8-port IP Power Manager

XL-IPM4014

User's Guide

Warning:
 Any changes to this equipment without permission may cause damages to your equipment! This equipment has been proved by CE & FCC to can be prevented from the influence of harmful electronic jamming in normal business use condition.

IMPORTANT NOTICE
1. We have no responsibility for the possible damage caused by improper usage or abnormal working environment.
2. Do not use XL-IPM4014 in strong shaking condition.
3. Please contact the dealer when device works improperly.

All other products mentioned in this document are trademarks of their respective manufactures.

We are exempt from notify any change of our products.

Content

Introduction

XL-IPM4014 is a web controller which can be easily used in the industry field. With the remote network control technology, user can control or query the power supply of equipment.

User can do this in any computer connected to the internet or local area network, there is no special program needed, also there is no need to open the external case of the computer.

Try to imagine that while traveling in a foreign country, you can control the power supply of your electric equipments, such as a computer, a server, a router, an entrance guard or security / surveillance system directly or use a time schedule comes with the IP Power Manager XL-IPM4014. You can remotely control the power switch with any computer connected to the network, which is not only convenient, but it also big saving on the manpower and time.

Features:
- ➢ Built in web server, can be used through the Ethernet or Internet network .
- ➢ Support multiple browser, such as Internet Explore, Netscape, you can operate the switch and check the state without any special program .
- ➢ Control **8set AC outlet** equipment at the same time.
  * 4 Set : power control by standard IEC 320 Outlet connectors .
  * 4 Set : power control by power outlet connectors .
- ➢ Supported HTTP, SMTP, SNMP, fixed IP and DHCP provided IP address
- ➢ Security passwords identify. Easily installed and can be updated online.
- ➢ Supported serial port communication, indicate all kinds of real time state of device
- ➢ Separated LED indicates the state of each switch.
- ➢ Developer tool (SNMP) is provided. It can be modified to meet the user's special need.
- ➢ Safely designed for high voltage resistance and protection for leakage of electrical currency, using nonflammable material.
- ➢ It can be used either separately or together with other products such as IP camera, IP Video and IP Sensor in all-directional network security monitoring, control and detection.
- ➢ Network Server reboot - can remotely control power and reboot the power on for the PC or Server at remote site.
- ➢ Timer Schedule - can pre-set the time schedule to turn power on / off thru Internet / Ethernet.
- ➢ Support NTP (Network Time Protocol) - synchronize the time of XL-IPM4014 with public accessible time servers.
- ➢ WAP Mobile Phone Control - can use the GPRS cell phone via WAP to control devcie
- ➢ Setup up own outlet default : when regain power it store each outlet to those status setting.
- ➢ Provides SDK (VB & VC) for own software development and integrating into applications.

1 Specification

1.1 *Working limits*

➢ Maximum rated voltage of each 4 outlet :   250V AC, 24V DC
➢ Maximum rated currency of each 4 outlet : 15A AC/DC,
➢ Maximum rated currency of Individual outlet : 6A AC/DC
➢ Action delay: Max 10ms
➢ Working temperature: 0 ~ 70°C

NOTE:

IP Power Manager XL-IPM4014 use **power (IN)** wire at **10A current**.
      Max output current (total) 10A / 240V
      Max (individual) 6A

1.2 *Interface Description*

XL-IPM4014
Front interface shown below:

From left to right:

1. POWER RESET: self-protect AC reset button. IP Power XL-IPM4014 can cut off the power supply of outlets automatically if there is a shortcut o current overload. After user having solved the problem, push the reset button, the AC power supply will become normal.
2. 4x LED indicator lights: If the LED is on, means the corresponding outlet is power on.
3. CONSOLE: RS-232 port, provide the power output state and get IP address to re-update if update fail
4. Cycling button: allow to switch among outlets
5. On/off button: allow to control manually outlet selected by cycling button.
6. NETWORK: RJ-45 connector for Ethernet

Rear interface shown below:

Port description, from left to the right:
1. 90-240VAC power input port
2. Power switch : the power switch ON /OFF of device
3. OUT 1- 4: 4 individually switched AC outlets

Front and top panel as below:

Front panel from left to right :

1. 90-240VAC power input port
2. Power switch : the power switch ON /OFF of IP Power 9258 Outlet.
3. RESET: Self-protect AC reset button. IP Power 9258 Outlet can cut off the power supply of outlets
      automatically if there is a shortcut or current overload. After user having solved the problem, push
      the reset button, the AC power supply will become normal.

4. LED: 4 LED indicator lights (Outlet 5-8) . If the LED is on, means the corresponding outlet is power on.
5. External I/O : for connect with daughter device - IP Power 9258 Outlet

Top panel : OUT 5- 8 : 4 individually switched AC outlets
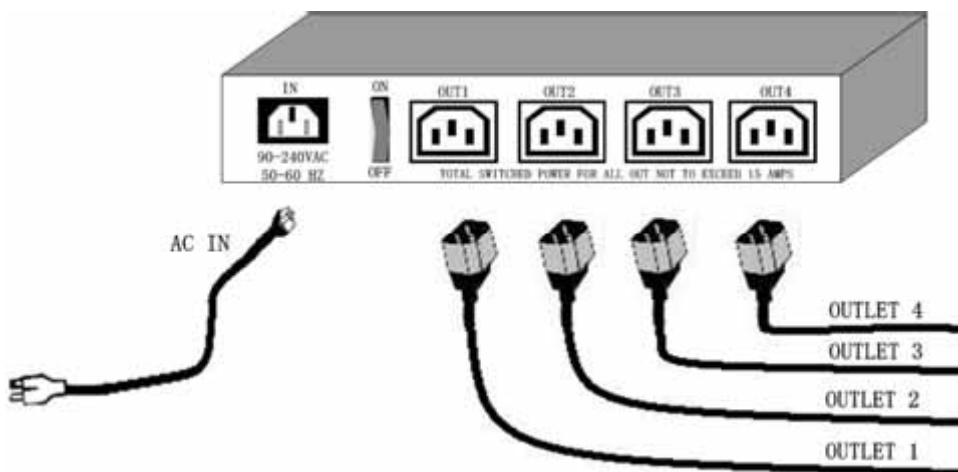
Installation

1.3 Hardware & Software installation

Before you start to use XL-IPM4014, please follow the steps below

➢ Check the package to make sure the contents is complete.
➢ Prepare one Ethernet HUB or Router
➢ Check the voltage of the power supply to make sure it is AC 110-240 volt
➢ Please confirm the specification of your power cable.
➢ Please use the 10A power cable.

1.4 Hardware installation

1. Connect the XL-IPM4014 to HUB through network wire.
2. Connect the HUB or Router to the internet (may through ADSL/XDSL modem).
3. Connect the power adapter to the XL-IPM4014.
4. Connect the power adapters of under control electric equipment to corresponding out port of XL-IPM4014.

Turn on your computer and the power adapter of XL-IPM4014.

Please note: use power wire can support 10A current (for 240V AC).
Max. output current: (total) 10A, (individual) 6A.

1.5 Software installation

Having connected the power supply and network wire with RJ45 port to the XL-IPM4014, please install the software by following the steps below:

1. Start your computer, put the installation disc in the CDROM, then find the file named ipeditv3.exe in the installation disc.
2. Copy the file to your desktop or any directory you want it saved to.
3. Start the initial setting process following the construction in next section.

1.5.1 Initial Settings

Initial setting through the Ethernet

1. Open attached CD and save IPEDIT.exe in to your Hardisk, execute **IPEdit.exe**

2. All the compatible devices in the same subnet of the Ethernet will be found and be display in the window by the software.

3. Click the equipment's name that you want to edit in the left of the window; it will turn fuscous, the equipment's name and IP address will display in the windows, you can rename (use numbers and letters). After that, click the update button and the new setting will be work in 20 seconds.

4. Double click the name of the equipment you want to control, the IE browser window will open and connected to this equipment in that Ethernet automatically. You also can type the IP address of the XL-IPM4014 in the IE browser to open the web page of 9000. We suggest you to update the IE to version 6.0 with SP1 or higher if your IE notices you the security level is too low to open that web page.

NOTICE:
1. Make sure RJ45 network cable have been connected and the XL-IPM4014 are power on.
2. XL-IPM4014's default setting is fixed IP address: **192.168.10.100**. The IP address of your computer should in the same subnet with that of XL-IPM4014's, so that you can open the control web page. You can make sure the IP address of your computer first, then use the ipedit.exe to modify the IP address of XL-IPM4014. After that, your computer can connect to the XL-IPM4014.
3. When user can not enter the control web page, please set the IP address of XL-IPM4014 and your computer in the same subnet.

   *Same subnet : means the first three parts of the IP address must be the same, such as XXX.XXX.X.abc. For example, 192.168.1.100 and 192.168.1.123 are in the same subnet.

4 .The default username and password of XL-IPM4014 are:

Username: **admin**
Password: **12345678**

1.6 Control and settings through the Internet Explore

Type the new IP address of XL-IPM4014 in the address field and you can enter the login web page. Input the default password 12345678, or the password set by you, click OK, and you can then enter the Web Control page.

Please enter user name and password.

User Name

Password

OK   Cancel

1.6.1 Control the power supply of outlets

Having entered the Web Control page of XL-IPM4014, click the SET POWER button on the left, you can enter the IO setting page as the following figure:

XL-IPM4014 can control 8 outputs individually at the same time. User can choose power on or power off with an electrical outlet . User may fill in the corresponding columns with the delay time you wish in seconds, then choose the action after delay to be on or off.

1.6.2 Power Supply State Query

Click the " Set Power" button on the left, the page will be refreshed. The state of each electric outlet will be displayed in column control.

1.7 System Settings

User can set the password, IP address, e-mail address, timer setting, online firmware update, and the time of XL-IPM4014 through the system settings.

1.7.1 Setting the password

Click the " Change password " button on the left you can enter the change password page. The default password of XL-IPM4014 is 12345678.

User can change it into any password (not longer than 8 bit), then click apply button to save the change.

Note: If forget the password, use username "super user " when log in webpage and then click "OK " turn power off for few second and then turn ON power . XL-IPM4014 will to set back to default password. (There is space between super and user.)

1.7.2 Setting the IP address

ALL CAHNGED MUST BE RESTART TO TAKE EFFECT.				
IP Address:	192	168	100	40
Subnet Mask:	255	255	255	0
Default Gateway:	192	168	100	1
DNS:	168	95	1	1
DHCP Client	⊙ Enable ○ Disable			
BEEPER	⊙ Enable ○ Disable			
Http Command Verification	⊙ Cookie+Base64 ○ Cookie			

Click the " Setup " button on the left side; fill in the proper IP address, Subnet Mask, Default Gateway, DNS. If you choose to use DHCP, please make sure that your network support DHCP service so the XL-IPM4014 will search and gain an IP address automatically when it starts. You can also control the Beeper sound .

1.7.2.1 IP address Settings: Ethernet (LAN) and Internet(WAN)

Local Area Network (LAN) :

In LAN, you can set a fixed IP address or gain it from a DHCP server automatically. We suggest to use a fixed IP address in order to let the other computers can visit the XL-IPM4014.

Now type the new IP address in the address field of IE, you can visit the XL-IPM4014. You also can use the ipedit.exe to find the XL-IPM4014 and modify its IP address.

Work on Internet (WAN) :

User can set the IP provided by your ISP. If the XL-IPM4014 has a public IP address, you can control it through the Internet. IP Sensor XL-IPM4014 supports fixed IP, DHCP.

- ➤ **IP Address:** please type in the IP address provided by your ISP. If XL-IPM4014 is working with a Router, please refer to the network settings of the Router.
- ➤ **Subnet Mask** : please type in the Subnet Mask provided by your ISP. If XL-IPM4014 is working with a Router, please refer to the network settings of the Router.
- ➤ **Default gateway:** please type in the Default Gateway provided by your ISP. When XL-IPM4014 is working with a Router, please refer to the network settings of the Router.
- ➤ **DNS Server** : please fill in the IP address of DNS server.
- ➤ **DHCP Clients**: Enable– activate DHCP service. DHCP will assign IP address for each PC.
    - o Disable – shut down the DHCP service. You can set the IP address by yourself.
- ➤ **Beeper :** Enable – activate the beeper . Disable – turn off the beeper. If you control the XL-IPM4014 through the web page, the beeper will beep once when the operation work.
- ➤ **Http Command Verification:** setup the control possibility from HTTP command or SDK (VB & VC):
    - ➤ Select " Cookie +Base64 " : enable Http command & SDK control
    - ➤ Select " Cookie " : enable Http command & SDK control

1.7.2.2 Email settings

When you finished the e-mail settings, you can set to let XL-IPM4014 send its IP address automatically.

Setup Email

MailServer:	abcd.com
Pop3Server:	cdef.com
Password:	••••••••
Sender:	123@abcd.com
Receiver1:	456@abcd.com
Receiver2:	
Receiver3:	
Subject:	IP Address
MailBody:	Hello
	Save Send

 For example:
* Mail Server: abc.com
* Pop3Servcer : cdef.com
* Password : XXXXXXXX
* Sender: 123@abcd.com
* Receiver 1: 456@abcd.com
* Receiver 2: 789@efgh.com
* Receiver 3:
* Subject: IP address
* MailBody : Hello

1. Mail Server : the server sends e-mail out. Please make sure the server is an available mail server.
2. Pop3Server : the server receive IP address (in Internet WAN) from your ISP for sending Internet IP address by E-mail when XL-IPM4014 in Internet. To receive IP address in WAN , please fill your ISP e-mail receive server.
3. Password : the password of this mailbox is no longer than 8 English letters.
4. Sender : please fill in the name of sender. The Mail Server must support SMTP and these fields must be filled in correctly.
5. Receiver: no longer than 50 English letters. Please use blank space to separate two receiver's e-mail address. After you have finished this setting, you will receive the email to inform you the IP address of the XL-IPM4014 every time you enter the webpage.
6. Subject : the subject of the mail to be no more than 50 English letters.
7. Mail Body : please type the content of the mail here, it cannot be left empty.

After you have finished all of the above settings, click " SAVE " button to save your settings.

1.7.2.3 Control through Time Schedule:

User can control the time when XL-IPM4014 starts or stop through preset time schedule.

Power Schedule

Power	Date			Time			PARAMETER	Power ON/OFF
Power1A	2006	06	06	06	06	06	Disable ▼	○ ON ◉ OFF
Power1B	2006	06	06	06	06	06	Disable ▼	○ ON ◉ OFF
Power2A	2006	06	06	06	06	06	Disable ▼	○ ON ◉ OFF
Power2B	2006	06	06	06	06	06	Disable ▼	○ ON ◉ OFF
Power3A	2006	06	06	06	06	06	Disable ▼	○ ON ◉ OFF
Power3B	2006	06	06	06	06	06	Disable ▼	○ ON ◉ OFF
Power4A	2006	06	06	06	06	06	Disable ▼	○ ON ◉ OFF
Power4B	2006	06	06	06	06	06	Disable ▼	○ ON ◉ OFF

System Startup Power Default Value:			
Power1	Power2	Power3	Power4
○ ON ◉ OFF	○ ON ◉ OFF	○ ON ◉ OFF	○ ON ◉ OFF

Submit

Power
 SetPower

System
 Setup
 DDNS
 E-mail
 Change Password
 Power Schedule
 Network Wakeup
 Ping
 Ping2
 Power Schedule2

 Firmware Update

Internal Time:
 Change Time

Click the power schedule on the left of the page; you can select enter the time schedule setting.

If user wishes to control the power in one outlet of XL-IPM4014, you can fill in the time in the power control column and choose on or off.

 Support parameter of operate schedule :

  ➢ Disable
  ➢ Just Once
  ➢ Every day
  ➢ Work Day : every Monday to Friday.
  ➢ Weekend : every Saturday and Sunday

1.7.2.4 Setup up own outlet default status :

When regain power , each outlet will set as appointed default status.

1.7.2.5 Internal Clock Settings & Network Time Protocol (NTP):

* User can enter the internal clock settings : year , month, day , hour , minutes and second.
* NTP function: customer can synchronize the time of XL-IPM4014 to the Internet web address time .

 Note: To work NTP, please do set up in e-mail and have to receive e-mail from XL-IPM4014.

1.7.2.6 Wake on Lan (WOL):

Remote Wake up PC by MAC address in Ethernet (LAN). Use Network port (RJ45), you can wake PC on
WAN by PC `s MAC address.

Wake On LAN (WOL) premise:
1. The main board needs to support "WOL " function. There must be a port to connect to your network card.
If your Main board support WOL,you can enable this function in BIOS setting, you could find this function in
Power Management of BIOS setting.

2. Your network card must support "WOL", remember to connect your connect cable to Main board or the network card can not send "power on" message to your main board.

After setup in main board and network card , you can use WOL function by following two step:

Step 1: Log in XL-IPM4014 web page and go to "Network Wakeup"
Step 2: Type in your MAC address then press "send" – the PC will be power ON.

Network Wake Up Setup

MAC: 0050BA0053

Save   Send

1.7.2.7 Ping (IP watchdog)

XL-IPM4014 support IP watchdog function. XL-IPM4014 can ping all connected devices and if there is no response for adjustable time XL-IPM4014 can do default action (turn on device or restart device).

Click on "Ping" or "Ping2" from System menu.

Ping Setting

Power
SetPower

System
Setup
DDNS
E-mail
Change Password
Power Schedule
Network Wakeup
Ping
Ping2
Power Schedule2

					Relay Setting				
Relay	Enable	Ping IP				NoEcho Count	BeforeAction Delay (Seconds)	AfterAction Delay (Seconds)	AfterAction	Action
Power1	ENABLE	192	168	10	1	2	2	2	Continue	Reset
Power2	DISABLE	192	168	10	1	2	2	2	Continue	OFF
Power3	DISABLE	192	168	10	1	2	2	2	Continue	OFF
Power4	DISABLE	192	168	10	1	2	2	2	Continue	OFF

Global Setting		
Ping Interval:	2	Seconds
Ping EchoWait::	20	Millisecond

Submit

For every power outlet you can set default action if there is no response on ping. U can also set "Before Action Delay" and "After action Delay" when ping function should be restored.

1.7.2.8 GPRS for Cell Phone : Support WAP.

XL-IPM4014 support GPRS function, you can use cell phone (with online function),

We support : Motorola V878 , Sony Ericsson T630 & K700i. .

To setup the online device (real IP address) as operate in browser .:

1) Address setting: key in your online IP address. For example: http://65.59.37.123 the interface is same as in IE (Internet Explore) .
2) The IP Address must be real IP address and can be work on Internet..
3) The name of IP device must be English, or will be encode in WAP.

Before using WAP control, please check if your cell phone support GPRS and if your number had apply online service.

1.7.2.9 Firmware update:

If no firmware to update please do not go to this page!

As received new firmware, user can gain more functions for XL-IPM4014 through firmware update. Click the firmware update on the right side of the page.

Step 1. : Click "firmware update",you will see follow webpage :

Note: Do not click "update " if no firmware file update!!!

Step 2. : Click update button, the following window will pop up.

Step3: Click the Brower button to find the corresponding update file (you can download it from our web site or ask it from the dealer), then click Update button to start update firmware. When the update is finished, you must wait one minute before you restart the XL-IPM4014.

NOTICE:
* Before running the online update program, please make sure that the TCP port is set to 80,or the online update may fail.
* Please check with your reseller /distributor / importer for the update news.

1.7.2.10   Check status though SNMP

XL-IPM4014 support SNMP V1 and V2 , user can use SNMP programs to get the status of each port in XL-IPM4014.

Following is MIB description:

Return value =1 ; the relevant outlet is power on
Return value =0 ; the relevant outlet is power off
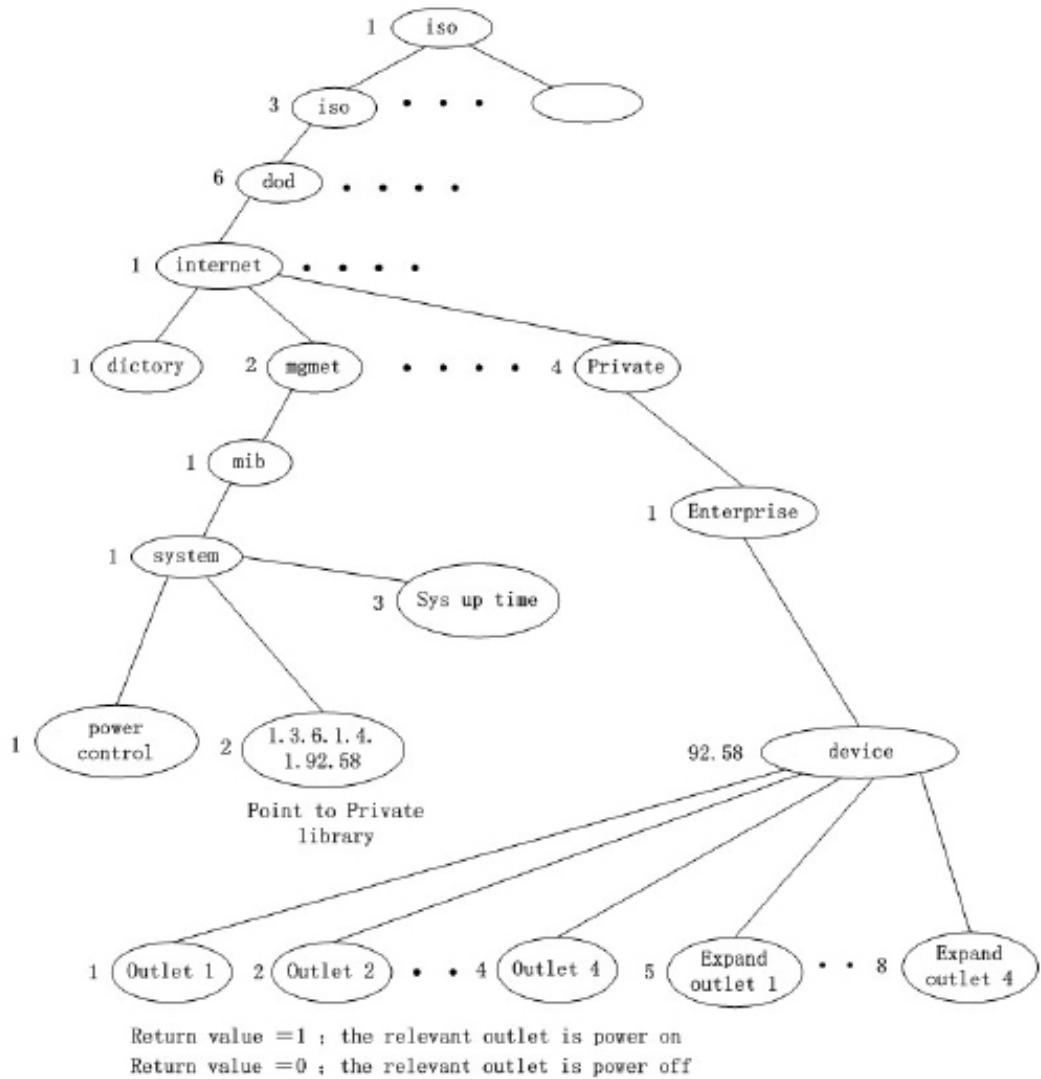
1.7.2.11   Control and Settings through HTTP commands

User can control the XL-IPM4014's action directly though the HTTP orders.

The format of the HTTP order is :

http://username:password@XXX.XXX.XXX.XXX/Set.cmd?CMD=***Power+para1=*+para2=*+para3=*..

Explanations of each part of the order:
  - Username : XL-IPM4014's username, default username is admin
  - Password : XL-IPM4014's password, default password is 12345678
  - XXX.XXX.XXX.XXX the IP Address of XL-IPM4014
  - CMD=***Power : the function module of XL-IPM4014
  - para1 ~ para3 parameters

Example 1 : control the power supply of XL-IPM4014:

http://admin:12345678@192.168.1.10 /Set.cmd?CMD=SetPower+ p60=1+p61=1+p62=1+p63=0

This command control XL-IPM4014 IP address at 192.168.1.0, user name is admin and password is 12345678.

This order will: turn on the power of outlet1 (p60), turn on the power of outlet2 (p61), turn on the power of outlet3 (p62), turn off the power of outlet4 (p63).

When this order is sent, the IP Power will return the following message:
<html>P60=1,P61=1,P62=1,P63=0</html>

Functions of XL-IPM4014:

1. **SetPower** : to control I/O - read parameter as follow

out1 set parameter as 0 (output1 disconnect power)or 1(output1 connect power)
out2-out4 same as out1

2. **GetPower :** to read I/O pasameter - read parameter as follow

out1 if parameter reply as 0 (output1 disconnect power)or 1(output1 connect power)
out2-out4 same as out1

http:// /admin:1234567@ 192.168.1.100/Set.cmd?CMD=GetPower

the above command control XL-IPM4014 IP address as 192.168.1.10, username is admin, password is 12345678.

XL-IPM4014, as send out this command , XL-IPM4014 will get message as follow: :
<html>P60=1,P61=1,P62=1,P63=0</html>

3. **Schedule Control** : User can use Http command to arrange the XL-IPM4014 operation in specific time, http command format as follow:

http://username:password@XXX.XXX.XXX.XXX/Set.cmd?CMD=SetSchedule+Power=**+YY=****+MM=**+DD=**+HH=**+MN=**+SS=**+PARAM=****+ONOFF=*

Explanations of each part of the order:
Username : XL-IPM4014's username, default username is admin
Password : XL-IPM4014's password, default password is 12345678
XXX.XXX.XXX.XXX the IP Address of XL-IPM4014
Power=** setting of each parameter. Control parameter are 1A 1B 2A 2B 3A 3B 4A 4B.
        A means connect power . B means discount power

YY=****+MM=**+DD=**+HH=**+MN=**+SS=* : time parameter
YY : year (20YY) , 01 = 2001
MM : month (0 1-12)
DD : date (01-31)
HH : hour (24 hours : 0- 23)
MN : minute (1-60)
SS : second (1-60)

PARAM=* : time schedule parameter . Parameter list as follow:

128 operate ONCE
127 EVERYDAY
31 MONDAY to FRIDAY
96 SATURDAY & SUNDAY

ONOFF=* : operate parameter
0 open
1 close

Example 1: control power on / off of XL-IPM4014:

http://admin:12345678@192.168.1.10/Set.cmd?CMD=SetSchedule+Power=1A+YY=2006+MM=02+DD=16+HH=06+MN=02+SS=16+PARAM=128+ONOFF=1

Above command control one XL-IPM4014 IP address at 192.168.1.0, user name is admin and password is 12345678. This XL-IPM4014 will connect power of outlet1 (p60) on 2006/2/16 06:02 .

Note:
1. please use + to separate each parameter,you can only control certain power on /off as :
http://admin:12345678@192.168.1.10/ Set.cmd?CMD=SetPower+P60=1

2. Please follow the capital and lower case in command format.

2 FAQ

Q1: I forgot the password and can not enter the administration page now, what can I do?
A1: Use username " super user " when log in webpage and then click "OK " turn power off for few second and then turn on ON . XL-IPM4014 will to set back to default password. (There is space between super and user.)

Q2: Why the on/off operation can work immediately?
A2: if you operate the XL-IPM4014 in Ethernet, the operation will work immediately. If you operate it through the Internet, the response speed depends on the situation of the network.