

# 8-Button Network Control Panel





## **Version Information**

Version	Release Date	Notes
4	Jan 2024	Updated warranty information



## Sales, Marketing, and Customer Support

#### Main Office

Atlona Incorporated 70 Daggett Drive San Jose, CA 95134 United States

Office: +1.408.962.0515

Sales and Customer Service Hours Monday - Friday: 6:00 a.m. - 4:30 p.m. (PST)

https://atlona.com/

#### **International Headquarters**

Atlona International AG Tödistrasse 18 8002 Zürich Switzerland

Office: +41.43.508.4321

Sales and Customer Service Hours Monday - Friday: 09:00 - 17:00 (UTC +1)

## **Operating Notes**



**IMPORTANT:** Visit https://www.atlona.com/product/at-anc-108d for the latest firmware updates and User Manual.

## Warranty

To view the product warranty, use the following link or QR code:

https://atlona.com/warranty/



## **Safety and Certification**



CAUTION: TO REDUCT THE RISK OF ELECTRIC SHOCK DO NOT OPEN ENCLOSURE OR EXPOSE TO RAIN OR MOISTURE. NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the product.

The information bubble is intended to alert the user to helpful or optional operational instructions in the literature accompanying the product.

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this product near water.
- 6. Clean only with a dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install or place this product near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

- 9. Do not defeat the safety purpose of a polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the product.
- 11. Only use attachments/accessories specified by Atlona.
- 12. To reduce the risk of electric shock and/or damage to this product, never handle or touch this unit or power cord if your hands are wet or damp. Do not expose this product to rain or moisture.
- 13. Unplug this product during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the product has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the product, the product has been exposed to rain or moisture, does not operate normally, or has been dropped.



## **FCC Compliance**

FCC Compliance and Advisory Statement: This hardware device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: 1) this device may not cause harmful interference, and 2) this device must accept any interference received including interference that may cause undesired operation. This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed or used in accordance with the instructions, may cause harmful interference to radio communications. However there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference by one or more of the following measures: 1) reorient or relocate the receiving antenna; 2) increase the separation between the equipment and the receiver; 3) connect the equipment to an outlet on a circuit different from that to which the receiver is connected; 4) consult the dealer or an experienced radio/TV technician for help. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Where shielded interface cables have been provided with the product or specified additional components or accessories elsewhere defined to be used with the installation of the product, they must be used in order to ensure compliance with FCC regulations.

## Copyright, Trademark, and Registration

© 2024 Atlona Inc. All rights reserved. "Atlona" and the Atlona logo are registered trademarks of Atlona Inc. Pricing, specifications and availability subject to change without notice. Actual products, product images, and online product images may vary from images shown here.

All other trademark(s), copyright(s), and registered technologies mentioned in this document are the properties of their respective owner(s).



## **Table of Contents**

	_
Introduction	8
Features	8
Package Contents	8
Panel Description	9
Installation	10
Power Connector	10
Connection Instructions	11
Connection Diagram	12
Wallplate Installation	13
Configuration and Management Interfaces	14
Web Server	14
System Settings tab	14
Device Settings tab	16
Command Settings tab	17
Macro Settings tab	18
Extension Macro tab	19
Message Polling tab	20
Schedule tab	21
Login Config tab	23
Device Operation	24
IP Configuration	24
Resetting to Factory Defaults	24
Accessing the Web Server	25
Getting the IP Address	25
Logging In	26
System Configuration	27
Changing the Network IP Mode	27
Changing the Telnet Port	28
Setting the Host Name	28
Adjusting Telnet Timeout	29
Downloading System Configuration	30
Restoring System Configuration	31
Resetting to Factory-Default Settings	32
Rebooting the AT-ANC-108D	33
Setting the System Date and Time	34
Setting Local Time	34
Setting Daylight Savings Time (DST)	30
Password Management	38
Button Orientation	38
Adding a Device	39
Command Configuration	41
Creating Macros	44
Configuring Extension Macros	50
Message Polling	53
lesting Macros	56
Velocity	58
Using the AMS Device Manager	58
Appendix	62
Updating the Firmware	62
Specifications	64



## Introduction

The Atlona AT-ANC-108D is an 8-button network control panel for Atlona IP-based single output channel switchers. It is designed for easy configuration using the free Atlona Management System (AMS) software resource as well as the embedded web server. The ANC-108D only requires a single category cable, from a PoE-equipped network switch, to deliver both control signal and power, and provide fast, hassle-free installation. Configuration is also fast. Simply download a configuration file from within AMS, or use the embedded web server, for Atlona single output switchers such as the OMEGA Series, HDVS-200 Series, HDVS-300 Kit, SW Series, AT-UHD-CLSO-601, or AT-UHD-CLSO-612ED.

Even with automatic input switching and display control on many of our AV switchers, presenters still want a visual means of changing inputs, operating displays and adjusting volume. The ANC-108D backlit panel provides a user-friendly means of controlling the AV in a meeting room or classroom. System designers need a cost-effective point of control to meet those needs without worrying about complex control system coding. The ANC-108D, working with AMS, meets both of these demands. Regardless of the Atlona IP-based switcher designed into the meeting space or classroom, with the ANC-108D the AV operator will always have a consistent control interface from room to room.

Combined with Atlona IP-controllable switching products for huddle spaces, classrooms and conference rooms, the network control panel acts as a remote control to send IP commands to the switcher. The switcher in turns acts on those commands or translates the IP commands into RS-232 commands to control external devices such as displays to create a seamless AV system. The ANC-108D fits into a US one-gang junction box and is compatible with Decorastyle wallplates.

## **Features**

- Remote control panel for Atlona IP-based products
- Fast-installing, single-cable integration
- Easy to configure with either the built-in web server or AMS and downloadable templates
- Eight soft-touch, backlit buttons
- Remotely-powered via PoE (Power over Ethernet)
- Installer-customizable, pre-cut label sheets
- Fits US one-gang junction box with Decora™ wallplate
- Award-winning 10 year limited product warranty

## **Package Contents**

- 1 x AT-ANC-108D
- 1 x White Decora faceplate
- 1 x Blank button template
- 1 x Pre-defined button template
- 1 x Installation Guide



## **Panel Description**



#### 1 Push Buttons

This set of eight programmable push buttons can be defined using the built-in web interface.

#### 2 Mini-USB

This port is used to updated the unit, manually. Atlona recommends using the built-in web server for updating the firmware on the AT-ANC-108D. Refer to Updating the Firmware (page 60) for more information.

#### 3 Reset Button

Press this button to reset the unit. Refer to Resetting to Factory Defaults (page 22) for more information.

#### 4 LAN

Connect an Ethernet cable from this port to the Local Area Network (LAN).

#### 5 DC 5V

Connect the optional 5V DC power supply (not included) to this port, if necessary. If the AT-ANC-108D is connected to a PoE-capable switch, the 5V DC power supply is not required.



## Installation

### **Power Connector**



**NOTE:** The DC 5V connector is only required if the AT-ANC-108D is not connected to a PoEcapable network switch. If a PoE-capable switch is unavailable, refer to the instructions below to connect the power supply. The power supply and captive screw connector are not included. To purchase the power supply (part no. AT-PS-54-C), contact Atlona.

Locate the included orange 2-pin captive screw terminal block and wire the included captive screw terminal block, as shown below. Do not use high-torque devices, when securing the wires to the terminal block, as this may damage the screws and/or the block.

- 1. Insert the wires into the correct terminal on the included captive screw terminal block, as shown below.
- 2. Tighten the screws to secure the wires. Do not use high-torque devices as this may damage the screws and/or terminal block.







### **Connection Instructions**

- 1. Connect an Ethernet cable, from the **LAN** port, on the rear of the unit, to one of the following devices. Ethernet cables should use EIA/TIA-568B termination:
  - a. PoE-compatible switch.
  - b. Atlona Power Over Ethernet Mid-Span Power Supply (AT-PS-POE). Use this option if the system endpoint is not capable of supplying power to the AT-ANC-108D.



**IMPORTANT:** Sheilded (STP) cables are recommended, in order to minimize signal noise and interference.

2. Complete the installation of the AT-ANC-108D into the electrical box or mud ring. Refer to the Wallplate Installation (page 11) if necessary.



## Installation

## **Connection Diagram**





### **Wallplate Installation**

- 1. Install the mud ring/electrical box (not shown in illustration) as required, then attach the AT-ANC-108D to the mud ring/electrical box assembly.
- 2. Connect the HDBaseT cable to the LAN port on the rear of the AT-ANC-108D.
- 3. Install the AT-ANC-108D into the mud ring/electrical box, using the two included screws and secure it in place with a regular screwdriver. Do not overtighten or use high-torque devices to secure the wallplate to prevent damage to the wall plate and/or the AT-ANC-108D mounting plates.





### **Web Server**

The AT-ANC-108D provides a built-in web server for easy configuration and control of the AT-ANC-108D. Refer to Accessing the Web Server (page 23) for more information.

#### System Settings tab

	AT-ANC-108
Visition Settings     System       Dock Settings     IP Mode       Command Settings     IP Mode       Macro settings     IP Mode       Extension Macro     Respace Index       Constant Settings     Index       Thire Settings     Index       Cohodat     Login Config       Login Config     Index       Admin Login     Telent Login Mode       Download Coursel     Settings       Motion Login     Telent Login Mode       Download Coursel     Coursel       Resource Configuration     Resource Configuration       Resource Configuration     Resource Configuration	ion Network
ALL Dest	IP Mode: DHCP
Firmware Upgrade Brows To file selected.	IP : 10.20.40.45
	Netmask : 255.255.255.0
	Gateway : 10.20.40.1
	Telnet Port 23

#### **IP Mode**

Click this toggle switch to set the AT-ANC-108D to DHCP or STATIC IP mode. The default setting is DHCP mode.

#### IP

Enter the IP address of the AT-ANC-108D in this field. This field will only be available when **IP Mode** is set to **STATIC IP**. The default static IP address of the AT-ANC-108D is 192.168.1.50.

#### Netmask

Enter the subnet mask of the AT-ANC-108D in this field. This field will only be available when **IP Mode** is set to **STATIC IP**.

#### Gateway

Enter the gateway (router) IP address in this field. This field will only be available when IP Mode is set to STATIC IP.

#### **Telnet Port**

Enter the desired Telnet port (for Telnet sessions) in this field. The default port is 23.

#### Save

Click this button to commit all network changes.

#### **Network Reset**

Click this button to reset network setting to factory-default.



#### **Telnet Login Mode**

Click this toggle switch to set the Telnet Login Mode to **ON** or **OFF**. If set to **ON**, then login credentials (same as web server) will be required when starting a Telnet session.

#### **Telnet Timeout**

Click this drop-down list to select the timeout interval in minutes. Range is: 1 to 1000 seconds.

#### **Download Current Configuration**

Click the **Download** button to save the current system configuration to a local file.

#### **Restore Configuration**

Click the **Browse...** button to select a configuration file to restore. Click the **Restore** button to upload the configuration file to the AT-ANC-108D. Restoring a configuration file will erase the current unit configuration.

Hostname
ANC108D-0098E2 Save
Telnet Login Mode
OFF
Telnet Timeout(Minute)
20 ~
Download Current Configuration
Download
Restore Configuration
Browse No file selected. Restore
Reset to Default
ALL Reset
Reboot the Unit
REBOOT
Firmware Upgrade
Browse No file selected. Upgrade

#### **Reset to Default**

Click the **ALL Reset** button to reset the AT-ANC-108D to factory-default settings. All current configuration settings will be lost and the unit will be set to DHCP network mode.

#### **Reboot the Unit**

Click the **REBOOT** button to perform a soft reboot of the AT-ANC-108D.

#### **Firmware Update**

Click the Choose File button to begin the firmware update procedure.



#### Device Settings tab

This tab allows devices to be added to the AT-ANC-108D for control. Refer to Adding a Device (page 37) for more information.

<b>()</b>					AT-A	NC-108D
		System Setting Decks Setting Command Setting Natros Setting Decks Pathog Constant, Decks Pathog Decks Pathog	P Adgess         Correct Part         Edit         Remove           Add         564         564         564           Add         564         644         564           Add         564         644         564           Add         564         646         564			
	Active	Device Name	IP Address	Connect Port	Edit	Remove
	DISABLE				Add	DEL
	DISABLE				Add	DEL
	DISABLE				Add	DEL
	DISABLE				Add	DEL
	DISABLE				Add	DEL

#### Active

Click this toggle switch to **ENABLE** or **DISABLE** the added device.

#### **Device Name**

Displays the device name when a device has been added.

#### **IP Address**

Displays the IP address of the added device.

#### **Connect Port**

Displays the Telnet port of the connected device.

#### Edit

Click the Add button to add a device to the AT-ANC-108D.

#### Remove

Click the **DEL** button to delete a device from the list.



#### Command Settings tab

This tab allows commands to be added, deleted, or edited. Refer to Command Configuration (page 39) for more information.

	hnology							4	AT-AN	<u>C-108D</u>
		System Settings Docke Settings Constant Settings Extension Macro Message Polling Time Settings Schokle Login Config Admin Logiot	Command           Dommand Name           20 RED 10%           ED RED 10%           ED RUE 10%           ED RUE 10%           ED RUE 200%           ED RUE 20%           ED RUE 20%           ED RUE 20%           ED RUE 30%           ED RUE 40%           ED RUE 40%           ED RUE 40%	Con LCR441100 LCR44110 LCR410 LCR410 LCR42100 LCR42100 LCR4220 LCR4220 LCR42300 LCR42300 LCR42300 LCR42300 LCR42300 LCR42300 LCR42400 LCR4240 LCR4240 LCR4240 LCR4240 LCR4240 LCR4240 LCR4240 LCR4240 LCR4240 LCR4240 LCR4240 LCR4240 LCR4440 LCR4440 LCR4440 LCR4440 LCR4440 LCR4440 LCR4440 LCR4440 LCR4440 LCR4440 LCR4440 LCR4440 LCR4440 LCR4440 LCR		End     Edf     Date       CR     641     Remove       CR     642     Remove       CR     644     Remove	8			
	Command Name			Com	nmand			End	Edit	Delete
LED RED	1 100%	LEDRed 1 100						CR	Edit	Remove
LED RED	1 0%	LEDRed 1 0						CR	Edit	Remove
LED BLUE	E 1 100%	LEDBlue 1 100						CR	Edit	Remove
LED BLUE	E 1 0%	LEDBlue 1 0						CR	Edit	Remove
LED RED	2 100%	LEDRed 2 100						CR	Edit	Remove

#### **Command Name**

Displays the name of the command.

#### Command

Displays the command line string for the command name.

#### End

Displays the terminating character for the command string.

#### Edit

Click the Edit button to modify the settings of an existing command.

#### Delete

Click the **Remove** button to delete a command from the list.

#### Add (not shown)

Click the Add button to add a new command to the AT-ANC-108D. The **Add** button is only displayed on empty rows. Once a new command is added, the **Add** button for that row will change to an **Edit** button.



#### Macro Settings tab

This tab allows the editing and creation of macro. Refer to Creating Macros (page 42) for more information.





#### Extension Macro tab

Extension Macros are required in order for the buttons on the AT-ANC-108D to display the current state of a device.





#### Message Polling tab

This tab allows the AT-ANC-108D to send a command, which behaves as a status call, to each of the connected devices.

							A	T-ANC	-108D
		System Setting Device Settings Command Settings Narro Settings Extension Narro Monage Baling Time Settings Scholde Lopin Config Advan Logad	Message DARANCE DAR	Hame         Resat         D           Introdates         Introdates         Introdates           Introdates         Introdates         Introdates         Introdates           Introdates         Introdates         Introdates         Introdates           Introdates         Introdates         Introdates         Introdates           Introdates         Introdates         Introdates         Introdates           Introdates         Introdates         Introdates	elce Blass Command Is and Peeblact b 	Congoin         Free Exacts Bin maso         Edit Add         Remove Dit           Add         OEL         Add         OEL           Add         OEL         Add         OEL			
	Active	Name	Repeat Interval(sec)	Device	Status Command to send	Feedback to Compare	If True Execute this macro	Edit	Remove
	DISABLE							Add	DEL
Ч	DISABLE							Add	DEL
	DISABLE							Add	DEL
	DISABLE							Add	DEL
L									0.01

#### Active

Click this toggle switch to ENABLE or DISABLE status polling for the device.

#### Name

Displays the descriptive name of the device.

#### **Repeat Interval**

Displays the repeat interval in seconds. For example, if this field displays "5", then polling will occur every 5 seconds.

#### **Device**

The name of the physical device.

#### Status Command to send

Displays the name of he actual API call.

#### Feedback to Compare

Displays the device's broadcast response. For example, on an AT-HD-SC-500, if the 'Mute Status' is sent to the device, then the device response would be either VOUT-Mute1 on Or VOUTMute1 off.

#### If True Execute this macro

Displays the macro that will be executed, depending on the Feedback to Compare column. For example, if the **Feedback to Compare** value is VOUTMute1 on, then the Mute On macro is executed.

#### Edit

Click the **Add** button to add a new polling configuration. Click the Edit button (not shown) to modify an existing polling configuration. The **Add** button is only displayed on empty rows. Once a new polling configuration is added, the **Add** button for that row will change to an **Edit** button.

#### Remove

Click the **DEL** button to delete a polling configuration from the list.



#### Time Settings tab

This tab provides the ability to set the internal clock on the AT-ANC-108D. Refer to Setting the System Date and Time (page 32) for more information.

ATLONA AT-ANC-108
System Setting:         Corverand Setting:         System Time:         Corverand Setting:         Setting:
System Time:
2015-01-01-Thu 05:41:00
Save
Daylight Saving Time
Use Daylight Saving
DISABLE Start
Month: Jan V Day: Thu V Hour: 0 AM V Day of Month: First V
End
Month: Jan V Day: Thu V Hour: 1 AM V Day of Month: First V
Save

#### **System Time**

Click in this field to select the desired year, month, and date.

#### Save

Click this button to commit the changes in the **System Time** section.

#### **Use Daylight Saving**

Click this toggle switch to ENABLE or DISABLE Daylight Saving Time (DST).

#### Start

Click each of these drop-down lists to set the month, day, and hour when DST begins.

#### End

Click each of these drop-down lists to set the month, day, and hour when DST ends.

#### Save

Click this button to commit all changes under the Daylight Saving Time section.



#### Schedule tab

This tab provides the ability to execute a repeating event or one-time event to a device. For example, it may be useful to execute a 'power off' macro for a device at 10:00 PM every evening.

	<u>`</u>						AT-	ANC-1
Donostin		System Settings Device Settings Command Settings Macro Settings Extension Macro Mecsage Polling Time Settings Schedule Legin Carlig Admin Legint	Schedule Repeating Event	Hour         Mourt         Moute           00         00         00           00         00         00           00         00         00           00         00         00           00         00         00           00         00         00           00         00         00           00         00         00           00         00         00           00         00         00           00         00         00	Second Macro	Edit     Daviet       Edit     Remove       Edit     Remove		
Active		eklv	Hour	Minute	Second	Macro	Edit	Delet
			00	00	00		Edit	Remo
			00	00	00		Edit	Remo
			00	00	00		Edit	Remo
			00	00	00		Edit	Remo
			00	00	00		Edit	Remo
			00	00	00		Edit	Remo
One Tim	e Event							
Active	Month	Date	Hour	Minute	Second	Macro	Edit	Delet
	00	00	00	00	00		Edit	Remo
	00	00	00	00	00		Edit	Remo
	00	00	00	00	00		Edit	Remo
	00	00	00	00	00		Edit	Remo
	00	00	00	00	00		Edit	Remo
						19		

#### Active

Displays whether or not the event is active.

#### Weekly

Displays the days of the week when the macro is executed.

#### Hour

Displays the hour at which the macro is executed. The hour is based on a 24-hour clock.

#### Minute

Displays the minute at which the macro is executed.

#### Macro

Displays the macro that is assigned to the event.

#### Second

Displays the second at which the macro is executed.

#### Edit

Click the **Edit** button to edit the event.

#### Delete

Click the **Remove** button to delete an event.



#### Login Config tab

This tab allows the administrator password to be changed. Note that the username cannot be changed.

		AT-ANC-108D
System Settings Device Settings Device Settings Device Settings Nearour Settings Schender Schende	jer	
Administrator		
Old Username	admin	
Old Password		Save
New Password		
Confirm New Password		

#### Old Username

The administrator username. This field cannot be changed.

#### **Old Password**

Enter the current password in this field.

#### **New Password**

Enter the new password in this field.

#### **Confirm New Password**

Enter the new password in this field, again, to confirm.

#### Save

Click this button to commit changes.



## **Device Operation**

## **IP Configuration**

The AT-ANC-108D is shipped with DHCP enabled. Once connected to a network, the DHCP server (if available), will automatically assign an IP address to the unit. The built-in web server is recommended to configure IP settings of the AT-ANC-180D. If a static IP address is desired, the unit can be switched to static IP mode. The default static IP address of the AT-ANC-108D is 192.168.1.50.

### **Resetting to Factory Defaults**

Resetting the AT-ANC-108D requires that the wallplate be removed. Refer to Wallplate Installation (page 11) for more information. If no DHCP server is found after a factory-reset, then AT-ANC-108D will be assigned the default static IP address of 192.168.1.50. The subnet mask will be: 255.255.255.0 and the gateway will be 192.168.1.254.

- 1. Remove the wallplate from the AT-ANC-108D.
- 2. Press and hold the upper-right button.
- 3. Press the **Reset** button, using the end of a paper clip or other pointed object. The upper-right button will flash twice.
- 4. Release the upper-right button and the **Reset** button.
- 5. Reattach the wallplate to the AT-ANC-108D.





### **Accessing the Web Server**

The AT-ANC-108D features a built-in web server, which allows the unit to be configured to control other Atlona products. By default, the AT-ANC-108D is set to DHCP mode and will automatically by assigned an IP address, if a DHCP server is present. To access the web server, the IP address of the AT-ANC-108D must be known. This can be accomplished by more than one method. Running IP scanner software or using the Address Resolution Protocol (ARP) are two possibilities. When running an IP scanner or using ARP, both the computer and the AT-ANC-108D must be known.

#### Getting the IP Address

The following method uses the arp command, which is available from the command line in Windows. The arp command will display the IP-to-physical address translation tables used by the Address Resolution Protocol (ARP). The following procedure can be used for both encoders and decoders.

1. Identify the MAC address of the unit by locating the label on the side of the unit. *Figure 1.1* shows a sample label.

Figure 1.1 - Sample MAC address label found on the side of an AT-ANC-108D.



- 2. Connect a PC to the same network where the AT-ANC-108D is connected.
- 3. Type cmd in the search bar in Windows, then press [ENTER] to launch the command line interface.
- 4. At the command prompt, type arp -a. Make sure to include a space between arp and the -a argument, then press [ENTER].
- Press [ENTER]. Several lines of information will be displayed. Locate the MAC address of the AT-ANC-108D under the **Physical Address** column. Directly across from the MAC address, the IP address of the encoder/ decoder will be listed under the **Internet Address** column.

	AT-ANC-1	08D IP address	MAC address
Interface: 10.1.0.4	- 0x16	_ /	
Internet Address	Physical Address	Туре	
10.1.0.3	30-cd-a7-37-26-bb	dynamic	
10.1.0.8	b8-98-b0-01-fa-58	dynamic	
10.1.0.11	b8-98-b0-01-f2-56	dynamic	
10.1.0.12 🧖	b8-98-b0-00-29-2f 🖊	dynamic	
10.1.1.254	00-38-df-d1-35-8a	dynamic	
10.1.1.255	ff-ff-ff-ff-ff-ff	static	
224.0.0.2	01-00-5e-00-00-02	static	
224.0.0.22	01-00-5e-00-00-16	static	
224.0.0.230	01-00-5e-00-00-e6	static	
224.0.0.252	01-00-5e-00-00-fc	static	
239.255.255.250	01-00-5e-7f-ff-fa	static	
255.255.255.255	ff-ff-ff-ff-ff-ff	static	



#### Logging In

- 1. Launch the desired web browser and enter the IP address of the encoder in the address bar.
- 2. Enter the username and password. Note that the password field will always be masked. The default credentials are:

Username:	admin
Password:	Atlona

3. Click the **Submit** button.



- 4. The System Settings page will be displayed. Refer to System Settings tab (page 12) for more information.
- 5. The login process is complete.



### **System Configuration**

The AT-ANC-108D provides easy access to system configuration through the built-in web server, and is the recommended method to adjust network settings.

#### Changing the Network IP Mode

By default, the AT-ANC-108D is set to DHCP mode. Once connected to a network, and if a DHCP server is found (or available), the AT-ANC-108D will be assigned an IP address on the network, and no further network configuration is required. However, if the AT-ANC-108D is unable to detect a DHCP server within 15 seconds, then the unit will use the default static IP address of 192.168.1.50. The instructions below will focus on setting the AT-ANC-108D to static IP mode.



**IMPORTANT:** Before assigning a static IP address to the AT-ANC-108D, it is recommended to consult with the network or system administrator and obtain a available IP address. If the AT-ANC-108D is assigned an IP address which is already in use by another device, it may cause either network issues and/or the AT-ANC-108D will be not accessible.

- 1. Login to the web server. Refer to Logging In (page 24) for more information.
- 2. Click the **System Settings** tab.
- 3. Locate the IP Mode toggle switch. The default setting of this toggle switch is DHCP.
- 4. Click this toggle switch to set it to **STATIC IP**.

			AT-ANC-108D
Spetern Setting Device Setting Corrunal Setting Marco Setting Marco Setting Foreson Marco Foreson Marco Schedule Sched	static content of the state of		
Restor Reset	Network           IP Mode:         STATIC           IP :         10.20.40.4           Netmask :         255.255.2		Save
Enter the desired IP address for the AT-ANC-108D in the <b>IP</b> field.	Gateway : 10.20.40.1 Telnet Port 23	Netw	vork Reset

- 6. Enter the subnet mask and gateway address in the Netmask and Gateway fields, respectively.
- 7. Click the **Save** button to commit changes. Changes will take effect immediately.

5.



#### Changing the Telnet Port

Typically, the Telnet service is assigned to TCP port 23. This is the default setting for the AT-ANC-108D. However, depending upon the network environment, the default Telnet port can be changed.

- 1. Login to the web server. Refer to Logging In (page 24) for more information.
- 2. Click the **System Settings** tab.
- 3. Locate the **Telnet Port** field and enter the desired port in the field.
- 4. Click Save to commit changes.

Network	DHCP	
IP :	10.20.40.45	Save
Netmask :	255.255.255.0	Network Reset
Gateway :	10.20.40.1	
Telnet Port	23	
	<u> </u>	

#### Setting the Host Name

By default, the AT-ANC-108D is assgned a hostname, which is constructed as follows:

ANC108D-[last six digits of MAC address]

For example, a default hostname might look like this: ANC108D-00021B. This value can be changed to easily identify the AT-ANC-108D on the network. If using a custom hostname, it must meet the hostname standards, defined here: <u>https://tools.ietf.org/html/rfc1123</u>

- 1. Login to the web server. Refer to Logging In (page 24) for more information.
- 2. Click the System Setttings tab.
- 3. Click the **Hostname** field and enter the desired name.
- 4. Click Save to commit changes.

Hostname	
ANC108D-0098E2 Save	



#### **Telnet Login Mode**

When a Telnet session is request, the AT-ANC-108D provides the option to prompt for user credentials or bypass authentication before the Telnet session begins. This credentials prompt option can enabled or disabled. When prompting for user credentials, use the same login information required by the built-in web server. By default, this setting is set to **OFF** (disabled).

- 1. Login to the web server. Refer to Logging In (page 24) for more information.
- 2. Click the **System Settings** tab.
- 3. Click the Telnet Login Mode toggle switch. Changes take effect immediately.
  - Set this toggle switch to ON to prompt for user credentials.
  - Set this toggle switch to **OFF** to bypass user credentials request.

Network		
IP Mode:	DHCP	
IP :	10.20.40.45	Save
Netmask :	255.255.255.0	Network Peset
Gateway :	10.20.40.1	Network Reset
Telnet Port	23	
Hostname		
ANC108D	-0098E2 Save	
Telnet Log	in Mode	

#### Adjusting Telnet Timeout

When a Telnet session is active, the AT-ANC-108D can be set to monitor Telnet activity. If there is no activity within the specified time interval, the Telnet session will automatically be terminated, adding a measure of security. The Telnet time out interval also affects the web server time out interval. For example, if the Telnet time out interval is set to 1 minute, then the web server will automatically perform a log out operation after 1 minute.

- 1. Login to the web server. Refer to Logging In (page 24) for more information.
- 2. Click the System Settings tab.
- 3. Click the **Telnet Timeout** drop-down list and select the desired time-out interval. Values from 1 to 1000 minutes can be selected. Changes take effect immediately, once the time interval is selected.

Telnet Timeout(Minute)		
20 ~		



#### Downloading System Configuration

The AT-ANC-108D allows the current system configuration to be downloaded to the connected computer, in .xml format. Multiple configurations can be saved and then restored at any time. Refer to Restoring System Configuration (page 29) for more information.

- 1. Login to the web server. Refer to Logging In (page 24) for more information.
- 2. Click the System Settings tab.
- 3. Click the **Download** button.



4. The page will display a "Wait..." message and after a few moments, the XML Edit dialog box will be displayed.



5. Click the **Save** button to save the file to the computer or click **Cancel** to abort the operation. When saved, the default filename name will be AT-ANC-108D.xml.



#### **Restoring System Configuration**

Once a system configuration has been saved as an .xml file, this file can be uploaded to the AT-ANC-108D, allowing a system configuration to be restored. Both the **Download** and **Restore** feature are useful for saving and loading different configurations and/or to provide a backup, in the unlikely event of a system failure. When a system configuration file is uploaded, it will overwrite the current settings.



**IMPORTANT:** IP Mode information is stored as part of the configuration file. Therefore, caution should be exercised when sharing configuration files between multiple AT-ANC-108D units. If the unit is set to *static* IP mode, then restoring multiple units with the same configuration file will result in the same IP address being shared between multiple units, causing an IP conflict on the network. *However, pre-configured device files, which are available from the Atlona web site, will not erase current network settings on the AT-ANC-108D.* 

- 1. Login to the web server. Refer to Logging In (page 24) for more information.
- 2. Click the **System Settings** tab.
- 3. Click the **Browse...** button and select the desired system configuration file. Once the file is selected, the selected filename will appear next to the **Browse...** button.
- 4. Click the **Restore** button to upload the configuration file to the AT-ANC-108D.



5. The following message box will be displayed, confirming overwrite of the current configuration. Click **OK** to continue with process or click **Cancel** to abort.

WARNING: This will ove Are you sure?	rwrite all of your current settings.
	OK Cancel

- 6. One the upload has started, a progress message will be displaying the restore process.
- 7. Once restore process has completed, the message "XML Restore Finish! Please Refresh Page!" will be displayed. Refresh the page.
- 8. The Login page will be displayed.
- 9. The restoration process is complete.



#### **Resetting to Factory-Default Settings**

The following procedure will reset the AT-ANC-108D to factory-default settings. The network IP mode will be set to DHCP mode.

- 1. Login to the web server. Refer to Logging In (page 24) for more information.
- 2. Click the **System Settings** tab.
- 3. Click the ALL Reset button.

Reset to Default	
ALL Reset	
Reboot the Unit	
REBOOT	
Firmware Upgrade	
Browse No file selected.	Upgrade

4. The following message box will be displayed, confirming the reset operation. Click **OK** to continue with process or click **Cancel** to abort.

Are you Sure you wa	ant to Reset?
ок	Cancel

- 5. The "Wait...." message will be displayed. After a few moments, the web page may indicate a "lost connection". If this happens, refresh the page or enter the IP address of the unit in the address bar.
- 6. The Login screen will be displayed.
- 7. The reset process is complete.



#### Rebooting the AT-ANC-108D

The following procedure will perform a soft reboot of the AT-ANC-108D. All unit settings are preserved.

- 1. Login to the web server. Refer to Logging In (page 24) for more information.
- 2. Click the **System Settings** tab.
- 3. Click the **REBOOT** button.

ALL Reset	
Reboot the Unit	
REBOOT	
Firmware <b>C</b> grade	
Browse No file selected.	Upgrade

4. The following message box will be displayed, confirming the reboot operation. Click **OK** to continue with process or click **Cancel** to abort.

Are you Sure you want to Re	eboot the Unit?
ок	Cancel

- 5. The "Wait...." message will be displayed. After about 15 seconds, the web page may indicate a "lost connection". If this happens, refesh the page or enter the IP address of the unit in the address bar.
- 6. The Login screen will be displayed.
- 7. The reboot process is complete.



### Setting the System Date and Time

The AT-ANC-108D uses the internal clock to store the current date and time. When setting the time and date, the 24-hour clock format is used.

#### Setting Local Time

- 1. Login to the web server. Refer to Logging In (page 24) for more information.
- 2. Click the **Time Settings** tab.
- 3. Click in the field under the System Time section.



4. The time pop-up dialog will be displayed, shown below.





- 5. Click the desired date in the calendar section. To advance to the next month, click the ▶ icon. To go back to the previous month, click the ◀ icon.
- 6. Click and drag the Hour slider, or use the + or buttons to set the hour.
- 7. Repeat step 6 for both the **Minute** and **Second**. The **Now** button may also be clicked to set the local time used by the computer.
- 8. Click the **Done** button to commit changes.

System Time:		
2015-01-10-Sat 00:27:04		
2020-04-02-Thu 14:27:55	Save	
C April 2020 🕟		
Su Mo Tu We Th Fr Sa		
1         2         3         4           5         6         7         8         9         10         11           12         13         14         15         16         17         18           19         20         21         22         23         24         25           26         27         28         29         30         30	Thu V Hour: 0 AM V	Day of Month: First ~
Time 14:27:55		
Hour -+	Thu V Hour: 1 AM V	Day of Month: First ~
Minute -+		
Second -+		
Now		



#### Setting Daylight Savings Time (DST)

The AT-ANC-108D provides the option to adjust the internal clock to compensate for Daylight Saving Time, depending on the region. Daylight Saving Time is disabled, by default.

- 1. Login to the web server. Refer to Logging In (page 24) for more information.
- 2. Click the **Time Settings** tab.
- 3. Set the Use Daylight Saving toggle switch to ENABLE.

Daylight Saving Time
Use Daylight Saving
Start
Month: Jan V Day: Thu V Hour: 0 AM V Day of Month: First V
End
Month: Jan V Day: Thu V Hour: 1 AM V Day of Month: First V
Save

- 4. Click the Start drop-down lists for Month, Day, Hour, and Day of Month, and set the desired values.
- 5. Repeat this process for the **End** drop-down lists.
- 6. Click the **Save** button to commit changes.



### **Password Management**

The AT-ANC-108D allows the administrator password to be changed. The password applies to both the web server and Telnet sessions. Note that the Username field cannot be changed.

- 1. Login to the web server. Refer to Logging In (page 24) for more information.
- 2. Click the Login Config tab.
- 3. Click the **Old Password** field and enter the current password.

		AT-ANC-108D
System Setting:     Web & Telnet Login Configuration       Connext Setting:     Administrator       Marco Setting:     Oid Usename       Strende Marco     Oid Wanname       Strende Marco     Contem New Password		
Administrator		
Old Username	admin	
Old Password	••••	Save
New Password		
Confirm New Password		

- 4. Enter the new password in the **New Password** field.
- 5. Retype the new password in the **Confirm New Password** field.
- 6. Click the **Save** button to commit changes. To login with the new username, click the **Admin Logout** tab, then enter the new password on the **Login** page.

**NOTE:** Password fields will always be masked for security purposes.





### **Device Configuration**

Each button on the AT-ANC-108D can be assigned to control a different function on another Atlona product. In addition, device configuration preset files can be downloaded from the AT-ANC-108D product page.

#### **Button Orientation**

A PANDUIT COMPANY

Before selecting the device to be mapped, make sure the AT-ANC-108D is in the proper orientation: Button 1 is in the upper-left corner of the unit; Button 8 will be in the lower-right corner of the unit, as shown below. The mini-USB port should be on the right of the unit, as it faces forward.

The button numbering, as displayed in the **Macro Settings** tab of the web server, matches the numbering scheme of each button on the AT-ANC-108D. The first column of buttons is numbered 1 through 4, and the second column of buttons is numbered 5 through 8.





#### Macro Screen



#### Adding a Device

- 1. Login to the web server. Refer to Logging In (page 24) for more information.
- 2. Click the Device Settings tab.
- 3. Click the **Add** button.

	System Settings Device Settings Connand Settings Merco Settings Extension Macro Meccage Indiag The Settings Shocké Loeff Config Admit Logod	ans Pragess ConsciPut Ed Reman Add DE Add DE Add DE Add DE Add DE Add DE Add DE Add DE Add DE Add DE		AT-ANC	<u>-108D</u>
Active	Device Name	IP Address	Connect Port	Edit	Remove
DISABLE				Add	DEL
DISABLE				Ada	DEL
DISABLE				Add	DEL
DISABLE				Add	DEL
DISABLE				Add	DEL

- 4. The Device Edit dialog will be displayed. Enter the required information in the Device Name, IP Address, and Connect Port fields. In the following example, the AT-OME-ST31A is being used. Note that the Device Name field can be any string and does not have to be the SKU. The Connect Port field is the port used for Telnet sessions.
- 5. Click the **Save Changes** button to commit changes.

Device 1 Edit	×
Device Name	
AT-OME-ST31A	
IP Address	
10.20.40.80	
Connect Port	
23	
	Save Change Cancel



## **Device Operation**

					AT-ANC	C-108D
	System Settings Booker Setting Command Setting Marro Settings Determine Macro Morses Refing There Settings Scheddar Lugin Comp Admin Loguet	NVICE	P Adawas         Contect/Prol         Euro         Ramove           10 20 400         20         640         500.           -			
Active	Device	Name	IP Address	Connect Port	Edit	Remove
ENABLE	AT-OME-	-ST31A	10.20.40.80	23	Edit	DEL
DISABLE					Add	DEL
DISABLE					Add	DEL
DISABLE					Add	DEL
DISABLE					Add	DEL

6. The device is now added and the **Active** toggle switch is automatically set to **ENABLE**.



#### **Command Configuration**

- 1. Click the **Command Settings** tab. This tab is where the commands for each function are entered. Atlona devices are controlled using Telnet. However, any TCP or UDP device may be controlled as well.
- 2. Scroll down past the "LED Red" and "LED Blue" command names, to a blank row.



**NOTE:** LED command names are presets, and do not require modification, unless a specific type of feedback is required. This is rare. LED "on" states are 100% and "off" states are set to 0%, by default.

	AT-ANC-108D
Spata Devis Gener San San San San San San	Setting 0 setti
Command Name	Command
LED RED 1 100%	LEDRed 1 100
LED RED 1 0%	LEDRed 1 0
LED BLUE 1 100%	LEDBlue 1 100
LED BLUE 1 0%	LEDBlue 1 0
LED RED 2 100%	LEDRed 2 100
LED RED 2 0%	LEDRed 2 0
LED BLUE 2 100%	LEDBlue 2 100
LED BLUE 2 0%	LEDBlue 2 0

#### 3. Click the **Add** button.

	Ard	Remove
	ALAS	Remove
	Add	Remove



- 4. The **Command Edit** dialog will be displayed. In the example below, the dialog box title **Command 37 Edit** means that row 37 of the command list is being edited.
- 5. Enter the name of the command in the **Command Label** field. In this example, we will create the command to power-on the display that is connected to the AT-OME-ST31A. Set the value of this field to Power On.
- 6. Enter the command line information, required to turn on the display, in the **Command Data** field. The API for the AT-OME-ST31A states that the DispBtn command is used to power-on / power-off the connected display. The on argument is used to power-on the display. Therefore, the **Command Data** field is: DispBtn on.
- 7. Click the **End character** drop-down list to select the terminating character. This command requires a carriage return. Therefore, CR is selected from the drop-down list.
- 8. Click the Save Changes button to commit changes.

Command 37 Edit		×
Command Label Power On		
Command Data To	enter hex characters, add \x prior to the character e.g. \x0D to send carriage return	n.
DispBtn on		
End character		
	Save Charge Cancel	

9. Create a Power Off command, following the steps above. For the Power Off command, enter the following data:

Command Label	Power Off
Command Data	DispBtn off
End character	CR

10. Finally, create a Display Status command. This command will be used to return the current power state of the display. Enter the following information for this command:

Command Label	Display	Status
Command Data	DispBtn	sta
End character	CR	



- 11. Continue adding additional commands, as desired. The example below shows several more commands that have been added.
- 12. Click the **Edit** button to modify a command or click the **Remove** button to delete a command from the list.

Power On	DispBtn on	CR	Edit	Remove
Power Off	DispBtn off	CR	Edit	Remove
/lute On 1 (Button 2)	VOUTMute1 on	CR	Edit	Remove
Jute Off 1 (Button 2)	VOUTMute1 off	CR	Edit	Remove
Jute On 2 (Button 2)	VOUTMute2 on	CR	Edit	Remove
lute Off 2 (Button 2)	VOUTMute2 off	CR	Edit	Remove
lute On LR (Button 2)	LRAUD on	CR	Edit	Remove
Jute Off LR (Button 2)	LRAUD off	CR	Edit	Remove
JSB-C Out 1 (Button 3)	x1AVx1	CR	Edit	Remove



#### **Creating Macros**

A macro is a series of steps or instructions that perform a certain task. This section will cover creating a macro by combining the commands that were created in the previous section with some default LED commands.

- 1. Click the Macro Settings tab.
- 2. Move the mouse over Button 1, in the upper-left corner, as shown.

Notice that a pop-up appears over the button. The information contained within the pop-up are the current macro settings for the button and will change, depending upon the button function. Currently, this button doesn't perform any function. However, for this example, we will create a macro to toggle power on the connected display, using the power-on and power-off commands. The power macro will be assigned to Button 1.





### **Device Operation**

- 3. Click Button 1. The button will be highlighted in yellow. 5 LED RED KEY 5 4. Click the **Edit** button. 100% Emulate 2 6 LED BLUE KEY 6 Edit 100% Cancel 3 RED LED KEY 7 OFF 8 4 KEY 8 BLUE LED OFF
- 5. The Macro Edit dialog will be displayed.
- Click the Toggle button and set it to ENABLE. This toggle must be set before commands are added to the macro. Once Toggle is enabled, two sections will appear in the Macro Edit dialog: the top row will be used to create a power-on macro and the bottom row will be used to create a power-off macro.

Macro 1 Edit			
Macro 1 - LED RED 100% LED RED 100% Macro Command	ENABL	Toggle _E	Repeat DISABLE
Command Name	Interface	Param 1	Param 2 Delay(ms)
Add			
Command Name	Interface	Param 1	Param 2 Delav(ms)
Add	interface	- didin 1	
Add			



7. Click the **Add** button in the top row.

Macro 1 Edit			
Macro 1 - LED RED 100%		Toggle	Repeat
LED RED 100%	ENABL	E	DISABLE
Macro Command	•		
Command Name	Interface	Param 1	Param 2 Delay(ms)
Add			
Command Name	Interface	Param 1	Param 2 Delay(ms)
Add			

- 8. The **Command Select** dialog box will be displayed. This dialog box contains a list of all commands that have been created, including the default LED commands. Since this is a power toggle, a power-on and power-off macro will need to be created. We'll create the power-on macro first.
- 9. Click the Power On command from the command list. This command was created in the previous section.

Command Select						×
LED Red 1 100%	LED Blue 5 0%	Mute On 1 (Button 2)	Device Power Off	NONE	NONE	NONE
LED Red 1 0%	LED Red 6 100%	Mute Off 1 (Button 2)	Device Power Status	NONE	NONE	NONE
LED Blue 1 100%	LED Red 6 0%	Mute On 2 (Button 2)	NONE	NONE	NONE	NONE
LED Blue 1 0%	LED Blue 6 100%	Mute Off 2 (Button 2)	NONE	NONE	NONE	NONE
LED Red 2 100%	LED Blue 6 0%	Mute On LR (Button 2)	NONE	NONE	NONE	NONE
LED Red 2 0%	LED Red 7 100%	Mute Off LR (Button 2)	NONE	NONE	NONE	NONE
LED Blue 2 100%	LED Red 7 0%	USB-C Out 1 (Button 3)	NONE	NONE	NONE	NONE
LED Blue 2 0%	LED Blue 7 100%	USB-C Out 2 (unused)	NONE	NONE	NONE	NONE
LED Red 3 100%	LED Blue 7 0%	Vol + (Button 5)	NONE	NONE	NONE	NONE
LED Red 3 0%	LED Red 8 100%	Vol - (Button 6)	NONE	NONE	NONE	NONE
LED Blue 3 100%	LED Red 8 0%	Mute 1 Status	NONE	NONE	NONE	NONE
LED Blue 3 0%	LED Blue 8 100%	Mute 2 Status	NONE	NONE	NONE	NONE
LED Red 4 100%	LED Blue 8 0%	Output Status	NONE	NONE	NONE	NONE
LED Red 4 0%	LED Red On 100%	HDMI 1 Out 1 (Button 4)	NONE	NONE	NONE	NONE
LED Blue 4 100%	LED Red Off 0%	HDMI 2 Out 1 (Button 8)	NONE	NONE	NONE	
LED Blue 4 0%	LED Blue On 100%	HDMI 1 Out 2 (unused)	NONE	NONE	NONE	
LED Red 5 100%	LED Blue Off 0%	HDMI 2 Out 2 (unused)	NONE	NONE	NONE	
LED Red 5 0%	Power On	Display Status	NONE	NONE	NONE	
LED Blue 5 100%	Power Off	Device Power On	NONE	NONE	NONE	



### **Device Operation**

10. The **Set Destination** dialog box will be displayed.

Set Destination	on	]
Delay(ms) Interface Device	25 Device V AT-OME-ST31A V	
	Save Charge Cancel	

- 11. Click the **Delay(ms)** field and specify the delay time.
- 12. Click the Interface drop-down list and select Device. This will allow an Atlona device to be selected.
- Click the **Device** drop-down list and select the AT-OME-ST31A. The AT-OME-ST31A should be the only available selection. If additional devices were added to the **Device Settings** tab, then more options would be available from this drop-down list.
- 14. Click the Save Changes button to commit changes.
- 15. Click the Add button.

Macro 1 Edit									×
Macro 1 - LED RED 100%	ENABL	Toggle _E		Repeat	ABL	E			
Command Name	Interface	Param 1	Param 2	Delay(ms)					
Power On	Device	AT-OME-ST31A	-	25			ю	ĿЭ	
Add									

- 16. Add the following list of commands and set the Delay field to 25 and set the Interface to SysCMD.
  - LED Blue Off 0% LED Red Off 0% LED Blue 1 100%

// initializes all blue LED to 0% visibility // initializes all red LED to 0% visibility

// sets Button 1 blue LED to 100% visibility



- 17. Change the field under Macro 1 LED RED 100% to read PWR. This will be the name of the power macro.
- 18. Once all changes are made, the Macro Edit dialog should look like the illustration below.

Macro 1 Edit							×
		Move rov	v down				
Macro 1 - LED RED 100%		Toggle		Repeat			
PWR	ENABL	E		DIS	ABL		
Macro Command		Move ro	ow up				
Command Name	Interface	Param 1	Param 2	Delay(ms)			]
Power On	Device	AT-OME-ST31A	-	25		∼ to te	
LED Blue Off 0%	SysCMD	-	-	25	^	∨ to te	
LED Red Off 0%	SysCMD	-	-	25	^	∨ to te	
LED Blue 1 100%	SysCMD	-	-	25	^	- to te	
Add							
		Delete	row				7
Command Name	Interface	Param 1	Param 2	Delay(ms)			
Add							

19. Create the power-off macro, in the bottom section, using the following information. Note that the SysCMD interface type specifies that this is a system-level AT-ANC-108D instruction.

Power Off	Device	AT-OME-ST31A	25
LED Blue Off 0%	SysCMD		25
LED Red Off 0%	SysCMD		25
LED Red 1 100%	SysCMD		25



- 20. The power macro should look like the following illustration.
- 21. Click the **Save Changes** button to commit changes. The "Wait...." message will appear, as changes are saved.

lacro 1 - PWR		Togale		Repeat				
WR	ENAB	LE		DIS	ABL	Е		
lacro Command								
Command Name	Interface	Param 1	Param 2	Delay(ms)				
Power On	Device	AT-OME-ST31A	-	25		$\sim$	ю	ιe
ED Blue Off 0%	SysCMD	-	-	25	^	$\sim$	ю	ιe
LED Red Off 0%	SysCMD	-	-	25	^	$\sim$	ю	ιe
LED Blue 1 100%	SysCMD	-	-	25	^		ю	ιe
Add	]		,					
Command Name	Interface	Param 1	Param 2	Delay(ms)				
Command Name Power Off	Interface Device	Param 1 AT-OME-ST31A	Param 2	Delay(ms)			<b>6</b>	
Command Name Power Off LED Blue Off 0%	Interface Device SysCMD	Param 1 AT-OME-ST31A -	Param 2	Delay(ms) 25 25			6 6	
Command Name Power Off LED Blue Off 0% LED Red Off 0%	Interface Device SysCMD SysCMD	Param 1 AT-OME-ST31A - -	Param 2	Delay(ms) 25 25 25			<u>ଟ</u> ଟି ଟି	
Command Name Power Off LED Blue Off 0% LED Red Off 0% LED Red 1 100%	Interface Device SysCMD SysCMD SysCMD	Param 1 AT-OME-ST31A - - -	Param 2	Delay(ms) 25 25 25 25 25			<u>ଟ</u> ଟ ଟ ଟ	

22. The PWR macro configuration is complete.



#### **Configuring Extension Macros**

Up to this point, the macro is in place for toggling the display power ON or OFF. The next step is to configure the LED indicators on the front panel of the AT-ANC-108D. Extension Macros are required in order for the buttons on the AT-ANC-108D to display the current state of a device.

1. Click the Extension Macro tab.



**NOTE:** The Extension Macro tab functions differently than the Macro Settings tab. When setting up button behavior for the AT-ANC-108D, it is not necessary to assign a macro to the same button that is used to perform a function. For instance, in the examples on the previous page, the PWR macro was assigned to Button 1. Here, we will use Button 15 and Button 16 to control the LED indcator of Button 1.

- 2. Click the **KEY 15** button.
- 3. Click the Edit button.





## **Device Operation**

4. Click the Add button.

Extension Macro 15 Edit						×
Extension Macro 15 - KEY 15						
KEY 15						
Macro Command						
Command Name	Interface	Param 1	Param 2	Delay(ms)		
Add						

5. From the **Command Select** dialog, click LED Blue 1 100%. Selecting this option will set Button 1 to turn blue at 100% brightness.

and select						
LED Red 1 100%	LED Blue 5 0%	Mute On 1 (Button 2)	Device Power Off	NONE	NONE	NONE
LED Red 1 0%	LED Red 6 100%	Mute Off 1 (Button 2)	Device Power Status	NONE	NONE	NONE
LED Blue 1 100%	LED Red 6 0%	Mute On 2 (Button 2)	NONE	NONE	NONE	NONE
LED Blue 1 0%	LED Blue 6 100%	Mute Off 2 (Button 2)	NONE	NONE	NONE	NONE
LED Red 2 100%	LED Blue 6 0%	Mute On LR (Button 2)	NONE	NONE	NONE	NONE
LED Red 2 0%	LED Red 7 100%	Mute Off LR (Button 2)	NONE	NONE	NONE	NONE
LED Blue 2 100%	LED Red 7 0%	USB-C Out 1 (Button 3)	NONE	NONE	NONE	NONE
LED Blue 2 0%	LED Blue 7 100%	USB-C Out 2 (unused)	NONE	NONE	NONE	NONE
LED Red 3 100%	LED Blue 7 0%	Vol + (Button 5)	NONE	NONE	NONE	NONE
LED Red 3 0%	LED Red 8 100%	Vol - (Button 6)	NONE	NONE	NONE	NONE
LED Blue 3 100%	LED Red 8 0%	Mute 1 Status	NONE	NONE	NONE	NONE
LED Blue 3 0%	LED Blue 8 100%	Mute 2 Status	NONE	NONE	NONE	NONE
LED Red 4 100%	LED Blue 8 0%	Output Status	NONE	NONE	NONE	NONE
LED Red 4 0%	LED Red On 100%	HDMI 1 Out 1 (Button 4)	NONE	NONE	NONE	NONE
LED Blue 4 100%	LED Red Off 0%	HDMI 2 Out 1 (Button 8)	NONE	NONE	NONE	
LED Blue 4 0%	LED Blue On 100%	HDMI 1 Out 2 (unused)	NONE	NONE	NONE	
LED Red 5 100%	LED Blue Off 0%	HDMI 2 Out 2 (unused)	NONE	NONE	NONE	
LED Red 5 0%	Power On	Display Status	NONE	NONE	NONE	
LED Blue 5 100%	Power Off	Device Power On	NONE	NONE	NONE	

- 6. The Select Destination dialog will be displayed. Click in the Delay(ms) field and set this value to 25.
- 7. Select SysCMD from the Interface drop-down list, if it is not already selected. The SysCMD option tells the AT-ANC-108D that this command is a system-exclusive message.

Set Destinati		
Delay(ms)	25	
Interface	SysCMD 🔻	
		Save Change Cancel
		Save change Cancer



- 8. Click the Save Change button to commit changes.
- The Extension Macro Edit 15 dialog will be displayed. Repeat Steps 4 through 8 and add the following. Under the Set Destination dialog, the Delay(ms) field and Interface drop-down list should be set to 25 and SysCMD, respectively.

LED Red 1 0% SysCMD

25

This command will turn off the red LED for button 1.

- 10. Click the **Save Changes** button to commit changes.
- 11. Change the name of the macro in the Extension Macro 15 KEY 15 field to Power On LED.
- 12. Click the Save Changes button at the bottom of the Extension Macro 15 Edit dialog to commit changes.

Extension Macro 15 Edit						×
		Move ro	w down			
Extension Macro 15 - KEY 15						
Power On LED				. \		
Macro Command		Move r	ow up			
Command Name	Interface	Param 1	Param 2	Delay(ms)		
LED Blue 1 100%	SysCMD	-	-	25	✓ to to	
LED Red 1 0%	SysCMD	-	-	25	` <b>b</b> b	
Add						
		Edit se	ettings			
		Delete	row			

13. Repeat the above steps for the **KEY 16** button to create a Power Off LED extension macro. Use the following information. The following instructions will set the red LED at 100% brightness and the blue LED to 0% for Button 1, when the display power is in the OFF state. Note that the order in which these commands are entered is not important.

LED Blue 1 0%	SysCMD	25
LED Red 1 100%	SysCMD	25

- 14. Change the name of the macro in the Extension Macro 16 KEY 16 field to Power Off LED.
- 15. Save all changes.
- 16. Extension macro configuration for the Power On and Power Off LED for Button 1 is complete.



#### Message Polling

The final step is to create the polling for the AT-ANC-108D. Polling is the process by which the AT-ANC-108D actively samples the current state of a device. Once the AT-ANC-108D receives the state of the device, it can be processed. Depending upon the returned value, the AT-ANC-108D can then change colors of the LED indicators or execute another macro.

- 1. Click the **Message Polling** tab.
- 2. Click the Add button in the first row.

					AT-A	<u>NC-108</u>
	System Setting Device Setting Command Setting Leakeds Marco Manage Palag The Setting Schools Lage Config Annie Lagout	Message         Hane         Repair Installer           Forsaller         Installer         Installer           Forsaller         Installer         Installer	Dence         Desce         Participants         Pareflacts to Company         PTrois Encode         Ein           U train         International         Additional         Additional	A           B		
Repeat Interval(sec)	Device	Status Command to send	Feedback to Compare	If True Execute this macro	Edit	Remove
					Add	DEL
					Add	DEL
					Add	DEL
					Add	DEL
					Add	DEL
					Add	DEL
					Add	DEL
					Add	DEL
					Add	DEL
					Add	DEL
					Add	DEL
					Add	DEL
					Add	DEL
					Add	DEL

3. The **Device 1 Edit** dialog will be displayed.



- 4. In the Name field, enter the value Power Status On, then set the Repeat Interval(sec) field to 1. The value of 1 indicates that the query will be performed every second.
- 5. Click the **Device** drop-down list and select the desired device. In this example, the AT-OME-ST31A is the device being controlled.

Device 1 Edit	×
Name	
Power Status On	
Repeat Interval(sec)	
1	
Device	
AT-OME-ST31A	
Status Command to send	
LED RED 1 100% Change	
Feedback to Compare	
If True Execute this macro	
LED RED 100% Change	

- 6. Click the Change button to display the Command Select dialog.
- 7. Select Display Status from the command list. This will execute the DispBtn sta command and return the power state of the display.
- 8. In the **Feedback to Compare** field, enter DispBtn on. This is the value that will need to be compared in order for the AT-ANC-108D to turn Button 1 either blue (on) or red (off).
- 9. Click the **Change** button to display the **Macro Select** dialog, then click the Power On LED Extension Macro. If the display is powered on (true), then the Power On LED Extension Macro will be executed. This will set the blue LED to 100% brightness for Button 1, reporting that the display is in the "ON" state.





- 10. Click the Save Changes button on the Device 1 Edit dialog.
- 11. Next, create a Power Status Off message poll, using the steps above. This poll will check for a power off state. Add the following information to each field within the **Device 2 Edit** dialog box:

Name Repeat Interval(sec)	Power Status Off 1	
Device Status Command to send Feedback to Compare If True Execute this macro	AT-OME-ST31A Display Status DispBtn off Power Off LED	<pre>// example device // button 16</pre>

- 12. Click the Save Changes button on the Device 2 Edit dialog.
- 13. The Message Polling tab should now look similar to the following. Note that once a polling message has been added, the **Active** toggle switch will automatically be set to ENABLE.

Active	Name	Repeat Interval(sec)	Device	Status Command to send	Feedback to Compare	If True Execute this macro	Edit	Remove	Î
ENABLE	Power Status On	1	AT-OME-ST31A	Display Status	DispBtn on	Power On LED	Edit	DEL	
ENABLE	Power Status Off	1	AT-OME-ST31A	Display Status	DispBtn off	Power Off LED	Edit	DEL	
DISABLE							Add	DEL	
DISABLE							Add	DEL	
DISABLE							Add	DEL	
DISABLE							Add	DEL	
DISABLE							Add	DEL	
DISABLE							Add	DEL	
DISABLE							Add	DEL	
DISABLE							Add	DEL	
DISABLE							Add	DEL	
DISABLE							Add	DEL	
DISABLE							Add	DEL	
DISABLE							Add	DEL	
DISABLE							Add	DEL	-

14. Message polling for the power state is complete.



#### **Testing Macros**

It is useful to test a macro, after creating it, to make sure that it performs the desired function. Testing a macro is done within the **Macro Settings** tab.

- 1. Click the Macro Settings tab.
- 2. Click the button that contains the macro to be tested. In this example, we will test the power macro we just created. Click the **PWR** button.
- 3. Click the **Emulate** button.





4. Check the front panel of the AT-ANC-108D. The associated button on the AT-ANC-108D should be active.

In this example, since a power toggle macro is being executed, the button will change color based on the state of the display. Therefore, if the display is in a powered-on state, Button 1 will be blue. If the connected display is powered-off, then Button 1 will be red. The example below shows a blue power toggle button, indicating that the display is now powered.



5. Macro testing is complete. If the macro doesn't perform as desired, click the **Edit** button for the selected button and check all macro and command settings.



## **Velocity**<sup>™</sup>

### Using the AMS Device Manager

The AMS Device Manager, within Velocity<sup>™</sup>, can also be used to configure and control the AT-ANC-108D. AMS is now a part of the Velocity System, and may be accessed with a VGW-HW hardware gateway, VGW-SW software gateway, or as a virtual machine software download.

- 1. Launch a web browser and enter the IP address of Velocity in the address bar.
- 2. Enter the required login credentials.
- 3. Click the Login button.
- 4. The Velocity Home screen will be displayed.
- 5. Click the  $\equiv$  icon, in the upper-left corner of the Velocity Dashboard.
- 6. Click Management > AMS Device Manager.







- 7. The **Device List** page will be displayed.
- 8. Click the AT-ANC-108D in the Device List window.

**IMPORTANT:** If the AT-ANC-108D does not appear in the **Device List** window, click the **SCAN** button to perform a network scan of all connected devices. Velocity will only be able to detect the AT-ANC-108D if both Velocity and the AT-ANC-108D are connected to the same VLAN.

			$\sim$	/elocity			± 🖾 🥹
DEVICE LIST	Device List					Search	SCAN :
Unassigned       ANC108D-000000	Status - Title	- IP Address	- MAC Address	- Version	- Site	- Building	- Rosa -
🖶 at-omni-111-01466	ANC1080-000000	10.1.0.108	B8/08/80/06/18/61	1.2.00	Unassigned	Unzesigned	Unassigned
🖶 at omni-112-01548	atorni-111-01466	10.1.0.111	88:98:80:01 FA:58	12.6	Unassigned	Unassigned	Unassigned
at omni-121-02097	🗑 at.omoi-112-01548	10.1.0.112	BR98:80:01F7.EB	1.2.5	Unassigned	Unassigned	Unassigned
🔮 at omni 521-00953	at cmni-121-02097	10.1.0.121	88.98.80.01 F2.56	126 S	CAN button	Unassigned	Unassigned
	at.omni-512-00826	10.1.0.51	BE98:80:01F7.43	1.2.6	Unassigned	Unassigned	Unassigned
	🖶 <u>at cmni 521-00953</u>	10.1.0.52	B8:98:80.01.F0.91	1.2.6	Unassigned	Unassigned	Unassigned
Devi	ce List						
Status	- Title		-	IP Address		-	MAC Address
•		00		10.1.0.108			B8:98:B0:06:1B:61

9. The **DEVICE INFO** page for the AT-ANC-108D will be displayed. Click **CONFIGURATION** in the top menu bar.

≡ 🔇			velocity	± 🖾 🥥
DEVICE LIST	÷	DEVICE INFO	NETWORK	CONFIGURATION
Unassigned	~			
ANC108D-000000	÷	Device Info		
🔮 at-omni-111-01466	1	Alias:		
🖶 at omni-112-01548	1	Model: AT-ANC-108D		
🔮 at-omni-121-02097	÷	IP Address: 10.1.0.108		
🔮 at-omni-512-00826	1	Firmware Version: 1.2.00		
🔮 at omni 521-00953	4	MAU Address: BSVMIBUUE: B56 1		
		Update		
		FIRMWARE UPDATE		
			Atlana Customer Sunnort Live Chat (SAM PST - SPM PST)	
		Parrisha (2020)		



10. The **CONFIGURATION** page will be displayed.

≡ ©			veloc	ːitu	± 1	ত্র 🖉
DEVICE LIST	÷	DEVICE INFO		NETWORK	CONFIGURATION	
Unassigned	~					
ANC108D-000000	÷	Configuration				- 1
🟺 at omni-111-01466	1	Device not configured				
🟺 at-omni-112-01548	÷	Device Type				
🔮 at-omni-121-02097	1	Config Film				
🖶 at omni 512-00826	1	Coning Files				
🖶 at-omni-521-00953	÷	Available Devices (0)				
			DISASSOCIATE ASSOCIATE			
			Ationa Custom	er Support Live Chat (SAM PST - 5PM PST) 🏴		
			Copyright @2020Ationa Inc (ationa.com). All Rights Reserved.    Versic	rr: 2.2.17 Active Gateway		

11. Click the **Device Type** drop-down list and select the device to be controlled by the AT-ANC-108D. In this example, the AT-HD-SC-500 is selected.

	± 🖾 🚇
Unassigned Configuration	
a comp 11 0146     belier rec configured	
ATHONS 200 TX ATHONS 200 TX ATHONS 200 TX AP	
et arum \$12 0x05s               et ATHD'S 210H TX MP                 et arum \$12 0x05s               et ATHD'S 210H TX MP	
ATUHO (23) 6610 ATUHO (23) 6612	
ATUNE-50/2 ATUNE-50/2	
ATOME ST31A ATUHD SW 52	
Configuration	
AT-HD-SC-500	
AT-HDVS-200-TX	
AT-HDVS-200-TX-WP	
AT-HDVS-210H-TX-WP	
AT-HDVS-210U-TX-WP	
AT-UHD-CLSO-601	
AT-UHD-CLSO-612	
AT-UHD-CLSO-612ED	



12. Click the **Config Files** drop-down list and select the configuration file.

Configuration		
Device not configured		
Device Type AT-HD-SC-500		
AT-HD-SC-500.XML		
Available Devices (0)		
	DISASSOCIATE	ASSOCIATE



## Appendix

### **Updating the Firmware**

The following procedure outlines the firmware update procedure for the AT-ANC-108D using the USB port. Download the firmware from the AT-ANC-108D product page on the Atlona web site.



**NOTE:** If the AT-ANC-108D is powered using Power over Ethernet (PoE), then substitute the Ethernet cable for the power supply in Step 2.

- 1. Disconnect the power from the AT-ANC-108D.
- 2. Press and hold **Button 1** while connecting power to the power receptacle on the rear of the unit. **Button 1** will flash three times, indicating that it is in firmware-update mode.



- 3. Connect a USB to mini-USB cable from the computer to the mini-USB port.
- 4. The USB UPDATE folder will be displayed. If this folder is not displayed, automatically, select the USB UPDATE drive from Windows Explorer.





- 5. Delete all files from the USB UPDATE drive, if any are present.
- 6. Drag-and-drop the firmware file to the drive folder. Once the firmware update process has completed, the USB UPDATE folder will close, automatically.
- 7. Disconnect the USB cable from the AT-ANC-108D. The unit is now ready for use.



## **Specifications**

Protocols		
Addressing	DHCP, static	
Management	Telnet	
Control		
IP	Protocols: HTTP, Telnet	h front popul and webCLU
	Modes: DHCP, Static – selectable throug	IT ITOTIL Parlet and webGOI
Connectors, Controls, and Ind	icators	
LAN	1 - RJ45, 100Base-T	
USB	1 – Mini-USB, Type B	
DC 5V	1 – 2-pin captive screw	
RESET	1 – push button, recessed, tact-type	
Control Buttons	8 – push button, tact-type	
Distance	Feet	Meters
Per hop of Ethernet cable	330	100
Temperature	Fahrenheit	Celsius
Operating	32 to 104	0 to 40
Storage Temperature	-4 to 140	-20 to 60
Operating Humidity (RH)	20% to 90%, non-condensing	
Power		
Consumption	3.3 W	
BIU/h	11.3	
External Power Supply	100 - 240 V AC, 50/60 Hz	
	Output: 5 V / 2.0 A DO	
Dimensions	Inches	Millimeters
Device (H x W x D)	4.49 x 2.71 x 1.50	114 x 69 x 38
Weight	Pounds	Kilograms
Device	0.33	0.15
Certification		
Device	CE ECC	
Power Supply	CE, FCC, Level IV, BoHS, cULus, BCM, (	000
Compliance		
NDAA-899	Yes	
TAA	Yes	
Warranty		
Device	To view the product warranty use the fol	lowing link:
	https://atlona.com/warranty	



