

DK-PV800

Portable Digital Video Recorder



INTRODUCTION

DK-PV800 is a video recorder portable miniaturized by pocket size. It goes well with any analog camera or camera RE TCN9XH specifically designed for portable use. Among the main applications:

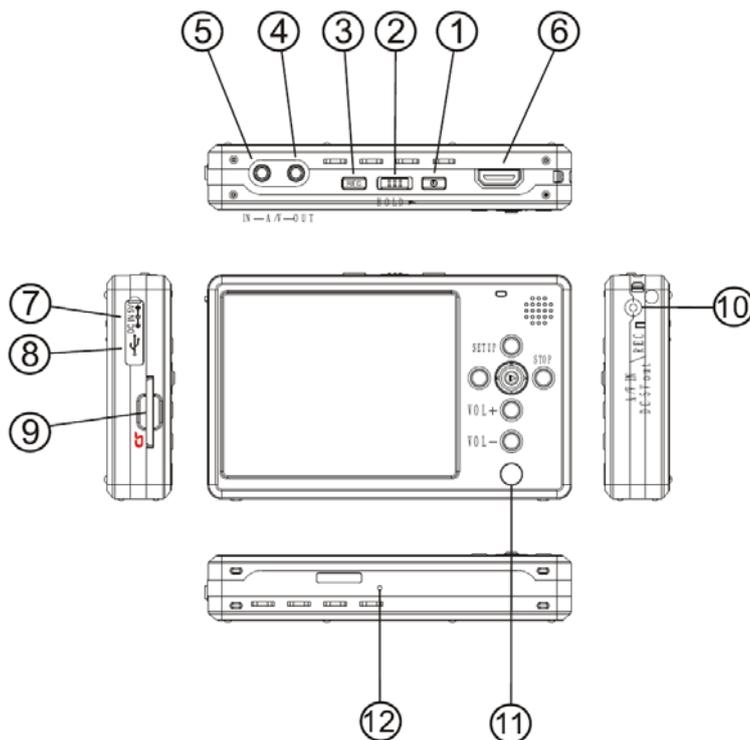
- **Candid cameras.** It can be easily kept in a pocket and operated as needed
- **Hidden cameras.** It can also be easily hidden in narrow spaces and requires no power
- **Shooting sports.** The minimum size and weight make it easy to wear for athletes for live performance (cars, motorcycles, skiing, hang gliding, paragliding etc.)
- **Roll of media.** Insensitive to vibrations, it can be used on vehicles or car. The TFT screen allows local viewing of images.

GENERAL CHARACTERISTICS

- **Compression MPEG4 / DivX** allows approximately 65 minutes of videotape for each Gb memory Registration of SD card (purchased separately) of any size and brand, without the need for any prior formatting. Insensitivity to vibration and shock.
- **Registration of Integrated Hard Disk, Total capacity: 60 GB (about 60 hours of recording) Management 1 inputs audio video.**
- Power supply external camera 12 or 5 VDC
- A / V Input + 5V supply for RE-TCN9XH / CH / BH camera input A / V + 12V power supply for generic camera
- **video Output** for TV or external monitor
- **TFT Monitor 3.5 "** incorporated
- **Programming Menu** graphic
- **Zoom 2x and 4x** during play
- **Accelerated playback and slow-motion Motion Detection** to start recording only if clearly intrusion.
- **Lithium battery from 3.6V 1,88A** able to provide a range of about 2 hours of continuous recording to the VCR and camera. Provide 2 batteries supplied.
- **High resolution image (640x544)**
- **acquisition capacity.** View and record in Real Time: Max. 25 frames / second
- **5VDC power supply.** 220V adapter supplied. Door **USB** for PC connection. The files simply by browsing with Windows Explorer and reproduce with Windows Media Player or similar player.
- **TV remote** infrared
- **Audio Recording** and playing audio files in WAV, WMA and MPEG Saving **JPEG photos**
- **Playback DivX movie Miniature size 130x80x23,5 mm Weight only 256 grams** including battery
- **Ease of mounting on movable means, and the possibility of easy concealment wear your VCR** simply holding it in his pocket.

PRODUCT DESCRIPTION

Video recorder



1 - Power ON / OFF 2 - Key Lock 3 - Switch Record / Pause 4 - AV output for connection to TV 5 - AV input for connecting cameras + 12V DC power supply

6 - Connector for remote control cable

7 - AC adapter connector 5VDC

8 - USB port for PC connection

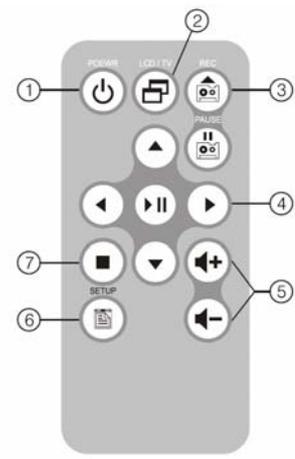
9 - SD card slot 10 - AV input for connecting cameras + 5V power supply DC 11 - Infrared receiver for IR remote control 12. Reset Hardware

TV remote

1 - Power ON / OFF 2 - Switching LCD TV built-in external 3 - button Record / Pause

4 - 5 navigation buttons. Central to select 5 - Volume buttons

6 - in the configuration menu access 7 - Button STOP / EXIT



ASSEMBLY AND INSTALLATION

Package Contents

- Video recorder DK-PV800
- Ranked # 2 lithium batteries adapter 220VAC / 5VDC
- Infrared remote control Wired Remote Control USB
- cable for PC connection Stereo Headset
-
-
-
-
- Cava AV for connection with 12VDC camera AV cable for connecting TV or external monitor Pouch CD with manual belt fabric in PDF format
-
-

Installing SD card

The VCR has an internal hard disk 60Gb hard to contain recordings. If you prefer to save your recordings on a removable media, there is a slot for SD card. E 'can use any SD-card without brand or capacity limits. As an indication, a 1 Gb SD card allows more than 1 hour of recording. The SD card is inserted into the side. The insertion position is rendered unique by the shape of the card. The selection between internal hard drive and external SD card you run the setup menu.



Removing the SD card should be done by pushing the SD card inward until the release stopped. The direct extraction towards the exterior leads to Slot damage.

Insert battery

They are supplied 2 x 1.88 Ah, each able to provide about 2 hours of autonomy in camera and DVR. The battery fits the back by removing the cover

Charging the battery

Before using the machine, you must charge the battery for at least 12 hours. Connect the power supply input DC5V IN check that the charging LED above the key set up, it is lit in orange. The LED turns off when fully charged.

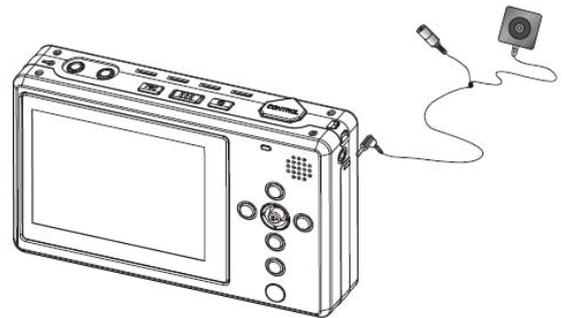
During normal operation the charging LED will light green color and will start flashing in case of insufficient battery.

Camera connection to RE-TCN9XH / CH / BH

The digital video recorder DK-PV800 is at its best when used with the RE-TCN9XH cameras, expressly studied for applications of concealment and portable.

The camera minijack be inserted directly into the AV IN jack DC 5V OUT / REC VCR. In this way the DVR retrieves the A / V signal of

camera and there It provides contextually power.



The RE-TCN9XH hidden camera is also available in versions for sports cap (RE-TCN9BH) and tie (RE-TBN9CH).

Connecting to generic analog camera

E 'can connect your VCR to any analog camera. It uses for this the adapter cable with connectors RCA yellow / white / red (yellow = video, white / red = audio). The mini jack of the adapter cable is plugged in IN-A / V

VCR.

The camera video output is connected to the yellow connector, any audio output to white / red connector. In addition to closed-circuit cameras it is possible to connect other sources

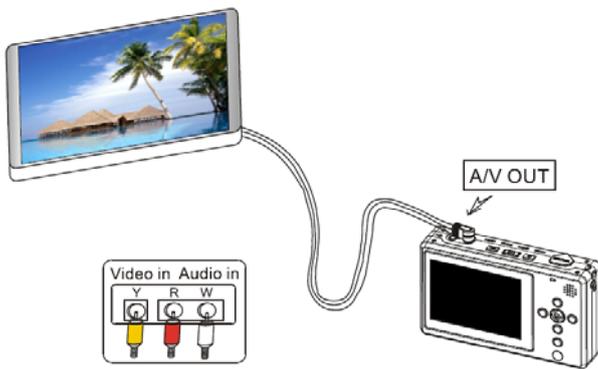
video, such as DVD players, VCRs and TV to record programs. Depending on the connections of the device to be connected you may be required appropriate adapters in order to be able to insert into the connectors female RCA cable provided. The DK-PV800 VCR also links

a camera to 12VDC is simultaneously feed it through the same internal battery of the VCR. In this case the camera must be connected to wired remote control as will be described below.

Connection to TV, VCR or external monitor

And 'possible to reproduce the visible image on the TFT screen on an external monitor or TV. You use the adapter cable supplied with connectors red / white RCA for audio and yellow for video.

The miniplug side is inserted into the socket **A / V OUT**.



If you make the connection to a TV fitted with one SCART socket you will need a SCART RCA RE SCART1 adapter (see table) to be purchased separately.



To transfer the video playback exit from the LCD TV selection must be made via the programming menu (see below)

remote Control

The DK-PV800 VCR is supplied with a wired remote control, useful to comfortably operate the recording even if the DVR is in your pocket or purse.



The remote control connects to upper connector protected in CONTROL plastic protection.

!!! CAUTION !!!

The HDMI connector of the remote control is not HOT SWAP, such as the USB cable and must not be connected / disconnected during operation of the appliance. Be sure to turn off the DVR before connecting the remote control.

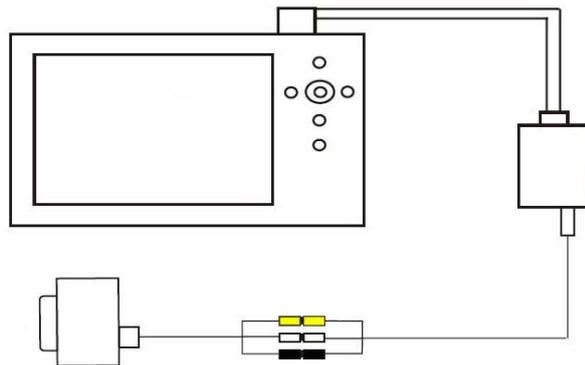
Make sure that the switch of the remote control is on OFF before making the connection to the DVR.

When connecting the remote control all of the DVR keyboard commands are not usable.

The remote control is equipped with a slide switch with 3 positions: OFF (DVR off), ON (DVR on), REC (recording start). There are also two LED indicators: LED BLU (DVR on) and RED LED (Recording in progress).

Connecting 12VDC analog camera powered by internal battery

The DK-PV800 VCR also links a camera to 12VDC is simultaneously feed it through the same internal battery of the VCR. In this case the camera must be connected to wired remote control via the cable provided with connectors Yellow (video) White (Audio) and Black (12VDC).



The power plug can serve to feed the camera (12VDC) doing caution the absorption of the latter (max. 250 mA).

!!! CAUTION !!!

The maximum absorption of the camera can not exceed 250 mA. IS' not recommended to connect cameras with built-in IR illuminator. If the VCR connected to the 220V network and simultaneously to a 12VDC external camera check that the battery is fully charged otherwise the DVR might fail to boot.

Connection to PC

Movies are saved on the SD card or on 'integrated Hard Disk and can be transferred to a PC. For PC connection use the USB2 cable and the USB port on the device OUT.

USER MANUAL

DIGITAL VIDEO RECORDER DK-PV800



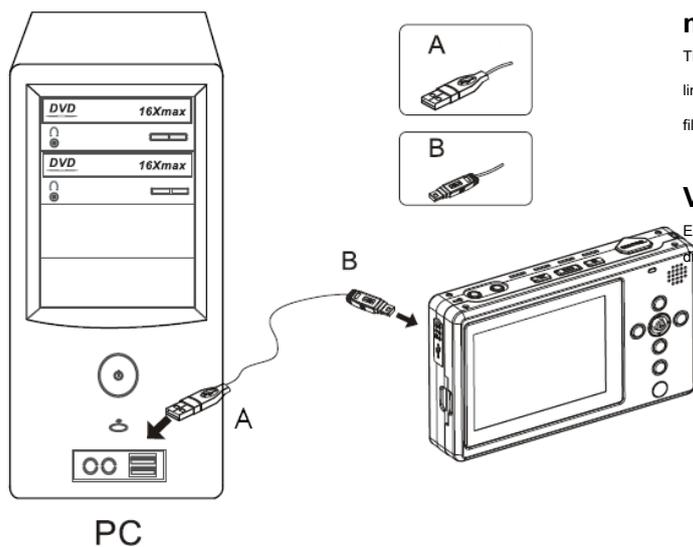
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Last updated: September 2007

As soon as the device is connected to the PC operating system (Windows or other) will recognize the device and install the driver in an automatic way.

The video is seen by the PC like any Hard Disk that can be peeled with EXPLORER.

In addition to copying the files on the hard disk of the PC is also possible to transfer images from the PC, audio files and video clips, and then reproduced by the VCR. It must avoid formatting the SD card and HDD made by PC.



managing files

The movies are stored for a maximum of two hours, three hours of audio clips. There is no limit to the number of stored files or folders, but each folder can contain no more than 999 files.

Vibration and mechanical shock

It is necessary to avoid strong vibrations or mechanical stress when using the internal hard disk as mass storage.

PRELIMINARY SETTINGS

Switching on the DVR

To turn on the power to act on the ON / OFF for a few seconds.

The front power LED will light GREEN to signal the state of operation unit.

To turn off one acts again on the same switch or by pressing the POWER button on the remote control.

Energy saving

::: IMPORTANT NOTE :::

If the power saving function is active, in the case of operational inactivity, the LCD screen turns off automatically. And 'advisable to enable line

energy saving until you have familiarized yourself with the controls of the device because otherwise the lack of on-screen instructions can lead to rash issue commands.

To disable the power-saving function, proceed as follows:

- Turn on the appliance
- Press the top SETUP button on front unit.
- Turn the joystick center navigation button to select BACK LIGHT OFF and press the joystick button to enter the edit parameter, which can vary from 30 sec., 1m., 3m. or off. Select: NO.
- Press the joystick button to confirm
- Press the STOP button repeatedly to return to the main menu.

HOLD

The HOLD button on the upper edge of the DVR captures all keyboard functions. The feature is useful for preventing accidental activation. Make sure that you switch the button to the LEFT to operate on the keyboard.

Control of front keyboard DVR

All VCR functions easily control the front keyboard.

To move between options using the central joystick button that allows you to move in 4 directions and can also be pressed to select or confirm (ENTER).

To leave / cancel using the STOP button on the right.

Completing the keyboard the SETUP button (for direct access to settings), and volume adjustment keys.

Control of TV remote DVR

As an alternative to the front keyboard it is possible to use the remote control Infrared. To use the Remote must direct it towards the receiver LED placed below the volume keys.

To move between options using the arrow keys UP DOWN LEFT RIGHT. To select the item of interest or confirm a value, press the center button (play / pause)



button STOP

It is used to exit a menu option and return to the previous page

Video Format PAL / NTSC

First you need to connect a camera to select the correct video format, otherwise the image will be altered or white / black. See later in the SETTINGS section.

Defrag

It 'good to provide for defragmentation Hard Disk every 2-3 months. To do this connect the DVR to your PC with the USB cable and use the appropriate utility windows

START / ACCESSORIES / UTILITY ' OF SYSTEM / Defragmenter. The defrag cycle has a rather long time, even several hours and does not involve the loss of data. Perform the operation exclusively with mains supply.

REGISTRATION

Start recording the keyboard

The dial pad lets you start recording by pressing the REC button on the top edge of the device. Press the STOP button to stop recording.

Start recording by remote control

It can also start recording by infrared remote control.



REC button
To start recording



PAUSE button
To stop recording temporarily. REC Press again to resume recording.



button STOP
To stop recording

Start recording by remote control

The remote control is fitted with a 3-position slide switch that allows you to:

- OFF - switch off the unit ON - turn on the REC unit
- allows you to start recording

Bring back the switch to ON to stop recording.

::: CAUTION :::

Turn off the machine and bring the selector to OFF before connect the control remotely video recorder. When connecting the remote control all the commands of the DVR keyboard are not usable

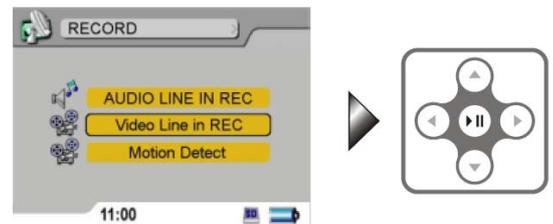


Start the video recording by RECORD menu

It's also possible to start recording from the initial menu to RECORDER SETTING voice. This way you can access all recording options. It's possible to act indifferently on the infrared remote control or on the front keyboard.



Select RECORDER SETTING and press ENTER. You are offered three options: Audio Line, Line Video and Motion Detect.



Choose the VIDEO LINE option and press ENTER to start recording video. The DVR is brought into a state of waiting for registration and requires you to press the REC button to start recording. If in this situation you can press the SETUP button to set the video recording device options:

- QUALITY** - Defines the high video quality (HIGH), or normal (LOW. CAUTION. With HIGH image quality is reduced the number of frames / second acquired from 25 f / sec to about 18 f / sec.
- DISPLAY INFORMATION** - Enable / Disable information superimposed on the screen
- REC DATE TIME** - Enable / Disable stamping date / time in the recording.
- DISPLAY** - Set the display to the LCD or TV output.

Press SETUP again to exit from the Recording Options

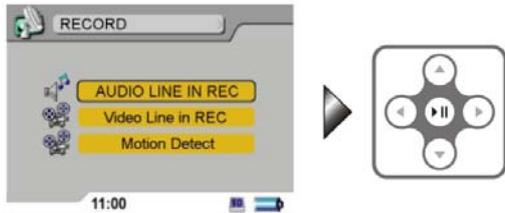
Press REC to start recording. Press STOP to stop.

only Audio Recording

The audio-only recording starts from the start menu, option: RECORDER SETTING.



Choose the AUDIO LINE and press ENTER.



The DVR is brought into a state of waiting for registration and requires you to press the REC button to start recording. If in this situation you press the SETUP button, you can set the unit's audio recording options:

- **QUALITY** - Defines the high audio quality (HIGH) recommended setting, or normal (LOW).

To start recording, press REC. Press STOP to stop.

Video recording with detection

movement

(Motion Detection)

DK-PV800 is able to start recording only in case of motion detection. In this way the

VCR does not record continuously, but only when the captured image is changed. Obviously the use of the motion detection provides that the camera is absolutely stops. Recording in Motion Detection starts from the start menu, RECORDER SETTING option.



Choose the MOTION DETECT and press ENTER. The DVR is brought into a state of waiting for registration and requires you to press the REC button to start recording. If in this situation you press the SETUP button, you can set recording options in Motion device. The first 4 parameters (**Quality / Display information / Rec Time / date display**)

They are analogous to the continuous recording (see above). In addition you must set:

- **MOTION DETECTION LEVEL** - Set sensibility of the detection of the movement Low / Medium / High (Low / Medium / High).
- **MOTION DETECT RECTIME** - Sets the duration recording in response to a motion detection (30 sec, 13,5,10 min.)

To start recording, press REC. The VCR will activate the detection and start to record only when it will come detected an intrusion. The recording will stop at the end of the time set and the VCR will return to stand-by waiting for a new intrusion.

SETTINGS

Access MENU Settings

To access environment of the VCR programming is necessary to act on the remote control or on front key, selecting the Program Setting then press the center selection button.



Alternatively you can press the SETUP button on the remote or on front key. To exit the programming menu, press the STOP button.

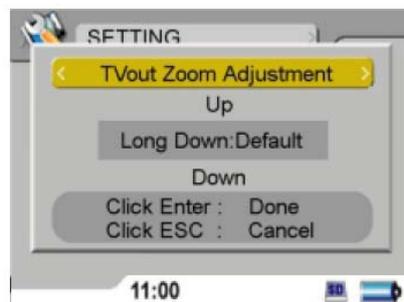
Settings Details



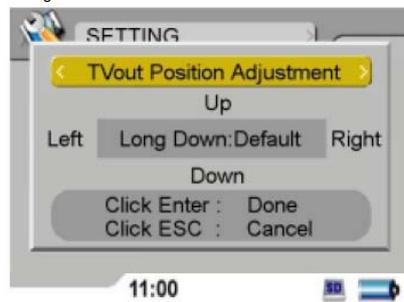
VIDEO REPEAT - This option is used to ensure that during playback the movies may play continuously without stopping until you stop the PLAY command. The options available are: SINGLE (play a single movie without interruption), ALL (plays all the movies continuously), and NO, to disable the feature

AUDIO REPEAT - As above but for audio files. Besides the same options listed above for VIDEO REPEAT, RANDOM adds the option to play audio files randomly.

- THUMBNAIL PREVIEW** - Show previews in file list
- SLIDE SHOW REPEAT** - In the display images can be displayed in sequence (SLIDE SHOW). Here you can choose whether scanning is performed once or continuously
- SLIDE SHOW TIME** - Set time to permanence of each image during the SLIDE SHOW (adjustable from 3 to 10 sec.)
- SLIDE SHOW AUDIO +** - Enable sound while SLIDE SHOW (The Audio files must be entered inside the images folder)
- SLIDE SHOW EFFECT** - Enable transitions during the SLIDE SHOW.
- BACK LIGHT OFF** - Set time to automatic shutdown of the screen in case of inactivity to conserve battery life (30 sec., 1 min, 3 min, or always on)
- TV FORMAT** - Set on the European PAL format or American NTSC format depending on the connected camera. With cameras purchased this option in Italy should be set to PAL.
- TVOUT ADJUSTMENT** - Allows you to adjust the zoom and placement of the monitor TV in output. Selecting ZOOM ZOOM you can adjust with the UP / DOWN



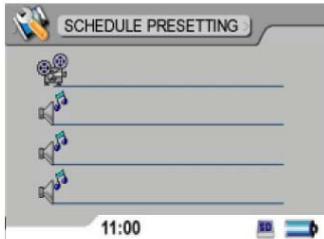
Selecting POSITION you can adjust position output TV with the keys Up / Down / Left / Right.



- DISPLAY** - Allows you to select whether the built-in monitor, or external TV output for playback.
- LANGUAGE** - Unused (English only)



- **FORMAT** - Allows you to format the SD card inserted into the side slot.
- **SCHEDULE PRESETTING** - This section is intended to program of the recordings automatic programmed. Position yourself on the first line and choose if you want to record only AUDIO or AUDIO / VIDEO changing the icon with the left arrow.



The recording of the video matches the icon of the projector. Then press ENTER and set the date and time of the start of the recording and the next page the end time. Finally you will be prompted to set the high recording quality (high) or standard (low).

To activate the programming insert ON SETTING last option and exit using the STOP button.



For to delete automatic programming select it and set the last option SETTING OFF.

NOTE: Registration is only possible with the video recorder switched off. The unit will automatically turn on at the set to REC Start and record the incoming video images showing on and off at the set to REC Stop. Make sure you have correctly adjusted the clock before programming of automatic registrations. If the recording you have planned is not feasible for limited space or conflict of schedules with other programming, it will see a red light next to the scheduled date. An icon next to the scheduled date of the ban will mean that registration is not successful (lack space, low battery etc.).

- **SETTING TIME** - Allows you to set the date and time current.



- **FIRMWARE UPGRADE** - is planned for DK-PV800 allow the upgrade to future versions of firmware.

To make the upgrade is necessary have the update file (.UPD) that is copied to the root directory (ROOT) of the SD card (Connect your VCR to the PC via USB and act with Windows Explorer.). Then select FIRMWARE UPGRADE and click OK. Is essential

make update with the appliance to the mains in order to avoid accidental interruptions during the process that would make the product unusable.

After the upgrade the unit will start again and will return to the factory defaults.

- **LOAD SETUP DEFAULTS** - This option It allows you to restore the original factory configuration parameters.
- **STORAGE** - In this item you can choose whether use to archive files to removable SD card or the internal hard drive. The icon at the bottom right next to the battery charge status indicator will act as the option chosen (SD or HD).



- **STORAGE INFORMATION (TOTAL SPACE FREE SPACE)** - This window shows the capacity of the SD card or HDD (depending on the previous choice) and even free space for

recording. there



REPRODUCTION

Access to the video archive

Movies are recorded on the SD card or hard disk in the form of AVI files with DivX compression. For playing movies from the main menu, select VIDEO FILES.



The movies are collected in MY RECORD folder. In the list of movies to choose the movie of interest and press the center ENTER button to start playback.

fast Play

During normal play different commands are available:

- Press once RIGHT ARROW to 2x faster playback
- Press again the right arrow for fast playback 4x
- Press a third time the right arrow for fast playback 8x
- Press ENTER to return to normal playback

slow motion playback

The same above commands activates the slow motion playback when used after pause button

- Press once RIGHT ARROW to slow play 1 / 2x
- Press a second time the right-arrow for slow play 1 / 4x
- Press a third time the RIGHT arrow to play slow motion 1 / 8x
- Press ENTER to return to normal playback

Pause and Stop

- The center button of the 4 arrows pauses playback
- The STOP button stops playback and returns to the movies list

Capture frames

During playback, you can capture a frame of interest and save them as photos. The procedure is as follows:

- Press the center button Press REC PAUSE

The image files are saved to the Pictures folder. E 'can store up to 30 images during playback.

To browse images saved from the main menu select the option PHOTO FILES (see below).

Playback options

During movie playback you can access the playback options by pressing SETUP. There are multiple commands.

- VIDEO REPEAT - To play the movie without interruption
- FULL SCREEN - For full-screen playback DISPLAY - Chooses the video output to be used (built-in LCD or TV output)

Control of video files

From the list of AVI files highlight the file of interest and press SETUP. There are multiple commands.

- DELETE - Delete single files or all files PROTECT - Prevents accidental deletion of files
- COPY - Copy the selected video or all videos (ALL) on the other memory media (from hard disk to SD card or vice versa)
- MOVE - Moves the selected video or all videos (ALL) on the other memory media (from hard disk to SD card or vice versa)
- VIDEO REPEAT - To play the movie without interruption
- INFORMATION FILE - In the last details are given Video files: date recording and file size.

Playing outdoor movies

E 'can be uploaded from PC video files on your SD card or hard disk drive and play them on your DVR. They support the following video formats

- AVI (DivX 4 / 5.0) - Resolution max. 720 * 480 - Bit Rate <4Mbps - Up to 25 fps
- MJPEG (AVI) - a-law, u-law

audio Playback

The audio files are stored on SD card or hard drive in WAV format. For playback of audio files from the main menu, select option Audio Files,

choose the recorded file and press Enter.



Audio Playback control

During normal playback of an audio file different commands are available:

- FAST FORWARD - Press the left arrow BACK FAST - Press the right arrow
- PAUSE - Press the pause button.
-

Press SETUP while playing back images access the following commands

- AUDIO REPEAT - To play without interruption BACK LIGHT OFF - Turns off the screen during playback.

- DISPLAY - Chooses the video output to be used (built-in LCD or TV output)

Press SETUP in the files list is access to the following commands

- DELETE - Delete single files or all files PROTECT - Prevents accidental deletion of files
- COPY - Copies the selected file or all files (ALL) on the other memory media (from hard disk to SD card or vice versa)
- MOVE - Moves the selected file or all files (ALL) on the other memory media (from hard disk to SD card or vice versa)
- AUDIO REPEAT - To play the files without break

Lastly are the details of the audio file: recording date and file size.

Playing external sound files

E 'can be uploaded from PC audio files on the SD card or hard drive and play them on your DVR. They support the following video formats

- MP3 version 1/2 / 2.5 WMA (64kbps
- 320kbps ...) WAV
-

viewing images

The image files are saved to SD card or hard disk as JPG files. To display images from the main menu select the Photo option File, choose JPG file and press ENTER.



Photo browsing

Once an image file has been opened it is possible to act on the UP / DOWN arrows to display in succession the image that follows or precedes.

Zoom

Once you open an image file you can zoom 2X and 4X by pressing the center button PAUSE. After that you can use the arrow buttons to move the zoomed area. Press PAUSE to return to normal viewing.

Slide show

Press SETUP during viewing an image, or the list of image files you can turn a cyclical scanning images. SLIDE SHOW Press START to begin. The following settings are available:

- SLIDE SHOW REPEAT - To repeat continuously
- SLIDE SHOW TIME - Sets time to permanence of each frame
- SLIDE SHOW + AUDIO - Combines a sound to the slide show (The audio file must be placed inside the images folder)
- SLIDE SHOW EFFECT - Enable randomici transitions between the image

To stop the slide show press PAUSE or STOP.

Picture Control files

If the SETUP button is pressed in the files list, to the SLIDE SHOW commands are added those of editing the files:

- THUMBNAIL PREVIEW - Enables the display of a thumbnail view in the files list.
- DELETE - Delete single files or all files PROTECT - Prevents accidental deletion of files.
- COPY - Copies the selected file or all files (ALL) on the other memory media (from hard disk to SD card or vice versa)
- MOVE - Moves the selected file or all files (ALL) on the other memory media (from hard disk to SD card or vice versa)

Display external image files

E 'can be loaded from a PC for image files on the SD card or hard drive and play them on your DVR. They support the following video formats

- JPG (Baseline up to 4096x4096 - Progressive up to 1024x1024)

Main technical data

FEATURE	DK-PV800
Type	Portable Digital Video Recorder
video Inputs	1 channel - 1 Vp-p 75 Ohm
video Outputs	1 output 1 Vp-p 75 for TV or external monitor
video Connections	minijack connector - RCA adapter supplied
audio Input	1 2V pp channel 50 Ohms
audio Outputs	1 outputs 2V pp 50 Ohms
audio connections	minijack connector - RCA adapter supplied
Internal Memory	Hard Disk 60 Gb 1.8 "
Removable Memory	SD Card of any brand or capacity
SD Series card	No - SD card to be ordered separately
Resolution LIVE Vision	PAL 640x544 NTSC 720x480
recording resolution	PAL 640x544 NTSC 720x480
Frame Rate Live Viewing	PAL: max. 25 f / sec per channel (real time) NTSC: 30 f / sec per channel (real time)
Frame Rate recording	PAL: 25 f / sec NTSC Total: 30 f / sec total
Compression	MPEG4 DivX
recording Capacity	Over 1 hour per GB of capacity
built-in Monitor	TFT LCD 3.5 "
Connection with PC	USB 2.0 port
Back up movies	The SD card and the Hard Disk will explore with Explorer windows Resources
Power output for camera	5VDC scheduled for RE-TCN9XH / BH / CH 12VDC for generic camera (max. 250 mA)
Battery	Lithium battery 3.6VDC 1.88Ah (2 pcs.)
battery Life	About 120 minutes (including mini-camera RE-TCN9XH)
Supply	5VDC (AC / DC power supply included)
Consumption	800 mA
Infrared remote control	including
Cable remote control	including
Operating temperature	+ 5 ... + 40 ° C / 20..80% RH
dimensions	130 (L) x80 (H) x23,5P) mm
Weight	Approx. 256 grams (including battery)