

General

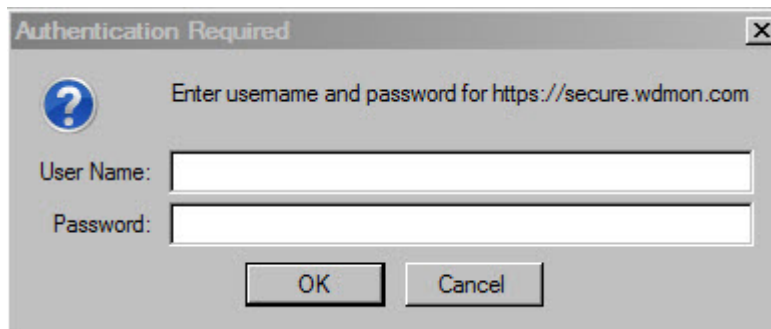
The Watchdog AW-4, in short AW-4, can be controlled and monitored by a centralized monitor server. This server is located in a large Dutch server centre with high speed connections, directly connected to the internet backbone and is fully redundant.

If connected and idle, the AW4 sends an encrypted status report (33 bytes) to the monitor server every minute. Moreover the AW4 contacts the server after every status or parameter change. The AW4 automatically starts contacting the server immediately after powering up. Once connected the server will monitor each AW-4 device continuously and 24/7 regardless of any users logged in and monitoring.

Contacting the server by the AW-4 is completely transparent when your LAN has a standard DHCP-server. So the connection will be established without any knowledge of LAN, Ethernet or TCP/IP. No changes in your modem/router configuration regarding NAT or port forwarding are required. Just plug in your network cable in the AW-4 device. That's all!

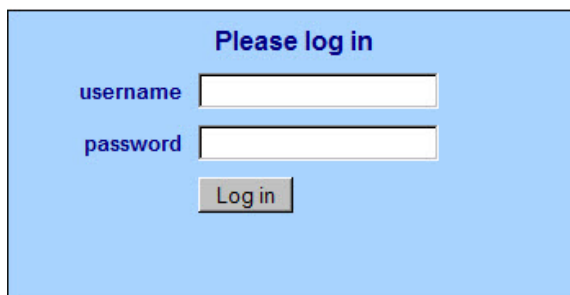
To personally log on to the server you need a username or password. If you are new to the server and have no username/password yet, contact us at: info@wdmon.com and we will be more than happy to create your personal account. To access the server go to <http://wdmon.com>

As soon as you will get access to the server the next dialog box appears:



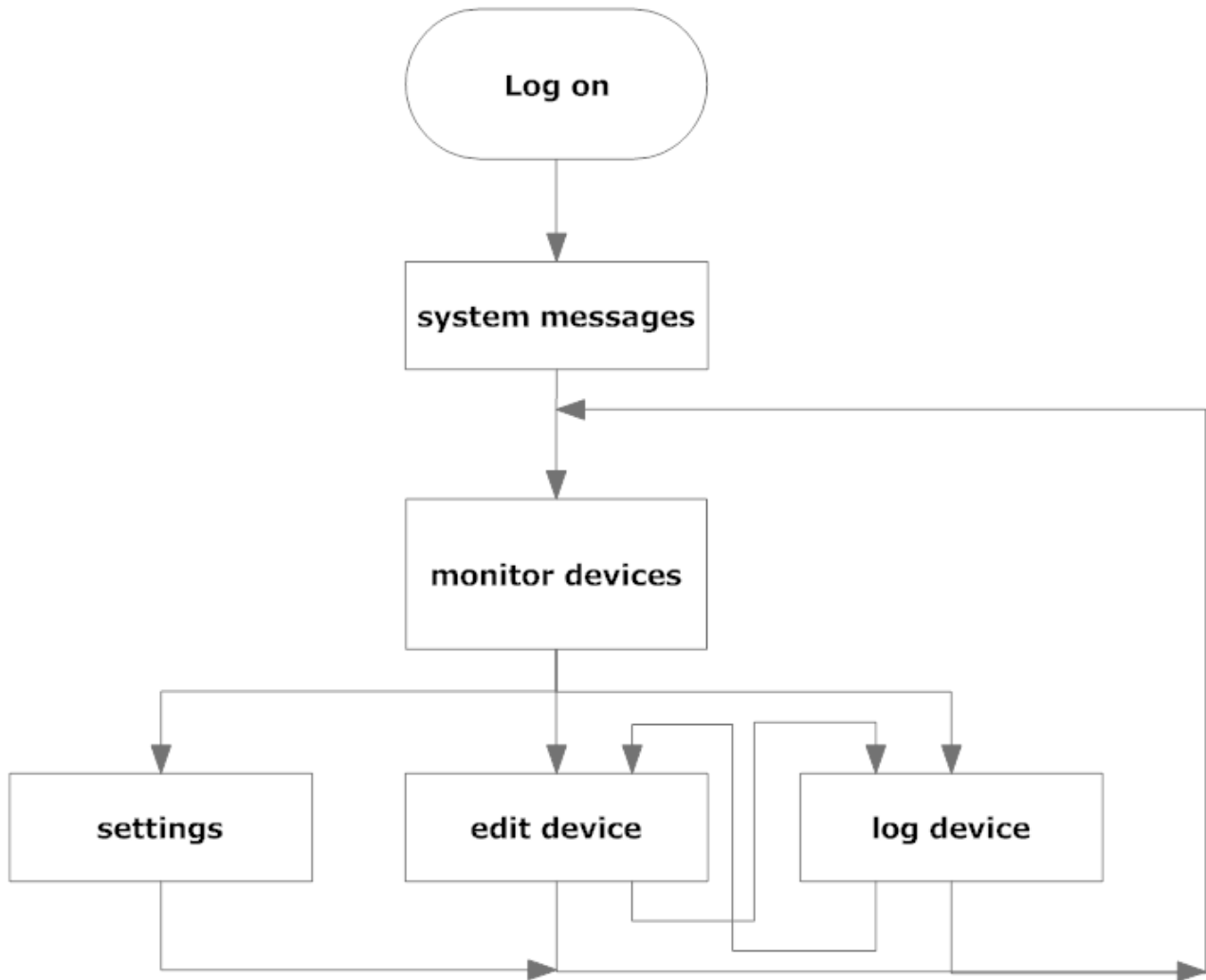
During the test cycle which ends January 1, 2012, use the following credentials:
User Name: **watchdog** and Password : **escape**

Now the server asks you to log in at userlevel. This username and password are unique for each user.



Group administrator can in turn create new accounts for the remaining employees each with their own password.

site mapping and navigation



Monitor Screen

As soon as you are logged on and system messages are displayed, you'll enter the monitor screen. The screen displays all the AW-4 devices registered to your group/organization. Besides monitoring you are also able to adjust and control all device settings. Also you have control over which events or changes will generate e-mail or text-messages on a per user basis.

To keep things simple, for now we assume you have only one AW-4 device in your group. So, a single row of 6 buttons will be shown which indicates the status of the device at a glance.

description	detector	output	program	backup				
00-50-C2-80-81-49	enabled	program	analog	detected	mp3-player	-	edit	log

description shows the MAC-address or a short description of your choice.
detector status if the silence detector is enabled or disabled.
output indicates if the program source or the backup source is routed to the output.
program the program source selected and whether or not audio is detected.
Backup the backup source selected and whether or not audio is detected.

On the monitor screen you can only adjust one setting: the detector status. If you click the first button in the 'detector'-column it changes to an animated button indicating the server has sent a command to the AW4 and is awaiting for a confirmation of this command from the AW-4.



After the AW-4 has been successfully processed the command, the AW-4 returns a confirmation of this change to the monitor server, resulting in the following screen update:

description	detector	output	program	backup				
00-50-C2-80-81-49	disabled	program	analog	detected	mp3-player	-	edit	log

All other device settings can be changed on the edit page by pressing the edit button.

The layout of this page is colour coded. So changes and error conditions can be recognised in a blink of an eye. Also audible alarms can be set for your web browser for each individual user. When a screen is all green, all is OK. If there is a deviation from the normal pattern a button on the bar will turn red and in case a user intervention is needed a button will blink.

If a row of buttons is greyed out, the server has not received any information from the AW-4 for the last 2 minutes.

IMPORTANT

Grey buttons don't imply there is a problem with the AW-4 or with its audio. It only means the AW-4 has (temporarily) not been able to contact the server.

Click the 'edit'-buttons of a device to open the device's Edit Screen. (see next page)

Edit Screen – tab Main

The screenshot shows the 'Watchdog Monitor' interface. At the top, it displays 'user: demo' and 'group: demo'. The main title is 'Watchdog Monitor' with the subtitle 'by Karel van Cooten Producties BV'. The current time is '11:59:18'. Below this is a blue bar showing the device MAC address: 'device MAC-address: 00-50-C2-80-81-49'. The interface has a navigation menu with 'Main', 'Levels & timing', 'GPI's', and 'Information'. The 'Main' tab is active, showing a form with the following fields and buttons:

- description**: A text input field.
- SMS short code**: A text input field.
- sort order (0-999)**: A text input field with the value '200'.
- detector**: A button labeled 'disabled' (in red) and a button labeled 'enable' (in grey).
- output**: A button labeled 'program' (in green) and a button labeled 'forced backup ON' (in grey).
- program source**: A button labeled 'HTTP-stream' (in cyan), and buttons labeled 'analog', 'digital', 'HTTP-stream', and 'RTP-stream' (all in grey).
- backup source**: A button labeled 'mp3-player' (in green), and buttons labeled 'mp3-player', 'HTTP-stream', 'external', and 'ext./HTTP fallback' (all in grey).
- RESET DEVICE**: A button in grey.

At the bottom of the form, there is a small green text note: 'some backup sources might be disabled due to hardware limitations'.

On the main tab of the Edit screen we can change the device status and input sources. All grey buttons are clickable. The coloured buttons are indicators only.

Description

Here you can input a human understandable description for the device. For example: "London 90.7 FM".

If you *return* to the main page you will notice the MAC-address has been replaced by your description. If you clear the description the MAC-address will be shown again.

SMS short code

Reserved for future use, where it will be possible to control the main functions of the AW-4 by sending short commands to a SMS/text message gateway.

sort order

Controls the order in which a group of AW-4 devices is displayed.

detector enable/disable

Enables or disables the AW-4 silence detector circuit. This functionality doubles the detector button on the monitor screen.

output forced backup ON/OFF

Forces the AW-4 to switch to the backup output.

program source

Selects the program input of the device.

HTTP/RTP streams must be properly configured in the system config file located on your AW-4's memory card. More information on this subject can be found in the AW-4 hardware manual.

backup source

Selects the backup source of the device.

reset device

Performs a hard reset on the AW-4 and restarts the firmware.

Depending on your program source selection and whether or not the device is in backup mode an audio interruption may be audible. On streams this interruption may be 20-30 seconds.

Edit Screen – Levels & timing

On this tab of the edit screen all settings can be adjusted on audio levels and attack and release times.

program level

Adjusts the audio level of the program source from -20dB to +20dB in steps of 1dB.

Level adjustment is disabled for digital audio sources and the slide bar is disabled.

All program sources have independently stored adjustment levels which make it possible to level out different sources.

backup level

Adjusts the audio level of the backup source from -20dB to +20dB in steps of 1dB.

All backup sources have independently stored adjustment levels which make it possible to level out different sources.

auto levelling ON/OFF

Sets the auto levelling mode for the backup source.

In the ON-mode, the backup signal will be levelled against the 0 dB level.

The slide bar is locked when auto levelling is ON.

attack time

Adjust the attack time of the silence detector from 0 to 180 seconds in steps of 2 seconds.

The attack time is the time a signal has to be below the threshold to be recognised as a silence.

So an attack time of 8 seconds, means it has to be silent for 8 seconds (below the threshold for 8 seconds) before the AW-4 will switch to its backup source.

release time

Adjusts the release time of the silence detector from 0 to 240 seconds in steps of 2 seconds.

The release time is the time the program signal has to present before the AW-4 switches back from backup mode to program mode.

threshold

Sets the threshold of the audio detector between -10dB and -50dB in steps of 5dB.

Below this threshold the AW-4 flags the audio signal as silence.

fade time

Adjusts the cross fade time the AW-4 uses when returning from backup signal to program signal.

The range is 2 - 5 seconds. A setting of 0 seconds will perform a hard switchover.

Edit Screen – GPI's (General Purpose Inputs)

GPI's can be used to report external events. Such as temperature, smoke or intrusion alarms. The AW-4 has a D-connector on the back panel where GPI's can be hard wired. (see AW-4 manual for details) In the GPI section of the edit screen you can assign text messages to GPI-events. These texts can be sent as an e-mail and/or SMS/text message.

Edit Screen - Information

On the information section of the Edit Screen all device dependent information is shown. Such as the MAC-address of the device, its IP address and peer port, the firmware versions of the internal software and the MP3-player and date and time of the first and last contact.

In the right hand corner of the edit screen you can exit to the main screen with the 'return'-button. Also there is a short cut to the device's log file, using the 'log'-button.

Log Screen

user: Johnny English
group: demo

Watchdog Monitor

by Karel van Cooten Producties BV 16:01:53

refresh return

date 00-50-C2-80-81-49 show details

<< page 1 of 2 >> last access: 28-10-2011 16:01:46

date / time	remote user	log entry description
Fri 28-10-2011 16:01:46		program signal present
Fri 28-10-2011 16:01:44		device cross faded to program input
Fri 28-10-2011 16:01:44	Johnny English	program source switched to HTTP-stream
Fri 28-10-2011 15:59:40		backup signal present
Fri 28-10-2011 15:59:38		** silence detected **
Fri 28-10-2011 15:59:38		device switched to backup input
Fri 28-10-2011 15:59:33		device enabled
Fri 28-10-2011 15:59:32		device cross faded to program input
Fri 28-10-2011 15:59:32		device disabled
Fri 28-10-2011 15:59:19		backup signal present
Fri 28-10-2011 15:59:17		device switched to backup input
Fri 28-10-2011 15:59:13		device enabled
Fri 28-10-2011 15:59:08		device cross faded to program input
Fri 28-10-2011 15:59:08		device disabled
Fri 28-10-2011 15:58:37		backup signal present
Fri 28-10-2011 15:58:35		** silence detected **
Fri 28-10-2011 15:58:35		device switched to backup input
Fri 28-10-2011 15:58:19	Johnny English	program source switched to analog in
Fri 28-10-2011 15:49:10		program signal present
Fri 28-10-2011 15:49:09	Johnny English	device cross faded to program input
Fri 28-10-2011 15:49:02		backup signal present
Fri 28-10-2011 15:49:02		** silence detected **
Fri 28-10-2011 15:48:58	Johnny English	device forced to backup input
Fri 28-10-2011 15:48:57		program signal present
Fri 28-10-2011 15:48:55		device cross faded to program input
Fri 28-10-2011 15:48:55	Johnny English	program source switched to HTTP-stream
Fri 28-10-2011 15:48:27		backup signal present
Fri 28-10-2011 15:48:25		** silence detected **
Fri 28-10-2011 15:48:25		device switched to backup input
Fri 28-10-2011 15:48:10	Johnny English	device enabled

<< page 1 of 2 >>

On the log screen you can view all device events and changes in chronological order. If you prefer the latest events to show up in the log first, you can choose the personal user option 'show logs in reverse order'. (see settings)

If a setting has been changed by a remote user, the name of this user is displayed in the column 'remote user'. If no remote user is displayed the settings have been changed by the AW-4 internal logic or by a local user on site.

Normally the log screen only shows the main device changes. All minor adjustments as audio levels and time settings are hidden. To display those as well, check the option 'show details'.

user: Johnny English
group: demo

Watchdog Monitor

by Karel van Cooten Producties BV 16:02:31

refresh return

date 00-50-C2-80-81-49 show details

<< page 1 of 3 >> last access: 28-10-2011 16:02:07

date / time	remote user	log entry description	details
Fri 28-10-2011 16:01:46		program signal present	
Fri 28-10-2011 16:01:44		device cross faded to program input	
Fri 28-10-2011 16:01:44	Johnny English	program source switched to HTTP-stream	
Fri 28-10-2011 16:01:27	Johnny English	backup autoleveling switched ON	
Fri 28-10-2011 16:01:24	Johnny English	backup level set to 0 dB	
Fri 28-10-2011 16:01:21	Johnny English	release time set to 18 seconds	
Fri 28-10-2011 16:01:15	Johnny English	release time set to 86 seconds	
Fri 28-10-2011 15:59:40		backup signal present	
Fri 28-10-2011 15:59:38		** silence detected **	
Fri 28-10-2011 15:59:38		device switched to backup input	

Settings

The number of tabs shown on the settings screen depends on your user rights.
In this document we assume you are a standard user. A standard user can only change personal settings.

user: Johnny English
group: demo

Watchdog Monitor

by Karel van Cooten Producties BV 15:50:59 return

personal

user name demo change password

full name all e-mail & sms warnings OFF

function show logs in reverse order

e-mail address 1 send email messages as plain text

e-mail address 2

mobile phone use small buttons on monitor screen

date format

--- Alarm Settings ---

	action	browser alarm	
on lost/re-established network connections	<input type="text" value="no warnings"/>	<input type="text" value="none"/>	<input type="button" value="play"/>
on watchdog disable or enable	<input type="text" value="e-mail & SMS"/>	<input type="text" value="none"/>	<input type="button" value="play"/>
on silence detection and signal restore	<input type="text" value="SMS"/>	<input type="text" value="none"/>	<input type="button" value="play"/>
on missing/reappearing backup signal	<input type="text" value="e-mail"/>	<input type="text" value="none"/>	<input type="button" value="play"/>
on GPI alerts	<input type="text" value="e-mail & SMS"/>	<input type="text" value="none"/>	<input type="button" value="play"/>

change password button

To change your logon password.

full name

Your full name. Used in references such as log files.

e-mail address 1 & 2

E-mail addresses to which e-mail alerts are sent.

mobile phone

The number of your cell phone to which SMS/text messages are sent.

IMPORTANT: As the watchdog server is located in the Netherlands you have to add your country code if your cell phone is registered in another country.

So if you own a UK cell phone, input your mobile number as **+44** 1 2344 5678.

date format

The format the Watchdog web interface displays dates.

all e-mail & sms warnings OFF

A master switch to temporarily disable all messages to you.
Very convenient when you're off duty and during vacations.

show logs in reverse order

If you want the most recent events to be displayed in the logs first, check this option.

Settings - continued

Watchdog Monitor

by Karel van Cooten Producties BV

user: Johnny English
group: demo

15:50:59

return

personal

user name **demo** change password

full name all e-mail & sms warnings OFF

function show logs in reverse order

e-mail address 1 send email messages as plain text

e-mail address 2

mobile phone use small buttons on monitor screen

date format

--- Alarm Settings ---

	action	browser alarm	
on lost/re-established network connections	<input type="text" value="no warnings"/>	<input type="text" value="none"/>	<input type="button" value="play"/>
on watchdog disable or enable	<input type="text" value="e-mail & SMS"/>	<input type="text" value="none"/>	<input type="button" value="play"/>
on silence detection and signal restore	<input type="text" value="SMS"/>	<input type="text" value="none"/>	<input type="button" value="play"/>
on missing/reappearing backup signal	<input type="text" value="e-mail"/>	<input type="text" value="none"/>	<input type="button" value="play"/>
on GPI alerts	<input type="text" value="e-mail & SMS"/>	<input type="text" value="none"/>	<input type="button" value="play"/>

send email messages as plain text

Normally e-mail messages are sent as HTML-messages with embedded server located images. If your e-mail client has troubles with these kind of e-mail messages, you can force -mail messages to be sent as plain text by checking this option.

Use small buttons on monitor screen

By checking this option you can decrease the height of the buttons by 50%. By doing so you can accommodate twice the number of devices on your monitor screen.

In the section Alarm Settings you can select which AW-4 events will generate e-mail and/or SMS/text messages. Moreover you can choose sounds to be played on your workstation. Of course you must have the Watchdog monitor screen open in your internet browser for this.