



SmartWatch® Eco/Eco Compact

Digital Video Recorders



SmartWatch® Eco



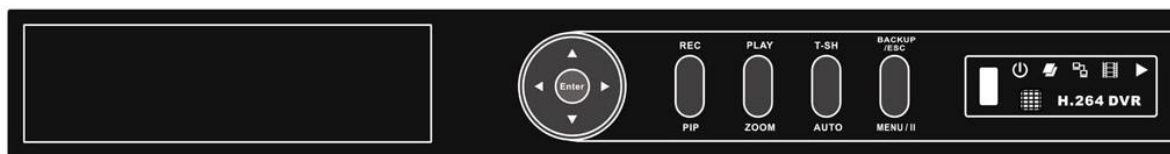
SmartWatch® Eco Compact

Quick User Guide

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Box Contents



1. DVR



2. Quick User Guide



3. IR Remote Control



4. Batteries x 2



5. CD



6. Power Adaptor



7. Power Cord



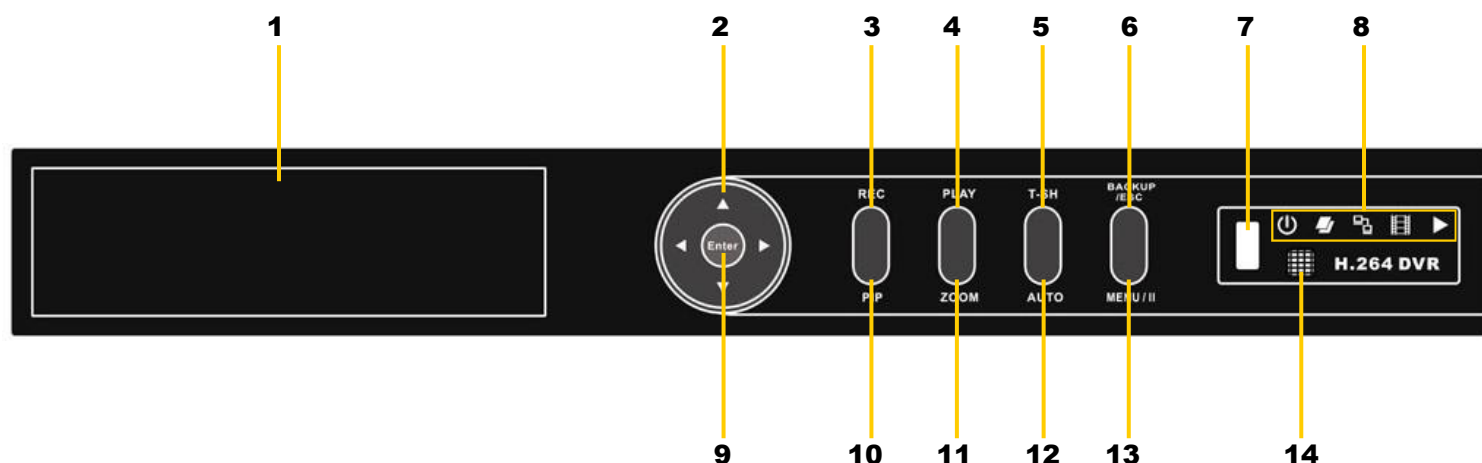
8. 25 Way Connector
(8 / 16 channel models only)

SmartWatch Eco Compact - Front Panel Controls



1	Power LED	Power status
2	LAN LED	Connected to the internet (<i>green</i>). Remote user logged in (red).
3	Play LED	DVR is in playback mode
4	Record LED	DVR is recording
5	IR Sensor	Input sensor for the remote control
6	USB Port	USB port

SmartWatch Eco - Front Panel Controls



1	DVD Writer	DVD-RW backup device
2	▼ / ■	In Setup mode, press to move cursor down. In Playback mode, press to stop.
	▲ / SLOW	In Setup mode, press to move cursor up. In Playback mode, press to slow down.
	► / ►►	In Setup mode, press to move cursor right. In Playback mode, press to fast forward.
	◄ / ◄◄	In Setup mode, press to move cursor left. In Playback mode, press to rewind.
3	REC	Start or stop recording (depending on schedule setup).
4	PLAY	Start playback (from start of current hour).
5	T-SH	Enter search menu.
6	BACKUP / ESC	In Live mode, press to display the Backup menu. In Setup mode, press to return to previous page.
7	USB Port	USB port
8	LED Display	⏻ : Power status.
		💾 : Hard Drive status.
		🌐 : Connected to the internet (<i>green</i>). Remote user logged in (<i>red</i>).
		🎬 : DVR is recording.
		▶ : DVR is in playback mode.
9	ENTER	In Setup mode, press to enter values. In Playback mode, press to switch between full screen quad, 9-channel & 16-channel displays.
10	PIP	In Live mode, press to display picture in picture.
11	ZOOM	In Live or Playback modes, press to zoom in digitally on images.
12	AUTO	Auto sequence display
13	MENU / II	In Live mode, press to display menu. In Playback mode, press to pause playback.
14	IR Sensor	Input sensor for the remote control.

Remote Control Functions In Live Mode





















Press DVR1 on the remote control to enable it

Button	Description
REC	Start or stop recording (depending on schedule setup).
PLAY	Start playback (from start of current hour).
LOCK	Lock DVR controls (password required).
1,2,3,4...	Select channel.
FREEZE	Freeze picture.
	Displays quad division.
	Displays 9-channel division (N/A on 4-channel DVR).
	Displays 13-channel division (N/A on 4-channel or 8-channel DVR).
	Displays 16-channel division (N/A on 4-channel or 8-channel DVR).
ENTER/MODE	Toggle between cameras and quad mode.
MENU /	Enter setup menu.
BK-UP/ESC	Enter backup menu.
SRH	Enter search menu.
MUTE	Mute live audio.
STATUS	Display DVR status.
OSD	Toggle the on-screen display.
ZOOM/ZOOM -	Digital zoom.
PIP/ZOOM +	Enter 'picture in picture' mode.
PTZ	Enter PTZ mode (when PTZ cameras are connected).
AUTO	Run camera sequence on main monitor.
DVR 1 / 2 / 3 / 4	Selects DVR to control when used on sites with multiple DVRs.











Mouse Functions In Live Mode









Right-clicking the mouse anywhere on the screen will bring up the following icons

Icon		Description
		Resting the cursor on this icon will bring up the following four menu icons.
		Enter setup menu.
		Enter search menu.
		Enter backup menu.
		Enter PTZ mode (when PTZ cameras are connected).
		Start or stop recording (depending on schedule setup).
		Start playback (from start of current hour).
		Resting the cursor on this icon will bring up the following five display icons.
		Freeze picture
		Enter 'picture in picture' mode.
		Digital zoom
		Run camera sequence on main monitor.
		Lock DVR controls (password required).
		Full screen display.
		Quad display.
		9-channel display.
		13-channel display.
		16-channel display.

On-Screen Graphical Icons In Live Mode

Icon	Description
	DVR is recording.
	Live audio is on.
	Live audio is off.
	Motion is detected.
	Sensor is triggered.
	Video loss detected.
	USB device detected.
	DVD burner is detected.
	Connected to the LAN cable.
	Film: Normal recording. Clock: Schedule recording.
	Auto sequence is on.
2X - 8X	Digital zoom level.
	Live screen is paused.
	DVR is locked.
	PTZ.
	HDD status (99% used).
	Current time display (can be repositioned)

On-Screen Graphical Icons In Live Mode When Connected Through 'DVR Remote Desktop'







Icon	Description
	Transmit at high / low quality.
	Full screen / half screen display.
	Record locally.
	Take snap shot.
	Set up path for saving recordings and snapshots.
	Enable / disable shortcut toolbar.

DVR Login

To enter the DVR menus, a user name and password are required. The default password for the administrator is '123456'.





Virtual Keyboard

Item	Description
	Switch between capital and small letters.
	Switch between numbers and letters.
	Press to cancel the setup, and re-choose the login account.
	Delete the last character.
	Press to enter the password. If the password is correct, the required menu will open.
	Space key.

Search Mode

To enter search mode:

- Press T-SH on the front panel
- Press SRH on the remote control
- Click  followed by  when using the mouse



Select 'Event Search' to search by event or 'Time Search' to search by time/calendar

Search Mode

Event Search:

The DVR will automatically log events with event type, time and additional information (e.g. channel, user). If there is recorded data for an event, a yellow signal (▶) will be displayed on the left side of event information. Press 'Enter', or left click your mouse to playback the recorded data.



Item	Description	
Date/Time	Date/time when the event occurred.	
Event Type	Event type, defined as follows:	
	Motion	Motion detected
	Sensor	Sensor detected
	Video Loss	Video loss
	Remote Login	User logged in over the network
	Remote Logout	User logged out over the network
	Power On	DVR powered on
	HDD Full	HDD full
	HDD Error	HDD error detected
	Reboot	DVR rebooted
Info	The channel on which the event occurred or the user responsible for event.	

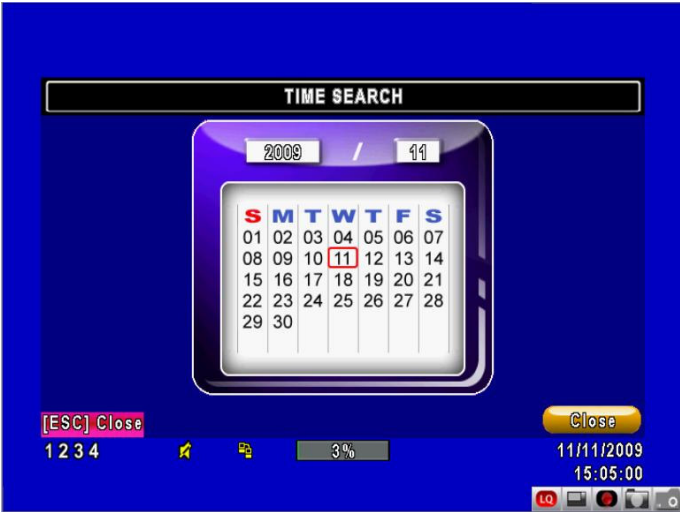
Event Search - Criteria:

It is also possible to filter the search results by selecting the criteria icon. The search can be filtered by date, time, event type and channel.

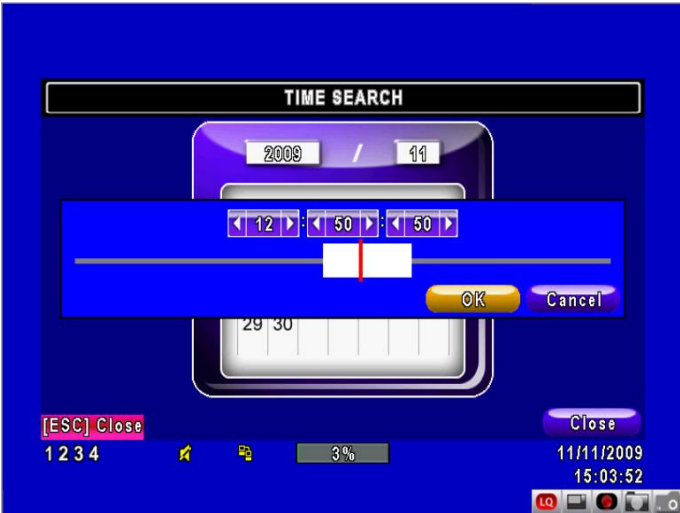


Time Search:

Time search will allow you to search for data from a specific date and time. Press 'Enter' or left click on the desired date (note that dates with recorded data are marked with a red square).



The time bar will now load.



Now enter the required time. Click OK and the recorded data will start playing.

File Search:


When a USB device is connected to the DVR, the file search option can be used to search through any recorded data that has been backed up to the USB device.



Select the required file to search through the recorded data.

Playback Mode










To enter playback mode:

- Press PLAY on the front panel
- Press PLAY on the remote control
- Click  when using the mouse

Remote Control Functions In Playback Mode

Button	Description
ENTER/MODE	Switch between full screen, quad, 9-channel and 16-channel displays
MENU /	Pause playback
PLAY	Play back at normal speed
▲ / SLOW	Slows playback by 1/2, 1/4, 1/8 or 1/16
◀ / ◀◀	Rewind playback at 2X, 4X 8X, 16X, 32X and 64X speeds
▶ / ▶▶	Fast forward playback at 2X, 4X 8X, 16X, 32X and 64X speeds
▼ / ■	Stop playback


Mouse Functions In Playback Mode

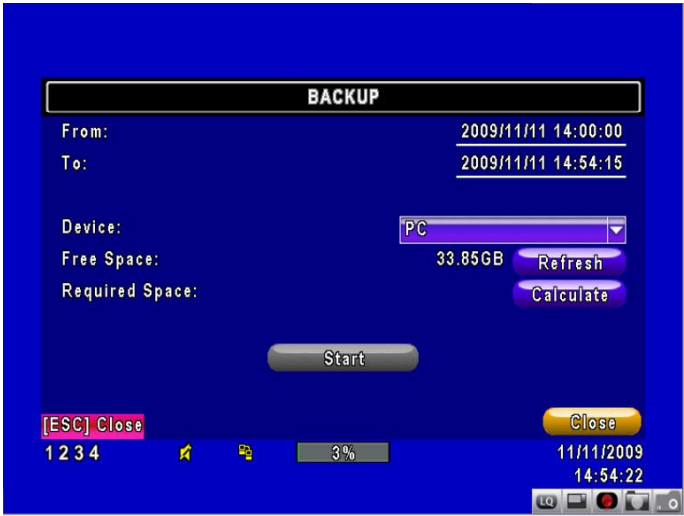
Icon	Description
	Rewind
	Fast forward
	Play / pause
	Slow playback
	Stop playback
	Playback frame by frame
	Full screen display
	Quad display
	Digital zoom in playback

To display a single camera on the full screen in playback mode, double left click it on the multi-camera display. To revert back to the multi-camera display, double left click again.

Backup Mode

To enter backup mode:

- Press BACKUP / ESC on the front panel
- Press BK-UP / ESC on the remote control
- Click  when using the mouse




Data can be backed up to a USB storage device or to a CD/DVD (on supported models)

Item	Description
From	Enter the required start time.
To	Enter the required end time.
Device	Select USB, or DVD as the backup device.
Free Space	Displays the available space in your backup device.
Refresh	Recalculate the available space in your backup device.
Required Space	Space required for backup.
Calculate	Calculate the size of backup file.
Start	Start backup operation.

Note: Be sure to calculate the size of backup file BEFORE beginning the backup. Do not unplug the USB device or turn off the DVR during the backup process. This will cause errors.

PTZ Control


To enter PTZ mode:

- Press PTZ on the remote control
- Click  when using the mouse









Remote Control Functions In PTZ Mode

Button	Description
▲ / SLOW	Move PTZ up.
▼ / ■	Move PTZ down.
◀ / ◀◀	Move PTZ to the left.
▶ / ▶▶	Move PTZ to the right.
ZOOM +	PTZ zoom-in.
ZOOM -	PTZ zoom-out.
FOCUS +	PTZ focus-in.
FOCUS -	PTZ focus-out.
IRIS +	PTZ iris-open.
IRIS -	PTZ iris-close.
TOUR	Activate PTZ preset tour (when preset is programmed).
PRESET	To save a preset location, move the camera to the desired scene, press PRESET and a number key. This will save this scene as the preset number selected e.g. to save a scene as Preset 1, press 'PRESET' and '1'.
PLAY + NUMBER	To call a preset, press Play and the number of the desired preset.

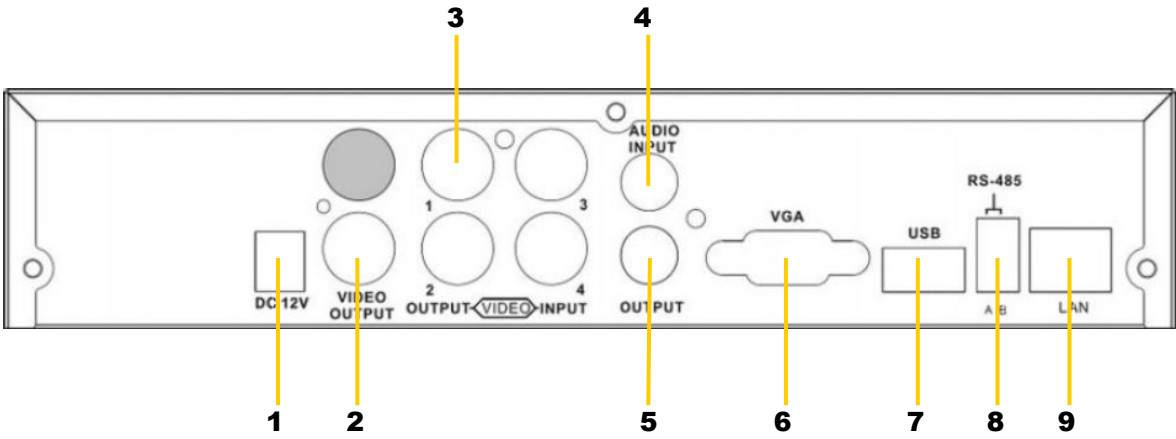
Mouse Functions In PTZ Mode

When the PTZ icon  is displayed in the upper left corner of the screen, the function icons will be displayed in the lower right corner of the screen. These can be dragged around the screen using the mouse.



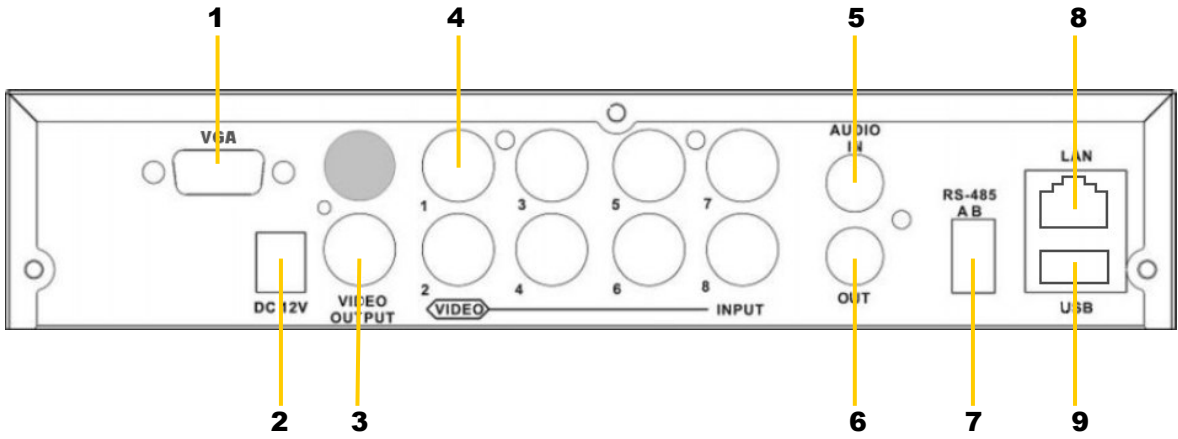
Icon	Description
	Exit PTZ Mode and return to Live Mode.
	Preset number N (1~64).
	Go to preset number N.
	Set current PTZ location at preset number N.
	Move PTZ in 360°
	PTZ zoom in; PTZ zoom out
	PTZ focus in; PTZ focus out.
	PTZ IRIS open; PTZ IRIS close.

SmartWatch Eco Compact (4 channel) - Rear Panel Connections



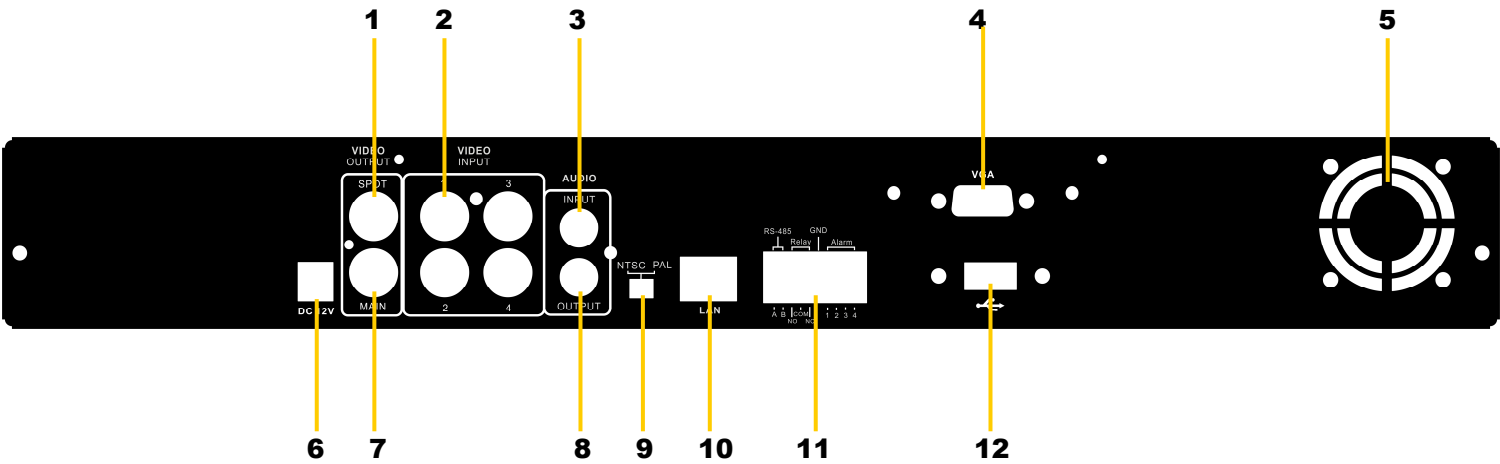
1	DC 12V	DC 12V input
2	VIDEO out	Main monitor output (BNC)
3	VIDEO in	Camera inputs
4	AUDIO in	Audio input
5	AUDIO out	Audio output
6	VGA	Main monitor output (VGA)
7	USB	USB port for connecting mouse
8	RS-485	RS-485 port for PTZ control
9	LAN	Ethernet port

SmartWatch Eco Compact (8 channel) - Rear Panel Connections



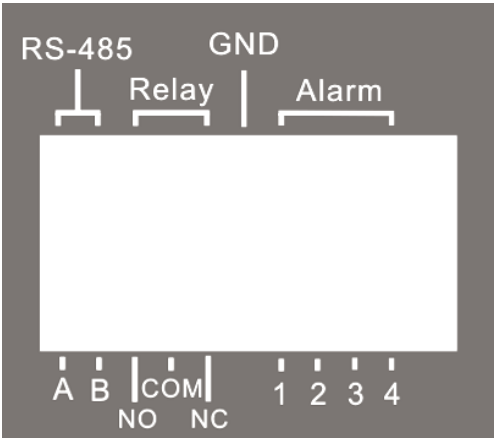
1	VGA	Main monitor output (VGA)
2	DC 12V	DC 12V input
3	VIDEO out	Main monitor output (BNC)
4	VIDEO in	Camera inputs
5	AUDIO in	Audio input
6	AUDIO out	Audio output
7	RS-485	RS-485 port for PTZ control
8	LAN	Ethernet port
9	USB	USB port for connecting mouse

SmartWatch Eco (4 Channel) - Rear Panel Connections

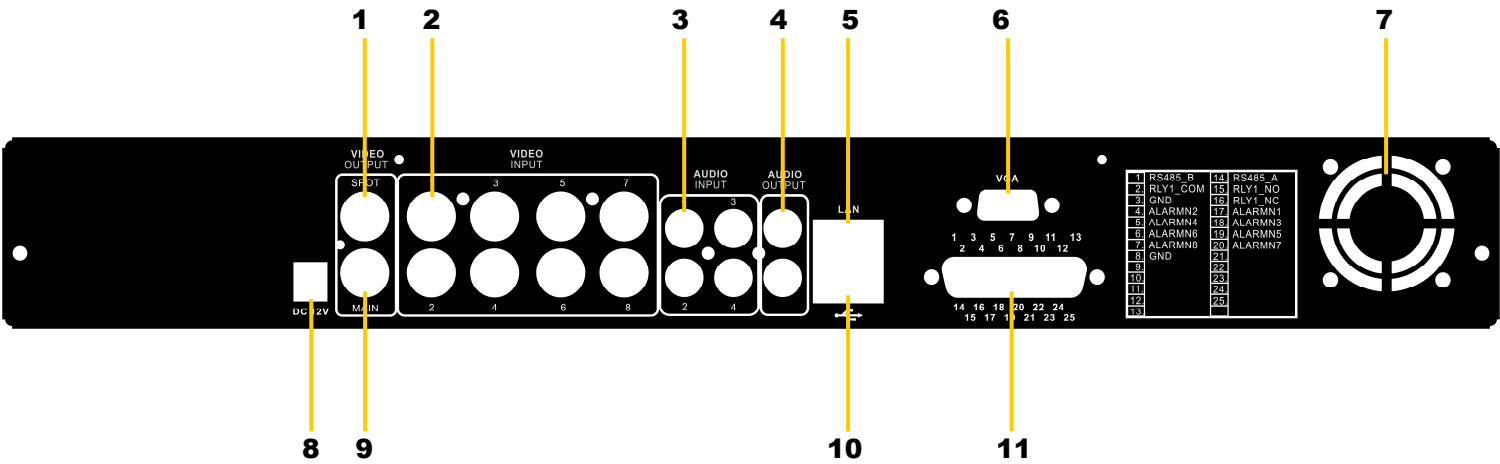


1	SPOT monitor	Spot monitor output (BNC)
2	VIDEO in	Camera inputs
3	AUDIO in	Audio input
4	VGA	Main monitor output (VGA)
5	Fan	Fan
6	DC 12V	DC 12V input
7	MAIN monitor	Main monitor output (BNC)
8	AUDIO out	Audio output
9	NTSC/PAL	Switch between NTSC and PAL format (make sure the switch is in the PAL position)
10	LAN	Ethernet port
11	External I/O	External I/O port (see below for pin layout)
12	USB	USB port for mouse connection

External I/O Pin Layout

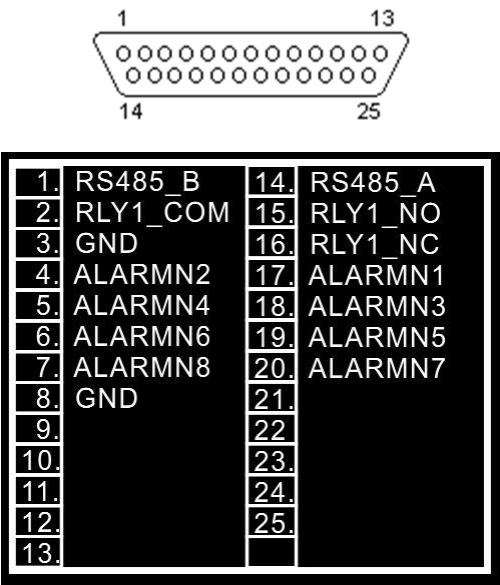


SmartWatch Eco (8 Channel) - Rear Panel Connections

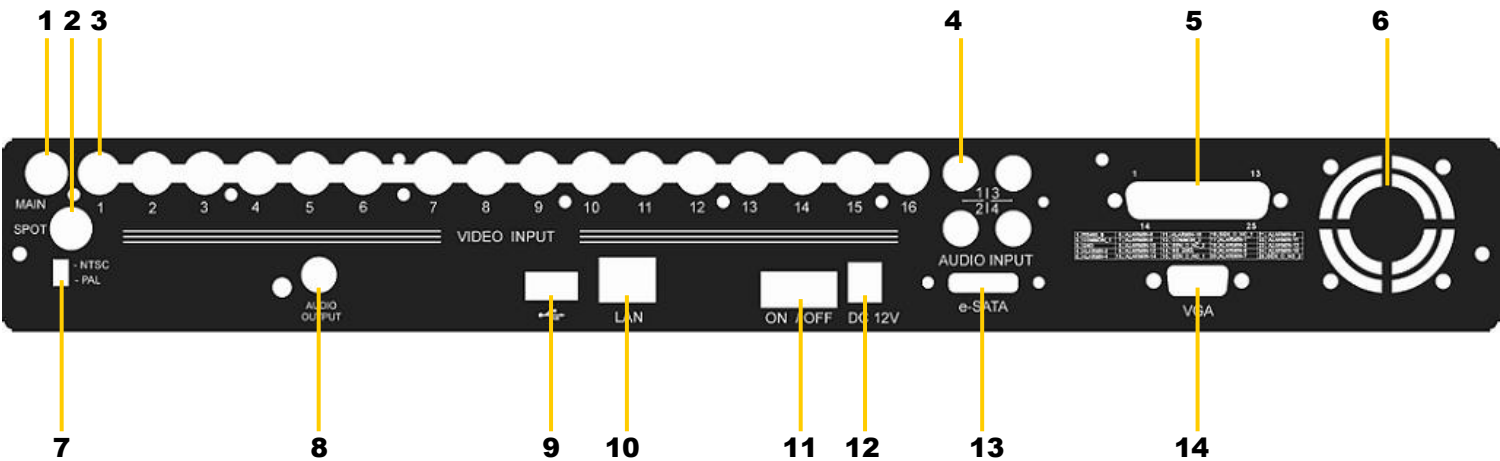


1	SPOT monitor	Spot monitor output (BNC)
2	VIDEO in	Camera inputs
3	AUDIO in	Audio inputs
4	AUDIO out	Audio outputs
5	LAN	Ethernet port
6	VGA	Main monitor output (VGA)
7	Fan	Fan
8	DC 12V	DC 12V input
9	MAIN monitor	Main monitor output (BNC)
10	USB	USB port for mouse connection
11	External I/O	External I/O port (see below for pin layout)

External I/O Pin Layout

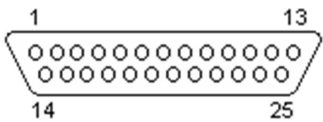


SmartWatch Eco (16 Channel) - Rear Panel Connections



1	MAIN monitor	Main monitor output (BNC)
2	SPOT monitor	Spot monitor output (BNC)
3	VIDEO in	Camera inputs
4	AUDIO in	Audio inputs
5	External I/O	External I/O port (see below for pin layout)
6	Fan	Fan
7	NTSC/PAL	Switch between NTSC and PAL format (make sure the switch is in the PAL position)
8	AUDIO out	Audio output
9	USB	USB port for mouse connection
10	LAN	Ethernet port
11	ON/OFF	Power switch
12	DC 12V	DC 12V input
13	e-SATA	External SATA hard disks port for external storage
14	VGA	Main monitor output (VGA)

External I/O Pin Layout



1. RS485 B	6. ALARMIN-6	11. ALARMIN-16	16. SEN O NC 1	21. ALARMIN-9
2. COMMON 1	7. ALARMIN-8	12. COMMON 2	17. ALARMIN-1	22. ALARMIN-11
3. GND	8. ALARMIN-10	13. SEN O NC 2	18. ALARMIN-3	23. ALARMIN-13
4. ALARMN-2	9. ALARMIN-12	14. RS 485A	19. ALARMIN-5	24. ALARMIN-15
5. ALARMN-4	10. ALARMIN-14	15. SEN O NO 1	20. ALARMIN-7	25. SEN O NO 2

