Mounting and Double-sided Display

The following steps are to be followed:

- a. Remove the hole on the top of the single-sided clock.
 - b. Use the mental coupling of screw thread to fix the mental bracket on the top of the clock.
 - c. Make the cable go through the mental coupling to connect with the interface.
 - d. For double-sided display in this type, another display screen is needed.
- Please observe the instruction in 3.4 (Watch the direction of the wire).

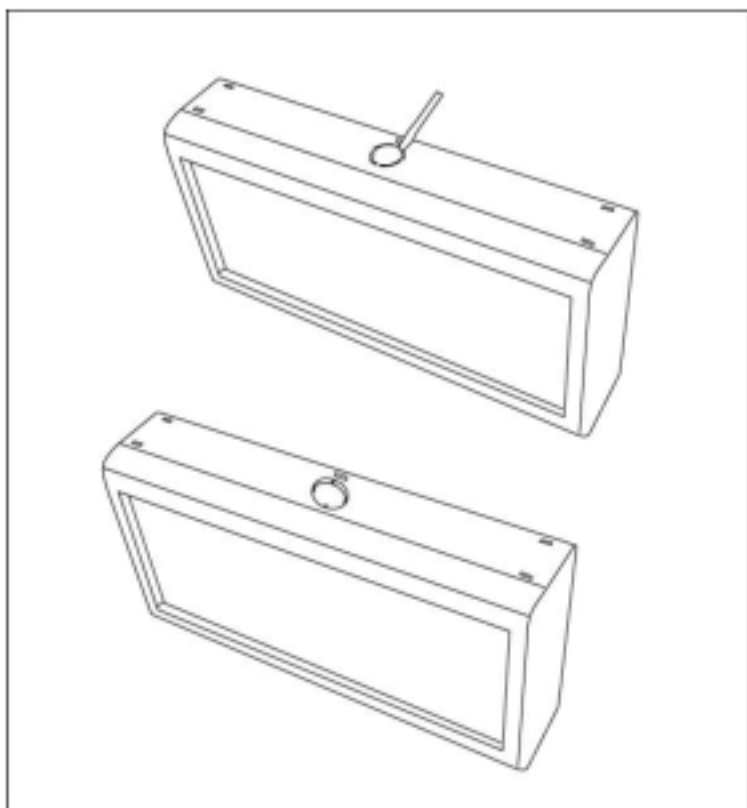
The following pictures are shown for reference.



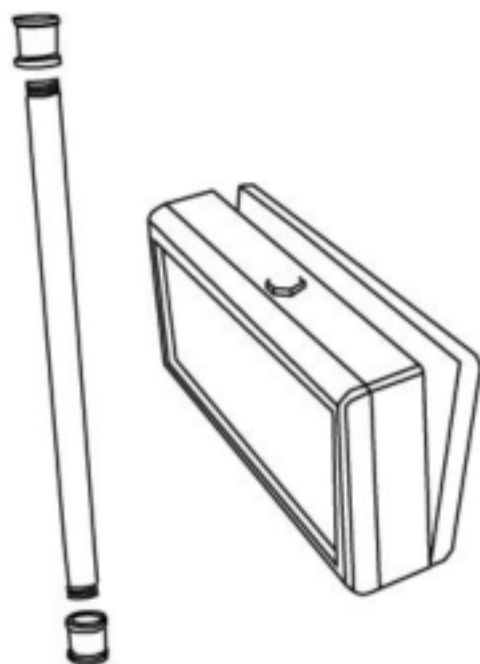
3.7 Pendant Mounting and Double-sided Display

In this type, the following steps are to be followed:

- a. Remove the hole on the top of the single-sided clock.



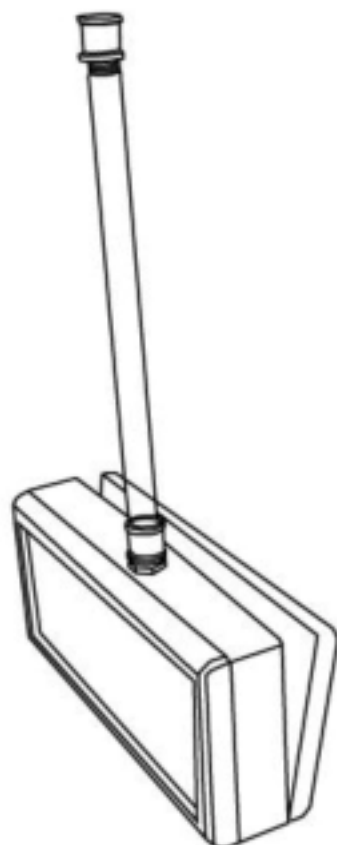
b. Take out the metal coupling and the nut at first, and install them on the top of the clock.



c. Then make the network cable pass through the pendant tube and the metal coupling; connect the cable with the interior interface of the clock screen.

d. For double-sided display in this type, another display screen is needed.

Please observe the instruction in 3.4(Watch the direction of the wire)



4. Operation Status

When powered up, the clock will go through:

- Self-Check
- IP address
- Time display

4.1 Self-Check

Self-check status aims to inspect whether all LED segments are in good condition. The status lasts 10 seconds, showing 99:99,88:88...to 00:00.



4.2 IP Address

The clock is both DHCP and static IP addressable, and it is DHCP addressing in default way.

When powered up,

The clock shows “dHCP” first before getting the IP address.

If it fails to track DHCP server within the scheduled time, the screen will automatically display IP address as 192.168.2.55.

4.3 Time Display

At first the time is displayed as: 00:00+ time zone. If it is not synchronized with the external time source, it will keep running based on this time zone.

After synchronizing with the network time server, it will display the correct local time.

5. Management Software

Please download the client software to manage the clock.

5.1 IP Search

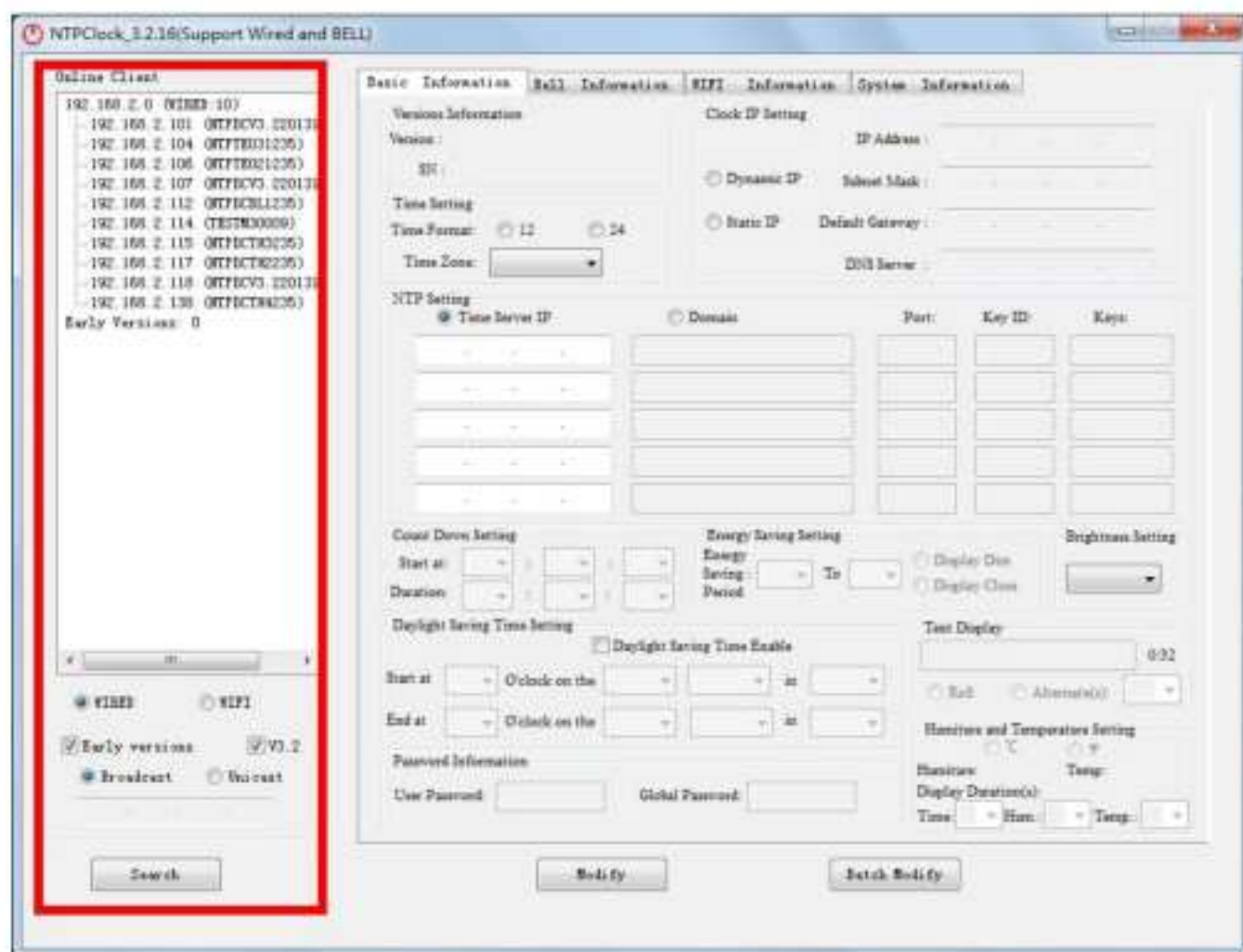
GlobalTime client software supports both Broadcast(255.255.255.255) and Unicast way to search online client clocks. Broadcast is the default way of search.

- Broadcast

Select *Broadcast*, and click *Search*, the software will automatically search online clock in the subnet, and group IPs based on different subnets. The number in the Brackets shows the number of online clocks searched.

- Unicast

Select *Unicast*, and input initial IP you want in the bar, then click *Search*, the software will search from the initial IP to the last one. For example, to search all clocks in subnet 192.168.3.0, you can input 192.168.3.001, and the software will search one by one till 192.168.3.254.



5.2 Basic Information and Settings

5.2.1 Password

Click one IP on the left window, you can view basic information of each clock, and start necessary settings.

- ❖ To effect each setting, you need to input password. Default user password is **admin**.
- ❖ Global password is for batch modification. Default password is **globalpw**.
- ❖ The software will pop out a dialog to remind you a successful modification.

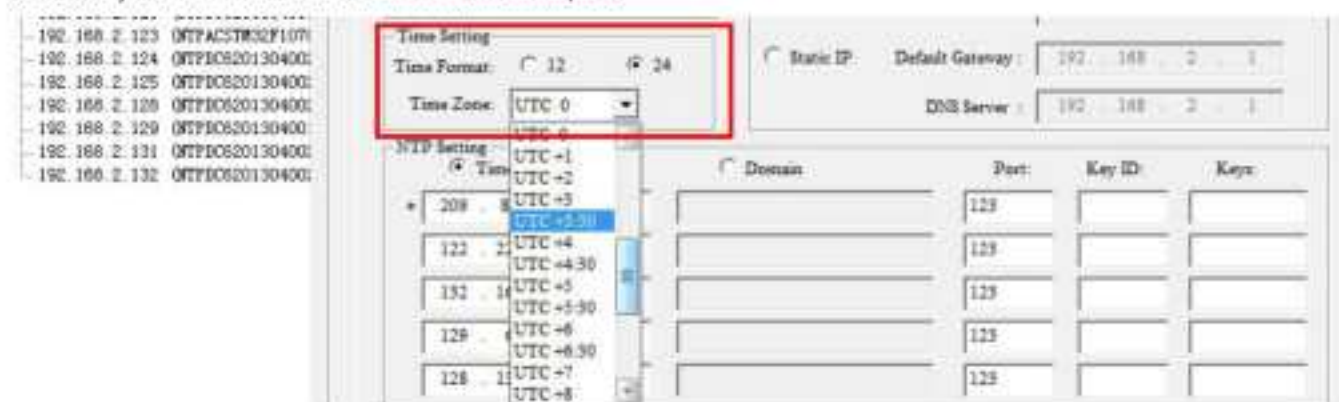
5.2.2 Version Information

Check the version and SN(serial number) of each clock.



5.2.3 Time Zone and Time Format

Choose your time zone and time format 12/24.



5.2.4 Static IP

GlobalTime clocks work with default DHCP mode. If you want to assign static IP for each clock, click *Static IP*, and input the IP you want to assign. Then, click *Search*, you will see the new IP.



5.2.5 NTP Setting

You can view NTP server information.

192.168.2.131 (NTFDC620130400)
192.168.2.132 (NTFDC620130400)

NTP Setting

Time Server IP	Domain	Port	Key ID	Keys
209.81.9.7		123		
122.226.182.4		123		
132.163.4.101		123		
129.6.15.28		123		
128.138.140.44		123		

Count Down Setting
Start at: 0 : 0 : 0
Duration: 0 : 0 : 0

Energy Saving Setting
Energy Saving Period: 0 To 0
☒ Display Dim
☐ Display Close

Brightness Setting
Normal

5.2.6 Countdown Setting(Optional)

GlobalTime clocks support countdown function. Please specify it with GlobalTime if you need this function.

128.138.140.44 123

Count Down Setting
Start at: 0 : 0 : 0
Duration: 0 : 0 : 0

Energy Saving Setting
Energy Saving Period: 0 To 0
☒ Display Dim
☐ Display Close

Brightness Setting
Normal

Daylight Saving Time Setting
☐ Daylight Saving Time Enable
Start at: - O'clock on the - - in -
End at: - O'clock on the - - in -

Password Information
User Password: Global Password:

Test Display
0:32
☒ Roll ☐ Alternate(s)

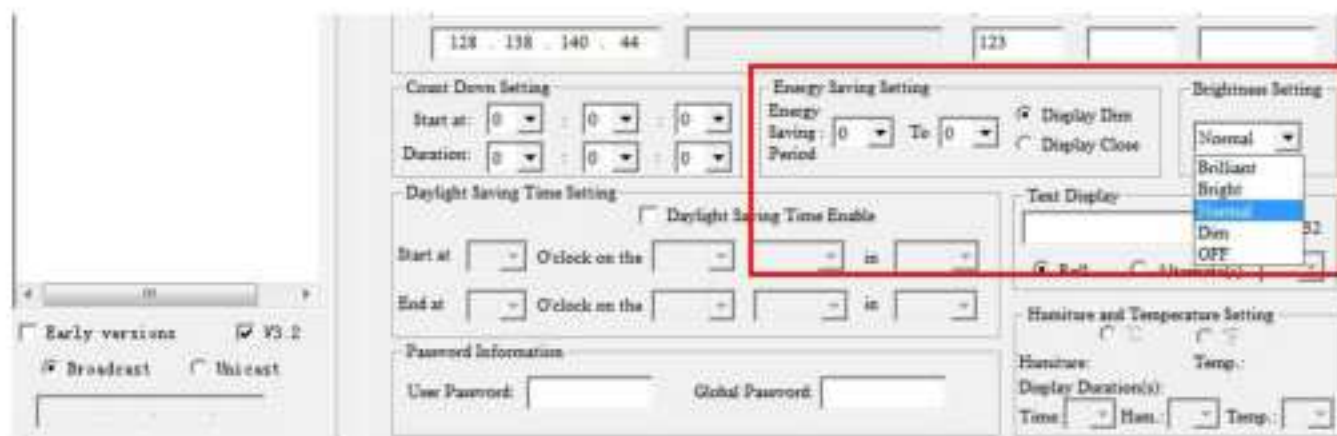
Humidity and Temperature Setting
Humidity: Temp:
Display Duration(s):
Time: Hum: Temp:

☐ Early version ☒ V3.2
☒ Broadcast ☐ Unicast

5.2.7 Energy Saving and Brightness Control

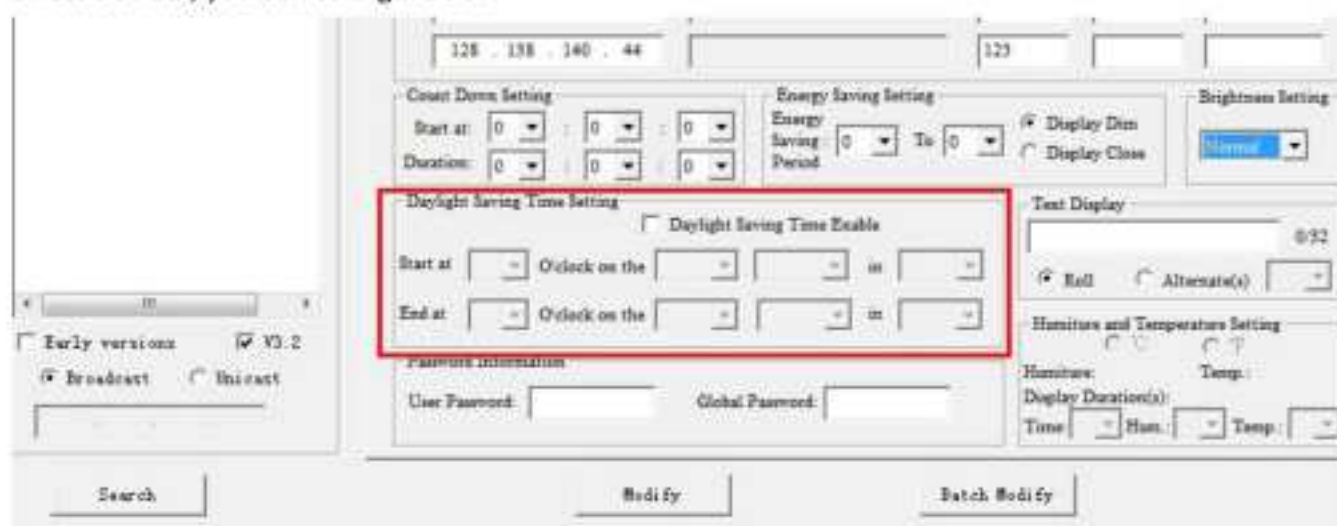
There are two modes to save energy, display dim or off. That happens after you specify a time period.

Besides, energy saving in specified period, you can control display brightness at 5 levels.



5.2.8 Daylight Saving Time

Effect DST bar, you can configure DST.



5.2.9 Batch Modify

If you want to batch modify all online clocks, you can select one IP on the left window, do a setting(for example, time format as 24h format), then input global password "globalpw", and click batch modify, all clocks under the same subnet will respond to the same setting.

The software will remind you how many clocks are successfully modified.



5.3 System Information

5.3.1 Password Setting

Select a clock IP, you can modify the default password under *User Password Setting* and *Global Password Setting*.

If you click *Batch Modify*, passwords of all clocks under the same subnet will be modified. The software will remind you how many clocks are modified.



5.3.2 Update Control

GlobalTime clocks support update through software.

- ❖ Click *Update Control*, and select the IP of the clock you want to update, then click "...", and find the update file we provide. After clicking *Modify*, this update process can not be stopped until it finishes. The software will remind you whether the update is successful.
- ❖ If you want to update all online clocks, you can choose the subnet, or the first IP under the subnet, and click *Batch Modify*, the software will update downward one by one.
- ❖ you can click *Break* on the right to break down the batch update process, the software will stop update task after it finishes the present one.



5.4 Bell Setting

GlobalTime NTP display can work with a bell alarm.

A bell alarm will be controlled by a relay, and users can set the alarm period via the software.

Bell alarm function is optional. Please specify it with us if you need this function.

Basic Information
Bell Information
WiFi Information
System Information

BELL_1
BELL_2
BELL_3
BELL_4
BELL_5

Event	Enable	Start Time			Days							Durations(s)		
1	<input type="checkbox"/>	0	:	0	:	0	<input type="checkbox"/> Sun	<input type="checkbox"/> Mon	<input type="checkbox"/> Tue	<input type="checkbox"/> Wed	<input type="checkbox"/> Thu	<input type="checkbox"/> Fri	<input type="checkbox"/> Sat	5
2	<input type="checkbox"/>	0	:	0	:	0	<input type="checkbox"/> Sun	<input type="checkbox"/> Mon	<input type="checkbox"/> Tue	<input type="checkbox"/> Wed	<input type="checkbox"/> Thu	<input type="checkbox"/> Fri	<input type="checkbox"/> Sat	5
3	<input type="checkbox"/>	0	:	0	:	0	<input type="checkbox"/> Sun	<input type="checkbox"/> Mon	<input type="checkbox"/> Tue	<input type="checkbox"/> Wed	<input type="checkbox"/> Thu	<input type="checkbox"/> Fri	<input type="checkbox"/> Sat	5
4	<input type="checkbox"/>	0	:	0	:	0	<input type="checkbox"/> Sun	<input type="checkbox"/> Mon	<input type="checkbox"/> Tue	<input type="checkbox"/> Wed	<input type="checkbox"/> Thu	<input type="checkbox"/> Fri	<input type="checkbox"/> Sat	5
5	<input type="checkbox"/>	0	:	0	:	0	<input type="checkbox"/> Sun	<input type="checkbox"/> Mon	<input type="checkbox"/> Tue	<input type="checkbox"/> Wed	<input type="checkbox"/> Thu	<input type="checkbox"/> Fri	<input type="checkbox"/> Sat	5
6	<input type="checkbox"/>	0	:	0	:	0	<input type="checkbox"/> Sun	<input type="checkbox"/> Mon	<input type="checkbox"/> Tue	<input type="checkbox"/> Wed	<input type="checkbox"/> Thu	<input type="checkbox"/> Fri	<input type="checkbox"/> Sat	5
7	<input type="checkbox"/>	0	:	0	:	0	<input type="checkbox"/> Sun	<input type="checkbox"/> Mon	<input type="checkbox"/> Tue	<input type="checkbox"/> Wed	<input type="checkbox"/> Thu	<input type="checkbox"/> Fri	<input type="checkbox"/> Sat	5
8	<input type="checkbox"/>	0	:	0	:	0	<input type="checkbox"/> Sun	<input type="checkbox"/> Mon	<input type="checkbox"/> Tue	<input type="checkbox"/> Wed	<input type="checkbox"/> Thu	<input type="checkbox"/> Fri	<input type="checkbox"/> Sat	5
9	<input type="checkbox"/>	0	:	0	:	0	<input type="checkbox"/> Sun	<input type="checkbox"/> Mon	<input type="checkbox"/> Tue	<input type="checkbox"/> Wed	<input type="checkbox"/> Thu	<input type="checkbox"/> Fri	<input type="checkbox"/> Sat	5
10	<input type="checkbox"/>	0	:	0	:	0	<input type="checkbox"/> Sun	<input type="checkbox"/> Mon	<input type="checkbox"/> Tue	<input type="checkbox"/> Wed	<input type="checkbox"/> Thu	<input type="checkbox"/> Fri	<input type="checkbox"/> Sat	5

clean

5.5 WiFi Setting

GlobalTime NTP display supports WiFi wireless connection.
This setting is only necessary when users gets WiFi displays.

The screenshot shows a configuration window with four tabs: "Basic Information", "Bell Information", "WIFI Information" (which is highlighted with a red box), and "System Information".

Under the "WIFI Information" tab, there are two main sections:

- Wired:** This section has a radio button labeled "Wired_Pattern". Below it is a table with columns: "Num", "SSID", "Channel", "Rssi", "Cipher", "Auth", and "Bss_type". There are six rows, each with a radio button in the "Num" column, numbered 1 through 6. The other columns in the table are currently empty.
- Wifi:** This section has a radio button labeled "Wifi_Pattern". Below it are three input fields: "SSID:" followed by a text box, "Cipher:" followed by a dropdown menu, and "Auth:" followed by a dropdown menu. At the bottom of this section is a "Wifi Password:" label followed by a text box.

6. Troubleshooting

6.1 The clock shows incorrect time.

Check the host IP configuration and make sure the network can communicate with the time server preset.

6.2 The display remains unchanged.

Check the condition of the button.

6.3 Display the default IP address

The host configuration is DHCP. Make sure the network support DHCP server. If the clock can not get the IP address from DHCP server for a long time, it will resort to the default IP: 192.168.2.121.