

# VIEWSTREAM 100

## MANUAL

Version 1.0

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**Revision History**

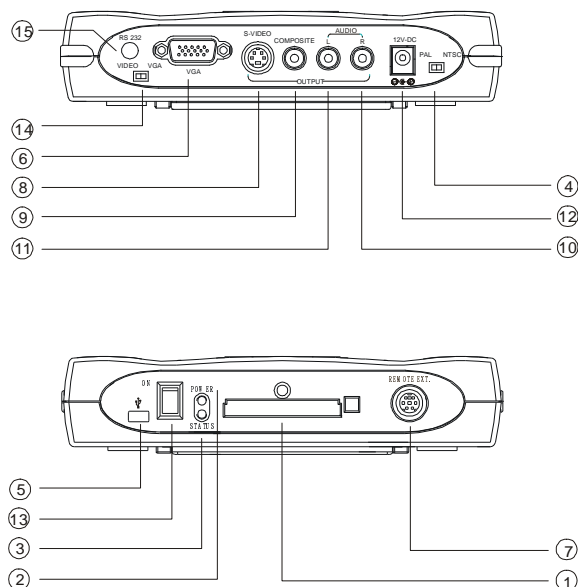
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# 1 Introduction

The ViewStream 100 is a powerful yet easy to use commercial digital media player designed for retail point of purchase (POP) product promotions, product demonstration videos and similar applications such as museum information displays. It supports both normal video displays and PC monitors.

## 1.1 Guide to the ViewStream 100

Diagram 1 – ViewStream 100



Item	Description	Type / Use
1	CompactFlash Card socket with ejector	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	Mini 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	Reserved (for RS-232 option)	3.5mm jack (3 pins)

## 2 Setup

When powered on the ViewStream 100 will automatically start to play video or still images found in the installed Compact Flash (CF) card. Files will be played in alphanumeric order unless a playlist has been prepared.

Basic setup involves 4 main steps:

1. Installing a CF card with suitable media
2. Setting ViewStream switches appropriately
3. Connecting to a display and power
4. Switching on

The ViewStream 100 also offers a range of **Additional Functions**. For details of these see the Additional Functions section below.


### 2.1 Basic Setup Notes

The following provides a short introduction to the basic setup:

- **CF cards (Compact Flash):** The recommended brand is SanDisk, all capacities and speeds should be suitable. Other brands may also be acceptable, for a list of tested CF cards see [www.digitalview.com/suport/cf](http://www.digitalview.com/suport/cf).

 CF cards should be formatted using FAT32 before first use.

 All media files on the CF must be in a root directory.

 All media filenames must be in 8.3 format (e.g. xxxxxxxx.xxx) though combinations with 7.3, 6.3 etc are fine.

Where: "8" is the maximum of alpha-numeric character to be used.  
 "3" is the file extension like .mpg / .jpg / .avi etc.

 Do not use any "Non alpha-numeric" characters like '~', '\_', '-', '&', '^', etc.

**NOTE: If 'Non alpha-numeric character' or the '8.3' format are not followed, the player will not recognize the playlist.**

A Playlist is optional, for details as to preparation see the Additional Functions section below. Without a playlist, media will play in alphanumeric order according to the filename.

- **Video:** It is recommended to use DVD settings in the preparation and encoding of video. Many popular video editing programs have a DVD setting however it is important that the file produced is .mpg for MPEG-1 & 2 or .avi for DIVX (see the Specification in this manual for suitable data-

rates). For more information on content creation and encoding guide to different software please see [www.digitalview.com/viewstream/documentation.php](http://www.digitalview.com/viewstream/documentation.php). In addition a technical guide to digital media content creation is available at [www.digitalview.com/viewstream/documentation.php](http://www.digitalview.com/viewstream/documentation.php).

- **JPEG still images:** A compression setting of medium to good is recommended. Resolution settings:
  - For output to a standard 4:3 display: 640x480
- **Switch settings** (see diagram 1 in Introduction):
  - Output Selection:
    - Video: For connection using S-Video or Composite
    - VGA: For connection using standard VGA (ARGB)
  - PAL/NTSC selection: When using S-Video or Composite output connectors this should be set according to the input requirements of the video display being used.
- **Display:** There is a very wide selection of displays on the market that are suitable for use with the ViewStream 100. Users are however recommended to consider the following:
  - Video resolution: The ViewStream only supports playback standard definition video, i.e. PAL & NTSC standards. Consequently a display with good scaling will produce optimal results.
  - Aspect ratio: Many displays available are now widescreen type with an aspect ratio of 16:9. However PAL/NTSC is 4:3. Consequently video output to widescreen displays will be slightly stretched. In most cases this is not very noticeable but if it is a concern it can be compensated for during the video production and encoding process.

## 2.2 Additional Functions

The ViewStream 100 offers a wide selection of options as briefly introduced below. For more information on each of these please refer to the detailed application notes at [www.digitalview.com/viewstream/documentation.php](http://www.digitalview.com/viewstream/documentation.php).

- **Playlist:** By default videos and still images play in alphanumeric order by filename. Using DV Studio, available for download from [www.digitalview.com/viewstream/software.php](http://www.digitalview.com/viewstream/software.php), files can be played in a specified order.
- **USB update:** The CF card content can be updated from a USB memory stick.
- **Scheduling:** Multiple playlists can be loaded and scheduled to play at specified times.
- **Motion sensor:** Motion sensors can be used to trigger playback of particular files or as people counters (see data logging).
- **Touch screen:** Up to 8 touch hotspots can be programmed using either a segment touch panel or analog touch panel.

- **External buttons:** External buttons can be added for track selection.
- **Data capture:** Details of all interactions with the player such as via the motion sensor, touch screen, buttons or barcode scanner can be recorded and stored on the CF card for later retrieval and analysis.
- **OSD setup functions:** A number of other operating modes and functions are available through the ViewStream OSD.
- **Manual control:** For manual operation of playback functions a remote control handset is available as well as a selection of button options.
- **Firmware upgrade:** From time to time the operating system of the ViewStream may be upgraded providing bug fixes and new features. For compatible hardware it is possible to install these upgrades through a simple process.
- **Customization:** Digital View provides customization services.

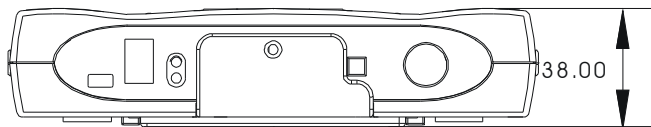
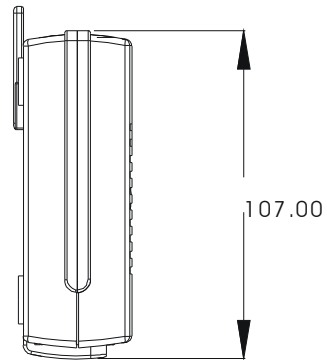
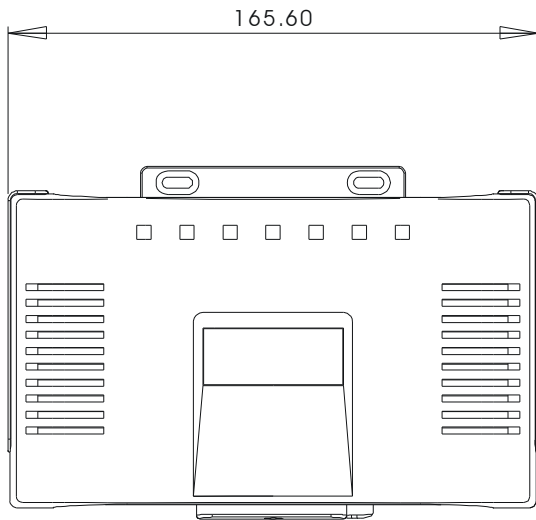
## 2.3 FAQ (Frequently Asked Questions)

- What CF cards are suitable?
  - SanDisk Compact Flash cards are recommended however many other brands are suitable. A list of tested CF cards is shown at [www.digitalview.com/support/cf](http://www.digitalview.com/support/cf)
- How do I format a CF card with FAT 32
  - This is a standard option in Windows XP and Vista disk format.
- How do I encode or prepare suitable video?
  - Settings equivalent to those used for making a DVD are recommended and many popular video editors have a DVD preset.
- How do I get video and still images to play in a particular order?
  - It is possible to create a playlist to specify the playback order by using DV Studio which can be downloaded from [www.digitalview.com/viewstream](http://www.digitalview.com/viewstream).
- What is DV Studio?
  - An authoring tool from Digital View for the creation of playlists and other additional functions possible with the ViewStream 100.
- Is manual operation possible?
  - Yes. Users can access manual operations using a Digital View remote control or by connecting a set of external buttons. Refer to the Manual Control Application Note at [www.digitalview.com/viewstream](http://www.digitalview.com/viewstream).
- How do I get the most out the advanced features?
  - A good place to start is with the Application Notes on the website as these will explain how the various features work. In addition Digital View's sales support team can provide ideas and assistance.
- What customization is possible?
  - Digital View provides both software and hardware customization services for – please contact Digital View's sales support team for assistance.
- What is the best content (JPEG) resolution on VGA out?
  - If it is for VGA output on ViewStream 100/M3-100, it is recommended to use the JPEG with 800x600 resolution.

## 2.4 Troubleshooting

- Nothing is displayed on the screen:
  - First check that all parts of the system are connected and powered on.
  - Check that the display is getting a signal from the ViewStream. This can be done by ensuring the ViewStream indicator LED is on then powering the ViewStream on & off, the display should flicker.
  - Ensure the media is compatible, see specifications.
  - Ensure media on the CF is in a folder named "media".
  - Ensure that files are in a compatible format.
- The display has vertical lines in it:
  - This may happen when a monitor is connected using the VGA connector. It can be corrected using the Tuning or Phase function accessed via the OSD (On Screen Display) menu on the monitor.
- The display is shifted to the side:
  - This may happen when a monitor is connected using the VGA connector. It can be corrected using the position adjustment controls function accessed via the OSD (On Screen Display) menu on the monitor.
- Video is jerky:
  - It is likely that the video is encoded at a data rate too high for the player.
- Video is very blocky:
  - Original content was low resolution
  - The video encoding settings are for a lower resolution. DVD settings are recommended.
- Text is not readable:
  - It is likely that the text is too small however it is worth checking the encoding settings. DVD settings are recommended.
- Audio playback is intermittent:
  - It is likely that the video is encoded at a data rate too high for the player.

# 3 Dimensions



Unit in mm

Unit in mm

## 4 Specifications

Playable formats	MPEG-1 (.mpg) Encoding bit rate: 1.15Mbit/s MPEG-2 (.mpg) Encoding bit rate: 5Mbit/s MPEG-4 DivX (.avi) Encoding bit rate: 2Mbit/s JPEG (.jpg) up to 800x600 pixels
Storage media	Compact Flash memory card type I or II Recommended max capacity: 16GB Brands – see <a href="http://www.digitalview.com/support/cf">www.digitalview.com/support/cf</a>
Video output resolution	Composite / S-Video - 720x576(PAL), 720x480(NTSC) VGA- 800x600
Audio volume	Controlled through OSD with switches attached
Line out	Stereo output, connector – RCA jack, 3.2 V p-p max. 5K ohm
Playback functions	Play / Stop / Pause / Repeat / Previous track / Next track / Volume / Mute Loop playback / Sequence play / Startup mode / Sleep mode
External I/O ports	USB client (content upload via PC) Remote Ext. (for 8-button & touch)
LEDs	Power LED (Green) Status LED (Green)
Real time clock	Battery-backup RTC
Power requirement	Regulated DC 12V input. 2.5mm center positive.
Power consumption	500mA @ 12V
Environmental	Operating temperature : 0°C to 50°C Relative humidity : 5%-95% relative humidity (Non-condensing)
Dimensions	165.6mm (W) x 107mm (D) x 38mm (H)
Weight (net)	250g

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## **WARRANTY**

The products are warranted against defects in workmanship and material for a period of three (3) 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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## **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.

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## **SAFETY INSTRUCTION**

Do not use this product near water, for example, near a bathtub, wash bowl, kitchen sink, laundry tub, in a wet basement or near a swimming pool.

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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**

The following are trademarks of Digital View Ltd:  
Digital View  
VIEWSTREAM 100

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