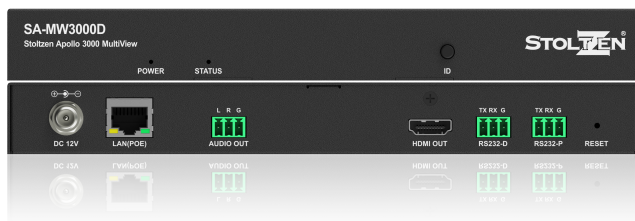


STOLTZEN[®]

APOLLO

1080P IP Decoder w/ Multi-window



SA-MW3000D
USER MANUAL

Important Safety Information

1. Read, follow, and keep these instructions.
2. Heed all warnings.
3. Do not use this product near water. Keep away from wet places, such as: spas, pools, sinks, laundries, wet basements, etc.
4. When cleaning, unplug the unit and wipe with a dry cloth. Do not use damp cloths, cleaning fluids, or aerosols which may result in electric shock, fire, or unit damage.
5. Operate this product using only the included power supply and/or power cable. Use of an unapproved power implement may impair performance, damage the product, or cause fires.
6. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
7. 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.
8. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the product.
9. Only use attachments/accessories specified by Stoltzen to avoid fire, shock, or other hazards.
10. 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.
11. Unplug this product during lightning storms or when unused for long periods of time.
12. Never open, remove unit panels, or make any adjustments not described in this manual. Attempting to do so could result in electric shock, damage to the unit, or other hazards.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



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

CAUTION

**TO REDUCE 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.**

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Introduction

SA-MW3000D is a high performance H.264 decoder that works with H.264 encoders to provide complete end-to-end streaming systems. It has the capability to simultaneously decode a maximum of nine IP streams in tile mode, and decode a maximum of six IP streams in overlay mode, and show them in various multi-view layouts on a single display.

The powerful decoder offers integration-friendly control features -- Windows PC configurator (Apollo Configurator), Apollo Visual Composer Touch on iPad and IP control box (SA-C), providing simple, flexible control and management options. Common applications include homes, classrooms, conference rooms and broadcasts.

Recommended Software Versions

SA-MW3000D works with H.264 encoders to distribute and switch IP streams throughout the matrix system by using specific software versions of operation tools. We would recommend that you use the following versions to deploy network.

Operation Tools	Software Versions
PC Configurator	v7.1.5.p1 or above
Apollo Visual Composer Touch on iPad	v3.7.7 or above
IP control box	API v1.8/v7.0.6 (v7.1.0) or above
Apollo Maintenance Tool	v2.1.4 or above

Features

- Supports live IP video stream decoding.
- Uses with H.264 encoders to provide complete end-to-end streaming systems.
- Input: one Ethernet input to accept up to nine H.264 high profile video streams.
- Output: one HDMI output, and one analog audio output that allows audio extraction from any encoder.
- Supports HDMI output at resolutions up to 3840x2160@60Hz in tile mode and up to 1080p@60Hz in overlay mode.
- Supports arbitrary display of up to 9 windows (tile mode) or 6 windows (overlay mode) from video content of up to 9 encoders (tile mode) or 6 encoders (overlay mode).
- In overlay mode, windows can overlap.
- Provides flexible management of multi-view layouts, allowing users to select from various layout presets and to customize layouts based on actual applications.
- Built-in auto scaling -- The output rate and resolution can be automatically scaled and output based on EDID information received from the connected display.
- Fast and seamless switching.
- Uploads and displays still image files — Upload still image files to the unit by using PC configurator. Present still image files such as organizational logos, photographs, or messages on each window of a single display when streaming data has been disrupted.
- HDMI 2.0 and HDCP 2.2 compliant.
- Features CEC function, allowing the TVs to be remotely set to turn on and enter standby mode by using PC configurator, Apollo Visual Composer Touch, IP control box's API commands.

- Supports bidirectional serial, allowing control of remote RS232 devices from both sides of decoders and IP control box.
- Provides two power supply options -- the local power adapter and remote PoE-enabled power source equipment.
- Selectable network settings from Auto-IP, DHCP and static IP.
- Works with Windows PC configurator, Apollo Visual Composer Touch on iPad and IP control box for device control and management.
- Supports communications protocols used on the Ethernet such as TCP/IP, ARP, DHCP, ICMP (ping), Telnet, multicast (IGMP), UDP.

Package Contents

- 1 x SA-MW3000D Unit
- 1 x DC 12V Power Adapter (with US, UK, EU, AU pins)
- 3 x Phoenix Male Connectors (3.5 mm, 3 Pins)
- 2 x Mounting Brackets (with Screws)

Panel Description

Front Panel



No.	Name	Description
1	Power LED	<ul style="list-style-type: none"> On: The device is powered on. Off: The device is powered off.
2	Status LED	<ul style="list-style-type: none"> Solid on: The device is connected to encoder and the video is displayed. Blinking: The device is disconnected from encoder. Off: The device is powered off or in the boot process.
3	ID Key	Press to display the encoder and decoder information on the screen such as device IP address or ID.

Rear Panel



No.	Name	Description
1	DC 12V	Connect to the supplied 12V power adapter.
2	LAN (POE)	<p>Connect this gigabit RJ-45 port to an Ethernet switch for device control and management. SA-MW3000D can be powered by a PoE-enabled power source equipment such as a switch via this port.</p> <p>Note: We would recommend that you power this device by using a power adapter or a PoE-enabled switch instead of both of them at the same time.</p>
3	Audio Out	Connect to an audio system such as an amplifier and speaker.

No.	Name	Description
4	HDMI Out	Connect to an HDMI display.
5	Serial Communication	<ul style="list-style-type: none"> • RS232-D: connect this port to a PC for debugging SA-MW3000D. • RS232-P: connect this port to a RS232 device such as a projector for bi-directional serial communication with a RS232 device on the IP control box side.
6	Reset Button	When SA-MW3000D is powered on, use a pointed stylus to hold down the RESET button for five or more seconds, and then release it, it will reboot and restore to its factory defaults.

Specifications

Technical	
Input Video Ports	1 x gigabit RJ-45 port
Input Video Type	H.264/MPEG-4 AVC
Input Video Resolutions	480p@60Hz~1080p@60Hz
Max. Number of Input Streams	In tile mode: nine IP streams. In overlay mode: six IP streams.
Output Video Ports	1 x HDMI port
Output Video Type	HDMI
Output Video Resolutions	HDMI: In tile mode: up to 3840 x 2160@60Hz 8bit In overlay mode: up to 1920 x 1080@60Hz 8bit
Video Impedence	100 Ω
End-to-End Latency	When used with H.264 encoder: <ul style="list-style-type: none"> About 80 ms on average (Low latency mode) About 300 ms on average (High quality mode)
Input Audio Ports	1 x gigabit RJ-45 port
Input Audio Format	Audio embedded in streaming media
Output Audio Ports	1 x Phoenix port (Male, 3.5 mm, 3 pins)
Output Audio Format	Stereo
Control Method	Windows PC configurator, Apollo Visual Composer Touch on iPad and IP control box
Upgrade Tool	Windows Apollo Maintenance Tool
Device Debug	1 x RS232-D (DEBUG) port
RS232 Bi-directional Communication	1 x RS232-P port
ID Key on the Front Panel	Present encoder and decoder information on the screen

General	
Operating Temperature	0°C to 45°C (32°F to 113°F)
Storage Temperature	-20°C to 70°C (-4°F to 158°F)
Humidity	10% to 90%, non-condensing
ESD Protection	Human-body Model: ±8kV (Air-gap discharge)/ ±4kV (Contact discharge)
Power Supply	DC 12 V 1 A
Power Consumption	<ul style="list-style-type: none"> 8.3 W (Powered via a power adapter) 12 W (Powered via PoE power source equipment)
Device Dimension	220 mm x 25 mm x 130.2 mm/8.7" x 1" x 5.1"

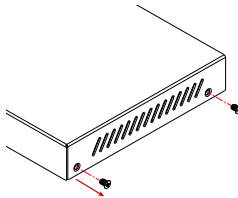
General	
(W x H x D)	
Net Weight	0.78 kg/1.72lb

Installation

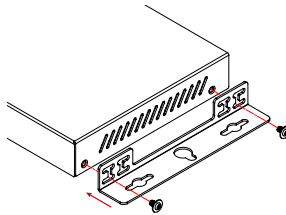
Note: Before installation, please ensure the device is disconnected from the power source.

Steps to install the device in a suitable location:

1. Remove the four screws from the two side panels.



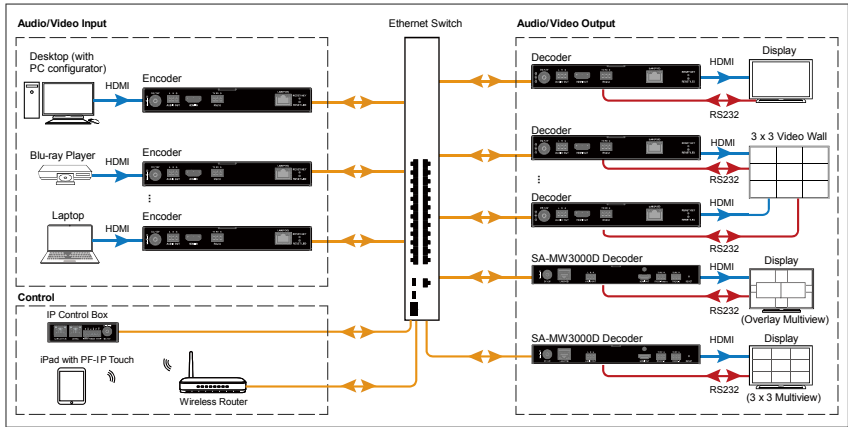
2. Position and install the mounting brackets on the two side panels using the mounting screws provided in package.



3. Mount and secure the device to a surface or a suitable location with the mounting screws (provided by others).

Typical Application

SA-MW3000D is designed to work with H.264 encoders to perform matrix switching.



Firmware Upgrade

You can use Apollo Maintenance Tool to update SA-MW3000D to the latest versions to obtain new features. For more information, see the user guide of Apollo Maintenance Tool.



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