# SiteWatch<sup>™</sup> Horn IP Speaker

DW-SWSP30AM



#### User's Manual Ver. 04/25

Before installing and using the camera, please read this manual carefully. Be sure to keep it handy for future reference.

#### Table of Content

1.		Overview	3
2.		What's in the box	3
3.		Hardware Installation	4
4.		Adding the Speaker to DW Spectrum	5
5.		Web Configuration	5
	5.1	Status	6
	5.2	Basic	7
	5.2.1	Network	7
	5.2.2	Date/Time	8
	5.3	SIP Account	9
	5.4	Audio	11
	5.5	Media File	12
	5.6	Alarm	13
	5.7	HTTP Commands	14
	5.8	Schedule	15
	5.9	RTP Multicast	16
	5.10	Firewall	17
	5.11	System	
	5.11.1	Upgrade	
	5.11.2	Security	
	5.12	Administrator Password Reset	19
6.		IP Finder	20
7.		Product Specifications	21
8.		Product Dimensions	21
9.		Warranty Information	23
10		Limits and Exclusions	24



## 1. Overview

This standalone, 30-Watt, IP-enabled smart audio IP horn speaker helps to proactively deter crime by responding to real-time events with automated and manual voice alerts. The IP66-rated housing has a built-in microphone for two-way communication, alarm input and is ideal for challenging outdoor environmental conditions with high ambient noise. The speaker supports digital signal processing (DSP) for clearer sound, has a built-in memory to support pre-recorded messages, and can play music, loud ringing, voice paging, and notifications with live speech. The speaker is fully integrated with DW Spectrum IPVMS and supported IP cameras and can integrate easily with 3rd party access control, analytics, and VoIP (supporting SIP) via open standards. The DW smart audio speaker is an ideal, scalable, and flexible approach to system design and comes with DW's 2-year warranty.

# 2. What's in the box

Check that all items listed below are included with your speaker. Contact your sales representative if any items are missing.

	WHA	T'S II	N THE BOX	
IP Horn Speaker		1	Quick Setup Guide	1
Waterproof Cap		1		

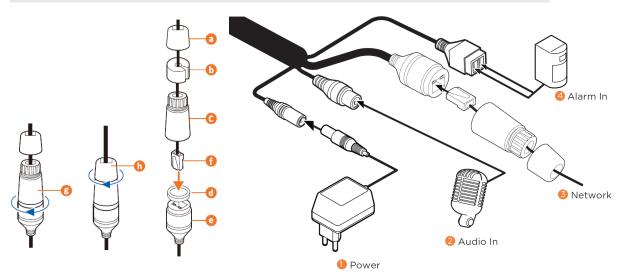
**NOTE:** Mounting fasteners are not included. Use M8 fasteners or screws with an outer diameter of 5/16" or smaller.



# 3. Hardware Installation

- 1. Mark and drill the holes in the mounting surface using the speaker's mounting bracket.
- 2. Pass wires through and make all the necessary connections. Connect to the camera's network. Use the waterproof cap for an added layer of protection from moisture. See the diagram on the right for installation.

**NOTE:** The speaker can be powered by PoE or 12V/24V DC. Both power sources CANNOT be used at the same time.



3. Secure the speaker to the mounting surface.

**NOTE:** Mounting fasteners are not included. Use M8 fasteners or screws with an outer diameter of 5/16" or smaller.

- 4. Complete the speaker's setup using the speaker's web interface. Open a web browser and enter the speaker's IP address.
  - Default IP address: 192.168.1.50.
  - Default username: admin
  - Default password: admin
     (The password must be changed during
  - (The password must be changed during the initial installation)
- 5. Change the IP address of the speaker to the same subnet range as the cameras.



## 4. Adding the Speaker to DW Spectrum

- 1. Open the DW Spectrum client.
- 2. DW-SWSP30AM should be listed under the resource tree if auto-discovery is enabled and the DW Spectrum media server and the speaker are on the same network.

\*If auto-discovery is disabled, add the speaker manually. Refer to the DW Spectrum user manual for more information.

## 5. Web Configuration

The speaker settings can be configured through a web interface. While connected to the same network, users can access the web interface through a browser using the default URL <u>http://192.168.1.50</u> unless this has been changed.

- Default Username: admin
- Default Password: admin

Login			
Username			
Password			
	Sign in	Cancel	

After logging in to the speaker, users will be prompted to update the password. The password must meet the following minimum requirements: at least 8 characters, a combination of uppercase and lowercase letters, and special characters.

Change Password	DW-SWSPW30iAM
Admin password m	ust be changed from default password to use the DW-SWSPW30iAM
Username	admin
New Password	
Confirm Password	
	Password must be at least 8 characters,
	including capital/small letters, numbers and special characters,
	special characters like $\sim '   ^ ( ) { } [ ] ; . ? / !$
	Save



## 5.1 Status

In the *Status* menu, the firmware version, free space, and status for the two SIP accounts will be displayed. In the *Network* menu, users can find the MAC address and IP address current configuration.

DW			
Status	Status		
Basic	Device Time	03/17/2025 08:49:16 AM	
busic	Serial Number	SWSPW30iAM2411190153	
SIP Account	Model Name	DW-SWSPW30iAM	
Audio	Firmware Ver	SWSPW30iAM_V4.1.0-IN4	
Addio	Free Space	3792KB	
Media File	SIP1 Status	NONE	
Alarm	SIP2 Status	NONE	
HTTP Commands	Network		
Schedule	MAC Address	A8:DC:5A:30:04:A7	
RTP Multicast	IP Address	192.168.1.50	
	Subnet Mask	255.255.255.0	
Firewall	Gateway	192.168.1.1	
System	Primary DNS	192.168.1.1	
	Secondary DNS	8.8.8.8	
			Refresh



### 5.2 Basic

#### 5.2.1 Network

In the *Network* menu, select the preferred network configuration settings for the IP speaker. Whenever the IP address is updated, users must enter the new IP address when accessing through a browser.

Network	
O DHCP	
O Static IP Address	
IP Address	192.168.1.50
Subnet Mask	255.255.255.0
Gateway	192.168.1.1
Primary DNS	192.168.1.1
Secondary DNS	8.8.8.8
	Save

- DHCP: When selected, the server automatically updates the speaker's IP address as assigned by the connected DHCP network device (router, smart switch, etc.).
- Static IP address: When selected, users must manually enter the speaker's network settings information. Enter the speaker's IP address, subnet mask, gateway, and primary and secondary DNS addresses. The IP address will not change unless manually adjusted.

In the *Network Advanced* menu, adjust the network communication port(s) and select the transfer protocol as needed.

Http/Https	Http&Https	<ul> <li>*Take effect after restar</li> </ul>	rt!
Http Por	80	(80, 1025~65534)	
Https Port	443	(443, 1025~65534)	

- HTTP/HTTPS: Select the preferred transfer protocol to communicate directly with the speaker using a web browser.
- HTTP Port: Select the port value for the Hypertext Transfer Protocol communication (default: 80).



- HTTPS Port: Select the communication port value for the Hypertext Transfer Protocol Secure communication (default: 443).
- \* The self-signed certificate is embedded in the unit and cannot be updated.

Press the 'Save' button to save all changes.

#### 5.2.2 Date/Time

There are two Update Mode options for Date/Time settings:

• NTP: Automatically uses time settings provided by an external server via the Network Time Protocol

 $^{\ast}$  To sync with any Internet time servers, the device must have access to the Internet.

• Current Computer: The speaker will sync with the date and time of the computer used to access the speaker settings.

Choose the preferred Update Mode and set the local time zone. If NTP is selected, configure the following settings:

- Time Zone: Set the local time UTC zone for the speaker.
- Daylight Savings: Enable the toggle to adjust for daylight saving time.
- NTP Server: Set the preferred network time protocol server (default: time.google.com).
- Sync Interval: Set the time interval in minutes to sync with the NTP server (default is 1440 minutes, 24 hours).

Press the 'Save' button to save all changes.

Date/Time		
Device Time	03/17/2025 08:26:43 AM	
Sync With	NTP 🗸	
TimeZone	UTC-08:00 United Sta	
Daylight Savings	<b>v</b>	
NTP Server	time.google.com	
Sync Interval	1440	Minutes
		Save



Date/Time		
Device Time	03/17/2025 08:26:43 AM	
Sync With	Current Computer	~
Computer Time	03/17/2025 08:26:43 AM	
		Save

### 5.3 SIP Account

The speaker has two SIP (Session Initiation Protocol) accounts that can be set up separately for initiating, maintaining and terminating communication sessions.

To configure, select the SIP 'Account' from the drop-down at the top of the *SIP Account* menu and configure the settings below.

Press the 'Save' button to save all changes.

Status	SIP Set		
Basic	Account	Account 1	NONE
SIP Account	User Name		
Audio	Auth ID		
Media File	Password		
Alarm	Display Name		
HTTP Commands	Server Host		
Schedule	Server Port		
RTP Multicast	Outbound Proxy	Disable	
Firewall	Expire Time	3600	Seconds
System	Ringing Tone	bell1	
	Auto Answer	Answer Immediatly	
	Incoming Notify	,	
	Answer Notify		
			Save
	SIP Advanced		
	SIP Protocol	UDP 🗸	•
	Encryption	None 🗸	·
			Save

- Account Select an account to configure.
- User Name Enter the username of the SIP account.



- Auth ID Enter the authentication ID to register.
- Password Enter the password associated with the SIP username entered above.
- Display Name Enter the display name of the SIP account.
- Server Host Enter the SIP server's IP address.
- Server Port Enter the SIP server's port number.
- Outbound Proxy Enable or disable the outbound proxy. When enabled, enter the proxy server's IP address and port number.
- Expire Time Set the expiration time of registered account information.
- Ringing Tone Set incoming ringtone from the available options.
- Auto Answer Set the answer mode. Select from 'Answer Immediately' or 'Answer with Delay.' When 'Answer with Delay is selected, enter the delay time in seconds.
- Incoming Notify Enable sending HTTP commands/requests when an incoming call occurs.
- Answer Notify Enable to send HTTP command/request when the call is answered.

Under the SIP Advanced menu, select the desired SIP Protocol.

Options are UDP, TCP and TLS.

	Contraction of the second s		
SIP Protocol	UDP	~	



## 5.4 Audio

Users can adjust the speaker audio volume and preferred audio settings as needed.

In the *Codec* menu, users can enable the preferred audio codecs that can be used with the speaker by checking the appropriate boxes.

Codec Setting	OPUS	
	UPUS	
	0.722 G.722	
	G.711U	

The Speaker menu has various settings.

Speaker			
Volume (0-100)	60		
Amp Auto OFF	YES	~	
Jitter Buffer (60 - 2000)	360		ms
HPF			
NR			

- Volume: Adjust the output volume of the speaker between 0-100.
- Amp Auto OFF: Enabled by default. When enabled, the amplifier will automatically deactivate when the speaker is not broadcasting.
- Jitter buffer: Adjust the wait time (ms) between collecting and sending VoIP to stabilize the audio and reduce audio delays and sound distortion while outputting sound.
- HPF: Enable this feature to use a high-pass filter, primarily allowing higher audio frequencies.
- NR: Enable this feature to use noise reduction and automatically remove unwanted ambient noise from the audio output.

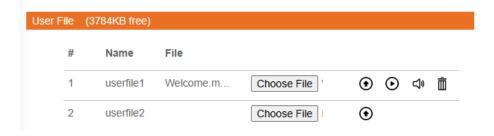
Press the 'Save' button to save all changes.



### 5.5 Media File

There are five (5) default system audio files. These files cannot be altered. Play through PC audio output # Name  $\odot$ 4 1 bell1 Play through speaker  $\odot$ 2 bell2 <1)  $\odot$ 3 bell3 <)  $\odot$ 4 4 bell4 5 bell5  $\odot$ <1)

Users can upload up to ten (10) custom media files (MP3 or WAV). Not to exceed the available storage, such as music, announcements, bells, etc., for additional audio-out options.





## 5.6 Alarm

The Alarm In function provides a means to integrate external systems with the speaker for enhanced security and alert functionality.

Users can select which sound to play in the "Play File" drop-down menu.

Users can also choose to cycle the sound with the following modes: Once only, multiple times, or for a duration.

tatus	Alarm In		
asic	Alarm Enable		
IP Account	Play File	bell1	~ •
udio	Cycle Mode	Once only	~
ledia File			
larm			
TP Commands			
nedule			
P Multicast			
rewall			
rstem			



## 5.7 HTTP Commands

Users can control the sound using an HTTP command from a web browser, VMS, cameras or network device to send commands to the speaker.

To use an HTTP command:

- 1. Open a browser or VMS on your computer.
- 2. Enter the HTTP URL and include the preferred media file for the alarm command as outlined in the HTTP Command examples provided below.

ITTD One	
ITTP Comr	ialios
≻ Play	sound.
http:	// <ip_address>/api/play?action=start&amp;file=<media_file></media_file></ip_address>
Exa	nple1: http://192.168.1.50/api/play?action=start&file=bell1
<me< td=""><td>dia_file&gt;</td></me<>	dia_file>
	• bell1 ~ bell5
	• userfile1 ~ userfile10
≻ Play	sound with once cycle mode and set volume.
http:	// <ip_address>/api/play?action=start&amp;file=<media_file>&amp;mode=once&amp;volume=<vol_level></vol_level></media_file></ip_address>
	mple2: http://192.168.1.50/api/play?action=start&file=userfile1&mode=once&volume=10
<me< td=""><td>dia_file&gt;</td></me<>	dia_file>
	• bell1 ~ bell5
	• userfile1 ~ userfile10
<vol< td=""><td>_level&gt; . 0 ~ 100</td></vol<>	_level> . 0 ~ 100
	• 0 ~ 100
-	sound with multiple cycle mode and set volume.
	// <ip_address>/api/play?action=start&amp;file=<media_file>&amp;mode=multiple&amp;count=<count_level>&amp;volume=<vol_level></vol_level></count_level></media_file></ip_address>
	nple3: http://192.168.1.50/api/play?action=start&file=userfile1&mode=multiple&count=10&volume=20
<me< td=""><td>dia_file&gt;</td></me<>	dia_file>
	bell1 ~ bell5     userfile1
<00	isement - usement
	• 0 ~ 120960
<vol< td=""><td>level&gt;</td></vol<>	level>
	• 0 ~ 100
> Play	sound with multiple cycle mode and set duration, volume.
-	o:// <ip address="">/api/play?action=start&amp;file=<media file="">&amp;mode=duration&amp;count=10&amp;volume=30</media></ip>
	ample4: http://192.168.1.50/api/play?action=start&file=userfile1&mode=duration&count=10&volume=
<111	edia_file>
	• bell1 ~ bell5
	• userfile1 ~ userfile10
<00	punt_level>
	• 0 ~ 604800
<٧0	ol_level>
	• 0 ~ 100
≻ Stor	playing sound.
	p:// <ip address="">/api/play?action=stop</ip>
EX	ample5: http://192.168.1.50/api/play?action=stop



## 5.8 Schedule

Users can schedule regular bell rings, announcements, and alarms in public areas such as schools, factories, and office spaces.

Status	Schedule	
lasic	# En Name Time D Action File	
SIP Account	1	
Audio	2	
Media File	3	
Alarm	4	
ITTP	5	
Commands	6	
Schedule	7	
RTP Multicast	8	
Firewall	9	
System	10	
	11	
	12	
	13	
	14	
	15	

To add a schedule:

- 1. Click on the Edit icon to edit or add a new audio schedule.
- 2. Check the *Schedule Enable* box to enable the schedule. Uncheck the box to disable the schedule.
- 3. Create a name for the schedule. This name will appear in the *Schedule* list.
- 4. Select the days of the week and time for the scheduled audio. When setting the *Action Time*, either click the hour/minute and manually enter the value or click the Clock icon to select from a drop-down.
- 5. Configure the following:
- Action type: select the preferred action type for this schedule (Start/Stop).
- Play File: select the audio file that will trigger when this schedule activates.
- Cycle mode:
  - Once only: play sound once
  - o Multiple times: play sound multiple times continuously
  - Duration: play sound for a duration of time.

Press the 'Save' button to save all changes.



### 5.9 RTP Multicast

Each device can receive up to ten (10) RTP IP addresses.

Do not use continuous port numbers, which can cause issues and conflicts.

For example:

239.255.1.2:8000, 239.255.0.1:8001, 239.255.0.1:8002 (Don't Use)

239.255.0.1:8000, 239.255.0.1:8002, 239.255.0.1:8004 (OK)

- Multicast address range: 224.0.0.0-239.255.255.
- Ports range: 1024-65536

Status	Multicast	
Basic	Priority	IP Address (e.g. 239.255.0.1:5004)
SIP Account	1	
Audio	2	
Media File	3	
Alarm	4	
HTTP Commands	5	
Schedule	6	
RTP Multicast	7	
Firewall	8	
System	9	
	10	
		Save



## 5.10 Firewall

Users can enable settings in the *Firewall* menu to adjust the speaker's security settings. Create a Firewall Rule to permit or deny access to devices as needed.

Fire	rewall Rules					
	#	Name	Туре	IP/MAC	Action	
count	1					
	2					
File	3					
	4					
	5					
nands						
lule	Itomatic Def	ense Rules				
ule	utomatic Defe			Port Pare	Pate	
ule Au ulticast	#	ense Rules Name	Protocol		Rate	FX
ule Au ulticast				Port Rage	Rate	
ule Au ulticast	#				Rate	Ľ
ule	#			-	Rate	
ule Au ulticast	# 1 2			-	Rate	



### 5.11 System

#### 5.11.1 Upgrade

In the Upgrade selection of the System Menu

- Reboot: Click to power cycle the speaker device. Users must log back into the system once the reboot has been completed.
- Reset: Click to complete a system default and return the speaker to factory settings.
- Users must log back into the device's default IP address, username and password.
- FW Upgrade: Click to upgrade the firmware of the IP speaker device. See directions below.

#### 5.11.2 Security

Users can set a new username and password in the *Security* section of the *System* menu. To change the login:

- 1. Enter the IP speaker's current username and password.
- Default username: admin
- Password: password set during initial setup
- 2. Assign the New Username and/or New Password to the IP speaker as desired. It is recommended that the username be kept as 'admin.'
- 3. Save the configuration and restart the IP speaker device to apply the changes.

Status	System
Basic	Reboot Device Now
SIP Account	Reset to Factory Setting
Audio	FW Upgrade Choose File No file chosen
Media File	
Alarm	Security
HTTP Commands	New Password Confirm Password
Schedule	Save
RTP Multicast	
Firewall	
System	



## 5.12 Administrator Password Reset

The administrator password can be reset using the device's MAC address or serial number.

To reset the password, access the following URL using the speaker's IP address http://{**Speaker's IP Address**}/pwreset.html

Ex: http://192.168.1.50/pwreset.html

Administrator Password Rese	t
MAC Address or Serial Number	
	RESET

Password Reset	× +		- 🗆 ×
← → C ▲ Not secur	e 192.168.1.50/pwreset.html		☆ ひ 8 :
	192.168.1.50 says Password reset success!	ОК	All Bookmarks
	Administrator Password Reset	DW-SWSPW30iAM	
	MAC Address or Serial Number A8.0	DC-5A:30:04:A7	
	RESE		



# 6. IP Finder

If users have difficulty accessing the speaker's web interface, users can use DW's IP finder. DW IP Finder is a software tool developed by Digital Watchdog that helps users locate and manage Digital Watchdog IP devices on a network. It can automatically scan the network for DW Sitewatch IP speakers. Visit <u>https://digital-watchdog.com/productdetail/DW-IP-Finder/</u>

for more information and to download the software.



Home > Products > DW IP Finder™



Find a Reseller Request a Demo Contact Us FAQs



#### Features

- Support all DW's MEGApix<sup>®</sup> IP cameras
- Detect any  $\mathsf{OnVIF}^\circ$  device on the network
- Windows and Linux Ubuntu OS compatibility
- Remote firmware upgrade for multiple cameras simultaneously
- Thumbnail preview
- Filter search results by camera series
- Select from multiple networks
- Bulk password assignment
- Bulk IP address assignment
- Access the camera's network settings
- · Uptime monitors how long a camera has been live since its last power cycle
- Free and easy to download. Included with all  $\mathsf{MEGApix}^*\operatorname{\mathsf{IP}}\mathsf{cameras}$

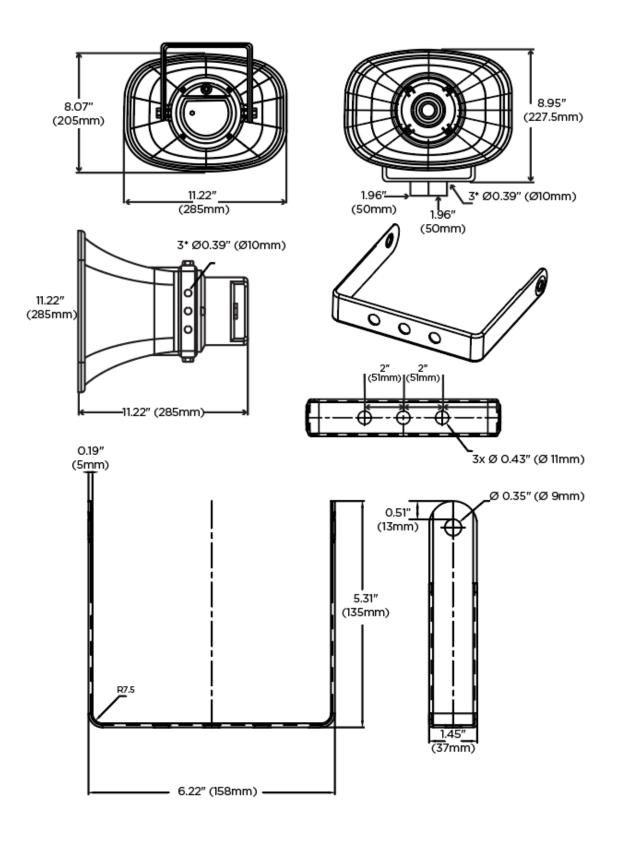


# 7. Product Specifications

Audio			
Codec	OPUS 48 kHz, MP3 44.1 kHz, G.722 ADPCM 16 kHz, G.711 PCMU 8 kHz, G.711		
	PCMA 8 kHz		
MIC			
Built-in microphone	Yes		
Speaker			
Max SPL	120dB		
Frequency response	350Hz ~ 8KHz		
Frequency range	500-2KHZ +-10dB		
	400-12KHZ +-20dB		
Harmonic distortion	0.1@1kHz		
Signal to noise ratio	91dB		
Amplifier	Built-in 30W amplifier		
Network			
Security	Password protection, IP address filtering, digest authentication, user		
	access log		
Network protocol	SIP, ONVIF, HTTP/HTTPS, IPv4, DHCP, RTSP, RTP, RTCP, TCP, UDP, ARP,		
	FTP, TFTP, NFS, NTP		
Network interface	10/100 Base-TX, RJ45		
VoIP	Support SIP protocol for integration with VoIP systems, integrated with		
	SIP/PBX Support SIP features: secondary/backend		
	Support Sir readies. Secondary backend		
	Supported codecs;		
	OPUS, G711U, G711A, GSM, MP3, WAV		
General			
Operating temperature	-22°F ~ 140°F (-30°C ~ 60°C)		
Operating humility	5%-85%		
Material	ABS (IP66-rated)		
Power supply	PoE or DC 12V/24V		
Interface	GPIO alarm in, audio in		
Installation	Wall mounted		
Dimensions	11.22" x 8.07" x 11.22"		
	(285 x 205 x 285mm)		
Weight	4.4 lbs (2 kg)		
Warranty	2 years		



## 8. Product Dimensions





# 9. Warranty Information

Go to <u>https://digital-watchdog.com/page/rma-landing-page/</u> to learn more about Digital Watchdog's warranty and RMA.

To obtain warranty or out-of-warranty service, please contact a technical support representative at 1+ (866) 446-3595, Monday through Friday from 9:00 AM to 8:00 PM EST.

Before the warranty service is rendered, a purchase receipt or proof of the original purchase date is needed. This warranty only covers failures due to defects in materials and workmanship that arise during normal use. This warranty does not cover damages that occur in shipment or failures that are caused by products not supplied by the Warrantor or failures that result from accident, misuse, abuse, neglect, mishandling, misapplication, alteration, modification, faulty installation, setup adjustments, improper antenna, inadequate signal pickup, maladjustments of consumer controls, improper operation, power line surge, improper voltage supply, lightning damage, rental use of the product or service by anyone other than an authorized repair facility or damage that is attributable to acts of God.



## 10. Limits and Exclusions

There are no express warranties except as listed above. The Warrantor will not be liable for incidental or consequential damages (including, without limitation, damage to recording media) resulting from using these products or arising out of any breach of the warranty. All express and implied warranties, including the warranties of merchantability and fitness for a particular purpose, are limited to the applicable warranty period set forth above.

Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you. This warranty gives you specific legal rights; you may also have other rights that vary from state to state.

If the problem is not handled to your satisfaction, then write to the following address:

Digital Watchdog, Inc.

ATTN: RMA Department

16220 Bloomfield Ave

Cerritos, CA 90703

Service calls that do not involve defective materials or workmanship as determined by the Warrantor, in its sole discretion, are not covered. The cost of such service calls is the responsibility of the purchaser.





# Complete Surveillance Solutions

DW® East Coast office and warehouse: 5436 W Crenshaw St, Tampa, FL USA 33634 DW® West Coast office and warehouse: 16220 Bloomfield Ave, Cerritos, CA USA 90703 PH: 866-446-3595 | FAX: 813-888-9262 www.Digital-Watchdog.com technicalsupport@digital-watchdog.com Technical Support PH: USA & Canada 1+ 866-446-3595 International 1+ 813-888-9555 French Canadian: + 1-904-999-1309 Technical Support Hours: Monday-Friday 9 a.m. to 8 p.m. Eastern Time