

DR-DR-2K4 2K8 digital Video recorders



INTRODUCTION

One of the main purposes for which it prepares a video surveillance system is the ability to video-record images continuously in order to keep clear track of every happened. Until a few years ago, the only devices capable of performing this function were the VCR cassette in so-called TIME-LAPSE versions for extended recording. Digital video recorders

They are the natural
Digital evolution of these and allow their analog ancestors in
them a large number of
advantages.

Some advantages of digital registration in respect of the videotape recording

Images unchanged in time - I
analog video recorded on a magnetic support delicate and perishable,
such as there
videotape. The Time-Lapse models, which record

often in a continuous manner, subjecting the cassette to high wear which requires continual replacement of the cassettes whose quality deteriorates at every overwriting. A digital recorder instead of recording to hard disk, or on a computer disk that does not require maintenance and ensures outstanding image quality over time.

○ **No maintenance** - The analog video recorders are based on mechanical organs of very delicate precision. If this can not be a defect in the normal domestic use, it certainly becomes the record

uninterrupted, where you will need
provide regular maintenance for the replacement of consumable parts. Digital video recorders do not have this problem and require no scheduled maintenance over time.

○ **Images smooth, stepless** - The
videotapes used in analog video recorders may contain 180 minutes actual recording REAL-TIME. To stand on the support 24, 48 or more hours of recording time, the TIME-LAPSE VCR recording fewer frames than the 25 frames per second required by the PAL video format. This results in images "jerky" very unpleasant. Digital video recorders instead use a medium such as the hard disk, much more spacious than a videotape and can record several days of images allowing for smooth viewing.

○ **Management of more cameras** - A
analog VCR has only one video input. To connect more than one camera to a VCR is necessary to use a multiplexer. This shall be recorded on a cassette frame for each camera in sequence, in order then to review each camera individually. The use of the multiplexer multiplies the problem of "jerky video" described above, as divided by 4, 8 or more, the number of frames / second registered (depending on how many cameras must manage). The multiplexer is also an object rather expensive. Digital video recorders DR-DR-2K4 and 2K8, provide yourself with managing multiple video inputs, without the need for expensive equipment and without affecting the fluidity of images.

○ **software Features** - The use of microprocessors
high level, makes digital video recorders DR2K4 / 2K8 able to perform advanced functions, not feasible with analog systems, such as motion detection, alert generation and transmission to remote PC images via TCP / IP.

○ **Simple management video clips** - I
Digital video recorders allow you to manage large video files finding the images of interest quickly. In analog video the need to unwind and rewind the tape makes viewing images and search for relevant episodes, much more uncomfortable.

Digital Video PC-based and stand-alone

There are two solutions for to achieve a video recorder digital: use a PC (PC-based video recorders) or use a specific device (called Stand-Alone) as DR-DR-2K8 and 2K4 models. THE

PC-Based recorders use digital PC hardware, which are installed one or more capture cards

such as, to example, The cards D-Vision. The functions of recording are controlled using software that uses the PC's operating system (Windows or Linux). **THE VCRs Stand alone** DR-DR-2K4 and 2K8 are specially constructed machines for digital recording. We see the advantages and disadvantages of the two solutions:



Main advantages of stand-alone digital video recorders DR-DR-2K4 and 2K8

- **Greater Stability** Operating in long periods due to non-use of external operating systems such as Windows or Linux, even version embedded.
- **Greater reliability of the compression** Static JPEG2000, against the dynamic compressions as MPEG4.
- **Possibility of installation in harsh environments,** where a PC would pose problems in commissioning works and operation.
- **No configuration to perform.** The VCR immediately ready for work without requiring any computer skills.
- **Does not require Mouse and keyboard**
- **THE 'Power 12VDC** allows battery power and use even on vehicles or wherever it is not available on 220V.
- Inability to manipulate images with video editing programs for computers. Greatest **worth trying** recording, as unalterable

Main advantages of PC-based digital video recorders

D-Vision

- **More comfortable viewing of long periods** - Thank you the use of scroll bars for quick viewing.
- **More Software Functions** - Video recorders D-Vision-based PC, allow more programmable software functions through windows menu
- **Greater Compression and then longer periods of registration for equality of Hard Disk** capacity, thanks to dynamic compression algorithms.
- **Management of audio inputs**

GENERAL CHARACTERISTICS

- **Compression** JPEG2000, the latest technological developments in video compression for standalone video recorders. Increased compression and higher quality video compared to MJPEG compression used by previous models C4-DR / DR-C8 and a majority of competing products.
- **Management of 1 or 2 Hard Disk** interiors of any size and brand, without the need for any prior formatting. **Management of 4:08 video inputs.** Each camera input has an output correlated to connect the recorder to other downstream devices.
- **Management of 4 audio inputs.**
- **watching multiple cameras simultaneously** screen by dividing it into quadrants of the monitor display in **scan cyclic** cameras possible to bring all **full screen camera** with the push of a button
- **programmable Superimposing Date, time and name** of the camera. Function **PIP** for displaying a camera to full screen and scans the remaining in superimposed pane.
-
-
-
-
- **Function freeze** for the movie frame by frame analysis function **quick play** for quick review of the last two minutes
- registered
- **Jog shuttle.** Rotary knob for the Advancement of precision of the movie forward / backward
- **High resolution** image (720x288)
- **Super-quality video playback** thanks to the new JPEG2000 compression
- **Video fluid and smoothly** DR-2K4: 50 frames / second of acquisition and 100 in DUAL mode. DR-2K8: 100 frames / second of acquisition and 200 in DUAL mode.
- operation **TRIPLEX** It can not stop recording or during playback to remote access.
- **Digital zoom 200%** when viewing the recording and during the monitoring. Different **Recording mode:** continuous, programmed in the calendar, as a result of external alarm and as a result of motion detection. Possibility to stop recording no space or overwrite the oldest images.
-
- **Motion Detection** settable for each camera individually. E 'can set the' sensitive area for each camera. different parameters are available for the elimination of false alarms.
- alarm Memory
- Protection **password** for access to functions of the VCR (10 user programmable)
- **Calendar** with programmable holidays
- **remote access** Via TCP / IP LAN network using remote control software. Network ready for. immediate access to the network without the need for additional equipment. E network configurable parameters
- automatic assignment of support from the server TCP / IP addresses **DHCP supply 12VDC.** 220V adapter supplied.
-
- **Dual monitor output and VGA output optional** to connect any PC monitor. Door **RS485** for the PTZ camera control (Speed Dome cameras). Available common protocols
- **Serial port RS232** to control the VCR through an external device (ASCII commands) Porta **USB** Front for connection to PC and firmware update port **ETHERNET** for connection to PC or LAN
-
-
- **burner** Built-in CD / DVD movies for backup can be connected **alarm inputs (sensors)** individual for each camera
-
- **Alarm output** in exchange for the activation of external devices (eg. siren) in case of alarm detected by a sensor or by the motion detection
-
- **Buzzer** Internal associated to different events.
- **TV remote** infrared
- **Software** Fins for remote connection provided for mounting **19 "rack (2**
- units)

USER MANUAL

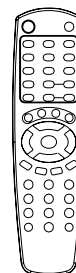
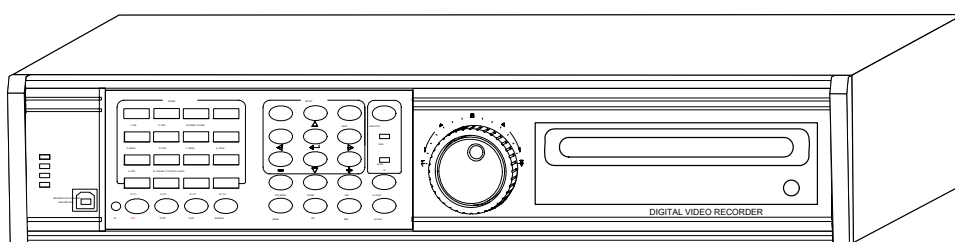
DIGITAL VIDEO DR-DR-2K4 2K8



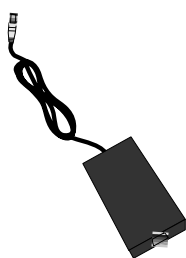
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IN THE BOX

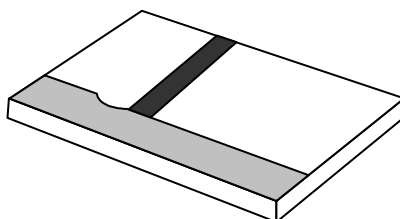


2. Remote Control

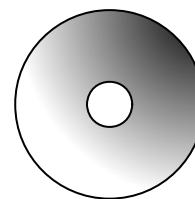


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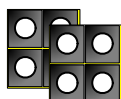
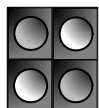
3. Feeder



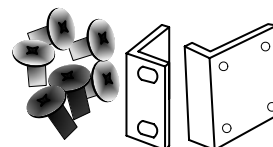
4. Manual



5. CD with software



6. Rubber feet 7. Damping HDD 8. Batteries for remote control

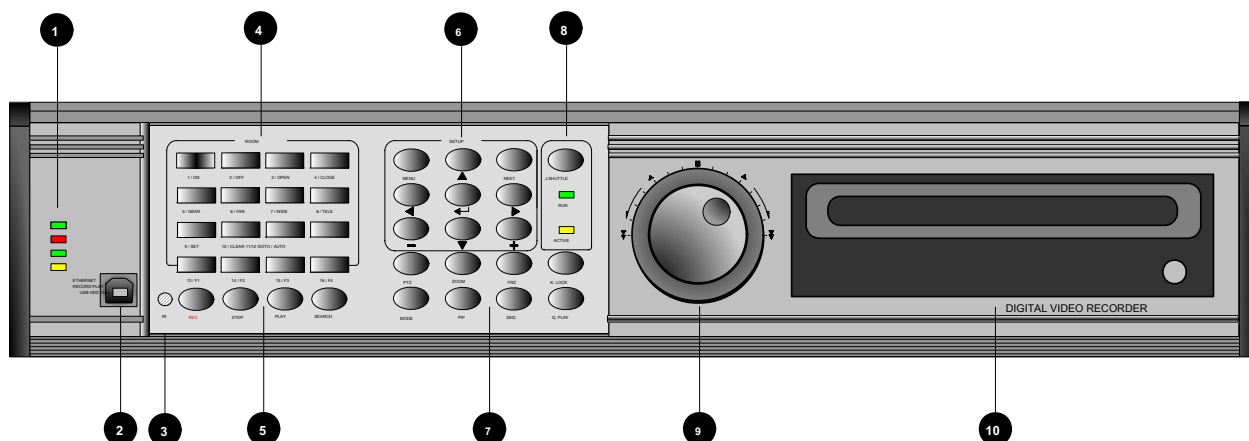


9. Mounting Accessories Rack

Package Contents

1. digital Video Recorder
2. TV remote
3. Power supply 220VAC 12VDC with connecting network cable
4. Manual in Italian
5. CD with remote PC connection software
6. Legs to be applied to the DVR base to prevent it from slipping on the support plane
7. To be used between HDD and VCR according to absorb vibration
8. Batteries for remote control
9. Brackets for mounting in a 19 "rack with screws - Screws for fixing Hard Disk

FRONT CONTROLS



1	LED	They show the status of the DVR (Record-Playback-remote-access HDD full)	
2	USB Port	USB port for connection to a PC, also portable, to be used for firmware upgrade.	
3	Infrared	Infrared receiver for remote control	
4	Choice and control Speed Dome cameras	Push-button 16 button to display fully the corresponding camera screen.	
		The same panel is used to control the movement of any speed-dome cameras in accordance with the following table	
		• ON: LIGHT ON	• September: SET PRESET
		• OFF: LIGHT OFF	• CLEAR: CLEAR PRESET
		• OPEN: IRIS OPEN	• GOTO: GOTO PRESET
		• CLOSE: IRIS CLOSED	• AUTO: AUTO SCAN
		• NEAR: FOCUS NEAR	• F1: USER 1
		• FAR: FIRE AWAY	• F2: USER 2
		• WIDE: ZOOM IN	• F3: USER 3
		• TELE: ZOOM OUT	• F4: USER 4
5	Recording Playback	REC	Emergency Record 50 f / sec
		STOP	End emergency recording and return to Schedule Record
		PLAY	Movie Playback
		SEARCH	Movies Search
6	Set up	MENU	Access to the programming menu
		ENTER	Confirmation data in the programming menu
		NEXT	Go to the next step.
		UP DOWN LEFT RIGHT	Navigating the programming menus
		+ -	Reduce or increase the values in the programming menu

USER MANUAL

DIGITAL VIDEO DR-DR-2K4 2K8

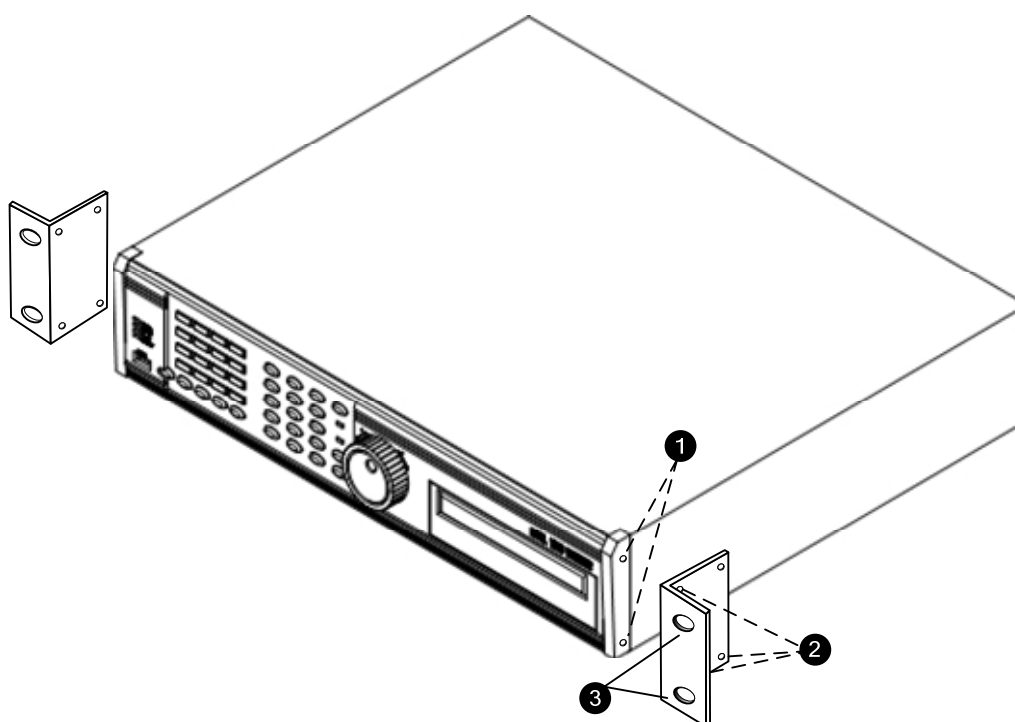


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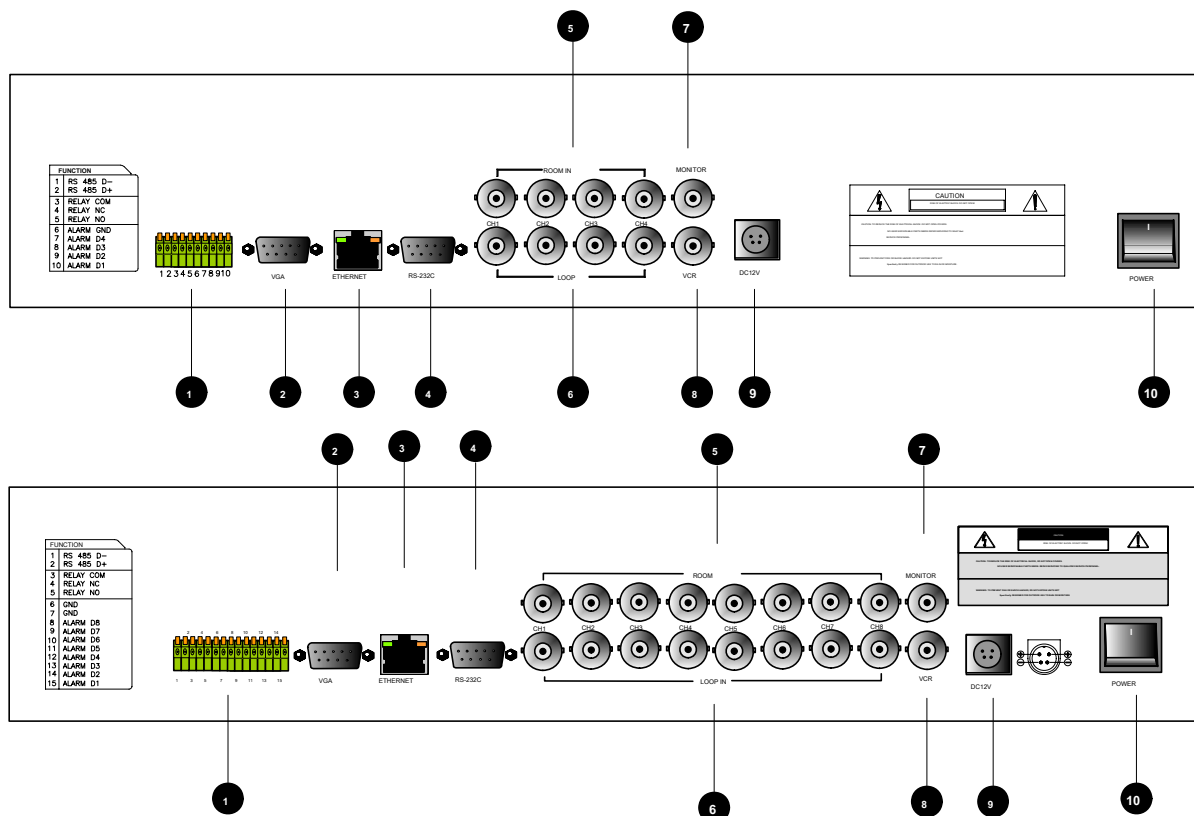
7	Display Controls	PTZ	Enable / Disable the PTZ controls for speed dome section 4
		ZOOM	Enable image zoom
		FRZ	Enable FREEZE function freezes the screen image
		MODE	Change the display from a multicam (4/8 cameras) full screen
		PIP	Enable viewing PIP Picture in Picture
		AUDIO / SEQ	Selecting the audio channel to be sent to the output speaker Enable cycle the display full-screen cameras
		K.LOCK	Block the control keyboard. To unlock, press for a few seconds and enter the password
		Q.PLAY	Quick Play. Plays the images recorded in the last two minutes
8	Control Jog Shuttle	J.Shuttle	Activate the Jog Shuttle knob controller. The playback image stops and waits for the knob control
		LED RUN	It lights up when it acts on the Jog Shuttle knob
		LED ACTIVE	It lights up when you press the Jog Shuttle button
9	Jog Shuttle	The Jog-Shuttle knob is very comfortable in playing the movie to step up or down between the frames at different speeds.	
10 burner CD / DVD burner to back up movies			

MOUNTING RACK



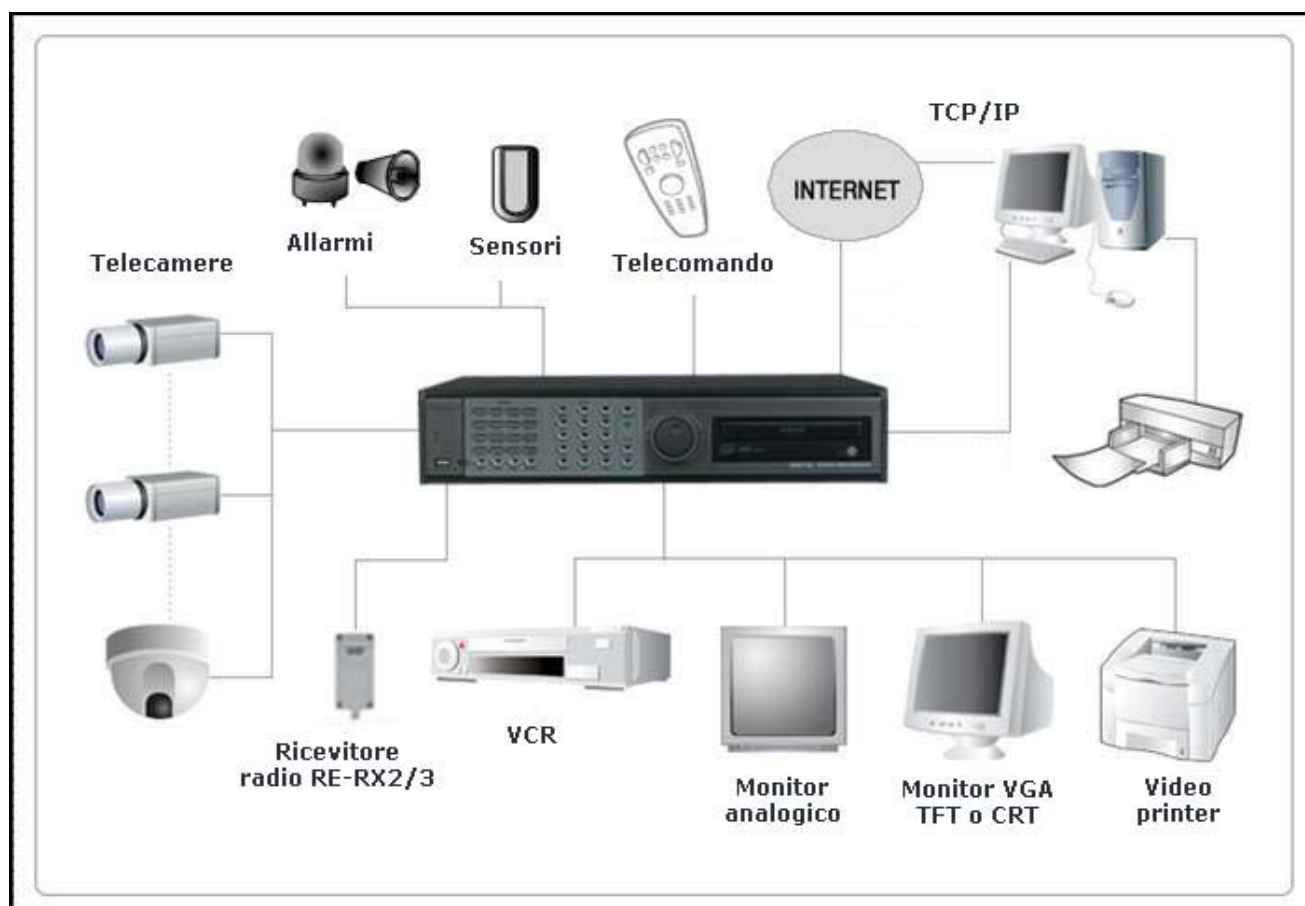
- 1 - Remove the 4 screws to the left of the front 2 - Screw for rack mounting brackets 3 - Fix the unit in a 19 "rack (2 units)

CONNECTIONS



1 Terminal	DR-2K4: 10 places	1-2	RS485 serial port for connecting cameras Speed Dome series SD-22, SD-27
	DR-2K8 15 places:	3-4-5	Alarm output - Changeover relay NO / NC to trigger external devices on alarm
		DR-2K4: 6..10 DR-2K8: 6..15	Inputs for alarm sensors, which enable logging.
2 VGA Output		VGA video output for monitor PC is TFT and CRT. It can be used only if you ordered the DR-VGA preparation	
3 ETHERNET		TCP / IP RJ45 connector for PC or LAN connection	
4 RS-232C		Serial RS-232 to control the VCR with external devices via ASCII commands	
5 Inputs		BNC female connectors to connect the cameras (4/8) RCA connectors for audio connection (not shown)	
6 outputs LOOP		For each room are available an inlet upper connector and a lower one that is used in output if you want to lead the camera signal to another device.	
7 Monitor output		BNC female output for connecting analog monitor or TV	
8 VCR output		Output BNC female auxiliary monitor, an analog VCR to connect back-up or a second monitor	
9 DC 12V		for 12VDC power supply connector provided	
10 POWER		Ignition switch	

CONNECTION EXAMPLES



ASSEMBLY AND INSTALLATION

Hard Disk Installation

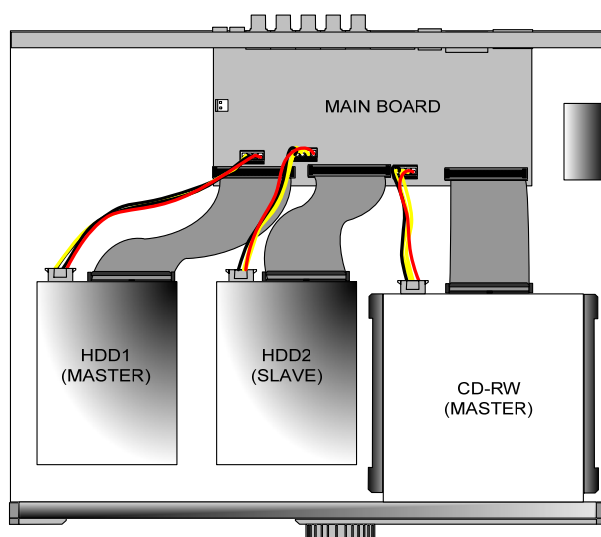
The first thing to do is to install the Hard Disk (maximum 2) inside the equipment. Without hard disk, the recorder is obviously not able to function. You can use any brand as long as Hard Disk

7200 rpm and also enter the same unit two HD brand and capabilities. There is no limit to hard drive capacity for which we recommend using a high capacity (at least 120GB). Hard disks must be either EIDE, SATA Hard Disk are not compatible.

The DR-2K4 video recorders and DR-2K8 does not require the hard disk is formatted before being inserted into the device. After the installation is, however, it required an initialization procedure.

It precedes as follows:

- Do not connect the power cord of the recorder Remove the cover by unscrewing the fixing screws
- Set the HDD jumper to MASTER (see the documentation provided by the manufacturer).
- Connect the hard drive to the left MASTER IDE connector (see drawing)
- Connect the power cord Hard Disk Fix
- the HDD with the screws screwing from outside the apparatus
- If you need to install a second hard drive in order to increase the recording capacity, repeat the above steps, but by placing the HDD jumper to SLAVE and connecting it to the second IDE connector.
- Close the lid of the VCR.



CAUTION - Handle the HDD with the

utmost care. It is a very delicate and even a slight bump object, such as the fall from the hand on the table, can damage it irreparably.

Installing VGA card

The rear port for connection of a computer monitor with VGA input is effective only if you install inside the VCR board is the appropriate DR-VGA that is supplied separately. For

to install there VGA card, Power down the device, open the top cover and insert the card into the slot provided.



video Connections

The connections are located on the back. In the image below shows the inputs and video outputs.



- **Video Inputs and outputs** - For each channel, there are 2 BNC connectors: an input (top) and an outlet (bottom). The cameras must be connected at the entrance at the top while the lower output is provided to bring the camera video signal to any other device. If the cable you have available has RCA connectors you must use a RE-BNCRCA1 adapter (see sidebar)



- **Monitor Outputs** - A classic CRT monitor or a TV is connected to the output MONITOR BNC attack.

- **Audio Inputs** - For each channel there is a RCA audio connector



- **VCR out** - The VCR output, always with BNC attack, it can be used to connect an analog video recorder, or a video printer. This output provides the same monitor output signal and can also be used to connect a second monitor.
- **Supply** - To the right is the connector feeding where to connect the supplied adapter.
- **VGA Output** - The VGA output is only usable if you have ordered the DR-VGA setup (see below for installation instructions). You can connect a PC monitor or TFT that CRT.
- **Other connectors** - On the back of the other connections are available, the use of which will be explained later.

Initialization of Hard Disk

The first thing to do after installing the hard disk and connected monitors and cameras, is to ensure the initialization of the Hard Disk. It must do this even if the hard drive is new. E 'necessary to sequentially perform the following steps:

- **Setting the time and date**
- **Restoring default settings**
- **Erasing the Hard Disk**
-

The initialization operations are necessary in order to start using the recorder. Below we summarize all the operations to be done step by step. Before

start make sure you have

connecting the monitor.

Access to the programming menu

- Turn on the VCR with the back button Wait about 30 seconds until the completion of the identification process of the Hard Disk. Press the MENU key and then, without entering any password, the ENTER key

(If you do not

press the enter button in time it is necessary to press again MENU).

adjust date and time

- to press the key for move on CONFIGURATION and press ENTER
- Press the button to move to the TIME / DATE SETUP and press ENTER
- Press +/- buttons to adjust the current year
- Press the button to move to MONTH and to press the +/- buttons to adjust the current month
- Press the button to move up and press DAY the +/- buttons to adjust the current day
- Press the button to move up and HOUR to press the +/- buttons to adjust the time

- Press the button to move up and MINUTE to press the +/- buttons to adjust the minutes
- Press the button to move up and SECOND to press +/- to adjust seconds
- 2 Press MENU to confirm TIMES

Restore factory settings

- Press key to move FACTORY DEFAULT and press ENTER
- Press ENTER to select all options ON
- Press the button to move up and press RUN ENTER
- Wait for the beep at the end of the procedure. Press
- MENU to confirm

Erasing the Hard Disk

- to press the key for move on CONFIGURATION and press ENTER 5 times consecutive.
- Press MENU several times to leave the programming menu.

Congratulations. The Hard Disk is now recognized and initialized correctly. The VCR can begin to function normally. If you look at the red LED RECORD left of the VCR you will see it on, which means that the recording is in progress.

If you had problems in performing the procedure, the individual operations date / time setting, restoring the default parameters and cancellation Hard Disk are also described later individually with support of explanatory images.

But remember to initialize the Hard Disk must perform three tasks consecutively, without exiting the programming menu.



CAUTION !!!

Use the VCR without having initialized the hard disk can cause malfunctions. For this reason, the VCR will not go up recording It occurred at initialization.

OPERATION AND CONTROL

The control panel

The front panel is very similar in both models.



There are, from left to right, the following commands

STATUS INDICATORS - On the left are

4 LEDs show the status.

- > **HDD FULL** (green) indicates that the Hard Disk is full
- > **RECORD** (Red) indicates that recording is in progress
- > **PLAY** It lights up when playing back recorded images.

- > **ETHERNET** It lights up when the unit is accessed remotely via LAN

The DR-2K4 and 2K8 VCRs are TRIPLEX equipment, ie able to allow both playback that

access remotely without to interrupt there
Video recording. Therefore it is possible that more LEDs are turned on simultaneously.

USB PORT - Allows you to connect a PC, too

Laptops, for the firmware update.

Remote Reception point - This

small hole on the side of the navigation buttons must always remain free to allow the proper functioning of the remote control.

CAMERA BUTTON 1..16 - These buttons

serve is playing in live display to bring a camera full screen. To return to multivision press MENU. Pressing the PTZ button these buttons change function and are used to control the speed dome cameras, as you will see later. Repressing PTZ they resume their original function.

STOP - Stops playback that is initiated

with PLAY

PLAY - Enable playback

SEARCH - Opens the search window to find a specific movie.

MENU - button to access the menu

programming. Pressing Yes suspends there
recording.

- These buttons are used to move to move between the programming options

NEXT - Go to the next step

ENTER - The ENTER button is used to select an item in the programming menu

+ / - - The +/- selecting buttons are used to change programmable values in the programming menus

PTZ - By pressing this button, the buttons 1/16

change function and serve to give commands to any Speed Dome cameras connected to the RS485 serial port. They are indicated below the functions of the various buttons. The camera 1..4 or 1 ... 8 is selected with the +/- buttons.

ZOOM - You press to be able to zoom in

an image to 2x. The function is active only in FULL SCREEN mode. The functionality is described later.

FRZ - The Freeze button is used to freeze the image

screen to allow detailed analysis. The button is in FULL SCREEN mode MULTIVISION. In the latter case you must press, after the FREEZE key, the camera number.

MODE - This button is used to change the

so the camera display. Switches between the multivision display screen with 4/8 cameras simultaneously, to the vision of a single camera in full screen and vice versa.

PIP - This button only works in

full-screen display of a camera and activates the Picture In Picture function where in a small box you can see the other cameras, while maintaining a full screen.

SEQ - If pressed during the full display

screen, this button activates the cyclic scanning function of the cameras.

K.LOCK - KEY LOCK This button is used to

prevent unauthorized control of a personal video recorder. Once you press the button, the video recorder keyboard is completely inhibited and you can not give any commands. To unlock the keyboard, press K.LOCK for about 3 seconds and enter a valid password.

Q.PLAY - The QUICK PLAY button is pressed for

to review immediately the last 2 minutes of recording.

J.SHUTTLE - Pressing this button activates the

functionality of the JOG SHUTTLE ie the central control knob. The function works only in PLAY. The picture freezes on the screen and it is possible to forward or rewind at various speeds using the outer ring or the central disc of the knob.

RUN LED and ACTIVE - The yellow LED ACTIVE

It turned on if it is pressed J.SHUTTLE key to move with the knob, The green RUN LED lights up at every command imparted with the knob.



Switching on the DVR

After fixing Hard Disk and connected the device to the cameras and the monitor, as described above, you can proceed to the first ignition by pressing the POWER button.

NOTE : Do not turn on the power until you have connected the monitor, because all the information necessary for the use of the recorder appears on the screen, and without the monitor could not see.

When you turn the VCR operates the search of the hard drive installed. In recognition performed on-screen data Hard Disk Master and Slave.

The recognition of the Hard Disk can take more than 30 seconds if one of the Hard Disk is not present. E 'can stop the recognition by pressing the MENU button.

Shutdown

Although the DR digital video recorders do not have an on-board operating system, which would necessitate a closure procedure, it is very inadvisable to switch off the device while the recording is in progress. This would bring an unexpected interruption of the hard disk writing with the possibility of damaging it.

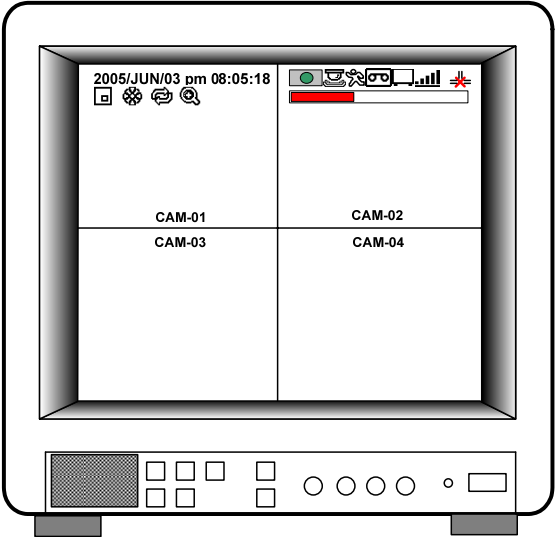
Always press the MENU button before turning off the device, in order to stop recording and preserving the Hard Disk.

Recording and Live Vision

The first image that you will see on the screen is a multivision, namely a home screen divided into four / eight shares with a camera for each quadrant.

For each camera is shown superimposed the default name (CAM 1,2,3,4) which you can then customize. several are also shown other information which is shown below:

- DATE HOUR** - In the upper left is the date and time. In LIVE vision It is the date / time current, while in PLAYBACK are indicated date / time of the image that Yes It is reproducing.
- PROGRESS BAR** - In the top right is present a progress bar that has 2 different functions: In Recording / Live Viewing the bar shows the hard disk space occupied by the recording, playback bar showing how far the video has arrived



There are also several icons indicative:

- PIP** - flashes if the vision Picture in Picture is active
- FREEZE** - Flashes if the FREEZE function is active
- SEQ** - flashes if the cycle the camera is active
- ZOOM** - Flashes when you turned on the image zoom function

ALARM RECORDING - Registration in case of external alarm input

- MOTION RECORD** - Registration of the movement Rilevazione
- CONTINUOUS** - Continuous recording
- HOW 'NORMAL** - 50 FPS 720x288
- METHOD 'DUAL** - 100 FPS 360x288

QUALITY 'IMAGE

- Basic Normal
- Enhanced Fine
- Super Fine

CONNECTION TCP / IP in progress

CONNECTION TCP / IP inactive

The first icon on the left above the progress bar can take many appearances that indicate the status of the VCR:

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	Emergency recording (EMERGENCY) Recording Schedule
	(SCHEDULE) Recording stopped Stop
	Play forward Play
	backward Pause
	1/16 ... 1 / 2X play Forward slow 1/16 ... 1 / 2X play
	Reverse slow
	2 ... 4X Play forward
	2 ... 4X Play back
	16 ... Play 64X fast forward
	16 ... Play 64X faster back

While recording available
Display options:

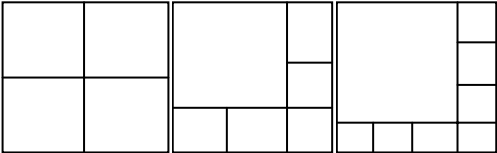
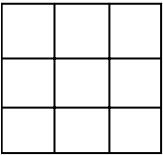
different

MULTIVISION - And 'the basic view that shows the screen divided into 4 or 8 quadrants each containing a camera.

VIEW FULL SCREEN - To bring one full-screen camera is sufficient to press the button corresponding to the camera (1 ... 8). To return to the multi-vision, press MODE.

Multivisioni ALTERNATIVE (only DR-2K8). Pressing the MODE button several times you can

visualize different
Alternate multivision that highlight one with respect to the other camera.
IS' possible to choose there
main camera with the +/- keys



NOTE: The multivisions to 6:08 panels are not available in DUAL mode (200 frames per second at 360x288 resolution)

cYcLiCaL SCAN - E 'can view the cyclical rotation of the cameras, so as to see full-screen cameras sequentially. To start the cycle simply press SEQ in FULL SCREEN mode. The unused channels are automatically excluded from the scan. The residence time of each camera can be adjusted from 1 to 99 seconds in the system settings, as described later. Press the MODE button to return to the vision of a single full-screen camera press the SEQ button to return to multi-vision display..

PIP (PICTURE IN PICTURE) - This mode display is useful when you have a greater camera by relevance to keep perpetually screen. And 'you can display a cropped frame in the main scanning

of all the remaining cameras. To turn the vision PIP, select the main camera to full screen and press PIP. To clear vision PIP just press the button and return to the vision of a single room in full screen.

FREEZE FUNCTION - If while watching FULL SCREEN mode, press the FRZ button the image freezes on the screen as frozen. FRZ Press again to return to normal playback. If you press FREEZE while multivision can then specify the number of cameras to be frozen.

ZOOM - While watching in FULL SCREEN mode, you can press the ZOOM button to activate the zoom box. The box that appears on the screen is the area to be magnified and can be moved using the arrow keys. Pressing ENTER will then run the 2x zoom. Press ZOOM again to return to the natural dimension.

PAN TILT - If you have connected the cameras Speed Dome to the RS-485 port on your VCR (see below), and you have correctly set up the communication protocol can control the movement of

these cameras during there display. You have to press the PTZ button and choose which camera to control the +/- button. Then you can act on the command buttons 1/16 assume that, with the pressure of the PTZ button, the following functions.

•	ON: LIGHT ON
•	OFF: LIGHT OFF
•	OPEN: IRIS OPEN
•	CLOSE: IRIS CLOSED
•	NEAR: FOCUS NEAR
•	FAR: FIRE AWAY
•	WIDE: ZOOM IN
•	TELE: ZOOM OUT
•	September: SET PRESET
•	CLEAR: CLEAR PRESET
•	GOTO: GOTO PRESET
•	AUTO: AUTO SCAN
•	F1: USER 1
•	F2: USER 2
•	F3: USER 3
•	F4: USER 4



Press again to exit the PTZ Speed Dome Control.

NOTE: The continuous recording on all cameras, independently from display that is chosen.
It stops recording only in the following cases:

- Is press the MENU button. There is not no video
-
- It is out of space on the hard disk and is not active Overwrite Function

Recording Capacity

THE VCRs DR-2K4 / 8 making there
JPEG2000 compression, the latest development in
static compression for non-PC-based video recorders, much better performance than the
previous Motion JPEG used by previous versions. It is an excellent compression for stability
and quality. In the table below

the capabilities are listed
recording hours for the different grades of selectable image.

Capacity HDD (GB)	Video quality				
	Basic	Normal	enhan.	end	Super Fine
	14	19	24	29	32
20	8.3	6.1	4.9	4.0	3.6
40	16.6	12.3	9.7	8.0	7.3
60	25.0	18.4	14.6	12.1	10.9
80	33.3	24.5	19.4	16.1	14.6
120	49.9	36.8	29.1	24.1	21.8
160	66.6	49.1	38.8	32.1	29.1
200	83.2	61.3	48.5	40.2	36.4
250	104.0	76.7	60.7	50.2	45.5
300	124.8	92.0	72.8	60.3	54.6
400	166.4	122.6	97.1	80.4	72.8

With 2 Hard Disk 400GB is thus contain up to 6 days of images at full video quality. If you
have requests for higher recording capacity is recommended

the use of registration with
Detection of Movement or the use of
PC-based video recorders like the D-Vision system.

Recording Mode

The DR-2K4 / 8, unlike VCRs for generic use VCRs, are in a perpetual state of recording. It
is therefore not necessary to press the REC button to start recording, but you will already
see light up

the light of
registration immediately after completed the
recognition of the Hard Disk.
○ **SCHEDULE RECORDING** (REGISTRATION
SCHEDULED) - When the power comes on, the screen appears in the recording icon with a
green dot that indicates the RECORD mode

SCHEDULED (SCHEDULE
RECORDING). This does not mean that the VCR is really saving images on the Hard Disk,
as are followed the
programming that will set later in
calendar. It can for each hour of the day, may request that the registration takes place in a
continuous manner, or on the basis of the motion detection (Motion Detection) or even on the
basis of the external alarm inputs.

○ **EMERGENCY RECORDING (EMEREGENZA OF RECORDING) - Beyond the**
programming it is however also possible
to leave there registration
manually to face such as a
emergency situation. To do this, you press the REC button and the screen recording icon
changes from green to red. The video recorder then records the maximum speed and
resolution
acquisition
regardless of regular programming. To exit the emergency record and return to the
scheduled recording, press the STOP button

Playback

The images are registered stored
Hard Disk and can be reviewed at any time.

Duplex and Triplex

Note that when playing movies there
registration is canceled if you set the duplex mode and will continue if the triplex mode. E
'advisable to activate the TRIPLEX mode only if really essential as it is reduced by more than
30% the amount of frames / second that can be recorded.

To play back images, proceed as follows:

○ **Press PLAY button.** E 'can press PLAY in both full-screen view that multivision to play
multiple cameras simultaneously. Playback starts. Observe the correct time on the screen
playback. E 'can operate with all the commands shown above in LIVE Vision (Zoom, Freeze,
Mode, etc.). The progress bar indicates what point in the video were recorded

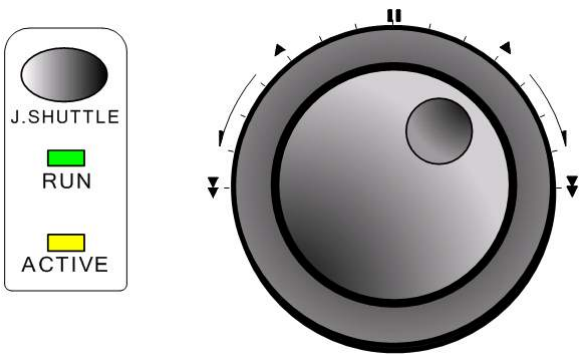
viewing. To stop playing, simply press the STOP button.

JOG SHUTTLE (control knob)

If during playback press the JOG SHUTTLE button the image will stop and you can scroll back and forth through images quickly using the outer ring of knob. Use the central disc of the knob to the detailed view frame by frame. The Jog Shuttle is a very useful feature that lets you

slide

Quickly long recording periods in seconds (feed rates up to 64x).



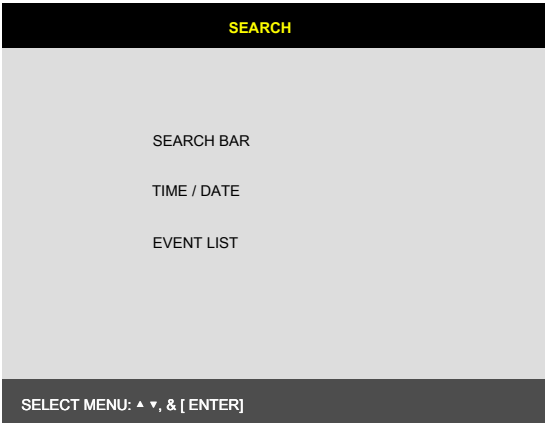
Press again the JOG-SHUTTLE button to return to normal playback continues.

The graduated notches 7 on the edge of the knob indicate the feed speed in forward and backward.

- 1 / 4x Slowed 4 times 1/2 times 1x 2x
- Slowed natural 2X speed 2 times faster
- 4X 4 times faster 16X 16 times faster
- 64X 64 times faster

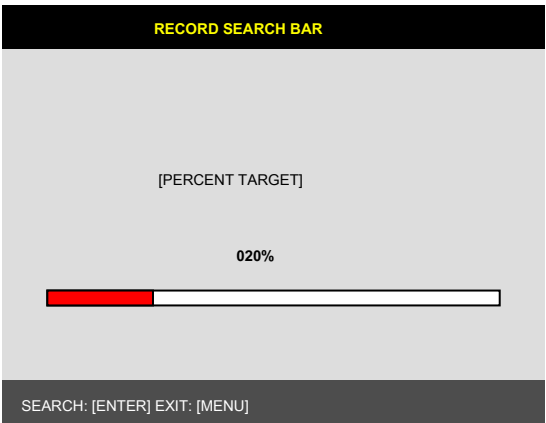
Search playback

When in the VCR are stored long recording periods can be uncomfortable scroll through the entire movie. For this there is a SEARCH function. Press the button **SEARCH**. They make themselves available 3 search mode



- SEARCH BAR (with scroll bar) TIME / DATE (date and time) EVENT LIST (for alarm memory) can select with the mouse the preferred method, and press ENTER.

SEARCH BAR (rev. With slider)



The bar represents 100% of the recorded time. Choose the percentage of movie with JOG SHUTTLE and press ENTER

TIME / DATE (playing for time and date)



TIME / DATE

[START] 2005 / JUN / 20 AM04: 04: 12

[END] 2005 / JUN / 20 PM08: 12: 23

INPUT TIME / DATE

2005 / JUN / 07 AM04: 04: 12

SEARCH: [ENTER] EXIT: [MENU]

Choosing the search by date and time opens a window at the top will show the date / time of the older images on Hard Disk (START) and the date / time of the most recent (END).

In the programmable row it is possible to insert the date and time that you want to play moving with the arrows and changing the value with +/- . Then press ENTER to play the movie.

If they have not been recorded images to enter date and time, the VCR will play the temporally closer images.

EVENT LIST (for alarm memory playback)

EVENT LIST

CH	EVENT	TIME / DATE	001/000
--	----	---- / -- / -	--: -: -
--	----	---- / -- / -	--: -: -
--	----	---- / -- / -	--: -: -
--	----	---- / -- / -	--: -: -
--	----	---- / -- / -	--: -: -
--	----	---- / -- / -	--: -: -
--	----	---- / -- / -	--: -: -
--	----	---- / -- / -	--: -: -

SEARCH: [ENTER] EXIT: [MENU]

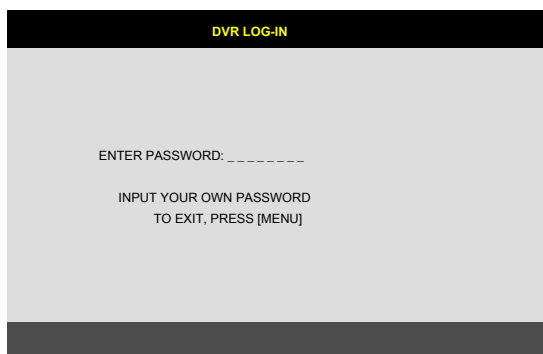
Compare the memory stored in the historical events of the VCR. Select the alarm of interest with the arrows and press ENTER to play the movie.

SYSTEM SETTINGS

Access MENU Settings (Log-in)

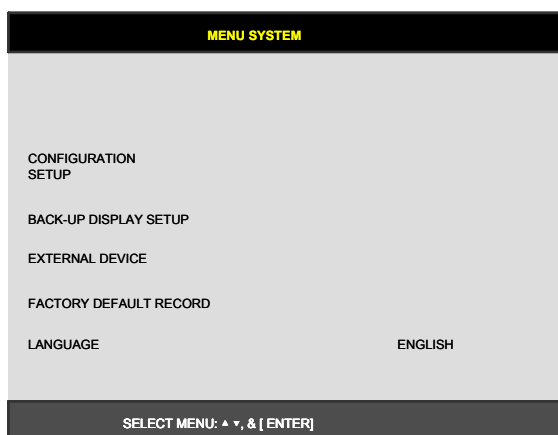
To access environment of the VCR programming is necessary to make a LOG-IN. You should do the following:

Press the MENU button; Log-In will appear asking you the introduction of the access password screen



CAUTION!!!
VIDEO RECORDER AND 'PROVIDED FACTORY WITHOUT
PASSWORD
SET.

For this will be enough not to introduce any password and just press ENTER to access programming. Afterwards, you can set different custom password using the buttons 1..10 maximum 8 digits. Access to the programming menu



NOTE: They 'available in the programming options selection of Italian language, but as a matter of international uniformity of the entries listed in this manual refer to in English captions.

Getting around in the settings MENU

- To move between the system settings to use the buttons and select items of interest with

key **ENTER**

- The values to be programmed will vary, once selected, with the +/- keys.

- To exit or return to the previous menu, press

MENU

- At the bottom of each menu it is often referred to a brief indication of the available commands.

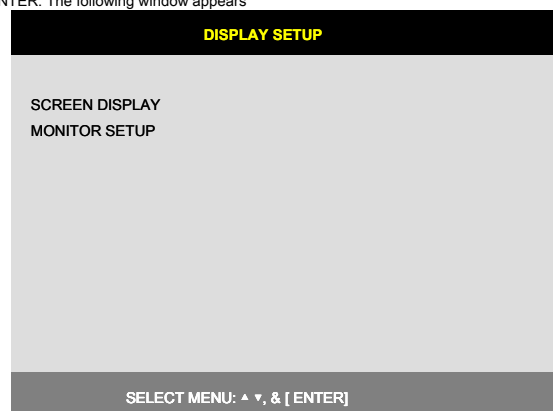
The SET UP menu items are described below one by one.

Setup Display - Display settings

After you access the settings menu with the LOG-IN procedure (see above) selected with the keys

DISPLAY SETUP item and press

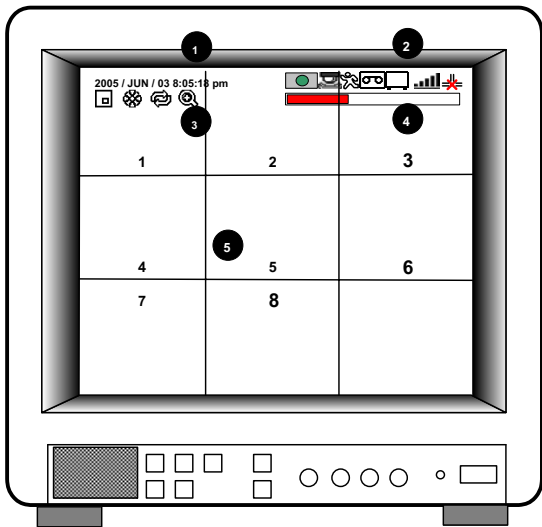
ENTER. The following window appears



- **SCREEN DISPLAY** - Select this item with the UP / DOWN keys then press ENTER. In this section you can obscure the signs and the on-screen icons when not required. You will see two entries: LIVE and PLAYBACK because you can set different parameters for viewing LIVE and for playback of recorded images. Choose one of two options and



press ENTER. Now you can select and disable ENTER with the following information



- 1. TIME / DATE - Time and date
- 2. ICON DISPLAY - Status Icons
- 3. DVR STATUS - Status Icons DVR
- 4. REC / PLAY BAR - Scroll bar
- 5. CAMERA TITLE - Camera name

When finished, press MENU to return to the Display menu and go to the MONITOR SETUP by pressing ENTER

MONITOR SETUP - they will see two entries: VGA
SETUP COLOR BAR TEST. If you purchased the preparation for the VGA video output access the first section by pressing ENTER. In this section we set the VGA output resolution between the following values:

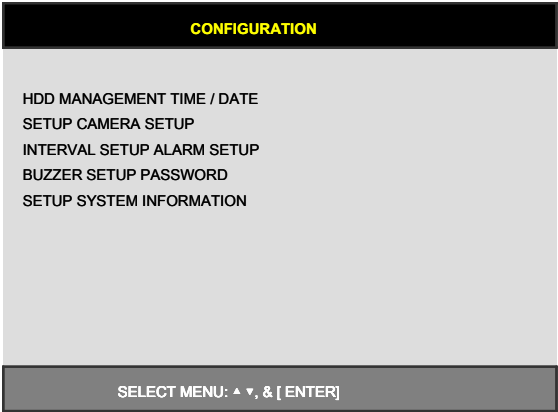
- 640x480 60Hz
- 640x480 75 Hz
- 800x600 60 Hz
- 800x600 75Hz.
- 1024x768 60 Hz
- 1024x768 75Hz

Set the most appropriate resolution value to your monitor.

The section COLOR BAR TEST shows the monitor test colors. Press MENU repeatedly to return to the main MENU.

Configuration - General Settings

Having gained access to the settings menu with the LOG-IN procedure (see above), select the second item CONFIGURATION and press ENTER.

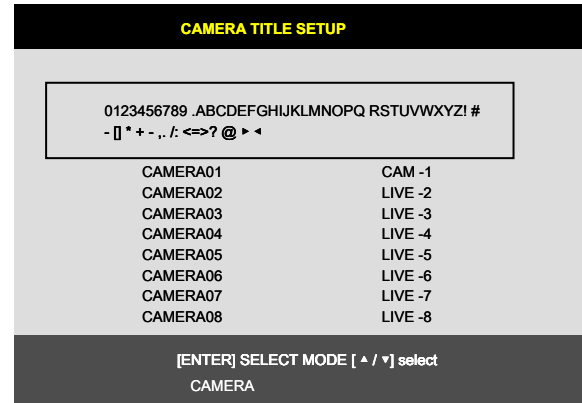


HDD MANAGEMENT (MANAGEMENT HARD DISK) -
two entries are available: HDD SETUP HDD INFORMATION. HDD SETUP shows the time and date of the beginning and end of the recording. Also shows the date of the last play (PLAY). At the bottom of the menu there is an option to delete the HDD contents. The voice HDD INFORMATION exhibition brand and capacity of the hard disk installed.

TIME / DATE SETUP - SETTING
DATE HOUR

Set the correct date and time is essential for the proper functioning of the SEARCH function. Select down YEAR, MONTH, DAY, HOUR, MINUTE, SECOND and change the value with +/- . Confirm with MENU.

CAMERA SETUP - CAMERA SETTINGS
- **CAMERA TITLE - CAMERA NAME** - E 'can customize the name of each of which are series camera CAM-1, CAM-2 etc. Select the camera and press ENTER, then change the first letter with +/- . Then go to the second letter with the mouse and press ENTER at the end



CAMERA COLOR SETUP - PICTURE SETTINGS - E 'can adjust the image

all cameras. Choose the camera (CHANNEL) with +/-, then move the following items

(BRIGHTNESS' - CONTRAST -
SATURATION - TONE) and vary the parameters

+ / - or Jog shuttle from - to +

- **CAMERA ACTIVE SETUP** - Here you can select to view and / or record the cameras. This MENU is composed of 4 columns. The first column on the left shows the channels
1..8. The second shows the status of channel ACTIVE = video signal present LOSS = video signal absent. LIVE In the third column you can choose whether the channel will be displayed on the screen (ON) or not (OFF). In the fourth column REC it will decide whether the channel will be recorded (ON) or not (OFF).

CAMERA ACTIVE SETUP			
CH	STATUS	LIVE	REC
01	LOSS	OFF	ON
02	ACTIVE	ON	ON
03	ACTIVE	ON	OFF
04	ACTIVE	ON	OFF
05	ACTIVE	ON	ON
06	ACTIVE	ON	ON
07	ACTIVE	ON	ON
08	ACTIVE	ON	ON
SELECT: ▲ ▼ ◀ ▶, & [ENTER]			

As always we will move to the adjustment option with the arrows and varying the parameter with ENTER.

- **MOTION SETUP - MOTION DETECTION** -
The DR VCRs are able to start recording when the image from the camera picture is changed following an intrusion. This function is

called MOTION DETECTION -
DETECTION OF MOVEMENT. In this programming menu contains

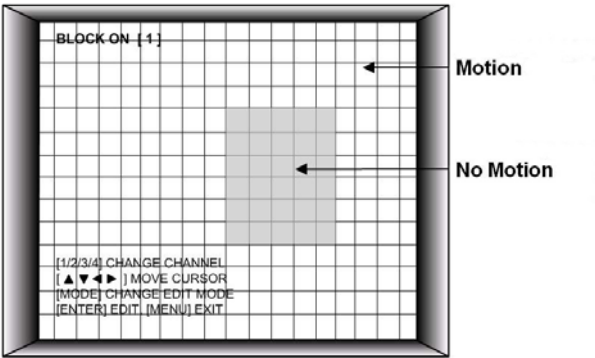
Two options:
MOTION SETUP (motion detection parameters) and MOTION MASK SETUP
(detection areas settings).

- **MOTION CONFIGURATION - PARAMETERS MOTION DETECTION.** With +/- choose the camera (CHANNEL), then move to the voices

following and adjust the SENSITIVITY LEVEL '(1,2,3,4). The
MOTION DISPLAY must be enabled if you want the violated cells of different
colors Colorino. Finally you set the DURATION OF RECORDING be carried
out as a result of an intrusion (1..99 sec.)

- **MOTION MASK SETUP - SETTING DETECTION AREA.** Choose the camera
with button selection Cameras 1-8.
The image will be divided into squares, all

included in the detection area. Move the highlighted box over the area to be
excluded from the survey, and select ENTER. The box will become gray and
will be excluded from motion detection



- For a faster selection you can press the MODE button to select one of the following modes of management that is indicated in the upper left
ALL ON - Pressing ENTER will include all the cells in the detection
ALL OFF - Pressing ENTER will exclude all cells as detection
BLOCK ON - Include a group of cells by pressing ENTER and then dragging the active pane
BLOCK OFF - Exclude from detection a group of cells by pressing ENTER and then dragging the active pane

- **INTERVAL SETUP - SETTING TIME**
Here Yes setting certain timings of the video recorder.

INTERVAL SETUP	
switching INTERVAL	
FULL SCREEN PIP	: 01 SEC: 01
SCREEN	SEC
RECORD	
EVENT UPDATE TIME EVENT	: 01 SEC
SELECT ▲ ▼ ◀ ▶, CHANGE VALUE: + -	



SWITCHING INTERVAL - E 'the residence time of each camera in the cyclic scanning in full screen (SEQ) and in the PIP window.

EVENT UPDATE TIME is the minimum interval of time that must elapse between two events is written because the events memory. If, for example, this value is set to 20 sec. an alarm that happens 10 seconds after the end of the previous will not be written to memory.

ALARM SETUP - SETTING ALARMS - Here we program the external alarm inputs

(Back terminal)

ALARM SETUP

CHANNEL ALARM	CH1
INPUT DURATION	NO
	005

NO NORMAL OPEN

NC NORMAL CLOSE

..... DISABLE

SELECT: ▲ ▼, CHANGE VALUE: + -

Select input (CHANNEL) to be programmed with + / - then define whether that input will operate as NO (normlamente open), NC (normally closed) or - (disabled). Finally, it sets the duration of the alarm generated from the entrance and the recording 0..300 sec .. How alarm duration means the time for which the system will keep the alarm condition after the alarm contact is returned to rest.

EVENT POPUP SETUP - In this menu you can set the EVENT POPUP function that lets you take a full screen on alarm channel.

four parameters are available:

- CHANNEL: is selected with the + and - buttons to set the channel.
- POP-UP ON / OFF: Enable / Disable the pop-up function on the selected channel.
- EVENT: you decide which event between Alarms Grounds (A) and / or Motion Detection (M), will trigger the function EVENT POPUP
- DURATION: Set the duration of the function, or for how many seconds should remain in the full-screen alarm went Channel

BUZZER SETUP - SETTING BUZZER -

The DVR is equipped with an internal buzzer which can be disabled in this section.

BUZZER SETUP

ALL KEY BEEP VIDEO	ON
LOSS ALARM ACTIVE	ON
MOTION DETECT	ON
	ON
	ON

SELECT: ▲ ▼, & [ENTER]

By choosing the first line ALL you enable and disable the ENTER key the buzzer totally. In the following lines we instead acts only on the KEY BEEP (BIP TO PRESSURE OF KEYS), VIDEO LOSS (BUZZER FOR LACK VIDEO), ALARM ACTIVE (BUZZER ALARM IN FROM INPUT) and MOTION DETECT (Bozzer ALARM IN MOTION)

PASSWORD SETUP - SETTING

PASSWORD - To prevent unauthorized access can set passwords.

PASSWORD SETUP

USER ID USER PW	ADMIN
PW CONFIRM NEW

[K1-K10] INPUT PASSWORD [ENTER]

CHANGE PASSWORD

TO EXIT, PRESS [MENU]

They can be placed 10 to 8-digit password max. (ADMINISTRATOR, MANAGER, UTENT11..8). The default password is: ADMINISTRATOR: No
MANAGER: 1 USER 1: 2 ... USER USER 8: 9



Use the arrows to select which password you are changing, then enter the old password and 2 times the new, using the keyboard (only 0..9).

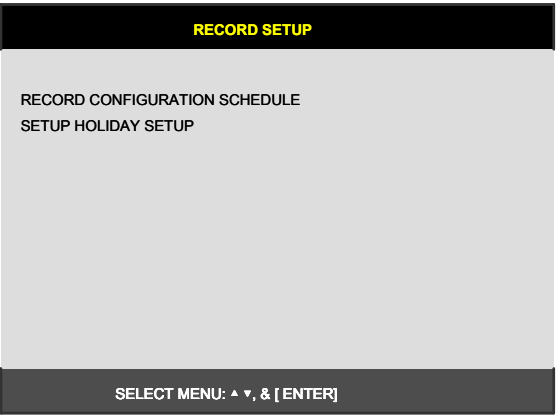
SYSTEM INFORMATION - INFORMATION This contains information about the version of hardware and software product, the identifier, and the model of the IDE devices (hard disk and CD-R)

Record setup - Recording
Settings

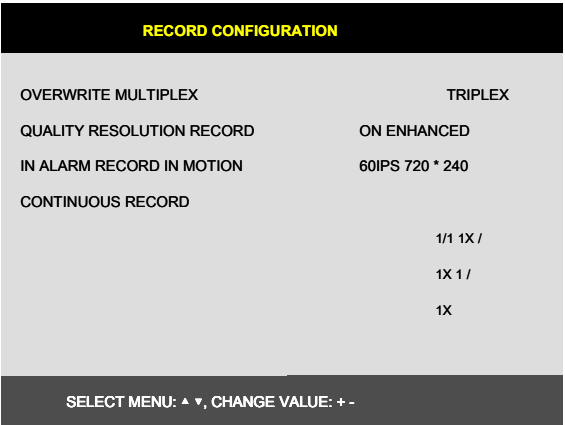
After you access the settings menu with the LOG-IN procedure (see above), select the entry RECORD SETUP and press ENTER.

In this section you program the recording options. The 3 sections

that they allow to appear
program preferences recording the
scheduled recordings and calendar holidays.



RECORD CONFIGURATION (REGISTRATION PREFERENCES) - In this section, you have options on how you want the recording to:



OVERWRITE - IS' possible to define the behavior when you run out of hard disk space. There are 2 options that are changed using the +/- keys: OVERWRITE ON = Continue

recording and
overwrite the oldest images OVERWRITR OFF = Stop Recording

MULTIPLEX - E 'can choose from two modes of operation:

DUPLEX: The video recorder does not stop recording during remote access via TCP / IP, but it stops recording when you play

the images.
TRIPLEX: The VCR is always continuous recording during remote access both during there reproduction of video clips.

NOTE: It 'good to choose the Triplex option if really necessary, because only the duplex option, you can play all the frames per second of recorded footage. Reproduction in triplex mode is with a reduced number of frames, because the device need to continue recording even during playback.

QUALITY - Set the quality of recording image. 5 settings are available: BASIC, NORMAL, ENHANCED, END, SUPER FINE. Obviously the image quality you choose will affect in direct proportion to the space occupied by recording hard disk (see

table on previous page). Self there registration it is activated manually (EMERGENCY RECORDING) image quality passes immediately to SUPER END regardless of the adjustments of this section.

And 'advisable not to exceed the quality ENHANCED if you are planning a remote access continuing use.

RESOLUTION - Yes tax the resolution the acquisition that directly affects



image detail. There are 2 options: 720x240 (PAL which becomes 720x288) and 360x240 (360x288 for PAL). If you use the maximum resolution (720x288) the VCR will be able to acquire 12.5 frames per second for each input (In total 50 f / sec in the DR-2K4 and 100 f / sec in the DR-2K8). If you use the 360x288 resolution (DUAL mode) the number of frames arrive at the so-called Real Time ie 25 f / sec per channel (total 100 f / sec in the DR-2K4 and 200 f / sec in the DR-2K8). In most cases it is advisable to set the maximum resolution because the image is still fluid and smoothly. Also, if not all channels are recording, for example. in case of motion detection recording, the DVR will restart

its maximum capacity of acquisition only on active channels greatly increasing the number of captured frames. The reduced resolution recording can, however, be convenient to increase the capacity of the recording or to transfer faster video remotely, for example in the case of limited availability of Internet bandwidth.

THU = Thursday FRI = Friday, SAT = Saturday). Move with the arrows on the first timeslot (00-02 SUN) and set the recording mode you want.

SCHEDULE REC SETUP							
	AM-MON	YOUR	WED	THU	FRI	SAT	
00-02	- M-	AM -	- - C	- - C-	- - C-	- - C	- - C
02-04	- M -	AM -	- - C	- - C	- - C	- - C	- - C
04-06	- M -	AM-	- - C	- - C	- - C	- - C	- - C
06-08	- M -	AM-	- - C	- - C	- - C	- - C	- - C
08-10	- - -	AM-	- - C-	- - C	- - C	- - C	- - C
10-12	- - -	SUN	- - C	- - C	- - C	- - C	- - C
MODE: CELL BY CELL							1/2
▲ ▼ ▶ and [NEXT] EDIT: + - & [MODE] A: ALARM M: MOTION C: CONTINUES							

- The following options are available
- - - No record
 - TO-- Recording only in case of external input activation
 - M- Registration only at intervention
 - Motion Detection
 - - C continuous Recording
 - AM- Registration in case of external alarm or motion detection activation.
 - B.C Continuous recording and detection of 'activation of external alarms
 - MC Continuous recording and detection of motion detection intervention

With the MODE button it is possible to vary the editing mode of the table that is shown at the bottom left:

ALL All time slots are set together

CLEAR ALL Clear suits the time slots

TIME CELL Set a time slot at a time

WEEK Set all bands of a day

TIME ZONE Set a timeframe equally throughout the week

HOLIDAY SETUP (SET HOLIDAYS ')

In this table are set by national or local holidays that will be treated for the purposes of registration as they SUNDAYS (SUN). A day that will be defined as holidays will follow the record settings that you set on Sunday in the table above. For

set a day as a public holiday must select it with the mouse and press ENTER so that its color changes from white (weekdays) to red (holiday). To change the month, press the +/- buttons. Even in this table are several ways to streamline the editing program:

- **RECORD IN ALARM** - This option is used to reduce the number of recorded frames in order to make a recording of very long TimeLapse time as VCRs to tape. If you leave this option set to 1 / 1X VCR will record every frame that is captured. If you set the +/- keys to the value 1 / 2X, only one frame recorder will track every 2. If you set 1 / 4x will only be stored on a frame 4, and so on down to 1 / 999x. It 'obvious that in this way you can extend the recording capacity in a very long time, but the video will appear more and more "jerky" as you increase the parameter. The value set in this row refers exclusively to the recording in the case of external input generated alarm.
- **RECORD IN ALARM** - As the previous item, but refers only to the registration in the event generated by the motion detection alarm (MOTION DETECTION).
- **CONTINUOUS RECORD** - As the previous item, but It refers only to the registration keep it going.

SCHEDULE	SETUP	(REGISTRATION)
SCHEDULED). In this section it is possible to set the type of recording to be carried out in different times of the day. In the left column shows a 24-hour day is divided into bands sa 2 hours each. On the first screen you will see bands from 00:00 to 12:00, pressing NEXT will pass at 12:00 bands ... 24:00. For each time slot a different programming is available for each		
day of	week	(SUN = Sunday,
MON = Monday,	TUE = Tuesday,	WED = Wednesday,

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Last updated: June 2008

EDIT HOLIDAY: Tax holidays

CLEAR MON DATA: Delete all holidays of the month

CLEAR ALL DATA: Clear all set holidays.

HOLIDAY SETUP

<April> 000/100

SUN	MON	TUE	WED	THU	FRI	SAT
					01	02
03	04	05	06	07	08	09
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

MODE: EDIT SELECT HOLIDAY ◀ ▶ ◂ ◃, EDIT [ENTER] and [MODE]

The maximum number of holidays that can be set in one year 100.

BACK UP - Saving Movies on CD / DVD

THE VCRs DR-2K4 / 8 are equipped of burner for easy storage of the embossed film. Once you logged into the programming menu as seen above, select BACKUP and press ENTER 2 times

CD-R SETUP

HDD [START] 2005 / AUG / 07 AM04: 04: 12

[END] 2005 / AUG / 08 PM08: 12: 23 CD-R

[START] 2005 / AUG / 07 AM04: 04: 12

[END] 2005 / AUG / 08 PM08: 12: 23 [SIZE] 000MB

BURN

SELECT: SETUP BUTTON, JOG SHUTTLE

In order to set the parameters you must first introduce a blank CD to burn. The first two lines of another can not be edited, but they give only

information about the start and the end of this recording on HDD. Move on CD-R START and press ENTER. With arrows and +/- keys set the date and time from where you want to start saving and confirm with ENTER. Then move to SIZE, press ENTER and set the +/- keys to the amount of data (MB) that you want to transfer to CDs. By reducing the value of the maximum of the CD / DVD capacity and pressing ENTER will see

shrink proportionally forward to the end of the video stored in the END line.

The date and time when the saving term (END) is not programmable, but it is always calculated from the apparatus according to the starting date and the amount of MB to be transferred. Once you choose the period you want to save, move to BURN and press ENTER. The burning will begin.


CD-R SETUP

HDD [START] 2005 / AUG / 07 AM04: 04: 12

[END] 2005 / AUG / 08 PM08: 12: 23 CD-R

700 MB [START] 2005 / AUG / 07 AM04: 04: 12 [END] 2005 / AUG / 08 PM08: 12: 23

[SIZE] 700 MB -> 700MB

BURN 

CD-RW BURNING: IMAGE DATA.

SELECT: SETUP BUTTON, JOG SHUTTLE

At the end of the Back up your CD / DVD will be ejected automatically.

To review the saved images with a PC using the Player program on the CD.

External Device - External links

Having gained access to the settings menu with the LOG-IN procedure (see above), select the entry EXTERNAL DEVICE and press ENTER. In this section we are programmed parameters that make it possible to connect the video recorder and other equipment. There are three sections: Settings TCP / IP port, RS232 port settings, camera settings Speed Dome.

● TCP / IP SETUP (SETUP TCP / IP)

Here you set the parameters of the rear Ethernet port that can be connected to a PC or to a LAN. There are 3 sections and is useful since the last:

DHCP SETUP - The DR-2K4 / 8 video recorders can be connected to networks with DHCP servers to networks with



Manual IP address setting. The networks with DHCP servers provide a device within the network that is able to assign IP addresses to network devices that request it. In networks with manual address instead of the IP address is fixed and assigned manually.

DHCP SETUP

DHCP MODE	MANUAL
DNS SERVER IP	000,000,192,168
ADDRESS SUBNET	192168001160
MASK GATEWAY	255.255.255.000
	192168001001

SELECT: ▲ ▼, CHANGE VALUE: + -

Enter this section and selected with the ENTER MANUAL setting (manual) or AUTOMATIC (DHCP). If you choose the first option you can exit with MENU and go to set the IP address manually. If you choose IP assignment from DHCP server then you can move to the next item (IP DETECT) and press ENTER to get the IP address to the server. Check that the VCR is connected to the network and that a DHCP server is running.

IP CONFIG SETUP - Here you set the IP parameters. In case you have chosen the address assignment with DHCP you can only change the communication port (IP PORT) because all other parameters are automatically set by the DHCP server. Choose any port, or leave the default value, unless it is not a function a firewall that inhibits communication on some doors. In this case of course it is necessary to use a free port.

IP CONFIG SETUP

MAC ADDRESS	00-0A-A2-00-00-00
IP ADDRESS	192168001160
IP PORT	50000
GATEWAY	192168001001
SUBNETMASK	255.255.255.000
DHCP SETUP	AUTOMATIC

SELECT MENU: ▲ ▼, & [ENTER]

If you choose the manual setting you can program the IP ADDRESS IP (IP address), IP PORT (communication port), GATEWAY and SUBNET MASK.

The top line is not editable and the MAC address of the device distinctive.

CONNECTION SETUP - Here yes set up two Technical preferences: Timeout and attempts connection. the TIMEOUT communication should remain that of the factory (200 msec.) at least that there will not connect through the Internet with a slow connection. In this case it may be necessary to increase the timeout. The RETRY COUNT is the number of connection attempts to be made in case of connection problems.

RS232C SETUP (SETUP RS232)
Here, you set the parameters related to the rear RS232 serial port. It is a port through which it is possible to control the VCR with an external device via ASCII commands.

THE communication parameters are the classic 4 serial communication parameters: SPEED (speed), LENGTH (length), STOP BIT and PARITY. It recommends the use of the serial command, programmers with adequate technical expertise.

PAN / TILT SETUP (SETUP SPEEDDOME)
Here, you set the communication parameters with speed dome cameras connected to the RS-485 rear door.

COMMAND SETUP (PROTOCOL SETTINGS)
Here, you set the commands that are sent to the Speed Dome camera to command the movements and the target and which must obviously be compatible with the camera that will have to perform them.

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COMMAND SETTING	
CHANNEL MODEL	01 Pelco-D
PTZ ID	000 2400 BPS
BAUDRATE CMD	1 MSEC
DELAY	
COMMAND	PAN / TILT STOP
LENGTH	0.7
CODE	FF 00 00 00 00 00 00
	00
SELECT: ▲ ▼, CHANGE VALUE: + -	

The DR-2K4 / 8 video recorders already include the most common communication protocols.

- PELCO P (Cameras SD-22/27)
- PELCO D (Cameras SD-22/27)
- SAMSUNG SCC-641
- DONGYANG DRX-502A
- NETKOREA AECD-2000
- HMC-250
- HiTron FASTRAX HID-2404
- VIDO AU-Gxx
- ACCUDOME

To set the parameters, proceed as follows: CHANNEL choose the top line, the channel

1..4 / 1..8 it is connected to the video output of the dome.

MODEL Choose a protocol compatible with your camera

PTZ ID Specify the address that the camera has the RS485 BUS and which generally is set using DIP switches in the camera itself.

BAUDRATE Select the speed of the protocol according increasingly setting the camera.
CMD DELAY Set the transmission delay In the three subsequent rows are shown all factory-set commands for the chosen protocol. COMMAND Select and press +/- to display one by one all the commands that the protocol chosen is capable of handling. The control codes can not be changed because the factory preset based on your choice of protocol.

CAUTION: Many commands in the protocol can not be handled by the camera you use.

SPEED SETUP - E 'can adjust the speed of the pan and tilt movements and objective
(function currently not available).

AUDIO SETUP - There are 4 RCA audio inputs, and one output, also RCA. E 'can decide which input to listen to (1, 2, 3, 4 or none) simply by pressing the

button AUDIO / SEQ on

front panel of the VCR.

On the menu

AUDIO SETUP you may decide, for each of the 4 channels,

whether to play the audio recording, playing, in both cases or never.

Factory Default - Restore factory settings

After you access the settings menu with the LOG-IN procedure (see above), select the entry FACTORY DEFAULT and press ENTER. In this section you can restore the factory settings.

FACTORY DEFAULT	
ALL SCREEN DISPLAY	OFF
CAMERA SETTING MOTION	OFF
SETUP PANTILT Serup	OFF
SCHEDULE SETUP	OFF
CONFIGURATION	OFF
	OFF
	OFF
RUN	
SELECT MENU: ▲ ▼, & [ENTER]	

You have to choose the reset options, and press ENTER on the last RUN item to reset. If you set the first option ALL ON, pressing RUN will restore all factory settings. If you prefer to reset some parameters and not all, turn it OFF by pressing ENTER. At this point you can enable with the enter button only the sections you want to reset.

- SCREEN DISPLAY cancel the display settings
- CAMERA COLOR erases the video camera settings.
- MOTION SETUP deletes detection masks
- PAN TILT SETUP deletes the settings of the speed dome camera controls
- SCHEDULE SETUP resets all settings programmed recording and calendar.
- CONFIGURATION clears the remaining system settings

Put ON the options you feel you need to reset and then press ENTER RUN.

Language - Language

Change the language of the menu by pressing +/- . And 'available the Italian language, but as a matter of international uniformity of the entries listed in this manual correspond to the English language.



BACK PANEL

On the back of the VCR, in addition to the inputs to the video outputs already seen previously there are other connections that are described below.



Terminal

At the far left of the VCR is a terminal block to connect alarm sensors, alarm and the output of the RS485 serial port. The function of each terminal is clearly indicated to the left of the terminal block.

The following terminals are available:

- RS485** - For connecting the RS485 BUS connect the speed dome cameras. There it connects the twisted pair which then connect in cascade all speed dome cameras. Observe positive and negative in the connection of the various cameras.
- RELAY** - Contact in exchange (COMMON, NORMALLY OPEN, NORMALLY CLOSED). E 'can connect an external device which is activated in case of alarm (eg. Flashing, siren). This contact is active only in case of an alarm coming from external sensors and not in case of motion detection alarms.
- ALARM** - Here you can connect signals from any anti-intrusion sensors that can start recording. The connection is made between the terminal 1 ... 8 and the ground GND. It will alarm when it is closed the connection between the terminal D1 ... 4 and GND, while in case of the open-circuit input is considered at rest.

CAUTION : To prevent damage should not apply voltages above 5V or negative voltages to the alarm inputs.

Supply

On the back of the device is present the power plug where to connect the supplied adapter. The power supply is 12VDC with positive center pin.

VGA

Next to the terminal is the VGA connection to connect one PC screen, both LCD and CRT

cathode ray tube. In order to use this port you must purchase the additional board is DR-VGA and install it into the VCR. The VGA card is supplied separately so as to allow the purchase also separately from the apparatus at different times. The assembly is carried out in a very simple manner by opening the lid of the VCR and inserting the card into the connection provided on the inner motherboard.

The most suitable for your monitor resolution must be set in programming (see above).

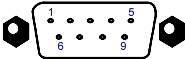
TCP / IP

An RJ45 connector is used to connect a LAN or WAN. The TCP / IP parameters (IP address, etc.) are programmed in the system settings as already described. The remote viewing of images is carried out using the appropriate software supplied with the product and which will be described later.

RS232

The RS232 port can be used as supplements to control the VCR with its external devices.

THE parameters of communication of the serial line are set in programming (see above).



The RS232 connector is composed of 9 PIN that can be numbered starting from the first at the top left in the pan (PIN 1) proceeding to the right until it terminates with PIN 9 in the bottom right corner. Here is how to properly connect the cable:

PIN 1	DCD	Data Carrier Detect
PIN 2	RxD	Receive data
PIN 3	TxD	Transmit data
PIN 4	DTR	Data Terminal date
PIN 5	GND	Ground
PIN 6	DSR	Data Set Ready
PIN 7	RTS	RS232C: Rx / Tx data
PIN 8	CTS	RS232C: Rx / Tx data
PIN 9	-	-

Here is the command table that can be imparted to the VCR via the RS232 port and representing all

the commands present on keyboard.

1 BYTE CODE ASCII

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REC	R
STOP	S
MENU	M
PLAY	P
PAUSE	TO
SEARCH	IS
MODE	D
PANTILT	T
JOG SHUTTLE	THE
FRZ	F
SEQ	Q
ZOOM	Z
PIP	THE
CHANNEL 1	1
CHANNEL 2	2
CHANNEL 3	3
CHANNEL 4	4
CHANNEL 5	5
CHANNEL 6	6
CHANNEL 7	7
CHANNEL 8	8
ON	U
DOWN	J
LEFT	H
RIGHT	K
NEXT	N
ENTER	0x0d
-	<
+	>
KEY LOCK	C
QUICK PLAY	Y

80 ° Right "& <8" [enter] Left 80 ° "& > 8" [enter]		
Jog Less "& -" [enter]	Jog More	"& +" [Enter]

In all commands SHUTTLE RIGHT / LEFT the VCR execute one command until the reception of a new command In the JOG commands +/- operation acts and stops at each command as a button.

If the command to Jog Shuttle is activated with the command "L" is controlled with the following commands:

10 ° Right "& <1" [enter] Left 10 ° "& > 1" [enter]		
20 ° Right "& <2" [enter] Left 20 ° "& > 2" [enter]		
30 ° Right "& <3" [enter] Left 30 ° "& > 3" [enter]		
40 ° Right "& <4" [enter] Left 40 ° "& > 4" [enter]		
Right 50 ° "& <5" [enter] Left 50 ° "& > 5" [enter]		
60 ° Right "& <6" [enter] Left 60 ° "& > 6" [enter]		
70 ° Right "& <7" [enter] Left 70 ° "& > 7" [enter]		



Connection to remote PC

The video recorders DR-DR-2K4 and 2K8 can be connected to a LAN, WAN or even, through it, to the Internet so you can see the images in real time via a remote PC. It 'also possible consultation of the images in the database and the remote control of speed dome cameras connected to the recorder.

Connection via LAN / WAN

The rear door provides an RJ45 connection normally used in connections based on TCP / IP. E 'can connect the port directly to a LAN, as it was the network card of a PC can assign an IP address to the VCR in the SETTINGS TCP / IP, or use an assignment by the DHCP server IP. Both features are supported. (See SETTING TCP / IP)

Internet Connection

If you want to access the VCR from a remote site via Internet it is necessary that the VCR is connected to a LAN, which is connected to the Internet.

And 'possible to operate remote access is through a router through a network of collagto ADSE PC to a modem that will act as a gateway. Self

desired connect the video recorder directly to the Internet, without going through a PC network, then you have to have a particular internet access which will directly provide a network connection and does not require the use of a PC, such as optical fiber links Fastweb.

You can not connect an ADSL modem directly to the recorder because it requires the presence of a PC for managing the PPPoE protocol.

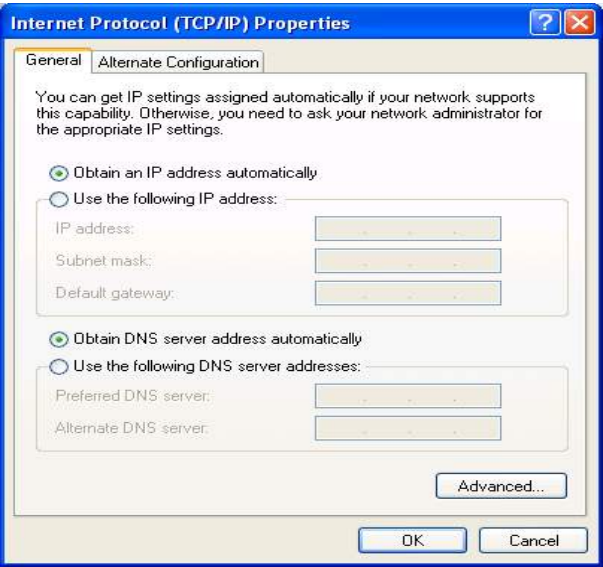
Networking

This manual does not explain how to create a network and it is assumed that the LAN is already existing and fully functioning.

To insert the video in the network you need to know the operation, eventually consulting with your network administrator. In particular it is necessary to know if the network uses the **fixed addresses for each PC, or there is a DHCP server that assigns addresses.**

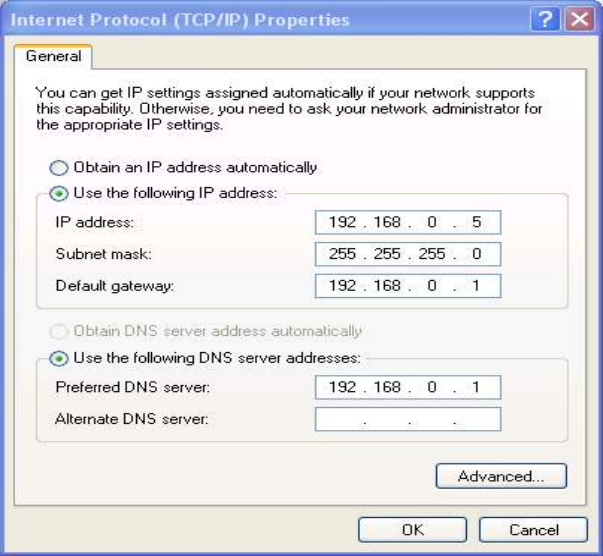
If there is not easy to find this information, check the network settings of any of the installed PC clicking CONTROL PANEL / NETWORK CONNECTIONS. And 'Just select the

network card used for LAN and open the PROPERTIES 'window Protocol TCP / IP. If you see a window like this:



It is meaning that the PC is set to obtain an IP address from a DHCP server on the network.

If you see displayed a specific address, such as:



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then it means that every PC on the network has its own address set manually on each machine.

The DR-2K4 / 8 VCRs are able to adapt to both network types.

● DHCP SERVER - If your network has a server

DHCP is all very simple.

- Connect the power cord to the DVR and turn it on
- Access to the programming menu and go to EXTERNAL DEVICE / TCP / IP SET UP
- Revenue in DHCP SETUP DHCP MODE and set to AUTOMATIC
- Press ENTER IP DETECT

The VCR will automatically the configuration parameters from the DHCP server and will be immediately visible on the network.

● ADDRESS MANUAL - If the network does not have

a DHCP server you must know the configuration parameters and enter them manually. If you have no way to get them by your TCP / IP properties check network of any of the connected PCs. For example, suppose one of the PCs on the network has the following parameters:

Use the following IP address:

IP address:	192 . 168 . 0 . 5
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	192 . 168 . 0 . 1

Now proceed as follows:

- Connect the power cord to the DVR and turn it on
- Access to the programming menu and go to EXTERNAL DEVICE / TCP / IP SET UP
- Revenue in DHCP SETUP and set DHCP to MANUAL MODE
- Enter now in IP CONFIG SETUP and set the parameters as follows
- If the IP address of the PC you have checked it for example 192.168.0 changed the last group of figures in 192.168.0.y. In the case of the previous figure where the PC address
192.168.0.5, you could for example use
192.168.0.6. To ensure that no conflicts with an already installed machine that you check any PCs on the network responds to the PING address you want to set (see next paragraph)
- Set Subnet Mask and Gateway identical to the reference PC (in the example 255.255.255.0 and 192.168.0.1.

The VCR will be immediately visible on the network. There communication port used to communicate with your VCR is set at the factory

50000. There is no need to change this parameter, unless this port is unavailable for the presence of a firewall. In this event you can change the socket on the IP CONFIG SETUP parameters

Ping

PING is a useful feature that allows DOS to verify whether a particular address is present and visible in the network.

Before choosing a fixed network address you should verify that there is a PC with the same address by a ping.

It must open a DOS window (in the accessories in Windows XP) and type PING followed by a space and from the IP you want to assign to the recorder. If there is no PC responds to that address will receive 4 REQUEST TIME OUT as in the following:

```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
C:\Documents and Settings\WAMD>ping 192.168.1.6

Pinging 192.168.1.6 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.6:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\Documents and Settings\WAMD>
```

Once properly set up the VCR address should prove that it responds correctly to the PING. In this case you will get 4 positive feedback, for example:

```
Pinging 192.168.2.5 with 32 bytes of data:
Reply from 192.168.2.5: bytes=32 time<1ms TTL=128
Reply from 192.168.2.5: bytes=32 time<1ms TTL=128
Reply from 192.168.2.5: bytes=32 time<1ms TTL=128
Reply from 192.168.2.5: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.2.5:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\Documents and Settings\Giuseppe Bussolino>
```

Once you verified the correct response to the VCR PING will be assured that the device is perfectly visible within the LAN to which it is connected.

Internet connection

The configuration possibilities are manifold. E 'can connect to the Internet in different ways, depending on the service that you buy from your

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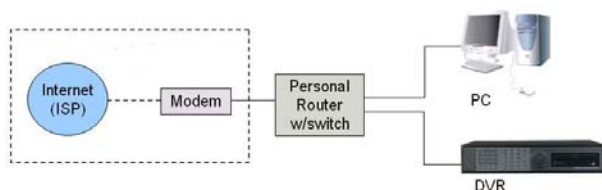
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provider. Also networks can manage access to the Internet in different ways and this multiplies the number of possible scenarios.

The DR VCRs fit two case studies connecting to the internet

LAN + ROUTER - Typically a network connects to

internet through a Router. The router is connected on one side to the internal network and the other to the connection device which can possibly also be integrated.



The service provider assigns an IP address to the router where to routing communications to internal PC network.

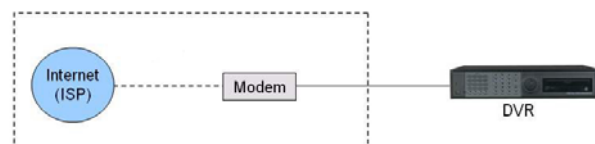
In this situation, in order to operate remotely, you must program the router so that the communication port used for remote access (factory 50000)

It is directed towards the video recorder. Each router has its own configuration menu. Refer to the manuals of the router to direct port 50000 to the IP address assigned to the VCR.

And 'necessary that the internal LAN using fixed and not dynamic IP address with DHCP server.

Direct connection to broadband - If

has a broadband access via cable, such as that provided by Fastweb, it is possible to connect the VCR directly to the network, even without connecting to a LAN.



You usually need to set the automatic DHCP address, unless you have access to a fixed IP address.

The IP address

Each PC of a network is distinguished by its own IP address. Similarly, each computer making a internet connection is identified by an IP address, just like it does on a local network.

The IP address you get from your provider is typically dynamic, that is different for each access, but you can also request to pay a fixed IP address.

With a fixed address, each time your computer will go to the network will always be identified with a default IP address. Instead a dynamic IP address (*FLOATING*) change changes whenever made a connection. The

Remote connection of video recorders DR works in both situations, but with a dynamic IP address each time the local PC will disconnect from the Internet IP address will change and you have to know to be able to connect from the remote site. If you plan to use the remote control of the VCR assiduously it is undoubtedly preferable to have a fixed IP, otherwise you will need to configure your PC each time you connect. The problem is fixed IP only places for the site where the VCR, while there is the remote sites, where you can safely have a normal subscription.

If there is possible to get a fixed IP you do not have some loopholes that allow you to make permanent a dynamic IP. The first is to use a paid service, available online, which registers the new IP of your PC to any Internet access, and I will simply questioning reveals a website. There are several similar services in Italy and free. Another system is installed between the PC and the network hardware firewall to keep always powered. In this way, even turning off the PC to your IP address will be the same.

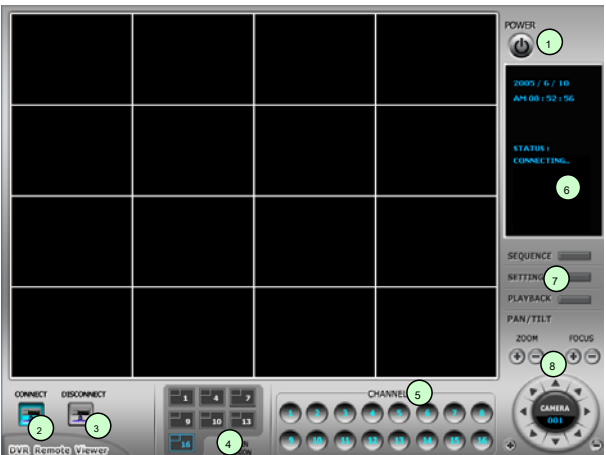
NOTE

You can not make more than a remote connection at a time. If your VCR is engaged in a remote connection with a PC will not respond to a request for access comes from another computer.

Software DVR Remote Viewer

To view images from a remote PC must install the DVR software RemoteViewer supplied with the video recorder.

Place the CD into your PC and install the software by following the instructions. The program is compatible with Windows XP, 2000.



1 - Switch to exit the program. Log off from the remote site before leaving. 2 - CONNECT button. Starts the connection with the VCR

3 - DISCONNECT button. Close connection to the VCR

4 - SCREEN DIVISION buttons allow you to define the split screen in multiple quadrants to display multiple cameras simultaneously. 5 - Buttons CAMERA. They allow you to choose to display camera

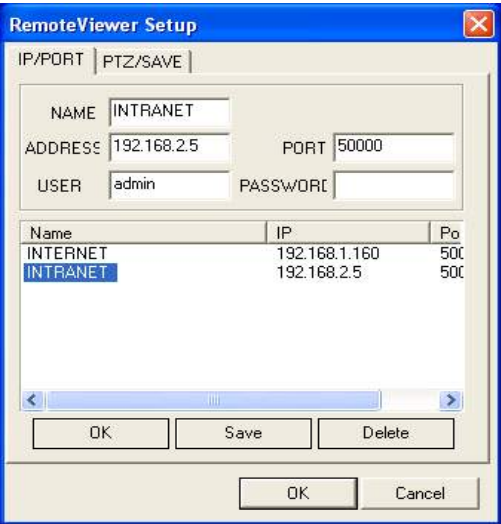
6 - Status Window. Shows the date and time of the reproduction and the connection status. 7

- Buttons SETTING / PLAYBACK / SEQUENCE allow respectively of log into a programming, enable remote playback options and see the full-screen cameras in cyclic sequence.

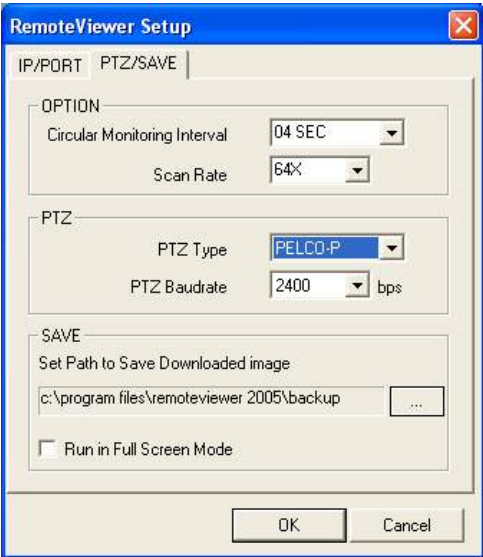
8 - Buttons PTZ. They control the speed dome cameras connected to the VCR.

Basic Settings

Before you can access the video you need to set the configuration parameters. Click the settings button and you can set the data for the DVR you want to control. The menu consists of two folders: IP / PORT and PTZ / SAVE.



- NAME - Enter the name you want to give the DVR remote.
- ADDRESS - Here you have to enter the IP address of VCR you have set in his internal parameters. If you use a dynamic IP with a DHCP server you can see the IP address assigned in the IP Setup menu.
- PORT - The communication port to be used is factory set to 50000. If this port is not available, for example because it blocked by a firewall, you can change both the software and on the recorder.
- USER - Here you can remain the ADMIN that He refers to the Admin password set in the recorder.
- PASSWORD - Of default there password ADMINISTRATOR and left blank. If you have changed your password in the correct password entered VCR
- LIST - E 'you can store multiple addresses remote to connect quickly.



CIRCULAR MONITORING INTERVAL - IS'

You can set the duration of the residence time of each camera when viewing in a cyclic scan.

SCAN RATE - Set the speed value

PLAY FAST you want to use when you will review movies already stored in the remote search of movies (see SEARCH REMOTE). For example, if you set the SCAN RATE 4X and press while playing the side buttons, the images will be reproduced 4 times faster than normal.



PTZ TYPE - If you have connected to the recorder of

speed dome cameras must choose here the protocol to be used to control them

BAUD RATE - If you have connected to the recorder

speed dome cameras here you have to choose the speed of the serial protocol.

SET PATH - The program offers the possibility to

search for video files that are already registered and review them remotely. In this case, as we shall see later, you will have the ability to save images and movies on the hard disk of the remote PC on which you are operating. Set here the folder where you want to save images and video files.

RUN IN FULL SCREEN MODE - Check this option if you want the program to run

full-screen on startup monitor.

Connection and controls

After setting the program, as seen above, the IP address you assigned to the video recorder, you can make the connection by pressing the button

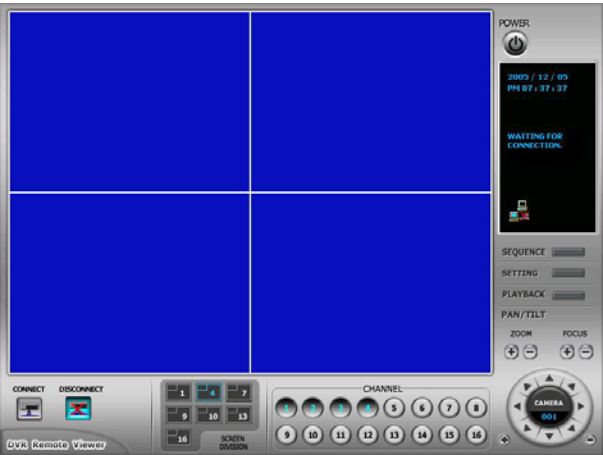
CONNECT. You will see the images displayed on the monitor and will appear: CONNECTION established (Connection established).

If nothing happens and remains STATUS WAITING FOR CONNECTION (waiting for connection) check the correct compliance of the TCP / IP parameters set in the program with those of the VCR. If the parameters are correct, make sure it is not running a firewall

that inhibits the door of the communication set (default 5000). Also check that the PC and DVR addresses have the same class, that is, with the first 3 groups of identical numbers (eg.

192.168.0.xe 192.168.0.y)

Once the connection is established you can act on commands placed on the control panel which are explained later.



CONNECT / DISCONNECT - The two buttons at the bottom

left serve to establish and break the connection.

SCREEN DIVISION - There are 7 different

screen divisions, to hold you from 1 to 16 cameras. The actual number of available options depends on the VCR model to which you linked. While watching multiple cameras on the screen, for example, in QUAD vision, it is always possible to bring a single camera in full screen by double-clicking on the image.

CHANNEL BUTTONS 1 ... 16 - These buttons

allow you to select the cameras you want to display on the screen. The number of buttons enabled depends on the VCR to which you are connected. They will be enabled but not functioning

buttons the channel where it is not This video signal.

POWER - In the upper right is the button for to close the program.

STATUS WINDOW - The

Status window shows the date, time and status of the connection. It 'also reported there resolution images you are seeing, and that



It depends on the VCR settings.

SEQUENCE - If you have set the display a single camera, this button you need to start the SCAN CYCLE. All cameras will start alternating on the screen. The residence time of each must be set in SETTING as seen above.

SETTING - Provides access to settings described in the previous chapter.

PLAYBACK - Opens the search window films already recorded by the VCR, as will be described in the following paragraph.

BUTTONS PTZ - If you have connected to the RE-485 port of the VCR of the speed dome cameras you can control them using the PTZ buttons that are placed at the bottom right. Select the camera with the +/- buttons

in the bottom of the screen so that its address appears in the window below the CAMERA voice. Then act



on directional navigation buttons and the buttons for the ZOOM +/- control and FOCUS (FOCUS)
+ / -.

Note: For correct operation of remote viewing is recommended to set the recording continuously.

Remote Search from Archive

When a connection is established with a VCR you can search and playback the images previously recorded and stored in your Hard Disk.

Depending on the mode of work established in programming the VCR will behave differently when you are in a remote playback

METHOD 'DUPLEX - During playback remotely of a non-realtime video, but wanted in archive,

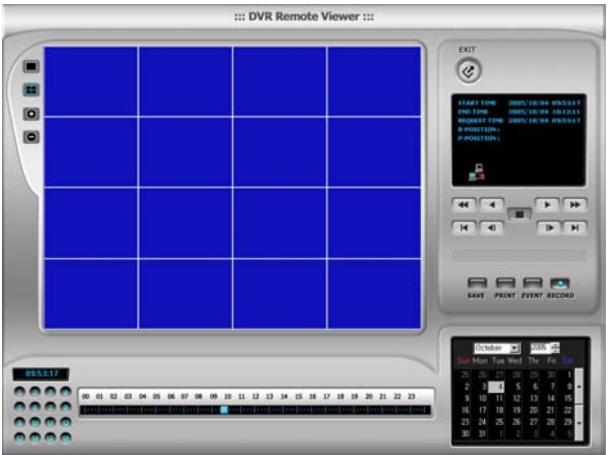
stops recording that then resume alone just finished the operation.

METHOD 'TRIPLEX - During playback remotely a movie recording continues uninterrupted.

NOTE: you 'good to choose the Triplex option only if really necessary, because only with the duplex option, you can play all

frames per second of video clips sign in. There the in triplex playback mode is done with many frames reduced, because of the need unit to continue recording even during playback.

To play a movie stored via remote access, once connected, press **PLAYBACK** to open the search window where you can set the search and playback options.



Search and playback based on date and time

The date and time of interest is set as follows:

CALENDAR - In the bottom right of the screen there is a calendar in which you have to set the year, month and day of search



TIMELINE - To the left of the calendar is a horizontal slider day from 00 to 23. Drag the cursor to the time of interest

To search for the movie, after setting the date and time of the search, press one of the **PLAY** buttons below the status window. Normally you use the **PLAY** button at normal speed which is shown opposite. It will start a research phase and later playback of recorded movies. If you have not set a date between the **START TIME** and **END TIME** by pressing **PLAY** you will be reported to you "INVALID DATE" to indicate that the request is not valid because the period was not covered by the registration.

If you set a time that the device was not recording it will play back the images temporally closer.



STATUS WINDOW - The window with characters blue at the top right of the screen shows you the date and time of the images oldest recorded hard disk recorder (START TIME). Below is an indication of the last recorded image (END TIME). The date and time shown as REQUEST TIME returns your search parameters, as you have them set in the calendar and the time line.

The values for START TIME - END TIME are detected by the program upon connection.



It is also indicated the amount of occupied HD (rPosition) and the playback position being expressed as a percentage of total recording time (P-POSITION).

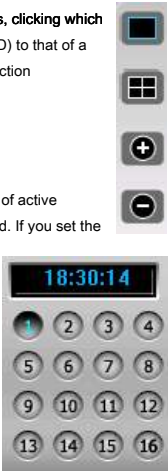
Checks during archive playback

Once you start playing the movie can act on several commands that allow you to control which camera view:

QUAD VISION OR SINGLE - At the top left there are 2 icons, clicking which it is possible to pass from the vision of 4 to screen cameras (QUAD) to that of a single camera in full screen. The buttons + / perform the same function

SWITCH CHANNELS - Bottom left is present the panel for the choice of the camera, where the number of active buttons will depend from the apparatus to which you are connected. If you set the single-camera view you can choose it

clicking the number correspondent, but if you have chosen the QUAD vision will go by the first 4 cameras to later. Above the panel shows the time of reproduction.



After setting the display to your liking, you can control playback with the following buttons:

- PLAY** - To start the search and at normal speed.
- FAST FORWARD** - It allows to accelerate playback. The speed you choose in SETTINGS - SCAN RATE
- BACK** - you need to see back images at regular speed but with the opposite direction to PLAY
- BACK FAST** - Playback accelerated backwards. The speed you choose in SETTINGS - SCAN RATE
- STOP** - Freeze the playback. This button should be pressed ever before acting on the buttons below.



The buttons below allow, in broken play to move quickly on the calendar without selecting the day and use the timeline bar

- NEXT TIME** - Moves quickly the timeline cursor hour following.
- NOW BACK** - It allows to shift Quickly slider timeline previous hour.
- BEGINNING OF PERIOD** - It allows to move the search parameter at the beginning of the registration period.
- END OF PERIOD** - Moves the search parameter to the end of the registration period.



SAVE PICTURES AND MOVIES

During movie playback previously recorded you can choose to save certain images or video clips. Are available the buttons shown below:



- SAVE IMAGE** - By pressing the button **SAVE** during playback, you save the image in JPG format at that time on the screen. And 'advisable to press the STOP button in the chosen moment to freeze the picture and then press SAVE. It is saved exactly the image you are seeing, so

viewing quad or single depending on the camera. Each camera will be superimposed date and time. The image saving is a good way to extract information from the movie because the jpeg images are small files of about 30KB

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each one and look to transfer dozens of practical floppy disk.

Images are saved in the folder you specified in SETTINGS (see above), are named with N.Telecamera-Date-Time and are reviewable on any PC.

● **PRINT PICTURE** - Similarly to

visa for saving the image, you can while playing press **PRINT** to print photos directly instead of saving it. This starts directly print to the default Windows printer.

● **SAVE VIDEO** - During playback you

You can also capture an entire movie. Simply press the RECORD button and the program will begin to record exactly what you are seeing. Press RECORD or STOP again to stop recording. When finished you will find in the folder you specified in the SETTINGS video clips in AVI format

You can review movies with Windows MediaPlayer. And therefore you can burn them to CD and review them on any other PC. The film, being saved

AVI format, are considerable size, so it is necessary to acquire

short periods and delete all from the Hard Disk the bailouts outdated to free up space. The video capture process requires a considerable effort of the CPU, so you'll notice a slow PC performance during capture and in cases of CPU or insufficient RAM the operation might not be feasible.

● **BUTTON EVENT** - Function currently not available.

IMPORTANT NOTE: Unlike PC-based video recorders, Standalone video recorders static compression. This ensures higher image quality and operational stability, but makes streaming video more "heavy network" in terms of data to be transferred. Should you experience critical situations in the network, the DVR Remote Viewer program may suspend streaming and interrupt transmission to protect himself and windows of critical errors. Nell'evenienza must press the CONNECT button to reconnect. If you expect a remote access continued use is advisable not to exceed

Quality level
ENHANCED image and not going through the CPU of the PC with other applications.

The diagram shows the front panel of the DMR-10000 with the following numbered callouts:

- 1:** Points to the top status display showing the time 11:22:19 AM.
- 2:** Points to the menu display showing START TIME, DATE, TIME, END TIME, and TIME fields.
- 3:** Points to the SPEED control, set to 2x.
- 4:** Points to the DELAY control, set to 1.
- 5:** Points to the bottom right control buttons: OPEN, EDIT, AVI SAVE, and EXIT.
- 6:** Points to the bottom row of 16 numbered buttons (1-16).
- 7:** Points to the left side controls, including a small screen, a 4x4 grid of buttons, and a single button labeled 1.

And - Play F - Fast forward G - Go to the end
of the movie 5 - **BUTTONS GENERAL**

2 - **STATUS WINDOW** - Shows the date and time of start and end of the recording saved on CD, as well as image resolution 3 - **SPEED 'RIRODUZIONE** - E 'can set the speed of the fast forward command (SPEED) and slow (DELAY) for analysis in slow motion playback. 4 - **CONTROL BUTTONS**

OPEN - Opens the backup files EDIT - In full screen mode allows you to isolate the image and edit it. AVI Save - Allows you to save the sequences that are being played back in AVI. EXIT - Closes the program 6 - **CHANNEL BUTTONS** - To select a single camera 7 - **SCROLLBAR** - Allows you to quickly scroll the movie 8 - **PAGE** - Useful in QUAD View to move the cameras of the cameras 1-4 1-8 9 - **DIVISION SCREEN** - Selects various multi-vision mode.

DSE -Torino Italy - Italy - WWW.DSE.EU

Main technical data

FEATURE	DR-2K4	DR-2K8
Triplex	Duplex / Triplex	Duplex / Triplex
video Inputs	4 channels - 1 Vp-p 75 Ohm	8 channels - 1 Vp-p 75 Ohm
audio Inputs	4 channels - 2 Vp-p 50 Ohm	4 channels - 2 Vp-p 50 Ohm
video Outputs	4 channels LOOP - 1 Vp-p 75 Ohm	8-channel LOOP - 1 Vp-p 75 Ohm
Composite Video Monitor Outputs	2 outputs 1 Vp-p 75	2 outputs 1 Vp-p 75
video Connections	BNC female	BNC female
VGA video output	Available on request	
Hard Disk compatible	Max. 2 7200 rpm Hard Disk without capacity limit and brand	
Hard Disk Serial mounted	Nobody	
Monitor Output Video Resolution	480 TV Lines	
screen Division	Single camera, Quadrivisione, Multivision, Cyclic scan.	
Zoom	2X both real-time and archive playback	
Picture in Picture	Yes, programmable	
cyclical selection	Yes, with programmable dwell time from 1 to 99 sec.	
Digital resolution acquisition	720x288 pixels with full 360x288 pixel screen room for the camera in the vision quad	
Capture rate	Adjustable from 0.1 to 25 frames / second per channel Total Capacity 50 frames / second	Adjustable from 0.1 to 25 frames / second channel Total Capacity 100 frames / second
Compression	JPEG2000	
Recording Mode	Real Time, Time Lapse, Motion detection, external alarms	
remote access	TCP / IP for LAN / WAN / INTERNET	
Software included	Software for viewing remote video player and backup files	
Connection PTZ speed dome	RS485 port	
Protocols including high speed domes	- PELCO P (Cameras SD-22/27) - PELCO D (Cameras SD-22/27) SAMSUNG SCC-641 - DONGYANG DRX-502 - NETKOREA AECD-2000 - HMC250 - HiTron FASTRAX HID-2404 - VIDO AU-Gxx - ACCUDOME	
Control via serial	RS232 port. And 'possible to transmit all of the expected commands from the keyboard.	
Alarm inputs for intrusion sensors	4 inputs NO	8 inputs NO
Alarm output	1 changeover relay C-NO-NC	
Supply	12VDC (Power supplied 8.3 A)	
Infrared remote control	including	
CD writer	Included	
firmware Update	Possible with front USB port	
Operating temperature	+ 5 ... + 40 ° C	
Rack Mounting	19 "2 units	19 "2 units
dimensions	436 (L) x88 (H) x396 (P)	
Weight	Approx. 8.5 kg (without HD)	

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