



# **M2000 / M6000 Series Smart Camera Housing User's Manual**

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## About This Manual

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### **Purpose**

This GUI user guide gives specific information on how to operate and use the management functions of the M2000 / M6000 Series via HTTP web browser

### **Audience**

The Manual is intended for use by network administrators who are responsible for operating and maintaining network equipment; consequently, it assumes a basic working knowledge of general switch functions, the Internet Protocol (IP), and Hypertext Transfer Protocol (HTTP).

### **CONVENTIONS**

The following conventions are used throughout this manual to show information.

### **WARRANTY**

See the Customer Support/ Warranty booklet included with the product. A copy of the specific warranty terms applicable to your Manufacture products and replacement parts can be obtained from your Manufacture Sales and Service Office authorized dealer.

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# INTRODUCTION

## Overview

AETEK, a professional camera housing manufacturer, provides a series of rugged outdoor surveillance housings which are compatible with most of IP and analog box cameras in the market. The camera housings are constructed from cast aluminum to meet IP66/IP68, and IK10 standards. AETEK camera housings even support cameras equipped with wide-angle lenses or long-distant remote focus lenses.

The M2000 series powered by 24VAC power input are professional models, all of them are equipped with window heater & blower. Additionally, more features such as side-opening alarm, adjustable sunshield, and an ITB (Illuminator Touch Board) which conceals the wiring for optional VAIR illuminator for long-ranged IP surveillance day & night.

The M6000 series powered by 90W bt PoE input are professional models, they are equipped with heater and blower to demist and deice for window. Additionally, more features such as side-opening alarm, adjustable sunshield, and ITB (Illuminator Touch Board) which conceals the wiring for optional VAIR illuminator for long-ranged IP surveillance day & night.

The M2000/M6000 series is professional Web Smart camera housing, it allows you to control the wiper, IR, Water tank, heater, blower via the web UI interface easily and remotely.

Some models also offer a built-in wiper or -40°C cold start.

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## Features

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M2000 Series:

- IP66 standard (M2000-IW, M2000-AIW)
- IP68 standard (M2000-I, M2000-AI)
- IK10 impact rated cast aluminum housing
- Heater & blower enable demisting / deicing for window
- Adjustable sunshield
- Side-opening alarm switch
- ITB (Illuminator Touch Board) snaps IR LEDs directly to the housing & conceals the wiring
- Accommodates box cameras equipped with wide-angle lenses & long-distance remote focus lenses (8-80 mm)
- Built-in wiper (M2000-IW, M2000-AIW)
- Camera heater supports cold start at -40°C (M2000-AI, M2000-AIW)

M6000 Series:

- IP66 standard (M6000-IW, M6000-AIW)
- IP68 standard (M6000-I, M6000-AI)
- IK10 impact rated cast aluminum housing
- Demisting & deicing for window
- Adjustable sunshield
- Side-opening alarm switch
- ITB (Illuminator Touch Board) snaps IR LEDs directly to the housing & conceals wiring
- Accommodates box cameras equipped with wide-angle lenses & long-distance lenses (8-80 mm)
- Built-in wiper (M6000-IW)
- Supported 60W / 90W bt PoE power input
- Plug-and-play over a single network cable

## Initial Configuration

This chapter instructs you how to configure and manage the M2000/M6000 Series through the web user interface. With this facility, you can easily access and monitor through LAN port of the smart camera housing all the status of the smart camera housing, including, input power status, output power status, Blower status, and so on.

The default values of the M2000/M6000 Series are listed in the table below:

<b>IP Address</b>	DHCP Client
<b>Subnet Mask</b>	-
<b>Default Gateway</b>	-

After the M2000/M6000 Series has been finished configuration it interface, you can browse it. For instance, type [http:// 192.168.1.1](http://192.168.1.1) in the address row in a browser, it will show the following screen and ask you inputting username and password in order to login and access authentication.



### Account / Password

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The device contains a security feature that requires a means of authentication before access is granted to the device.

Username

---

New password

**Figure 1-1: The first time login page**

The first time login need key in new username and password, please enter the new username and password, and then click the <Apply> button. The login process now is completed. In this login menu, you have to input the complete username and password respectively, the M2000/M6000 Series will not give you a shortcut to username automatically. This looks inconvenient, but safer.

In the M2000/M6000 Series, allowed two or more users using administrator's identity to manage this switch, which administrator to do the last setting, it will be an available configuration to effect the system.

A login form element consisting of a small black icon of two people, followed by the text "Username" and a horizontal line underneath, indicating an input field.

**Figure 1-2: The login page**



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**NOTE:**

When you login the Switch WEB page to manage. You must first type the Username of the admin. Password of the admin, so when you type after the end Username, please press enter. Management page to enter WEB.

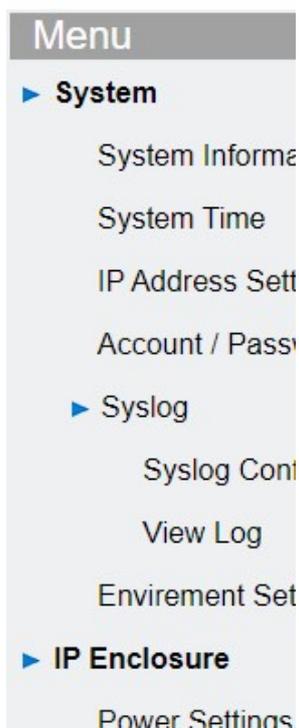
When you login M2000/M6000 series switch Web UI management, you can use both ipv4 login to manage

To optimize the display effect, we recommend you use Microsoft IE 6.0 above, Netscape V7.1 above or Firefox V1.00 above and have the resolution 1024x768. The switch supported neutral web browser interface

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This chapter describes the entire basic configuration tasks which includes the System Information and any manage of the IP Camera Housing (e.g. Time, Account, IP, Syslog and NTP.)

The Web UI supports all frequently used web browsers listed below:



**Figure 2-0: Menu list**

In the Web UI, the left column shows the configuration menu. The top system bar shows the IP Camera Housing’s current status described below.



**Figure 2-1: Top system bar**

On the top-right part, it shows auto logout count down and useful functions for users to save the system configuration, log out the system. The rest of the screen area displays the configuration settings.

- Auto logout: Default auto logout after 300 seconds.
- Save configure: Click the button then saves all system configuration into the system.
- Logout: Click the button then logout the system.

## 2-1 System Information

You can identify the system by configuring system name, location and the contact of the switch. The switch system's contact information is provided here.

### Web interface

To configure System Information in the web interface:

1. Click System -> System Information.
2. Input System Name, Location and Contact information in this page.
3. Click Apply.

System Information	
Model Name	M2000-AIW
System Description	Smart Camera Housing
Firmware Version	Ver 1.0.0 [build 2020/02
MAC Address	68:8D:B6:00:00:02
IP Address	192.168.1.26
Subnet Mask	255.255.255.0
Default Gateway	192.168.1.1
System Name	<input type="text" value="M2000-AIW"/>
Location	<input type="text" value="Label"/>

Figure 2-2: System Information

### Parameter description:

#### ■ Description

Displays the system description.

#### ■ Model Name

Displays the factory defined model name for identification purpose.

#### ■ MAC Address

Base MAC address of the switch.

#### ■ IP Address

The IP Address of this switch.

#### ■ Subnet Mask

The Subnet Mask IP Address of this switch.

#### ■ Default Gateway

The Gateway IP Address of this switch.

#### ■ Firmware Version

The software version of this switch.

■ **System Time**

The current (GMT) system time and date. The system time is obtained through the Timing server running on the switch, if any.

■ **UPTime**

The period of time the device has been operational.

■ **System name :**

An administratively assigned name for this managed node. By convention, this is the node's fully-qualified domain name. A domain name is a text string drawn from the alphabet (A-Z, a-z), digits (0-9), minus sign (-). No space characters are permitted as part of a name. The first character must be an alpha character. And the first or last character must not be a minus sign. The allowed string length is 0 to 128.

■ **Location :**

The physical location of this node(e.g., telephone closet, 3rd floor). The allowed string length is 0 to 128, and the allowed content is the ASCII characters from 32 to 126.

■ **Contact :**

The textual identification of the contact person for this managed node, together with information on how to contact this person. The allowed string length is 0 to 128, and the allowed content is the ASCII characters from 32 to 126.

## 2-2 System Time

The IP Camera Housing provides manual and automatic ways to set the system time via NTP. Manual setting is simple and you just input "Year", "Month", "Day", "Hour", "Minute" and "Second" within the valid value range indicated in each item.

The screenshot shows a web interface for configuring system time. It is divided into three main sections:

- Time Configuration:** Includes a checkbox for "Enable NTP Client update" (checked), and a "System Date" section with input fields for Year (2020), Month (Mon), Day (2), Hour (20), Minute (16), and Second (21). A "Copy Computer Time" button is also present.
- Time Zone Configuration:** Features a dropdown menu for "Time Zone" set to "(GMT+08:00) Taipei".
- Daylight Saving Time Configuration:** Includes a checkbox for "Enable" (unchecked), a dropdown for "The first day of the week" set to "Sun", and a note: "Monday is the first day of the week according to the international standard ISO 8601, but most European calendars start the week on Monday". Below this are fields for "Start from" (Month: Mar, Day: The last, Hour: 00) and "Stop from" (Month: Oct, Day: The last, Hour: 00). An "Offset settings" field is set to 60 minutes.

**Figure 2-3: System Time**

■ **Web Interface :**

To configure Time in the web interface:

1. Click System and System Time
2. Specify the Time parameter.

3. Click Apply.

## 2-3 IP Address Settings

The IPv4 address for the switch could be obtained via DHCP Server for VLAN 1. To manually configure an address, you need to change the switch's default settings to values that are compatible with your network. You may also need to establish a default gateway between the switch and management stations that exist on another network segment.

### Web Interface

To configure an IP Settings in the web interface:

1. Click System -> IP Address Settings.
2. Enable or Disable the IPv4 DHCP Client.
3. Specify the IPv4 Address, Subnet Mask and Gateway.
4. Input IPv4 DNS Server if desired.
5. Click Apply

**IPv4 Address Settings**

DHCP Client Enable

IP Address  .  .

Subnet Mask  .  .

Gateway  .  .

**IPv4 DNS Settings**

DNS configure  Disable  Get DNS server address from

by manual define:

Overwrite  High priority

Primary DNS

Secondary DNS

**IPv4 Operational Status**

Figure 2-4: IP Address Setting

### Parameter Description:

#### ■ DHCP Client Enable

Enable the DHCP client by clicking this checkbox. If this option is enabled, the system will configure the IPv4 address and mask of the interface using the DHCP protocol. The DHCP client will announce the configured System Name as hostname to provide DNS lookup.

#### ■ IPv4 Address

The IPv4 address of the interface in dotted decimal notation.

If DHCP is enabled, this field is not used. The field may also be left blank if IPv4 operation on the interface is not desired.

- **Subnet Mask**

User IP subnet mask of the entry.

- **Default Gateway**

The IP address of the IP gateway. Valid format is dotted decimal notation, or a valid IPv6 notation. Gateway and Network must be in the same type.

- **DNS Server**

This setting controls the DNS name resolution done by the switch.

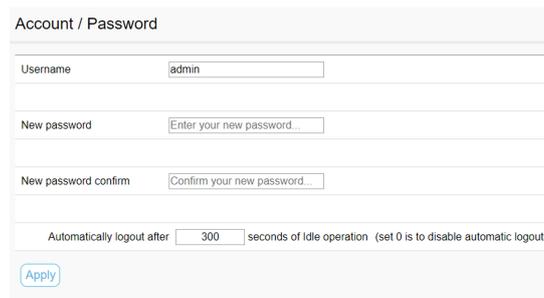
## 2-4 Account / Password

This page provides an overview of the current users. Use this page to modify the user name and password.

### Web Interface

To configure User Account in the web interface:

1. Click System -> Account/Password.
2. Specify the User Name.
3. Specify new password and confirm new password.
4. Click Apply.



**Figure 2-5: Account / Password**

### Parameter Description:

- **User Name**

The name identifying the user. The field can be input 31 characters.

- **New Password**

To type the new password. The field can be input 31 characters, and the allowed content is the ASCII characters from 32 to 126.

- **New Password Confirm**

To type the new password again. You must type the same password again in the field.

- **Automatically logout**

To type the automatically logout time. The field can be input the number 0~9999 for timeout seconds, set 0 will never timeout.

## 2-5 SysLog

### 2-5.1 Syslog Configuration

The Syslog Configuration is a standard for logging program messages. It allows separation of the software that generates messages from the system that stores them and the software that reports and analyzes them. It can be used as well a generalized informational, analysis and

debugging messages. It is supported by a wide variety of devices and receivers across multiple platforms.

## Web Interface

To configure the SysLog Settings in the web interface:

1. Click System -> Syslog Configuration.
2. Specify Enable and TFTP Server 1(~5) parameters.
3. Click Apply.

**Figure 2-6: Syslog Configuration**

### Parameter Description:

■ **Enable**

To enable/disable Syslog function.

■ **TFTP Server 1(~5)**

SysLog Server. (IP address or Host name)

## 2-5.2 View Log

To display Log, click System -> SysLog -> View Log

ID	LEVEL	Time	Message
1	Info	1970-01-01 08:00:18	System Boot
2	Info	1970-01-01 08:00:19	NTP client update time from 69.10.161.7 [S

**Figure 2-7: View log**

### Parameter Description:

■ **Level**

The log event category.

■ **Time**

The log event occurs time.

■ **Message**

The log event content.

- **Refresh[Button]**  
To reload log events.
- **Clear[Button]**  
To clear log events.
- **Navigate Bar**  
Display page number and navigation buttons.

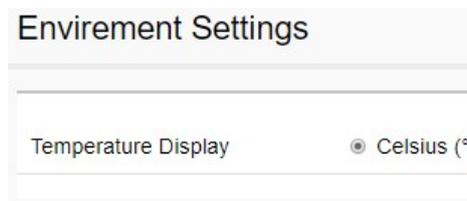
## 2-6 Environment Settings

This page provides the current environment setting. Use this page to modify the Temperature Display.

### Web Interface

To configure User Account in the web interface:

1. Click System -> Environment Settings.
2. Specify the Temperature Display.
3. Click Apply.



**Figure 2-8: Environment Settings**

### Parameter Description:

- Temperature Display  
To select the option Celsius (°C) or Celsius (°F) to display.

This chapter describes the IP Camera Housing configurations including Power Settings, Power Status and RS485 Settings.

## 3-1 Power Settings

This page displays current IP Camera Housing power and miscellaneous devices settings. It can also be configured here.

### Web Interface

To configure a power and miscellaneous devices in the web interface:

1. Click IP Camera Housing -> Power Settings.
2. Specify the power and miscellaneous devices you want to configure.
3. Click Apply.

Power Settings

---

POE Output       Manual     Triggered on defined temperature

24V Output       ON     OFF

12V Output       Manual     Triggered on defined temperature

IR LED Settings

---

IR LED Output     Manual     Triggered by DI 1 connected GND     Triggered at night  
 Turn ON at <  lux. Turn OFF at >=  lux.

Angle of the IR     Manual     IR angle adjustment by DIP switch  
 LL     LH     HL     HH

Wiper Settings

---

Wiper Output       Manual     Triggered by DI 2 connected GND     Triggered by interval  
 Start     Stop

Wiper Range       90°     180°

Blower Settings

---

Blower Output       Manual     Triggered on defined temperature

Heater Settings

---

Camera Heater       Manual     Triggered on defined temperature

Window Heater       Manual     Triggered on defined temperature

Digital Input / Output Settings

---

Digital Input 1 (Read Only)     ON     OFF  
 Enable alarm log     Disable alarm log  
An alarm is triggered when the DI 1 is connected to GND.

Digital Input 2 (Read Only)     ON     OFF  
 Enable alarm log     Disable alarm log  
An alarm is triggered when the DI 2 is connected to GND.

Digital Output 1     Digital Output     Triggered on after IR LED turn on  
 ON     OFF

Digital Output 2     Digital Output     As water pump, manual control     As water pump, triggered on before wiper turn on  
 ON     OFF

**Figure 3-1: Power Settings**

**Parameter Description:**

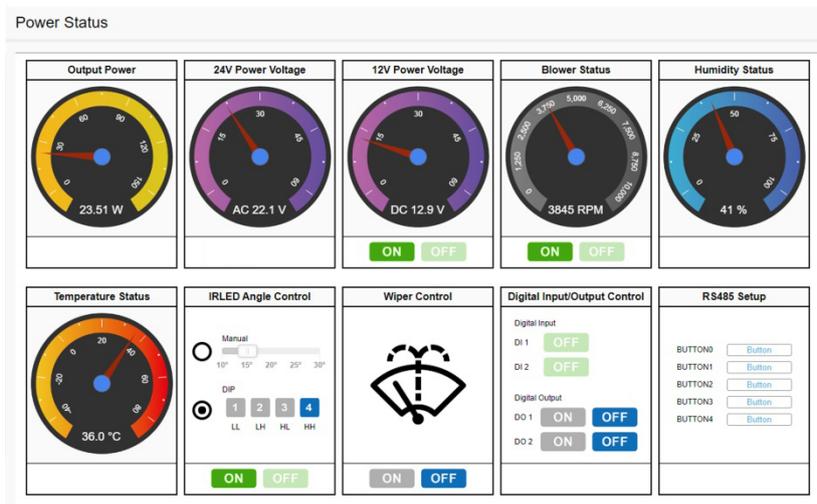
- **24V Output**  
The IP Camera Housing's 24V Output Control.
- **12V Power Voltage**  
The IP Camera Housing's 12V Output Control. (ON/OFF)
- **VAIR LED Output**  
The IP Camera Housing's VAIR LED Control. (ON/OFF)
- **Angle of the IR**  
The IP Camera Housing's VAIR LED Angle Control. (By degree change)  
The IP Camera Housing's VAIR LED Angle Control. (By DIP switch)
- **Wiper Output**  
The IP Camera Housing's Wiper Control. (ON/OFF)
- **Wiper Range**  
The IP Camera Housing's Wiper Control. (90°/ 180°)
- **Blower Output**  
The IP Camera Housing's Blower Control. (ON/OFF)
- **Camera Heater**  
The IP Camera Housing's Camera Heater Control. (ON/OFF)
- **Window Heater**  
The IP Camera Housing's Window Heater Control. (ON/OFF)
- **Digital Input/Output Control**  
The IP Camera Housing's Digital Input/Output Control. (ON/OFF)

**3-2 Power Status**

This page displays current IP Camera Housing power and miscellaneous devices status.

**Web Interface**

To display power and miscellaneous devices information in the web interface, click IP Camera Housing -> Power Status.



**Figure 3-2: Power Status**

### Parameter Description:

#### ■ Output Power

The IP Camera Housing's current Output Power status.

#### ■ 24V Power Voltage

The IP Camera Housing's 24V Power Voltage status.

#### ■ 12V Power Voltage

The IP Camera Housing's 12V Power Voltage status and control. (ON/OFF)

#### ■ Blower Status

The IP Camera Housing's Blower status and control. (ON/OFF)

#### ■ Humidity Status

The IP Camera Housing's Humidity status. (%)

#### ■ Temperature Status

The IP Camera Housing's Temperature status. (°C/°F)

#### ■ VAIR LED Angle Control

The IP Camera Housing's VAIR LED status and control. (ON/OFF)

The IP Camera Housing's VAIR LED Angle status and control. (By degree change)

The IP Camera Housing's VAIR LED Angle status and control. (By DIP switch)

#### ■ Wiper Control

The IP Camera Housing's Wiper status and control. (ON/OFF)

#### ■ Digital Input / Digital Output Control

The IP Camera Housing's Digital Input / Digital Output status and control. (ON/OFF)

#### ■ RS485 Setup

The IP Camera Housing's RS485 commands name and button. (BUTTON 0~4)

### 3-3 RS485 Settings

This page displays current IP Camera Housing RS485 Settings.

#### Web Interface

To display RS485 Settings in the web interface, click IP Camera Housing -> RS485 Settings.

### RS485 Port

---

Baud rate:

Data bits:

Parity bits:

Stop bits:

Flow control:

---

### RS485 Command

Leaving the "Button name" field empty means the command button will not be displayed in the control page

Command 1	<input type="text" value="BUTTON0"/>	<input type="text"/>
Command 2	<input type="text" value="BUTTON1"/>	<input type="text"/>
Command 3	<input type="text" value="BUTTON2"/>	<input type="text"/>
Command 4	<input type="text" value="BUTTON3"/>	<input type="text"/>
Command 5	<input type="text" value="BUTTON4"/>	<input type="text"/>

**Figure 3-3: RS485 Settings**

**Parameter Description:**

- **Baud rate**  
Choose baud rate.
- **Data bits**  
Choose data bits.
- **Parity bits**  
Choose parity bits.
- **Stop bits**  
Choose stop bits.
- **Flow control**  
Choose flow control.
- **Command1(~5)**  
Leaving the "Button name" field empty means the command button will not be displayed in the control page.

This chapter provides the maintenance of the system. These includes Configuration Import/Export, Restart Device, Reset to default and Firmware Upgrade.

## 4-1 Configuration

### 4-1.1 Import / Export

This section describes how to import or export the IP Camera Housing Configuration for maintenance needs. Any current configuration files will be exported as text format, and the configuration files on the IP Camera Housing can be backed up and saved on the station running the web browser.

It is possible to transfer any of the files on the IP Camera Housing to the web browser. Select the configuration file for uploading, as the file must be backup before uploading.

#### Web Interface

To import or export the current device's configuration in the web interface:

1. Click Maintenance -> Configuration -> Import / Export.
2. For import configuration, select the file you want to import and click Import.
3. For export, click Export to save the configuration file.



Figure 4-1.1: Import / Export

#### Parameter Description:

- **Import[Button]**  
Restore settings from upload file in the web interface.
- **Export[Button]**  
Backup settings to specific file in the web interface.

## 4-2 Restart Device

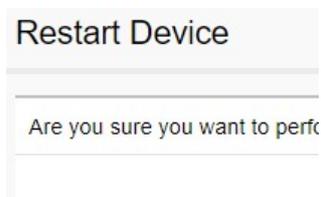
This section describes how to restart the device for any maintenance needs. Any configuration

files or scripts that you saved in the IP Camera Housing should still be available afterwards.

## Web Interface

To Restart Device in the web interface:

1. Click Maintenance -> Restart Device.
2. Click Yes.



**Figure 4-2: Restart Device**

### Parameter Description:

#### ■ Restart Device[Button]

To restart device.

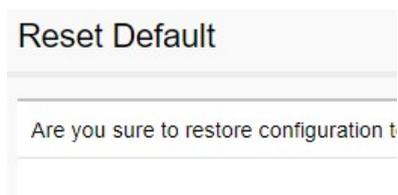
## 4-3 Reset Default

This section describes how to restore the IP Camera Housing configuration to factory default value.

## Web Interface

To restore to factory default value in the web interface:

1. Click Maintenance -> Reset Default.
2. Click Yes.



**Figure 4-3: Reset Default**

### Parameter Description:

#### ■ Reset[Button]

To reset the device to factory default value.

## 4-4 Firmware Upgrade

To display firmware upgrade page, click Maintenance > Firmware Upgrade. This page allows user to upgrade firmware image through HTTP.

## Web Interface

To update firmware of the device in the web interface:

1. Click Maintenance -> Firmware Upgrade.
2. Choose the firmware you want to upgrade.
3. Click Upgrade.

Firmware Upgrade	
Current Firmware Version	1.0.0 [build 2020/02/18 19:44:32]
Firmware Configuration	<input type="button" value="選擇檔案"/> 未選擇任何檔案
<b>Note:</b>	1. Do not turn off device while upgrading 2. <b>Configuration</b> field is used for upload 3. The device will boot with the new setti

Figure 4-4: Firmware Upgrade

**Parameter Description:**

- **Current Version**  
The firmware version which currently runs on this device.
- **Upgrade[Button]**  
Click to perform firmware upgrading.

Don't turn off the device during the firmware upgrading.