

# **M3-300**

## **USER GUIDE**

Version 1.9

**Revision History**

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March 2008	V1.0
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# 1 Introduction


This brief guide explains how to use and set up your M3-300 decoder board. It is intended for Digital View staff who assemble ViewStream product for demos or for customers, and for resellers.

The M3-300 is an MPEG decoder board designed to use with TV and Video Monitors for playing MPEG-1/MPEG-2/MPEG-4 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 and S-Video signal output  
VGA or YPbPr output  
Audio output  
RS-232 port  
USB Update

\* DivX MPEG-4 format

## IMPORTANT USAGE NOTE

 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.**

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:

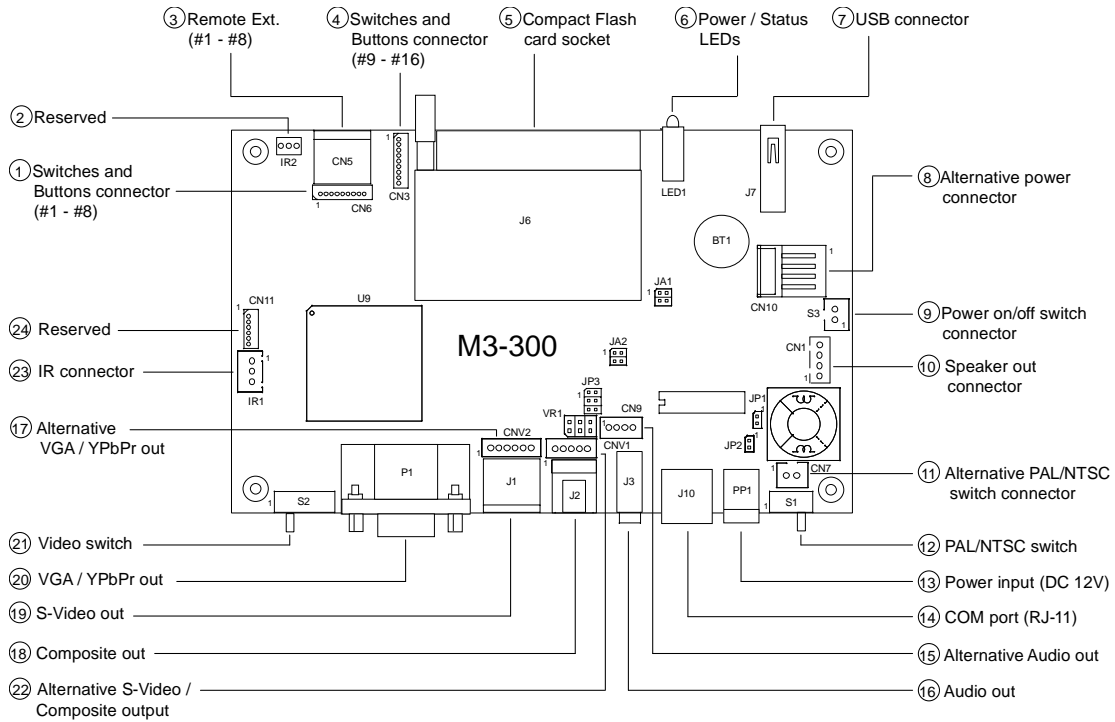
Ensure that all necessary and appropriate safety measures are taken.  
Obtain suitable regulatory approvals as may be required.  
Check power settings to all component parts before connection.

## DISCLAIMER

There is no implied or expressed warranty regarding this material.

# 2 System Design

## M3-300 Connector Summary:



## Summary:

1. Switches and buttons connector (1 – 8 button)	13. Power input (DC 12V)
2. Reserved	14. COM port
3. Remote Ext. (1-8 button)	15. Alternative audio out
4. Switches and button connector (9 – 16 button)	16. Audio out
5. Compact flash card slot	17. Alternative VGA / YPbPr out
6. Power / Status LEDs	18. Composite out
7. USB connector	19. S-Video out
8. Alternative power out	20. VGA / YPbPr out
9. Power on/off switch connector	21. Video switch
10. Speaker out connector	22. Alternative S-Video / Composite out
11. Alternative PAL /NTSC switch connector	23. IR connector
12. PAL / NTSC switch	24. Reserved

### A) Mechanical buttons

- Standard MV-switchmount (P/N:416101300-3) for 1-8 buttons when connected to the button connector CN6 via the standard switchmount cable (P/N:426451100-3) or connected to the Remote Ext. socket (CN5) via the standard cable (P/N:426631800-3).
- Custom made switchmount for 1-16 buttons when connected to the buttons connector CN6 and CN3 via the standard switchmount cable (P/N:426451100-3)
- Custom made switchmount for 1-8 buttons when connected to the Remote Ext. socket (CN5) for alternative remote control buttons via the standard cable (P/N:426631800-3).

### B) Touch screen segments

- The M3-300 when connected with a LCD interface controller can output videos on to LCD screen. Button control can be performed via touch screen for panel sizes of 6.4", 7", 8", 10", 12", 15", 17" and 20"
- There is one type of button pattern layouts on the touch screen available: 8 buttons

(For any special button layout, please contact local sales office.)

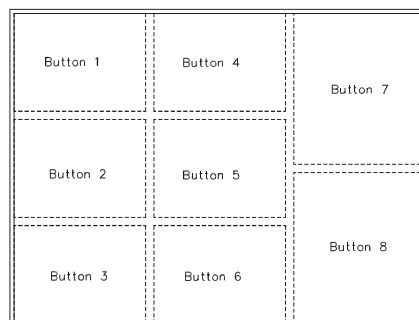


Fig. 1 8-buttons for LCD touch screen

### C) Button function settings

- Whether the buttons are of the mechanical type (on the standard switchmount or custom made) or the touch screen segment type, each button function can be programmed with **the DV Studio Software program** to perform a VCD player mode function or specific track select function. **(See DV Studio Software user manual).**
- The DV Studio Software program is separately provided

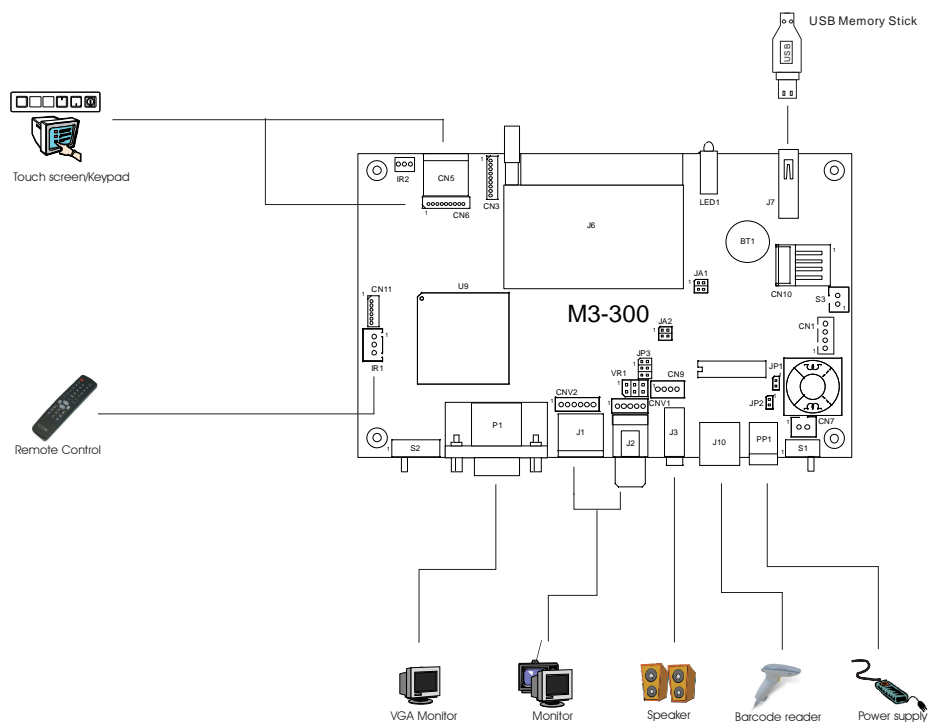
# 3 Quick Start

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

## 3.1 Prepare for 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 and jumpers 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.
- If you are making your own cables & connectors refer carefully to the video monitor specifications and the "Connectors, Pin outs & Jumpers" section in this user guide to ensure the correct pin-to-pin wiring.



### 3.2 Basic connection for M3-300

- Connect the keys pad to CN5 (if required)
- Set the Video/YPbPr/VGA switch (S2) to the chosen output connector.
- If Video output is selected, set the 'PAL/NTSC' switch (S1) for the S-Video or Composite output format.
- Connect the video and audio ext. cables from the M3-300 to the monitor.
- Connect the power supply (DC 12V @ 1.2A minimum. - ensure correct + & - orientation) to the controller power input (PP1).
- Connect the on/off switch cable (p/n:426680401-3) or short Pin1-2 at S3 for "Auto power on"

For a detailed system setup, go to section 6

# 4 General Notes

The M3-300 is designed for use with Video Monitors and other analogue signal input displays. Here are some notes for correct use:

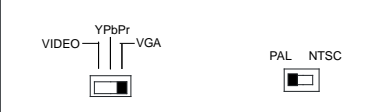

- **Preparation** - Before you proceed, please familiarize yourself with the various connectors, jacks, switches and function buttons of the M3-300 unit (see the 'System Design' diagram).
- **The unit** - Handle the unit with care; any knocking may cause components to come loose and disconnect. Operate in a cool and dry place.
- **Power Input:** 12V DC, 1.2A (minimum) is required; this should be a regulated supply. Power connector is using DC jack, 2.5mm diameter (Center +)
- **Video output** – Video - displays PAL & NTSC signals with either Composite or S-video. The PAL/NTSC switch should be set correctly.
- **Audio output** – Audio - Stereo output. Master volume is controlled through OSD with switch mount buttons.
- **Switch settings** – To define and select the source of output.



Video switch (S2):

- Video: For connection using S-Video or Composite
- YPbPr: For connection using Component YPbPr
- VGA: For connection using standard VGA (ARGB)

PAL/NTSC switch (S1): When using S-Video or Composite output connectors this should be set according to the input requirements of the video display being used.

VGA/YPbPr output resolution selection: With the combination of video switch and PAL/NTSC switch, you can select 640x480 or 1280x720 output resolution on VGA/YPbPr port.

		VGA output resolution
		640 x 480
		1280 x 720

		YPbPr output resolution
		640 x 480
		1280 x 720

- Remote Ext.** - Using the standard switch mount (p/n: 416101300-3) - 8 momentary buttons for OSD config and video playback control (standard functions (in simple play mode) being: Play, Stop, Pause, Next Track, Volume decrease, Volume increase, Mute). An optional function control device is a custom-made switch mount connected to the switches and buttons connectors (CN6 and CN3) with a maximum of 16 momentary buttons
- Remote Ext. cable** - The cables (p/n: 426631800-3) to the switches and buttons connector should be of suitable quality and length so that impedance does not affect performance. Generally lengths up to 1 meter (3 feet) should be acceptable.
- LED (LED1)** - The power LED indicator shows power is being supplied to the M3-300. The Status LED indicates the status of CF card.
- RS-232 port** – Requires RJ-11 to DB-9 extend cable (p/n:426894301-3) for RS-232 connection. This serial port supports barcode scanner and RS-232 command control. The baud rate must be set to (9600, n,8,1) and record suffix is set to CR (0DH).
- USB** – USB Host. Use USB memory stick for content update without removing the CF card. The M3-300 will reset power when the USB stick is detected inserting into the USB connector or removing from the USB connector. (For the details of USB content update, please refer to the Application note.)
- VGA out** – Supports VGA or YPbPr. Both Component video and VGA signal are sharing the same connector. A YPbPr extend cable (P/N:426004800-3) is required for Component video (YPbPr) connection.

**Note:** This VGA out is currently set to 1280x720 resolution which may not be supported by all monitors. If the display looks reasonable but not perfect please use the OSD settings of the monitor to adjust image position and tuning. (sometimes called *Phase, H. size, H. Freq,* etc) It may also be necessary to adjust image size.

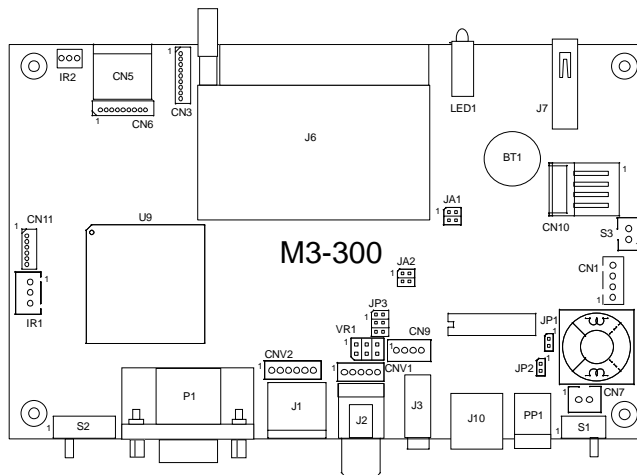
- Infra-red (IR)** - Supports IR control with DV remote control handset (P/N:559000104-3). The IR sensor and cable kit (P/N:446010401-3) are required. The IR control functions are shown as below.



- **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, pinouts & jumpers



The various connectors are:

Ref	Purpose	Description
CN1	Speaker out (L/R) connector	JST B4B-XH-A
CN3	Switches and buttons connector (#9 - #16)	Hirose 1.25mm, 9-pin, DF13-9P-1.25DSA
CN5	Remote Ext. (#1 - #8)	MINI DIN 8-way
CN6	Switches and buttons connector (#1 - #8)	Hirose 1.25mm, 9-pin, DF13-9P-1.25DSA
CN7	Alternative PAL/NTSC connector	JST B2B-XH-A
CN9	Alternative audio output	JST B4B-PH-K
CN10	Alternative power out connector	JS-1116-04WS
CN11	Reserved	Hirose 1.25mm, 6-pin, DF13-6P-1.25DSA
CNV1	Alternative S-Video/Composite video output	JST B5B-PH-K
CNV2	Alternative VGA/YPbPr output	JST B6B-PH-K
LED1	Power (up)/Status (dn) LEDs	Stacked housing LED
J1	S-Video out	Mini DIN 4-way
J2	Composite video out	RCA jack (yellow)
J3	Audio out	Stereo Phone Jack
J6	CF card connector	CF-CARD, 25x2Ppin 3M CF-II socket
J7	USB connector	USB, A type USB connector, 4-way
J10	RS-232	RJ-11 socket
P1	VGA/YPbPr out	DB-15F Connector
PP1	Main power input	DC power jack, 2.5mm diameter (Center +)
S1	PAL/NTSC switch	4mm stem select switch
S2	VIDEO/YPbPr/VGA switch	4mm stem select switch
S3	Power On/Off switch connector	JST B2B-XH-A
JA1	5V Logic Power	2x2 header (2mm pitch)
JA2	3.3V Logic Power	2x2 header (2mm pitch)
IR1	IR Connector	JST B3B-XH-A
JP1	12V Aux. power enable	2x1 header (2mm pitch)
JP2	5V Aux. power enable	2x1 header (2mm pitch)
JP3	Line out / Speaker out selection	2x3 header (2mm pitch)
VR1	External volume control	3x2 header (2.54mm pitch)
BT1	Battery for Real time clock	CR1216 Type

**Details:**

**CN1 – Speaker out (Left / Right)**

PIN	SYMBOL	DESCRIPTION
1	GND	Ground
2	L	Left speaker out
3	GND	Ground
4	R	Right speaker out

**CN3 – Switches and buttons (#9 - #16)**

PIN	SYMBOL	DESCRIPTION
1	SW9	Button 9
2	SW10	Button 10
3	SW11	Button 11
4	SW12	Button 12
5	SW13	Button 13
6	SW14	Button 14
7	SW15	Button 15
8	SW16	Button 16
9	GND	Ground

**CN5 – Remote Ext.**

PIN	SYMBOL	DESCRIPTION
1	SW1	Button 1
2	SW2	Button 2
3	SW3	Button 3
4	SW4	Button 4
5	SW5	Button 5
6	SW6	Button 6
7	SW7	Button 7
8	SW8	Button 8

The shielding of connector is grounded.

**CN6 – Switches and buttons (#1 - #8)**

PIN	SYMBOL	DESCRIPTION
1	SW1	Button 1
2	SW2	Button 2
3	SW3	Button 3
4	SW4	Button 4
5	SW5	Button 5
6	SW6	Button 6
7	SW7	Button 7
8	SW8	Button 8
9	GND	Ground

**CN7 – Alternative PAL/NTSC connector**

PIN	SYMBOL	DESCRIPTION
1	SYSTEM	PAL/NTSC select 1-2 short: NTSC 1-2 open: PAL
2	GND	Ground

**CN9 - Alternative audio output**

PIN	SYMBOL	DESCRIPTION
1	GND	Ground
2	AUDIO_L	Audio left channel output
3	GND	Ground
4	AUDIO_R	Audio right channel output

**CN10 - Alternative power out**

PIN	SYMBOL	DESCRIPTION
1	VCC	+5V out
2	GND	Ground
3	GND	Ground
4	+12V	+12V out

**CN11 – Reserved**

**CNV1 - Alternative S-Video/Composite video output**

PIN	SYMBOL	DESCRIPTION
1	CHROMA	S-Video : Chroma out
2	LUMA	S-Video : Luma out
3	GND	Ground
4	GND	Ground
5	CVBS	Composite video out

**CNV2 - Alternative VGA / YPbPr output**

PIN	SYMBOL	DESCRIPTION
1	GND	Ground
2	H_SYNC	Horizontal Sync Output
3	V_SYNC	Vertical Sync Output
4	B (Pb)	Analog Blue (Component Pb)
5	G (Y)	Analog Green (Component Y)
6	R (Pr)	Analog Red (Component Pr)

**LED1 - Power / Status LED**

PIN	SYMBOL	DESCRIPTION
1	Anode_A	Anode of Status LED
2	Cathode_A	Cathode of Status LED
3	Anode_B	Anode of Power LED
4	Cathode_B	Cathode of Power LED

### J1 - S-Video Out

PIN	SYMBOL	DESCRIPTION
1	GND	Ground
2	GND	Ground
3	LUMA_OUT	Luma Out
4	CHROMA_OUT	Chroma Out

### J2 - Composite video Out

PIN	SYMBOL	DESCRIPTION
1	CENTER	Center pin, composite out, 0.7Vp-p
2	GND	Ground

### J3 - Audio out

PIN	SYMBOL	DESCRIPTION
1	FRONT_LEFT	Audio left output
2	MIDDLE_RIGHT	Audio right output
3	REAR_GND	Ground

### J6 – Compact Flash card connector

PIN	SYMBOL	DESCRIPTION
1	GND	Ground
2	D3	Data bit 3
3	D4	Data bit 4
4	D5	Data bit 5
5	D6	Data bit 6
6	D7	Data bit 7
7	/CE1	Card enable 1
8	GND	Ground
9	GND	Ground
10	GND	Ground
11	GND	Ground
12	GND	Ground
13	VCC	+5V
14	GND	Ground
15	GND	Ground
16	GND	Ground
17	GND	Ground
18	A2	Address bit 2
19	A1	Address bit 1
20	A0	Address bit 0
21	D0	Data bit B3
22	D1	Data bit B4
23	D2	Data bit B5
24	IOCS16	IOCS16
25	/CD2	Card detect pin 2
26	/CD1	Card detect pin 1
27	D11	No connection
28	D12	No connection
29	D13	No connection
30	D14	No connection
31	D15	No connection
32	/CE2	Card enable 2
33	GND	Ground

34	/RD	Memory read strobe
35	/WR	Memory write strobe
36	/WE	No connection
37	IRQ	Interrupt request
38	VCC	+5V
39	/CSEL	Chip SEL
40	NC	No connection
41	RESET	System reset
42	IORDY	IO Ready
43	NC	No connection
44	NC	No connection
45	/DASP	DASP
46	/PDIAG	PDIAG
47	D8	No connection
48	D9	No connection
49	D10	No connection
50	GND	Ground

#### J7 - USB connector

PIN	SYMBOL	DESCRIPTION
1	UVCC	USB - VCC
2	D-	-VE USB Data
3	D+	+VE USB Data
4	GND	Ground

#### J10 - RS-232

PIN	SYMBOL	DESCRIPTION
1	NC	No connection
2	5V	+5V (jumper enable/disable)
3	TXD	Tx data
4	RXD	Rx data
5	GND	Ground
6	12V	+12V (jumper enable/disable)

#### P1 - VGA / YPbPr out

PIN	SYMBOL	DESCRIPTION
1	R (Pr)	Analog Red (Component Pr)
2	G (Y)	Analog Green (Component Y)
3	B (Pb)	Analog Blue (Component Pb)
4	GND	Ground
5	GND	Ground
6	GND	Ground
7	GND	Ground
8	GND	Ground
9	NC	No connection
10	GND	Ground
11	NC	No connection
12	NC	No connection
13	H_SYNC	Horizontal sync
14	V_SYNC	Vertical sync
15	NC	No connection

**PP1 - Main power input**

PIN	SYMBOL	DESCRIPTION
1	+12_CENTER	+12V DC in center pin
2	GND	Ground

**S1 - PAL/NTSC switch**

PIN	SYMBOL	DESCRIPTION
1-2	PAL	Left : PAL
2-3	NTSC	Right : NTSC

**S2 - Video/ YPbPr / VGA switch**

PIN	SYMBOL	DESCRIPTION
1-2	COMP_SVIDEO	Left : Composite / S-Video
2-3	YPbPr	Middle : YPbPr
2-4	VGA	Right : VGA

**S3 – Power On/Off switch connect**

PIN	SYMBOL	DESCRIPTION
1	12V_IN	+12V input
2	12V_OUT	+12V output

**IR1 – Infra-red**

PIN	SYMBOL	DESCRIPTION
1	GND	Ground
2	VCC	+5V
3	IR	IR Data

**JA1 – 5V Logic power**

PIN	DESCRIPTION
1-2, 3-4	Close (Factory default)

**JA2 – 3.3V Logic power**

PIN	DESCRIPTION
1-2, 3-4	Close (Factory default)

**JP1 – 12V Aux. power enable (on J10)**

PIN	DESCRIPTION
1-2	Open (+12V output disable)* Close (+12V output enable)  *Factory default

**JP2 – 5V Aux. power enable (on J10)**

PIN	DESCRIPTION
1-2	Open (+5V output disable)* Close (+5V output enable)  *Factory default

**JP3 – Line out / Speaker out selection (on J3)**

PIN	DESCRIPTION
1-3, 2-4	Open (Line out disable)* Close (Line out enable)  *Factory default
3-5, 4-6	Open (Speaker out disable) Close (Speaker out enable)*  *Factory default

**VR1 – External volume control**

PIN	DESCRIPTION
1-3, 2-4	Close (Factory default) Open (for connection with 47K VR ext. cable (p/n:426890500-3))

# 6 System Setup

## 6.1 Select switches

Before powering on the M3-300:

- Make sure the corresponding signal cables have been connected from the Composite, S-Video or VGA output connector.
- Set the Video/YPbPr/VGA switch (S2) to the chosen output connector.
- Set the 'PAL/NTSC' switch (S1) to the chosen output format.

## 6.2 OSD Configuration

In OSD configuration mode, you may need external buttons, 8-segmented touch screen or IR remote handset to operate.

### Use with external button or 8-segmented touch screen

- To enter OSD configuration mode, holding button 8 and power on. The OSD menu screen will be shown as follow:

```
VOLUME  08          V1. 19. 00
      Y  M  D          H  M  S
2009 . 09 . 14 MON    21 : 00 : 12

ID NO: 0000

DATA LOGGING: OFF
OSD: ON

JPEG TRANS TYPE: OFF

SAVE AND EXIT
```

- Press button 8 to select option.
- Press button 7 or button 6 for change value.
- Press button 7 or button 6 to confirm "SAVE AND EXIT".

## Use with IR remote handset

- To enter OSD configuration mode, holding "Display" key and power on the M3-300 unit. The OSD menu screen will be shown as follow:

VOLUME	08	V1.19.00
Y M D		H M S
2009 . 09 . 14	MON	21 : 00 : 12
ID NO:	0000	
DATA LOGGING:	OFF	
OSD:	ON	
JPEG TRANS TYPE:	OFF	
SAVE AND EXIT		

- Press "Display" key to select option.
- Press "+" or "-" key to change value.
- Press "+" or "-" key to confirm "SAVE AND EXIT".

## 6.3 Start up

There are two kinds of start up mode (Start track mode and Sleep mode) can be selected when writing playlist on to the Compact Flash Card by using DV Studio Software.

### 6.3.1 Start track mode

If start track mode is selected in playlist, the pre-defined started track will be played first when boot-up. For example, if track #5 is defined as started track, then M3-300 will play track #5 after start up. (The default started track is the first track in playlist)

Step by step:

- Plug in the external power supply
- Insert Compact Flash Card containing DV Studio Software exported ".pll / .prj" and other media 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 track #5 (started track) will be played first.
- Once the track #5 is finished, the first track in playlist will be followed and played.

### 6.3.2 Sleep mode

If sleep mode is selected in playlist, a blank screen will be shown at the beginning until the pre-defined button has been pressed. For example, if button# 3 is defined in sleep mode, then M3-300 will play the 1<sup>st</sup> track until the button #3 is pressed.

Step by step:

- Plug in the external power supply
- Insert CompactFlash Card containing DV Studio Software exported “.pll / .prj” and other media 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 'button #3'.
- The first track will be played.

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

#### **6.4 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 M3-300 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 M3-300 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 M3-300 but the track playback sequence can be changed as required: contact local sales office.)

# 7 Operating Instructions

## 7.1 Operating modes

There are two operating modes in M3-300 – “Playlist mode” and “Simple play mode”.

### 7.1.1 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”.

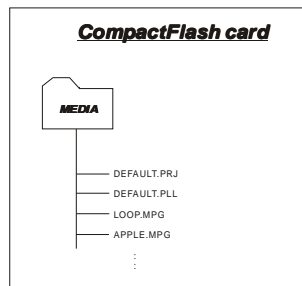
### 7.1.2 Simple play mode

In simple play mode, the user just copies all video files (.mpg) or JPEG files (.jpg) onto the Compact Flash card. The M3-300 will play these files in alphabetical sequence.

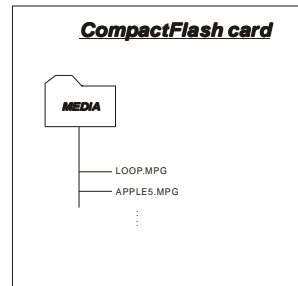
For JPEG files, the play time can be set by the last digit of the filename. (For example: APPLE5.jpg, where “5” means the track will be displayed for 5 seconds.) *Note: Do not use the same filename on both MPEG and JPEG.*

Note:

- (1) Make sure all capital letters in filename defined in playlist are consistence with the filename on Compact Flash card. All filename should be in 8.3 format (i.e. xxxxxxxx.xxx) and avoid using any illegal characters like “~”, “\_”, “-”, etc
- (2) 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

## 7.2 Operating functions

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

PLAY (Button 1)	<ul style="list-style-type: none"> <li>• Resumes playback of videos from track 1 after STOP has been pressed.</li> <li>• Resumes playback of the track from the point that it has been set to PAUSE.</li> <li>• Playback is reset back to the beginning of the specific track which is being played at the time the PLAY button is pressed.</li> </ul>
STOP (Button 2)	<ul style="list-style-type: none"> <li>• When STOP is pressed the video stops playing and a blank screen is displayed.</li> </ul>
PAUSE (Button 3)	<ul style="list-style-type: none"> <li>• When PAUSE is pressed the video image instantly freezes.</li> <li>• Press Pause again or PLAY to resume normal playback from the position where it was paused.</li> </ul>
REPEAT (Button 4)	<ul style="list-style-type: none"> <li>• When REPEAT is pressed the current track loop back on itself continuously.</li> <li>• 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.</li> </ul>
NEXT TRACK (Button 5)	<ul style="list-style-type: none"> <li>• 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.</li> </ul>
VOLUME - (Button 6)	<ul style="list-style-type: none"> <li>• Decreases audio output volume setting.</li> </ul>
VOLUME + (Button 7)	<ul style="list-style-type: none"> <li>• Increases audio output volume setting.</li> </ul>
MUTE (Button 8)	<ul style="list-style-type: none"> <li>• When MUTE is pressed, all the tracks will have no sound.</li> <li>• Press MUTE again to resume the normal sound in all tracks.</li> </ul>

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

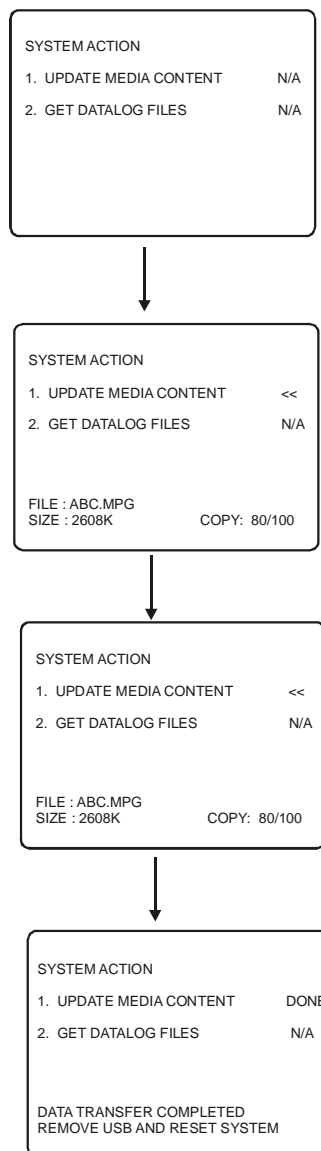
\*DV Studio Plus software can be found and downloaded from [www.digitalview.com](http://www.digitalview.com)

### 7.3 USB Update

The M3-300 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)*

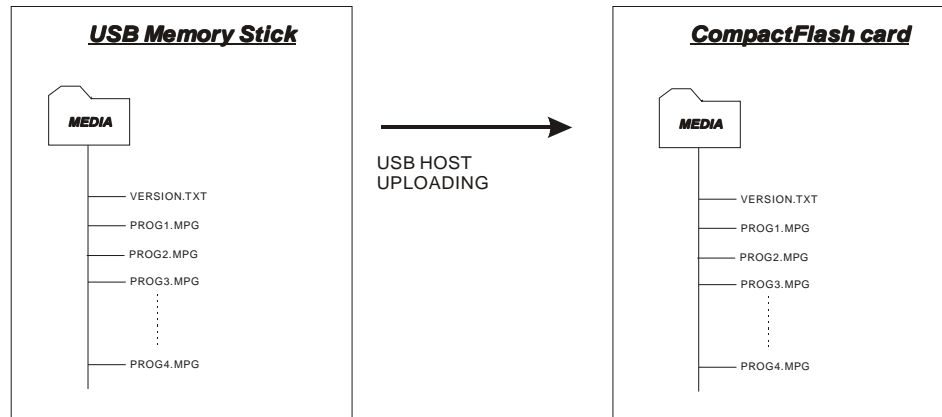
\*Application Notes can be found and downloaded from [www.digitalview.com](http://www.digitalview.com)

- When connect USB memory stick of your M3-300 unit, the power will reset and read the USB content and show the following screen sequences:



- The M3-300 will reset power again once you remove the USB stick from USB connector.

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



#### 7.4 Formatting Compact flash card


When you bought the new CF card or want to re-used the old CF card. It is suggested to re-format the card with FAT32 again before to export any content on it.


Formatting procedure for Windows:

- Double click the **My Computer** icon on your Windows desktop.
- Right-click the drive name of card reader.
- Click **Format**. The format dialog box appears.
- Click **Start**.

Notes:

 *CF cards should be formatted using FAT32 before first use.*

 *All media files on the CF must be in a folder name "media".*

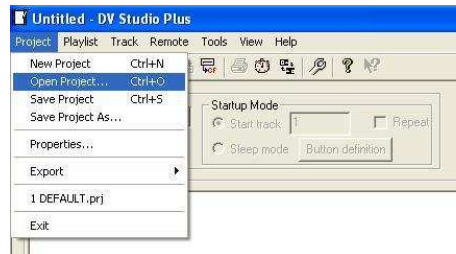
 *All media filenames must be in 8.3 format (e.g. xxxxxxxx.xxx) though combinations with 7.3, 6.3 etc are fine. Filenames must be alpha-numeric characters only, not '~', '\_', '-', '!', '@', '^', etc.*

## 7.5 Exporting Project and Playlist

Using DV Studio Plus\* software to export your project file (.prj) and playlist file (.pll). Make sure the CF card is formatted with FAT32 and the CF card reader is connected and the driver is well installed. The CF card reader is auto-detected as the 'Removable Disk'


\*DV Studio Plus software can be found and downloaded from [www.digitalview.com](http://www.digitalview.com)

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



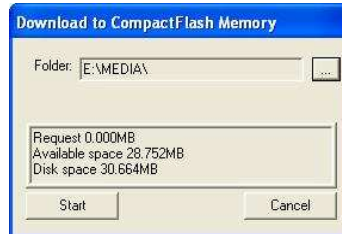
- In the **Project** pull down menu, select **Export** and click **Local Drives**



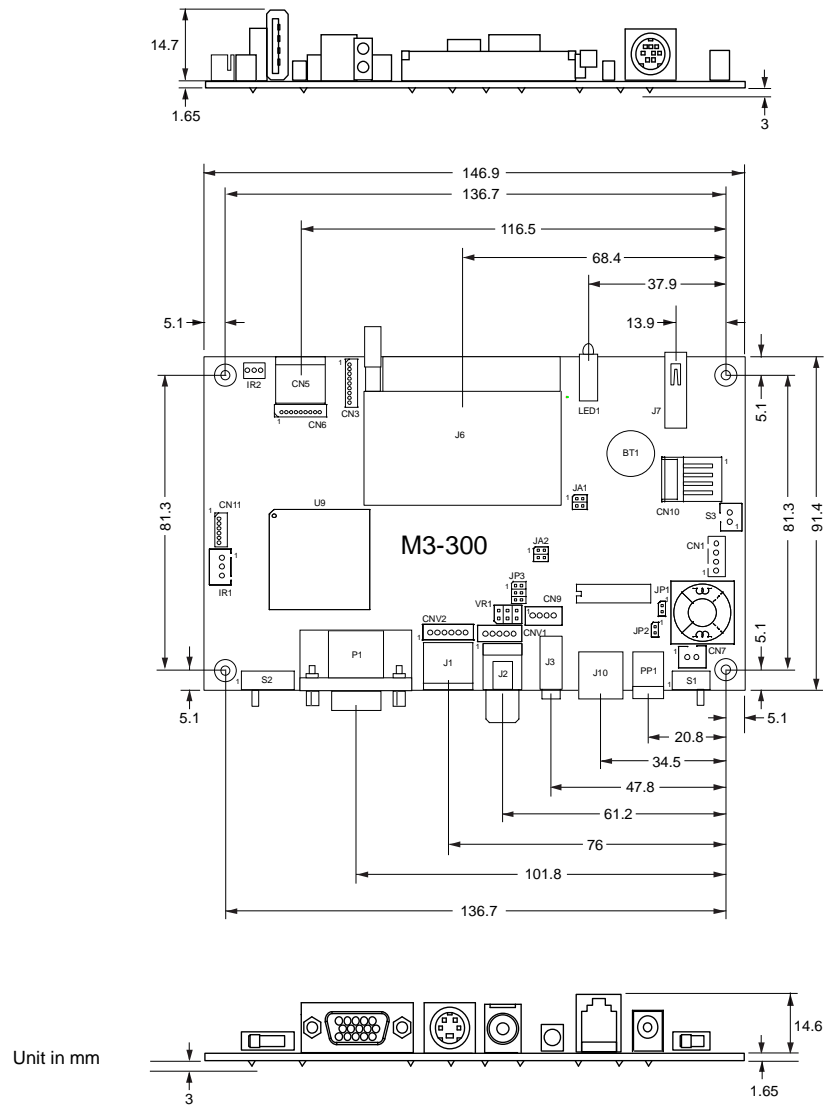
- Click  to select destination drive (i.e. Removable Disk).
- Enter the file path including a **Media** folder to export on CF card (e.g. E:\MEDIA ), then click **OK**



- Click **Start** to export.



# 8 Dimension



The maximum thickness of the board is 19.3mm without add-on board (measured from bottom of PCB to top of components, including any underside components & leads). We recommend clearances of:

- 5mm from bottom of PCB - if mounting on a metal plate we also recommend a layer of suitable insulation material is added to the mounting plate surface.
- 10mm above the components
- 3~5mm around the edges

Any of the holes shown above can be used for mounting the PCB, they are 3.2mm in diameter.

**CAUTION: Ensure adequate insulation is provided for all areas of the PCB with special attention to high voltage parts. (e.g. the inverter)**

## 9 Specification

Playable format	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 1280x960 pixels
Storage media	Compact Flash memory card Recommended max. capacity: 16GB
Video output resolution	Composite / S-Video - 720x576(PAL), 720x480(NTSC) VGA / YPbPr – Configurable to 1280x720 or 640x480
Audio line out	3.2V p-p max. 5kohm
Speaker out	1.5W @4ohm stereo
Audio volume	Controlled through OSD with switches attached or IR
Playback functions	Play / Stop / Pause / Repeat / Previous track / Next track / Volume / Mute Loop playback / Sequence play / Startup mode / Sleep mode
Touch screen functions	Support Analog touch glass (4-wires) and ITO (segment type) touch glass
External I/O ports	RS-232 (9600, N-8-1) USB (content upload) Infra-red (use with DV IR handset, P/N:559000104-3) Remote Ext. (for button & touch)
LEDs	Power LED (Green) Status LED (Green)
Watchdog	Support system reset
Real time clock	Battery-backup RTC
Aux. power out	+5V DC (fuse protection) +12V DC (fuse protection)
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	146.9 (W) x 91.4 (D) x 18 (H) mm
Weight (net)	135g

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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

M3-300

ViewStream 300

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