



# SmartWatch<sup>TM</sup>

## SWE Series

### SWE4/SWE8/SWE16 Series

## Quick Installer's Guide

The picture might differ according to the specifications.

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Thank You for purchasing Reliable Security Products Ltd. SmartWatch<sup>TM</sup>.  
Before operating the system, please read this User's Manual thoroughly and retain it for future reference.

The manufacturer reserves the right to revise and improve its products. Therefore the technical specifications are subject to change. No liability will be assumed for printing errors and other errors.

## CATEGORIES

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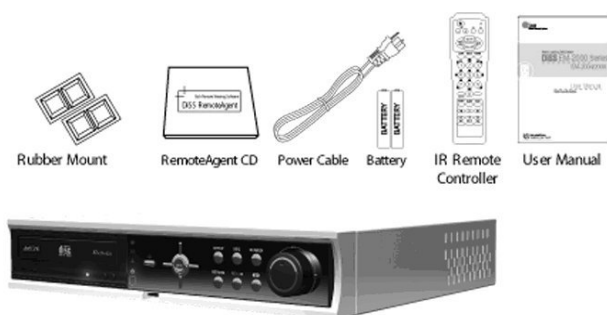
## 1. INTRODUCTION

The following set-up guide has been written in order to assist the installation engineer on setting up a basic recording system. It is not a substitute for the User Manual which should be read carefully. This quick set up guide should help the installer set up a basic recording system. Every installation's functional requirements will be different and therefore this quick setup guide will only go some way towards achieving this.

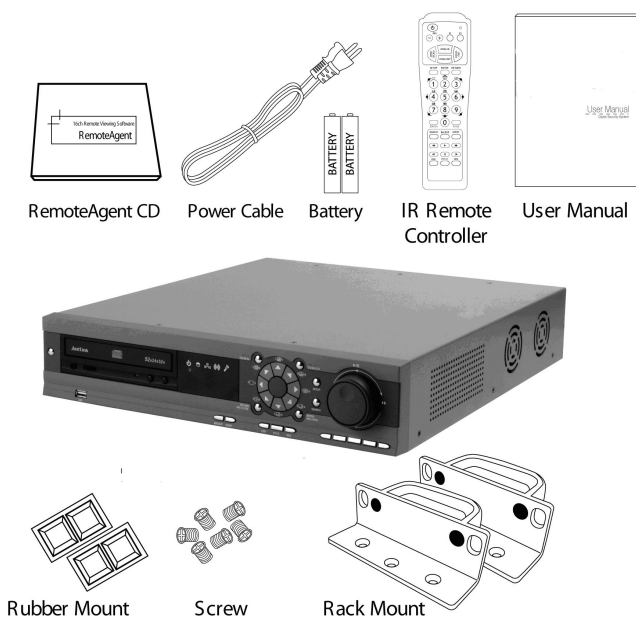
## 2. BOX CONTENTS

The following accessories are supplied with the SWE Series digital video recorder. If any of these items is missing or damaged, notify your dealer immediately. Keep the packing utilities for moving or storage purposes afterwards.

### SWE4 Series:



### SWE8 and SWE16 Series:



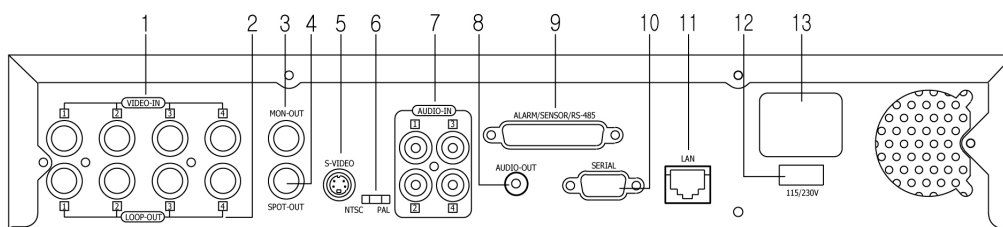
SWE4 Series		SWE8 and SWE16 Series	
Qty	Accessories	Qty	Accessories
1	User Manual	1	User Manual
1	IR Remote Controller	1	IR Remote Controller
1	RemoteAgent CD	1	RemoteAgent CD
1	Power Cable	1	Power Cable
2	Power Battery (AAA Size)	2	Power Battery (AAA Size)
1	Rubber Mount Set	1	Rubber Mount Set
		1	Rack Mounts and Screws

### 3. CONNECTING YOUR SMARTWATCH™ UNIT

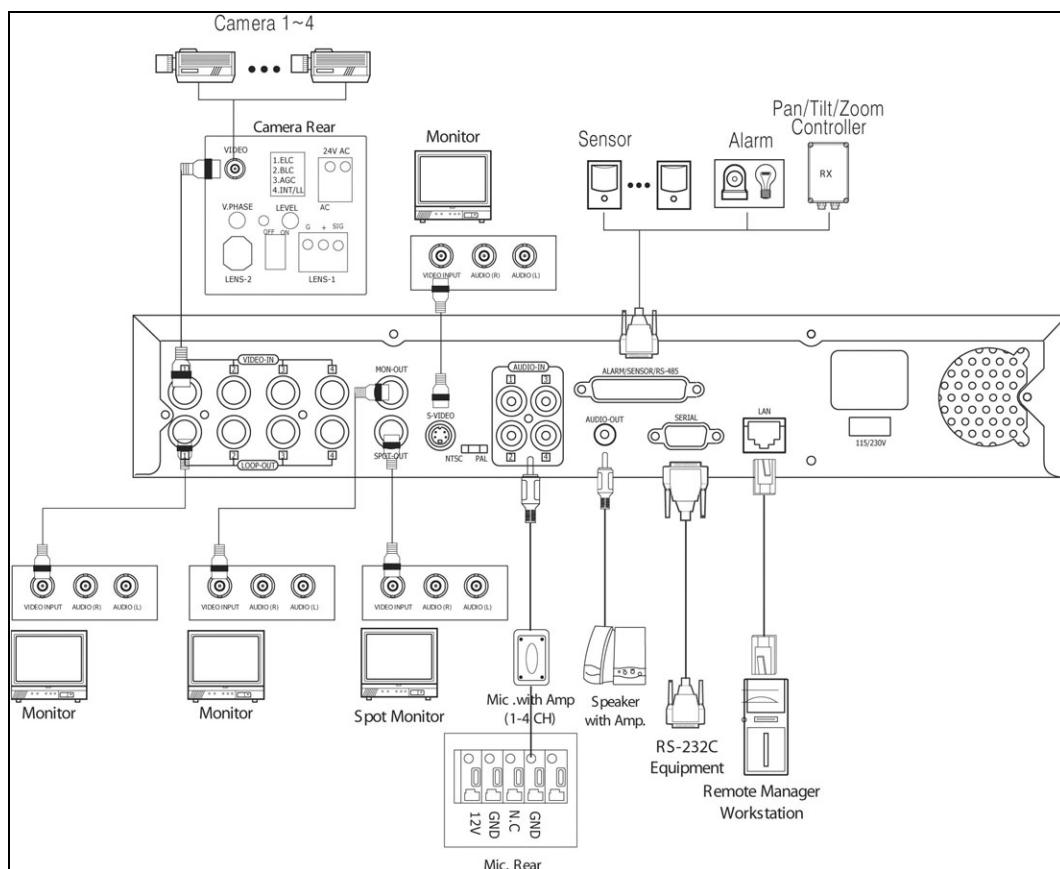
Install the SWE Series on a flat surface. If required, attach the rubber mount for installation. If a 19-inch rack is used, it is recommend to install the system on a shelf and use 2.5~3U (1U=1.75 inch or 4.45cm) space for proper ventilation.

**Note** Install the system in a location with good ventilation to prevent overheating.

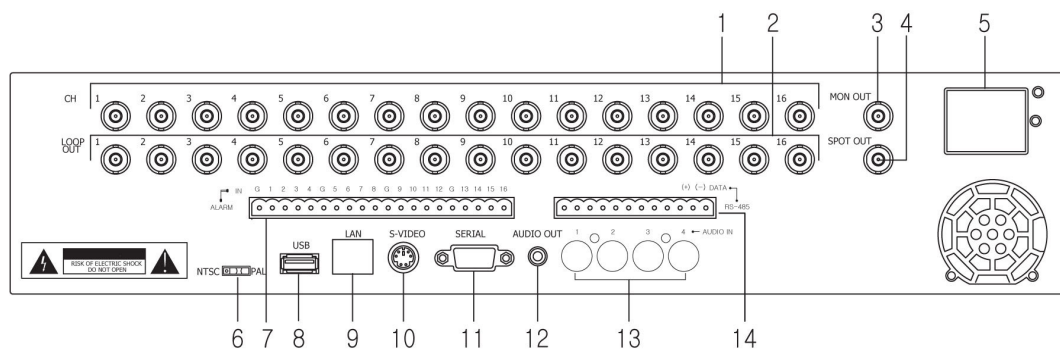
#### SWE4 Series



No.	Name	Description
1	VIDEO-IN (BNC)	Connect camera. (Supports NTSC/PAL)
2	LOOP-OUT	Camera images of each channel will be outputted as is. Also, used when the corresponding image is required for other product.
3	MON-OUT	Connect to the main monitor for camera image for surveillance/management/playback.
4	SPOT-OUT	Use to output the entire surveillance screen one by one, in an interval.
5	S-VIDEO	Connect to S-Video input terminal to output image of the main monitor.
6	Select NTSC / PAL	Select the signal system. (NTSC / PAL)
7	AUDIO IN	Connect Audio Input Device. (with Amp.)
8	AUDIO OUT	Connect Audio Output Device. (with Amp.)
9	ALARM/ SENSOR /RS-485	Terminal to connect external input sensor of 1~4 channel. (Supports N/O or N/C) Connect RS-485 signal output or relay for P/T/Z camera control.
10	SERIAL Port	RS-232 port
11	LAN Port	10/100 Ethernet connection terminals for remote connection.
12	Power Input	Power cable connection terminal for connecting to main power.
13	Power Switch	Switch to change input power. (115/230V)

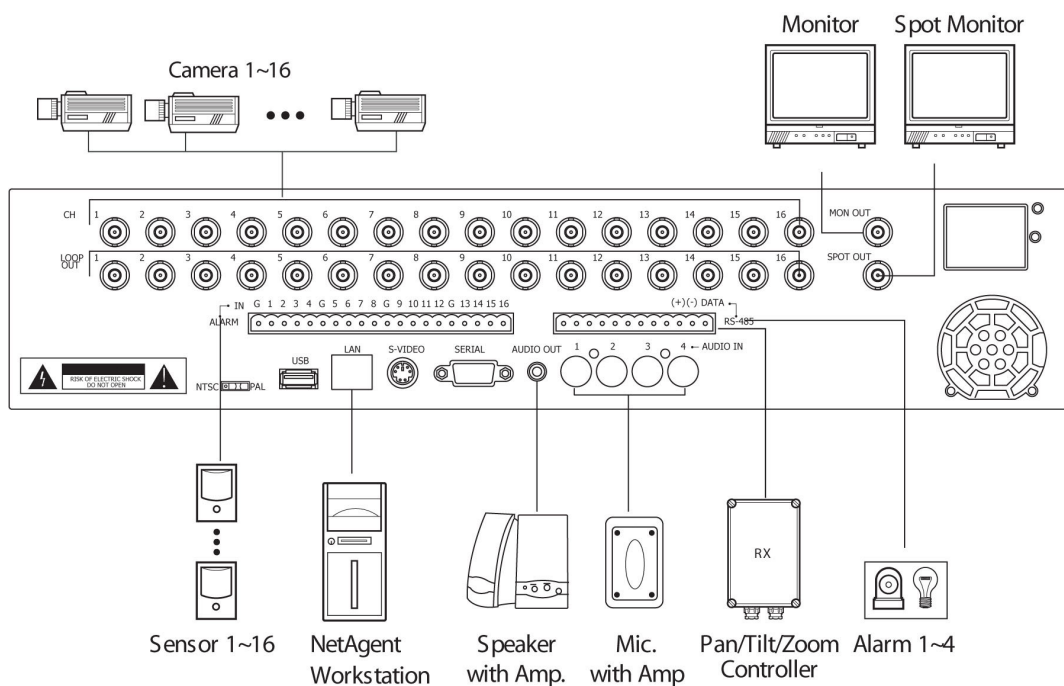


### SWE8 and SWE16 Series



No.	Name	Functions
1	Camera Input (BNC)	Connect to Camera (supports NTSC/PAL)
2	LOOP OUT	Camera images of each channel will be outputted as is (also used when the corresponding image is required for other product)
3	MON OUT	Connect to the main monitor for camera image surveillance / management / playback
4	SPOT OUT	Use to output the entire surveillance screen one by one, in an interval

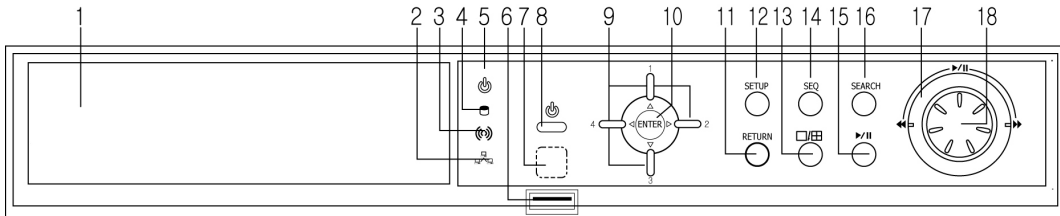
No.	Name	Functions
5	Power Input	Connect main power cable
6	Select NTSC / PAL	Select the signal system (NTSC/PAL)
7	SENSOR Input	Connect 1~16 external input sensors (supports N/O or N/C)
8	USB Port	Connect USB device
9	LAN Port	RJ-45 socket for 10/100 Ethernet connection
10	S-Video Output	Secondary main monitor output
11	Serial Port	RS-232C port
12	Audio Out	Connect Audio Output Device (with Amp.)
13	Audio In	Connect Audio Input Device (with Amp.)
14	Alarm Out / P/T/Z	Connect P/T/Z receiver(RS-485) and/or relays



## 4. YOUR SMART WATCH™ UNIT

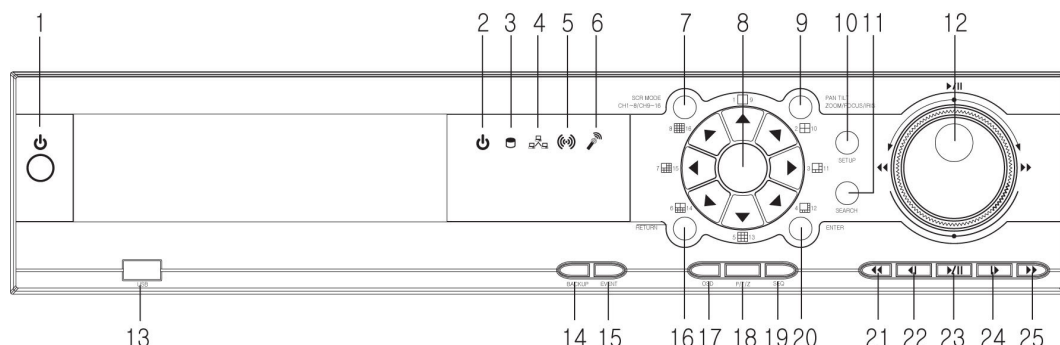
### 4.1 Front Panel

#### 4.1.1. SWE4 Series



No.	Button	Function
1	CD-RW	Built-in CD-RW for recorded image backup.
2	Network LED	The LED is lit while the network client(s) (RemoteAgent) is connected to the system.
3	Sensor LED	The LED is lit when an active input is triggered.
4	HDD LED	Shows if the camera image is being stored onto or retrieved from the HDD (Hard Disk Drive).
5	Power LED	Shows the Power status of the system. (GREEN: Working, RED: Stand-By).
6	USB Port	USB interface port for connecting external storage equipment.
7	Remote Controller Receiver	Receives input signal from the IR Remote Controller.
8	Power Button	Used to turn the Power On/Off.
9	Select Channel (1~4 CH)	Images of corresponding input channel are displayed when channel number above the arrow button is pressed. Used as cursor (for direction) in menu screen.
10	ENTER Button	Used to enter detail menu, go into the next stage, select or set value.
11	RETURN Button	Used to exit from the setting menu or to cancel setting value.
12	SETUP	A menu to enter setup mode.
13	Screen Mode Selection	Select between 1-screen mode and 4-screen mode.
14	SEQ Button	Automatic camera sequencing.
15	Playback	Playback recorded images.
16	Search	Search recorded images.
17	Shuttle	Shuttle (outer dial): speed up the playback speed of the image (1~32X).
18	Jog	Jog (inner dial): playback frame by frame.

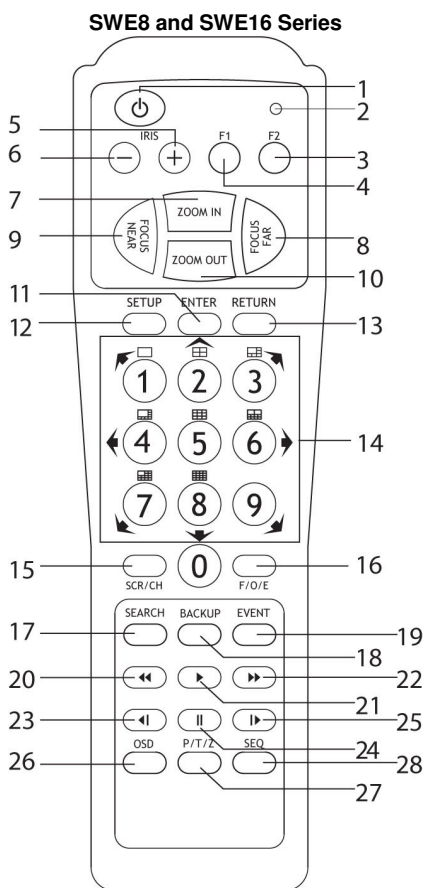
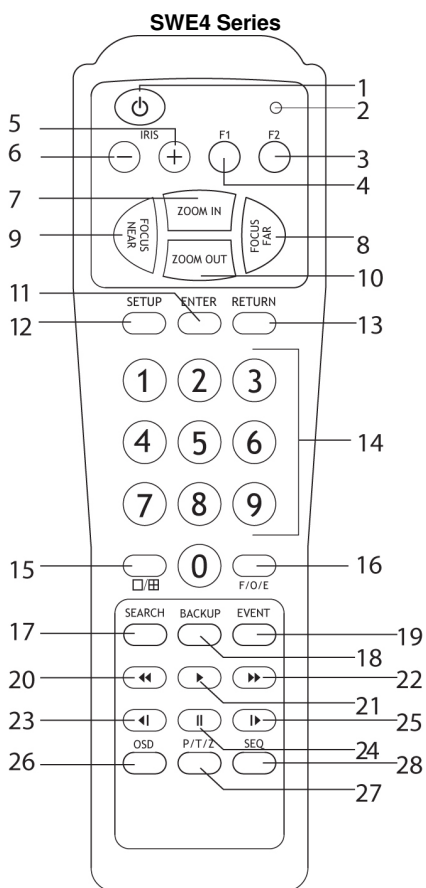
#### 4.1.2. SWE8 and SWE16 Series



No.	Buttons	Functions
1	Power Button	Use to turn the Power On/Off.
2	Power LED	Shows the Power status of the system (GREEN: Working, RED: Stand-by).
3	HDD LED	Shows if the camera image is being stored into or retrieved from the HDD (Hard Disk Drive).
4	Network LED	LED is lit while the network client(s) (RemoteAgent) is connected to the system.
5	Sensor LED	LED is lit when an active input is triggered.
6	Audio LED	LED is lit while audio data from audio input device is being recorded.
7	SCR MODE CH1-8/CH9-16	Button to select modes of the arrow buttons. Whenever the button is pressed, the screen will change to [1~8 channel mode], [9~16channel mode], or [multiple(split) screen mode]. The default mode is [multiple(split) screen mode].
8	Multiple Screen Mode Buttons (Arrow Buttons)	Buttons to select the multiple screen mode as printed, or for use as cursor keys.
9	PAN/TILT/ ZOOM/FOCUS/ IRIS	Button for Camera PAN/TILT/ZOOM/FOCUS/IRIS functions.
10	SETUP	Menu to enter setup mode.
11	SEARCH	Search recorded image.
12	Jog/Shuttle	Jog (inner dial): playback frame by frame. Shuttle (outer dial): Speed up the playback speed of the image (1~32X).
13	USB Port	USB interface port to connect external storage equipment.
14	BACKUP Button	Button to backup recorded images.
15	EVENT Button	Shows system's event log and event viewer to search image related to the event.
16	RETURN Button	Use to exit from the setting menu or to cancel setting value.
17	OSD Button	Button to control the OSD (On-Screen Display): date/time, camera title.
18	P/T/Z Button	For using P/T/Z functions of the camera.
19	SEQ Button	Automatic camera sequencing.
20	ENTER Button	Use to enter detail menu, go into the next stage, select or set value.
21	Fast Playback Backwards	Fast playback the recorded images backwards in the playback mode.
22	Playback Backward Frame by Frame	Playback the recorded images frame by frame backwards in the playback mode (playback only I-Frame)
23	Playback	Playback recorded images from playback menu.
24	Playback Forward Frame by Frame	Playback the recorded images frame-by-frame forward in the playback mode.
25	Fast Playback Forward	Fast playback the recorded images forward in the playback mode.



## 4.2 IR Remote Controller



No.	Functions
1	Power Button
2	Activating LED
3	F2 (Reserve Button)
4	F1 (Reserve Button)
5	IRIS+ (Open Iris)
6	IRIS- (Close Iris)
7	ZOOM IN (Decrease)
8	FOCUS FAR
9	FOCUS NEAR
10	ZOOM OUT (Increase)
11	ENTER
12	SETUP
13	RETURN
14	SWE4 Series: Select Number Button / Direction Key SWE8 and SWE16 Series: Select Number Button / Multiple Screen
15	SWE4 Series: Screen Mode Selection (1-screen mode / 4-screen mode) SWE8 and SWE16 Series: SCR / CH Button
16	F/O/E Button

No.	Functions
17	SEARCH Button
18	BACKUP Button
19	EVENT Button
20	Fast Playback Backwards Button
21	Playback Button
22	Fast Playback Forward Button
23	Playback Backward Frame by Frame
24	Pause Button
25	Playback Forward Frame by Frame
26	OSD Button
27	P/T/Z Button
28	SEQ Button

## 5. SETUP

Turn on the power of the DVR; watch the indicators on the front light up (the Power LED). When the unit is powered up for the first time, no user login password will have been configured. In this case, press the <ENTER> key to access the <USER> functions.

To enter the Setup Menu, press the [SETUP] button on the front panel or the IR Remote Controller. Use the arrow buttons of the front panel or on the IR Remote Controller to browse the Setup Menu. The entire system configuration is done using the System submenu.

In order for the system to record properly after being powered up, the following programming changes will be necessary:

1. date and time
2. ID for IR Remote Controller
3. recording picture size
4. number of recorded images per second if the recording is to be continuous or recording by motion only
5. administrator and user ID codes

To enter the Setup Menu, press the [SETUP] button on the front panel of the DVR (Note: the IR Remote Controller will not function at this stage as no ID has yet been programmed). You will be prompted to enter an administrator password. If this is the first time the unit has been powered up, just press the [ENTER] button. On the SWE4 Series, the [ENTER] button is the circular button at the centre of the 1, 2, 3, 4 keys. At this point the System Information will be displayed. Next press the [SETUP] button again.

The drop down box will be displayed. Use the left and right buttons to change between the different menus.

1. Setting the date and time.

Use the left arrow to move to the System programming menu. Use the up or down arrows until the Date and Time option is highlighted. Press the [ENTER] button. Press the [ENTER] button again and a line will appear under the date. Use the up and down arrows to change this value to the correct value. When this is done use the right arrow to move to the month, year, hour, minute and second. Change as required. When this is done press the [ENTER] key.

Now use the down arrow to go to Date Format, Time Format and Daylight Savings. Change where required by using the above method.

**When all the parameters in the above menu have been changed you must highlight the [SAVE] button and press [ENTER]. The done message will appear on the bottom left of the screen.**

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**Note** If the [SAVE] button is not pressed then the setting changes will not have been effected.

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## 2. Setting the ID for the IR Remote Controller

It is important at this stage to set the ID for the IR Remote Controller. Every function of the DVR can be controlled remotely by using the IR Remote Controller. Some functions on the SWE4 Series are easier to select by using it as dedicated buttons are assigned for each function.

To set the ID for the IR Remote Controller enter the System Setup and select the System tab. Highlight the General option and press [ENTER]. Highlight the IR Remote ID option and press [ENTER]. Use the up and down arrows to change the value. This can be from 1 to 99. In most cases this value will be 1, but the same IR Remote Controller can be used to control several DVRs. When the required value has been displayed, press [ENTER], then highlight the [SAVE] key and press [ENTER].

To program the IR Remote Controller with the required ID press the [SCR/CH] key and the [F/O/E] key at the same time. The red LED will come on. Now enter a two digit value. For the value 1, enter 01. The red LED will flash on and off for a few seconds indicating that the programming of the IR Remote Controller was successful.

## 3. Setting the recording picture size

To change the recorded image size, enter the Setup menu. Use the left and the right arrows to access the System menu. In the system menu highlight the General option and press [ENTER]. Press [ENTER] and a line will appear below the image size.

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**Note** A full explanation on the three image sizes available can be found in the User Manual.

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The image size relates to the resolution of the picture. This is the number of pixels in width x length which are used to display an image. This has a bearing on the overall recording duration and the quality of the images on playback.

The option 720x576 is the largest image size and will give the sharpest picture quality on playback. 640x288 will produce a softer picture on playback as will 352x288 produce an even softer picture.

When the required image size is selected by using the up and down arrows, press [ENTER]. When finished, **save** and press [ENTER].

## 4. Setting the number of recorded images per second

The required number of pictures to be recorded per second for each camera will need to be set. Enter the Setup menu and select the Camera tab. In the Camera menu select Recording and press [ENTER]. By default, the Recording Quality is set to 70. Any value less than 100 will cause the machine to record motion detection only. If continuous recording is required, then this value should be changed to 100. This is done by highlighting the Quality value and pressing [ENTER]. Use the up and down arrows to change accordingly.

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**Note** A full explanation of the Recording Quality can be found in the User Manual. This should be read and fully understood, as this will have a bearing on the storage time of the DVR.

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The number of pictures that each camera will record is calculated in Frames per Second (fps). The default values set are the maximum number of pictures possible relative to each image size. Once the image size has been set, then only the values for each camera for that image size need to be adjusted. For the purpose of calculating the maximum storage time, the value of one frame per second per camera is used. The installer must decide how many frames per second per camera should be set based on the operational requirements of the camera.

To change the number of frames highlight the existing value under the required image size and press [ENTER]. Use the

up and down arrows to change this value. When the correct value is displayed, press [ENTER]. Highlight [SAVE] and press [ENTER].

#### 5. Setting administrator and user ID codes

To set up a new Installation Administrator code and new user code, enter the Setup menu and select the System tab. Highlight the Passwords option and press [ENTER]. There are three levels of password. The Admin level is the administrator of the system and allows access to all options in the setup menu. The User level is for the day to day user of the system. This user level allows the user to change cameras, select single or multi screen option, view playback, etc.

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**Note** If you are programming a code for the first time, then skip the Old Password box and just enter New Password and Confirm it. This is the same for the Installation Administrator, User and Network codes. See the User Manuel for more details.

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Installers can either input or change the setting values listed in the table below once a valid administrator password is entered.

Main Classification	Sub Classification	Setting Category	Explanation
System	General: Set general operating conditions for the system.	Image Size	Select the recording resolution.
		Page Sequence	Set sequencing period when the automatic screen sequencing mode is selected on the main monitor.
		IR Remote ID	Set IR remote controller ID.
		P/T/Z Protocol	Set the protocol to control the P/T/Z camera connected to P/T/Z port on the back panel.
		Spot-out Dwell	Set the dwell time for the spot monitor image output, connected to the system.
	Date and Time: Set the time and date of the system.	Date and Time	Input the current time and date accurately since this is the time that will be attached to the recorded image for that instant in time. If the time is incorrect then the integrity of the system could be compromised.
		Date Format	Set the date display format.
		Time Format	Set the time display format.
		Daylight Savings	Select the daylight saving time for each country.
	Networks: Set the network environment of the system.	Connection Type	Select the connection type.
		Host Address (SWE4 Series) / IP Address (SWE8 and SWE16 Series)	Input the IP address assigned to SWE Series system.
		Subnet Mask	Subnet Mask address recognizes the subnet to which the system belongs.
		Default Gateway	This is the IP address of the network router or gateway.
	Passwords: Set passwords.	Admin	Set the <Admin> password.
		User	Set the <User> password.
		Network	Set the <Network> password to allow connections via the RemoteAgent software.
Camera	Recording: Set the general environment related to camera	Quality	Set the recording quality for the corresponding channel.

Main Classification	Sub Classification	Setting Category	Explanation
	usage.	720x576	Set the speed rate (frame per second) to record the image inputted through connected camera.
		640x288	Set the speed rate (frame per second) to record the image inputted through connected camera.
		352x288	Set the speed rate (frame per second) to record the image inputted through connected camera.
	Schedule: Set the recording schedule for the associated camera.	Record	Controls whether recording of the channel will be on or off.
		Mode	Setting the recording schedule after selecting the weekly recording mode.
		Start	Set the recording start time for the cameras.
		End	Set the recording end time for the cameras.
	Motion Area: Set the area and sensitivity of the motion detection.	Sensitivity	Set the motion sensitivity value.
		Centre	Center area of camera image will trigger recording.
		Full/User Area	Full area or user-selected area of the camera image will trigger recording.
	Title: Input or modify the channel name of the connected cameras.	Title	Input the camera title of selected camera.
	Colour: Set the brightness, contrast, color and tint of the connected cameras.	Brightness	Adjust the brightness (shades) of the channel.
		Contrast	Adjust the contrast, which is the ratio of brightness to darkness of the image.
		Colour	Adjust the color density.
		Tint	Set the color hue of connected cameras.
	Audio & P/T/Z: Set the camera audio and P/T/Z environment.	Audio	Select whether to use audio recording.
		Aud-CH	Select the audio channel to use among the 4 audio input channels.
		P/T/Z Address	Set the P/T/Z dome address of the connected camera.
Alarm	Alarm Input: Alarm-activated recording.	Camera	Select which camera the alarm recording will trigger.
		Start	Select the sensor start time to set the sensor-operating schedule.
		End	Select the sensor end time to set the sensor-operating schedule.
		Type	Select the sensor type.
	Alarm Output: Set alarm actions regarding recording and relay output.	Relay	Select the relay number to operate.
		Alarm Mode	Select either Set or Duration depending on the desired alarm action.
		Dwell	Set the period for which the alarmed camera will be recorded and the relay output turned on.
	Pre Alarm: The alarm is activated and the images will be recorded before the point of alarm.	Pre Alarm	Decide whether to use the Pre Alarm function.
		Record Duration	Set the recording time for the image with Pre Alarm activating.

Main Classification	Sub Classification	Setting Category	Explanation
Tools	System Information		Signal System, Software Version, Hardware Version, HDD Usage, IP Address, MAC Address, Daylight Saving, Network Connection
	System Upgrade		
	Event Viewer (only for the SWE4 Series)		
	Data Backup (only for the SWE4 Series)		
	Factory Default: Return to the default factory setting.		
Quit	Log Off		
	Close Menu		

## 6. REMOTE AGENT SOFTWARE

Install the RemoteAgent Software on the PC where you want to view the DVR images. You can connect to the DVR via LAN or DHCP (only for the SWE4 Series).

To make the connection to a DVR, first you have to register the DVR. Click the [CONNECT] button or right click and chose Open Site/File (CTRL+O). The Site/File Open dialog box will appear. To add and register a new site, select [ENABLE] and then click the [Add] button. You will be asked to enter the following information: connection type, site name, server IP, user ID, password, channel, description and hot key. After you entered all this information, click the [OK] button and the site (DVR) will be registered with the Remote Agent.

To connect to a registered DVR (site), click the [CONNECT] button on the upper right side of the Screen. All the registered DVRs (sites) will appear in the Connect Panel on the Screen. Choose the one you want to connect to and drag it to one of the channel screens. You can also right click on a channel screen and choose Open Site / File (CTRL+O). The Site/File Open dialog box will appear. Choose the site you want to connect to and click [OK].

For more information see the RemoteAgent User Manual.



NO.	Functions	Description
1	Channel Screen	Display current or registered images from selected channels (maximum 16 channels) on the split-screen mode.
2	Event Panel/Intelli-Search Panel	Register the User IP to the connected DVR and shows each event on the DVRs (system booting, recording system, stop recording, etc.).
3	Date/Time Indicator	Show the date and time of the PC operating the RemoteAgent.
4	Connect/Disconnect/ Close all Channels	Used to connect, disconnect or close all channels of registered DVRs.
5	Two Way Audio	Used for audio communication between the remote registered site and the PC operating the RemoteAgent. Both need microphones and speakers.
6	Connection Panel/PTZ Panel/Relay Panel	Chose between Connection Panel, PTZ Panel and Relay Panel.
7	Remote Playback Panel	The user can search DVR recorded images using the remote playback panel.
8	Tools Button	Includes environment setting such as Options, Print Image, Back-up Image and exit application.