

# ViewStream 200 User Guide

V2.4

*This brief guide explains how to use and setup your ViewStream 200. It is intended for Digital View RemoteMedia staff who will be setting up ViewStream 200 for demos or for customers, and for resellers of RemoteMedia equipment.*

## 1 Introduction

The ViewStream 200 is a commercial digital video and audio player designed to use with TV and Video Monitors for playing MPEG-1/MPEG-2 video and audio files.

- MPEG-1/MPEG-2/MPEG-4\* video
- MPEG still picture output
- JPEG picture
- MP3 audio file
- Video signals of PAL & NTSC standard
- Composite or S-Video output
- VGA output
- Stereo audio output
- RS-232 port
- USB Host

\*DivX MPEG-4 format

### HOW TO PROCEED

Ensure you have all parts & that they are correct, refer to:

- Quick start instruction
- General notes
- System setup

### IMPORTANT USAGE NOTE

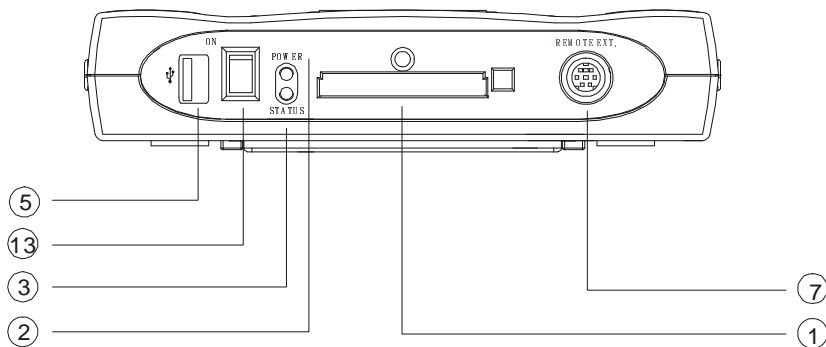
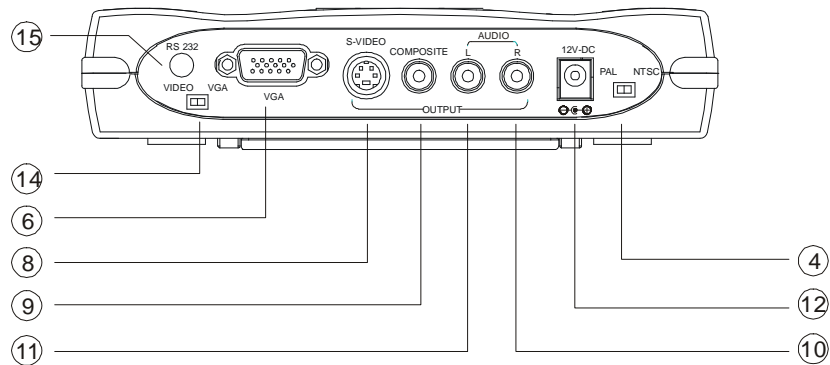
This equipment is for use by developers and integrators; the manufacturer accepts no liability for damage or injury caused by the use of this product. It is the responsibility of the developer, integrators or other users of this product to:

- Ensure that all necessary and appropriate safety measures are taken.
- Obtain suitable regulatory approvals as may be required.
- **Check power settings to all component parts before connection.**

### DISCLAIMER

There is no implied or expressed warranty regarding this material.

## 2 System Features



Item	Description	Type / Use
1	CompactFlash Card socket with ejector (accepts CF Card types 1 & 2)	25x2 pin Hirose CF-II Socket
2	Power status LED	On (green) / Off (clear)
3	Status LED	Enabled (green) / disabled (clear)
4	PAL / NTSC select switch	6mm stem switch
5	USB connector	Regular type
6	VGA connector	DB-15 pin 2.54mm female connector
7	Remote Ext.	8-pin mini DIN socket
8	S-Video output	5-pin mini DIN socket
9	Composite video output	RCA jack (yellow)
10	Audio output – stereo right	RCA jacks – Right (red)
11	Audio output – stereo left	RCA jacks – Left (white)
12	12V DC Power input jack	DC power jack. Center pin positive, 2.5mm diam.
13	Power on/off switch	Rocker switch
14	Video / VGA select switch	6mm stem switch
15	Serial connector (RS-232)	3.5mm jack (3 pins)

# 3 Quick Start Instruction

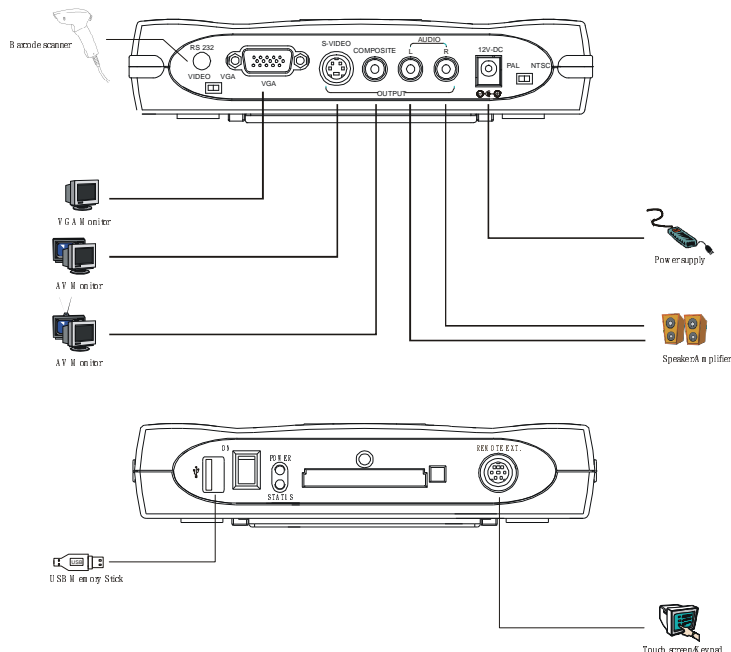
**CAUTION:** Never connect or disconnect parts of the system when the system is powered up as this may cause serious damage.

**CONNECTION** – Connection and usage are straightforward. However, care needs to be taken with the following:

- Ensuring parts have been correctly connected – both power & signal considerations.
- Checking that all switches are set correctly.
- The input signal is compatible.
- Legal & safety requirements have been met.
- If you are using supplied cables & accessories, ensure they are correct for the model of video monitor.

**Now connect the system as follows:**

- Connect Video Monitor signal connections.
- Switch settings. (e.g. PAL/NTSC switch setting)
- Connect the Video and Audio cables from the ViewStream 200 to the Video Monitor.
- Connect the power supply to the Video Monitor.
- Connect the power supply (DC 12V @ 1.2A minimum. - ensure correct + & - orientation) to the ViewStream 200.
- Power on the video monitor display.
- Power on the ViewStream 200 unit.



# 4 General Notes

The ViewStream 200 is designed for use with Video Monitors and other analogue signal input displays. Here are some notes for correct use:

- **Preparation** - Before you proceed, please familiarize yourself with the various connectors, jacks, switches and function buttons of the ViewStream 200 unit (see the 'System Features' diagrams).
- **The unit** - Handle the unit with care; any knocking may cause components to come loose and disconnect. Operate in a cool and dry place.
- **Power Input:** 12V DC1.2A (minimum) is required; this should be a regulated supply.
- **Digital Video:** use MPEG-1/MPEG-2 video encoded at Video-CD. (See "Content Creation Guide" for proper encoding rate.)

*\* For MPEG-2 video, the encoding rate is limited to 5Mb/s*

- **Audio & Video output:** Video - displays PAL & NTSC signals with either Composite, S-video or Component signal. The PAL/NTSC switch should be set correctly. Audio - Stereo output. Volume is controlled by the switch mount buttons.
- **Remote Ext.:** A external port for remote button control (p/n: 4161013-00 (buttons)) User can use this port as a touch screen interface. Maximum up to 8 touches can be accessed.
- **Remote Ext. cable:** The cables (p/n: 4266318-00) to any remote button control should be of suitable quality and length so that impedance does not affect performance. Generally lengths up to 1 metre (3 feet) should be acceptable.
- **Power LED:** The power LED indicator shows power is being supplied to the player – LED light activated by the power on/off switch.
- **Status LED:** The LED indicates the status of CompactFlash card.
- **RS-232 Serial port :** Only support barcode scanner. The baud rate must be set to (9600, n,8,1) and record suffix is set to CR (0DH). Requires RS-232 extend cable (p/n: 4268913-00)
- **USB –** USB Host. Connect to USB memory stick and upload content directly on CF Card.
- **VGA out –** Supports 640x480 VGA resolution.
- **Service & Warranty:** Warranty is invalidated if the unit is dismantled in any way. The unit is not user serviceable or repairable.

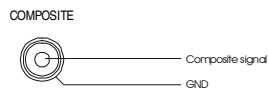
**CAUTION:** do not attempt to remove any part of the casing or internal parts.

# 5 Connectors and Buttons

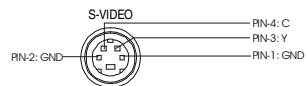
## 1. Jacks / Connectors:

- **Storage Device** (CompactFlash Card - insert into front CompactFlash Card socket)
- **USB** (Regular USB connector)
- **Video Outputs**

Composite – connect Composite video signal cable

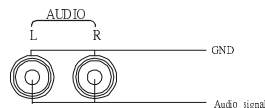


S-Video – connect S-Video signal cable

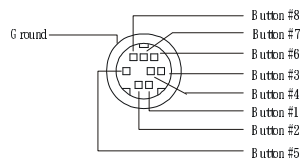


- **Audio Output (Stereo)**

R – right audio channel  
L – left audio channel

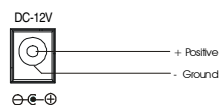


- **Input control**

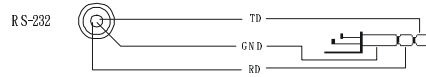


Remote Ext. - for remote button control.

- **Power input – DC 12V, 500mA (min)**



- **RS-232 Serial port**



## 2. Switches

- Power on/off switch
- PAL / NTSC output select



- VIDEO / VGA output select



## 3. LED's

- Power LED (green –'on')
- Status LED ("Flashing" green – Reading/Writing)

# 6 System Setup

## A) SELECT SWITCHES

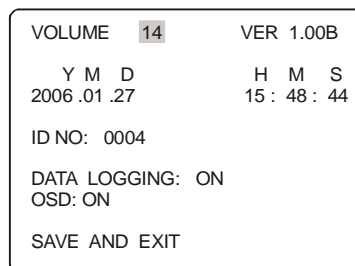
Before powering on the ViewStream 200:

- Make sure the corresponding signal cables have been connected from the Composite or S-Video output jacks.
- Set the 'PAL/NTSC' switch to the chosen output format.

## B) POWER UP

*Config mode*

In config mode, you may need either external buttons or 8-segmented touch screen to operate.



- Holding button 8 and power on. The OSD menu screen will be shown as follow:
- Press button 8 to select or press button 7/6 for up/dn.
- Press button 7 or 6 for save and exit.

*Auto-Play start up mode\**

- Plug in the external power supply
- Insert CompactFlash Card containing DV Studio exported “.pll / .prj” and other digital files. (e.g. .mpg, .mp3, .jpg) All filename should be in 8+3 format (i.e. xxxxxxxx.xxx) and avoid using any illegal characters like “~”, “\_”, “-“, etc
- Switch the power 'on/off' switch to 'on'.
- The first track of the collection of MPEG files will be auto-played.

### *Sleep mode\**

- Plug in the external power supply
- Insert CompactFlash Card containing DV Studio exported “.pll / .prj” and other digital files. (e.g. .mpg, .mp3, .jpg) All filename should be in 8+3 format (i.e. xxxxxxxx.xxx) and avoid using any illegal characters like “~”, “\_”, “-“, etc
- Switch the power 'on/off' switch to 'on'.
- Press the 'play' button'.
- The first track of the collection of MPEG files will be played.

Note: special specific track playback activated by assigned button can also be performed in sleep mode - contact local sales office.

\*The Autoplay and Sleep playback mode are selected when writing the MPEG files on to the CompactFlash Card by using DV Studio software.

### **C) AUTO-LOOP PLAYBACK**

After Track 1 is set to play, it will play to the end, then Track 2 will start playing from beginning to end, then Track 3 etc. When the ViewStream 200 plays to the end of the last track, it will automatically jump back to the beginning of Track 1, repeating tracks 1,2 then 3 etc. The ViewStream 200 will play in auto-loop play mode, so long as none of the function buttons are pressed. (NOTE: Loop playback is the standard playback setting of the ViewStream 200 but the track playback sequence can be changed as required: contact local sales office.)

# 7 Operating Instructions

## OPERATING MODES

There are two operating modes in ViewStream 200 – “playlist mode” and “simple play mode”

### 1. *Playlist mode*

When operating in playlist mode, both project file (\*.prj) and playlist file (\*.pll) must be present on the Compact Flash card. These are used to control the sequence for all video tracks.

The project and playlist file are created using **DV Studio** software. Using this software, you can set simple sequences or complex sequences including “jump track” or “next track” actions. DV Studio can also program buttons with different function like “play”, “stop”, “pause”, “mute”, “previous”, “next” and “volume”.

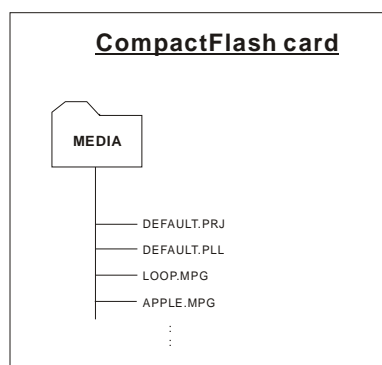
### 2. *Simple play mode*

In simple play mode, the user just copies all video files (.mpg) or JPEG files (.jpg) onto the Compact Flash card. The ViewStream 200 will play these files in alphabetical sequence.

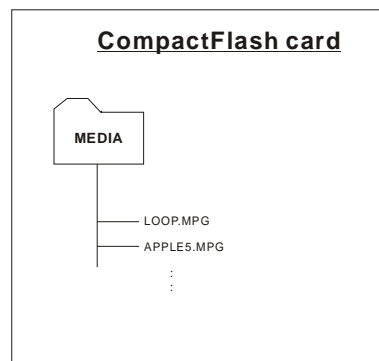
For MPEG still pictures or JPEG files, the play time can be set by the last digit of the filename. (For example: APPLE5.jpg, where “5” means the track will be displayed for 5 seconds.) *Note: Do not use the same filename on both MPEG and JPEG.*

**Note:** Make sure all capital letters in filename defined in playlist are consistence with the filename on CompactFlash card. All filename should be in 8+3 format (i.e. xxxxxxxx.xxx) and avoid using any illegale characters like “~”, “\_”, “-“, etc

All files (including project file and playlist file) must be placed under a folder named “Media” on Compact Flash card. For example:



Playlist mode



Simple play mode

## **OPERATING FUNCTIONS**

The following key buttons are default in "Simple Play mode" . (This operation requires button switchmount or 8-segments touch screen connection.)

### **PLAY (Button 1)**

- Resumes playback of videos from track 1 after STOP has been pressed.
- Resumes playback of the track from the point that it has been set to PAUSE.
- Playback is reset back to the beginning of the specific track which is being played at the time the PLAY button is pressed.

### **STOP (Button 2)**

- When STOP is pressed the video stops playing and a blank screen is displayed.

### **PAUSE (Button 3)**

- When PAUSE is pressed the video image instantly freezes.
- Press Pause again or PLAY to resume normal playback from the position where it was paused.

### **REPEAT (Button 4)**

- When REPEAT is pressed the current track loop back on itself continuously.
- To disable the repeat mode press REPEAT, PLAY, PREVIOUS TRACK or NEXT TRACK . When the track plays to the end it will playback the next track (and etc.) as normal.

### **NEXT TRACK (Button 5)**

- The NEXT TRACK function can be activated only when a track is already playing. When NEXT TRACK is pressed the current video stops playing and jumps directly to the start of the next track.

### **VOLUME DECREASE (Button 6)**

- Decreases audio output volume setting.

### **VOLUME INCREASE (Button 7)**

- Increases audio output volume setting.

### **MUTE (Button 8)**

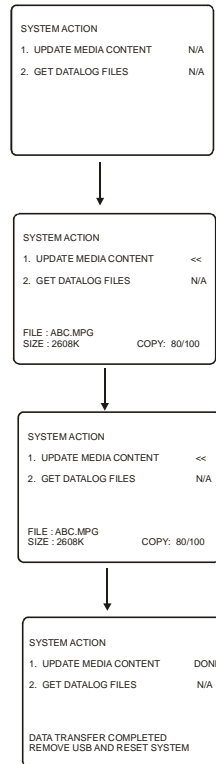
- When MUTE is pressed, all the tracks will have no sound.
- Press MUTE again to resume the normal sound in all tracks.

Note : All above buttons can be re-defined by DV Studio software if operating in playlist mode.

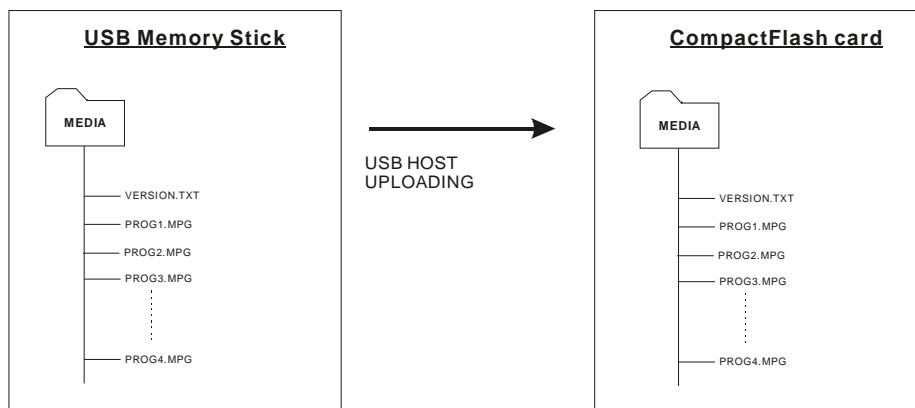
## USB PORT

The ViewStream 200 USB port provides the ability to connect a USB memory stick directly and to read and write data to and from the Compact Flash card. *(Please refer to Application Note for details)*

- Connect USB memory stick of your ViewStream 200 unit. It will show the following screen sequences:



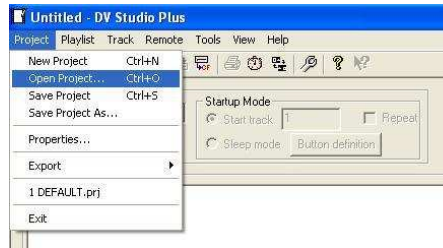
- A “Media” folder must be created on both USB memory stick and CF card.



## EXPORTING YOUR PROJECT AND PLAYLIST


Using DV Studio Plus software to export your project file (.prj) and playlist file (.pll). Before writing to the CompactFlash card, make sure the CF card reader is connected and the driver is well installed. The CF card reader is auto-detected as the 'Removable Disk'

- Open DV Studio Plus software.
- Click **Project** from the menu and select **Open Project**.



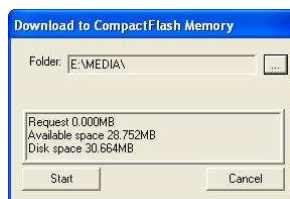
- In the **Project** pull down menu, select **Export** and click **Local Drives**



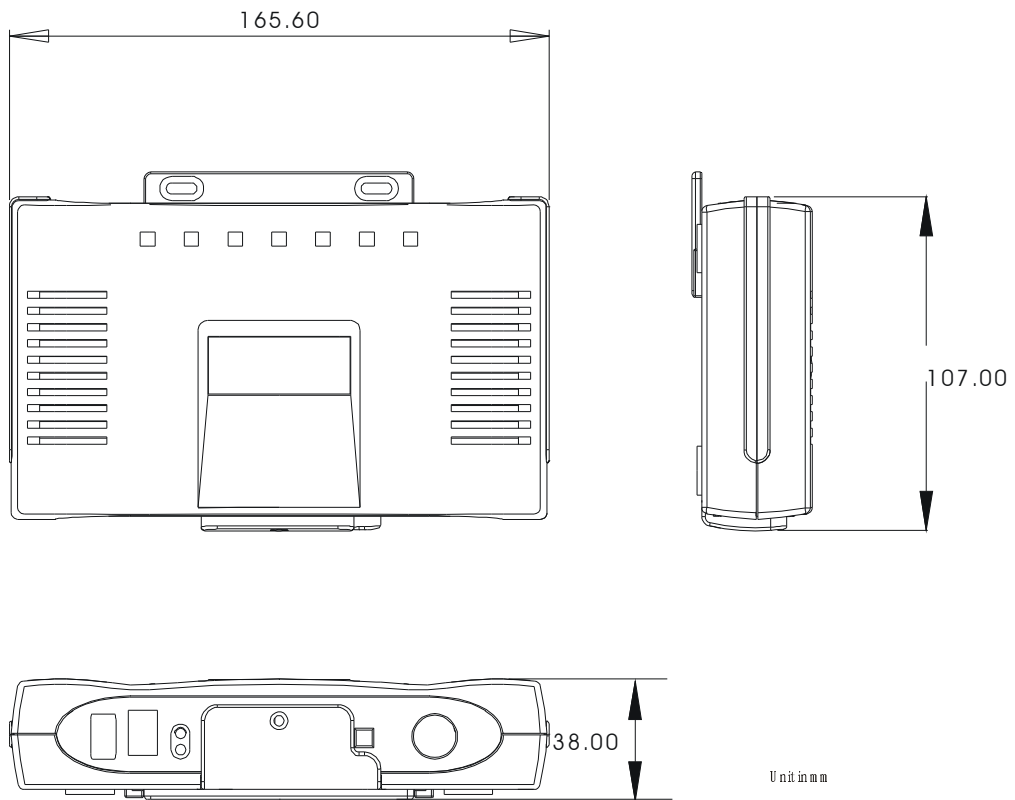
- Click  to select destination drive (i.e. Removable Disk).
- Enter the file path including a **Media** folder to export on CF card (e.g. E:\MEDIA ), then click **OK**



- Click **Start** to export.



# 8 Dimensions



Unit:mm

**Notes:**

- Dimensions are in mm.
- Drawing is not to scale.

## 9 Specifications

<b>Playable formats:</b>	MPEG-1 video (Video CD) MPEG-2 video (DVD)* MPEG-4 video (DivX format) MPEG still picture MP3 audio JPEG still picture VGA (640x480)
<b>Video Storage medium:</b>	CompactFlash Memory Cards : Type 1 & Type 2
<b>Output Display Systems:</b>	TV and Video Monitors VGA monitors
<b>Video Output:</b>	Signal type : Composite and S-Video Output format : PAL and NTSC
<b>Output Resolution:</b>	Low resolution : 352 x 288 pixels (PAL) : 352 x 240 pixels (NTSC) High resolution : 720 x 576 pixels (PAL) : 720 x 480 pixels (NTSC) Still picture : 704 x 576 pixels (PAL) : 704 x 480 pixels (NTSC) JPEG picture : 800 x 600 pixels
<b>Audio Outputs:</b>	Stereo output, connector – RCA jack, 3.2 V p-p max. 5K ohm
<b>Signal-to-Noise:</b>	96 dB
<b>Select Switches:</b>	Power ON/OFF switch PAL/NTSC playback format select Video / VGA select
<b>Indicators:</b>	Power LED, Status LED
<b>Start-up Modes:</b>	Autoplay (at power-on); Sleep mode (after power-on)
<b>Power Input:</b>	12V DC, 500mA typical
<b>Power Consumption:</b>	6 W
<b>Environment:</b>	0 °C to 50 °C , free air circulation
<b>Relative Humidity</b>	5-95% relative humidity, non-condensing
<b>Dimensions:</b>	165.6 x 38 x 107mm (W x H x D)
<b>Weight :</b>	net weight: 300g
<b>External ports:</b>	RS-232 port – for barcode application (Baud rate: 9600, n,8,1). Record suffix = CR (0D Hex) Remote Ext. – External buttons connection (8-buttons) USB port – USB Host
<b>Video Storage Accessories:</b>	CompactFlash Card – various memory capacities available 128, 256, 512MB, 1G, 2G, 4G

\* For MPEG-2 video, the encoding rate is limited to 5Mb/s

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## WARRANTY

The products are warranted against defects in workmanship and material for a period of one (1) year from the date of purchase provided no modifications are made to it and it is operated under normal conditions and in compliance with the instruction manual.

The warranty does not apply to:

- Product that has been installed incorrectly, this specifically includes but is not limited to cases where electrical short circuit is caused.
- Product that has been altered or repaired except by the manufacturer (or with the manufacturer's consent).
- Product that has subjected to misuse, accidents, abuse, negligence or unusual stress whether physical or electrical.
- Ordinary wear and tear.

Except for the above express warranties, the manufacturer disclaims all warranties on products furnished hereunder, including all implied warranties of merchantability and fitness for a particular application or purpose. The stated express warranties are in lieu of all obligations or liabilities on the part of the manufacturer for damages, including but not limited to special, indirect consequential damages arising out of or in connection with the use of or performance of the products.

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## CE AND FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with the relevant EN 55013, EN 55020, EN 61000-3-2 and EN 61000-3-3 standards.

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## CAUTION

Whilst care has been taken to provide as much detail as possible for use of this product it cannot be relied upon as an exhaustive source of information. This product is for use by suitably qualified persons who understand the nature of the work they are doing and are able to take suitable precautions and design and produce a product that is safe and meets regulatory requirements.

**DISCLAIMER: There is no implied or expressed warranty regarding this material.**

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## **LIMITATION OF LIABILITY**

The manufacturer's liability for damages to customer or others resulting from the use of any product supplied hereunder shall in no event exceed the purchase price of said product.

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## **TRADEMARKS**

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- DigitalView
- ThinSurfer
- RemoteMedia
- ViewStream 200

CompactFlash is a registered trademark of SanDisk Corporation.  
Other brands and products are trademarks of their respective holder/s.

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## CONTACT DETAILS

**ASIA:** Digital View Ltd  
19<sup>th</sup> Floor, Tai Tung Building  
8 Fleming Road  
Wanchai  
Hong Kong

**Tel:** (852) 2861 3615

**Fax:** (852) 2520 2987

**Sales:** [sales@digitalview.com.hk](mailto:sales@digitalview.com.hk)

**Technical Support:** [technical@digitalview.com.hk](mailto:technical@digitalview.com.hk)

**EUROPE:** Digital View Ltd  
36-38 Mortimer Street,  
London  
W1W 7RJ  
UK

**Tel:** (44) (0) 20-7631 2150

**Fax:** (44) (0) 20-7631 2156

**Sales:** [sales@digitalview.co.uk](mailto:sales@digitalview.co.uk)

**Support:** [support@digitalview.co.uk](mailto:support@digitalview.co.uk)

**USA:** Digital View Inc.  
18440 Technology Drive  
Building 130  
Morgan Hill, CA 95037  
**Tel:** (1) 408-782 7773  
**Fax:** (1) 408-782 7883

**Sales:** [sales@digitalview.com](mailto:sales@digitalview.com)

**Support:** [support@digitalview.com](mailto:support@digitalview.com)

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Specifications subject to change without notice

Document No. 9171201-10 (August 2006)

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