

MA-801/MA-802 NTP Server

NTP time server

Manual for installation

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<http://ntpclock.yasapersada.co.id>

Manual Instruction

Welcome to purchase our production.

MA-801/MA-802 Series can acquire standard time by GPS, Beidou, CDMA and so on, realize the synchronization of computer, server and equipment that support NTP standard in local area network. MA-801/MA-802 Series have been widely applied in occasions of inspection, legislation, transportation, research and school.

Main parameters of time server

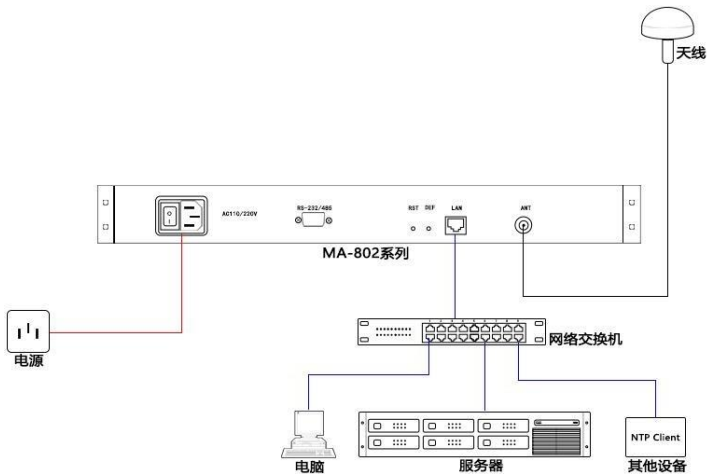
Support agreements	NTP v1.v2.v3 (RFC1119&1305) SNTP (RFC2030) (RFC1321) NTP DHCP (RFC2131) HTTP IPV4
Time performance	GPS clock reference mode, first-level network time server, synchronization precision 1μs user terminal synchronize with time precision: <50ms (LAN typical value) user capacity:tens of thousand of clients NTP request quantity: 10000 every second every internet access
satellite catching performance	16 channels timing GPS receiver UTC synchronization precision30ns (RMS) , single star timing window is supported receipt signal L1,C/A -1575.42MHz sensitivity of Tracking and locking-160dBm

Interface information	GPS antenna interface: 1 AC220V/12V power interface: 1 internet access RJ45: 1 Reset button: 1 Factory reset button: 1
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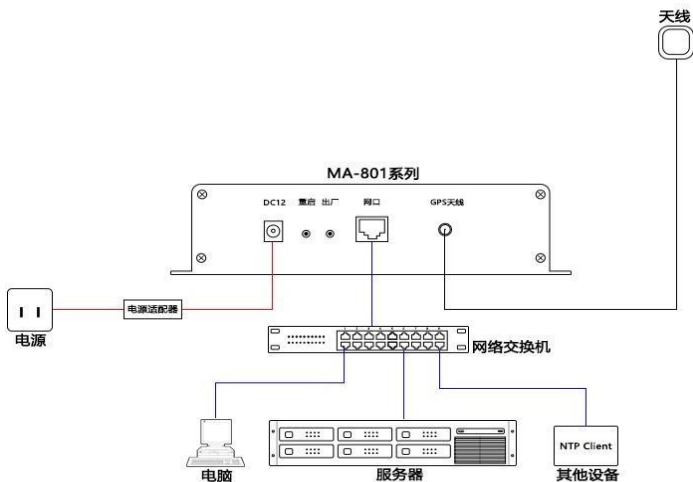
You can install and allocate time server frequently as well as check the problems found in usage through the manual.

一、sketch of time sever installation

1、sketch of rack-mounted MA-802 series



2、sketch of desktop-installed MA-802 series



*: antenna must be outdoor as open as possible.

二、 Time server configuration

The factory default IP address:192.168.1.30, sub network mask: 255.255.255.0. WEB administrative page admin: admin,code: admin.

Process of initial configuration:

1、alter the IP of your computer to that of the time server

2、insure your server can receive ping

3、import: <http://192.168.1.30I> in internet explor(IE for example) , open administration page, and import admin and code to login in.

In administration page you can achieve those : IP modification 、code management、restart 、reset、GPS and Beidou configuration.

Multi-interface setup:

Multi-interface equipment can be configured with 8 interfaces at the most, among which the first interface is main network interface, and the others are Sub network interfaces. Every interface is physically isolated, so it can configure different IP. Every interface's factory IP is 192.168.1.30, the way to modify default IP is same as that of main network interface. through main network interface you can inquiry the current IP of sub network interfaces and reset it.

*1:Only MA-802/GB support dual mode of GPS and Beidou satellite.

三、 Check of operating status

1、 MA-801desktop installation series

The three status lamps on front panel show running status :

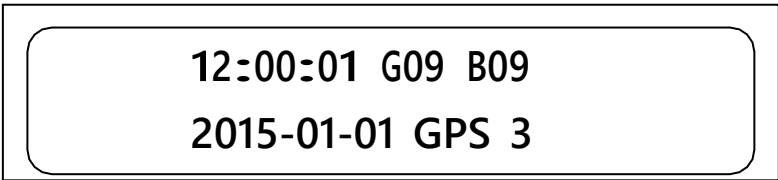
Power light: constant brightness stands for the normality of external battery, extinguishment stands for the abnormality.

RUN light: flash stands for normal operation ,on the contrary that system failure.

NTP light: flash stands for satellite time unlocked, constant brightness for locked.

2、 MA-802 rock-mounted series

MA-802rock-mounted series is equipped with LED display by which you can check running status.



12:00:05 G09 B09

192.168.001.030

LED displays in upper and lower rows, the upper display time, information of GPS and Beidou satellite.the lower switches from IP information to date,time and capturing state.

State explanation :

12: 00: 01: current Chinese standard time

G09: number of locked GPS satellite (MA-802/G, MA-802/GB)。

B09: number of locked Beidou satellite (MA-802/GB only) 。

2015-01-01: current Chinese standard time

GPS: locked time sources,whose possible value include GPS (GPS system) 、BDS (Beidou system) 、GLS (GLONASS system) 、CDM (CDMA system for MA-802/C only) 、NTP(superior NTP server)、N/A(unlocked).

3: capturing state:stands for the status of time capturing .0:equipment failure.1: time information has been captured but hasn' t been completely genlocked .3: time information has been captured and completely genlocked .
192.168.001.030: current IP address of time server .

四、NTP client configuration and time service

NTP server of MA-801/MA-802 series provide standard NTP service externally.all hardware(server,workstation and hardware wanting time) supporting protocol of NTP、SNTP V3 V4 can capture standard time through the NTP server, hereafter are set-up methods of NTP in common systems.

1、Microsoft Windows series

All Microsoft Windows series can be synchronized with

NTP. As following is the setup(Windows Server 2008 for example):

Click “control panel” -> “time and date setting ” -> “Internet time ” -> “setting change”, tick “synchronize with Internet time server” and import NTP time server IP in “server”, then click “OK ”. “Update Now” stands for 可 updating the current time .

2、Linux

Linux can be synchronized with NTP with a ntpdate command such as ntpdate 192.168.1.30 as well as configuring NTPD service. For more information, please refer to corresponding manual of LINUX .

3、other hardware supporting NTP protocol

Start synchronization in NTP configuration options. The IP of NTP server should be the same as that of NTP time server. Port number is 123 and communication protocol is UDP, if needed. At last ,click SAVE.

五、Way to acquire stable and exact time

Server series (MA-801/G、MA-802/GB、MA-802/G) acquire standard time through satellite (GPS、Beidou) :

As GPS and Beidou IS far away from the earth and its signal is relatively weak when it reaches the earth. So we suggest time antenna be palced outdoor as open as possible such as roof and somewhere out of windows.

Theoretically our system can acquire standard time by capturing only one satellite, but for the safety of time we suggest 4 or more satellites be captured by GPS or Beidou. If 4 or more satellites can’ t be captured for a long time, the change of antenna is suggested.

The feeder of antenna will influence signal strength too. Through the test it is found that feeder can reach 50M. If ii exceeds 50M, we suggest you install a signal-amplifier

or change the install location of server.

Server series (MA-802/C) acquire standard time through CDMA:

For this kind of server, time source comes from CDMA system, so we just need to insure there's enough CDMA signal (which can be tested by Telecom mobile).

六、common fault and solution

1、Time client can't be synchronized with NTP server

A: NTP server works regularly or not (inquiring running status)。

B:the network of time client and NTP server is regular or not(ping check)。

C:the time on time client and NTP server differ drastically or not (out of time safety,LINUX and WINDOWS can't be synchronized if time differs drastically, please make synchronization manually)。

D:Time function of time client is open or not (such as w32time to windows)。

2、time synchronized is inaccurate

A:Make sure that NTP server has captured enough satellites and locked satellites.

B:Timezone of time client is set right or not (GMT is +8)

C:longer the uptime is,more accurate the locked time will be

If the fault is absent from the above, please log in:

<http://ntpclock.yasapersada.co.id> or contact us.

WhatsApp +62-821 146 117 32

Quality Assurance

Dear customer :

Thanks for purchasing MA-801/MA-802 series NTP time server produced by our company .

All the products above are implemented by “three guarantees” , and the guarantee period is one year (subject to the invoice) . we also provide paid maintenance to the expiration of guarantee time. We will take responsibility for product’ s quality problem in the guarantee period, and provide paid maintenance for inappropriate installation, misuse and unauthorized disassembling or refitting.

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Guarantee Card

username: _____

User contact number: _____

User mailing address: _____

Purchase date : _____

Invoice number : _____

Sales unit name: _____

Sales unit phone: _____