



# VIDEO HD PLAYER VP100HDi



**MANUAL**

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**CAUTION! DO NOT EXPOSE TO HUMIDITY & DUST!**

***Unplug the power supply cable before any servicing***

**FOR YOUR SAFETY, PLEASE READ THE USER'S GUIDE CAREFULLY BEFORE OPERATING YOUR PLAYER.**

## **A. SAFETY INSTRUCTIONS**

### **A.1 CE marking**

The CE marking is found on the nameplate, at the rear side of the device. It certifies the conformance of the device with the low voltage CE Directive, according to the EN 55022 standard, and the Electromagnetic Compatibility Directive 61000-4-x.

### **A.2 Directives**

- The requirements related to the electromagnetic compatibility and low voltages directive are met.

### **A.3 Overview**

- The user manual is an integral part of the product. It must always be kept handy & close by. Proper usage conforming to the product intended purpose involves strict compliance with the instructions given in this manual.

In the event of return of the equipment, the user manual should be handed over to the new purchaser. The staff should receive instructions concerning the proper usage of the device.

- Only usage of genuine parts ensures perfect safety for the user and correct operation of the device. Moreover, only accessories mentioned in the technical documentation or explicitly approved by the manufacturer must be used. In the event of usage of accessories or consumable products from other brands, the manufacturer cannot stand guarantee for the correct and safe operation of the device.
- Damages caused through usage of accessories or consumable products from other brands will not entail right to any benefit under the terms of warranty.
- The manufacturer will be liable for the safety, reliability and functioning of the product as long as the assembly, settings, modifications, extensions and repairs have been carried out by the manufacturer or a company approved by the manufacturer and if the device is used in accordance with the instructions mentioned in this manual.
- The player complies with the technical safety standards in force at the date of print of this manual. All rights reserved for the electrical diagrams, procedures, names and devices mentioned herein.
- Any reproduction of the technical documentation, even partially, without the written authorization from Waves System is prohibited.

### **A.4 General Safety instructions**

This device has been shipped out from our facilities in perfect working condition. In order to preserve these conditions, for safety and to avoid any risk of accidental bodily injury, the user must imperatively follow the safety instructions and read the 'Caution!' messages included in this manual.

This device, made by Waves System, has been designed in a way that practically eliminates any risk if it is used in accordance to its intended purpose. Nevertheless, with a concern for safety, we would like to draw your attention to the following instructions:

- When using the device, comply with all local rules and regulations in force. Any modification or

conversion of the device automatically entails loss of the homologation. The operation of a modified device is liable to a penalty. In the interest of occupational safety, the operator and the user are held responsible for complying with the regulations.

- Keep the original packing for a possible product re-shipment. Also ensure to keep the packing material out of children's reach. Only this original packing ensures optimal protection for the product during transportation. If a product reshipment appears to be necessary during the guarantee period, Waves System is not liable for any ensuing damages arising during the transportation and attributable to a defective packing.
- This device is used to broadcast audio files. It should be used only by persons whose training or knowledge ensures proper handling.
- Before every use, the operator must check that the device is in perfect working condition.
- This product must not be used in places where there is a potential explosion risk. Besides, it must neither be used in an environment favouring combustion nor in a humid or excessively hot or cold location.

### **A.5 Safety instructions against risks due to electric currents**

- The device must be connected to a grounded AC power outlet or a European standard outlet installed as per good professional practices.
- Before connecting the device, check that the power supply voltage and frequency match the specifications indicated on the device.
- Before powering, check that the device and cables are not damaged. Damaged cables and connections must immediately be replaced.
- Never allow the power cords to come in contact with other cables. Handle the power supply cable as well as all other cables connected to the mains with extreme care.
- Always connect the plug-in connector in the end. Ensure that the On/Off switch is in 'Off' position before connecting the device to the mains. The mains outlet must remain accessible after the installation.
- Check the device and its power supply cable from time to time. Disconnect the device from the mains when it is no longer used or for the purpose of maintenance.
- Handle the power cord by using the plug-in connector only. Never remove the plug-in connector by pulling the power cord.
- Electrical connection, repairs and maintenance must be carried out by qualified personnel.
- Do not switch on or switch off the device within a short span of time as this will reduce equipment life.

## **A.6 - Terms of use:**

- This product has been designed for indoors use only.
- If this device has been exposed to very high temperature fluctuations (e.g.: after transportation), do not connect it immediately. The condensation formed inside the device could damage it. Allow the device to attain ambient temperature before connecting it.
- Do not shake the device, avoid sudden movements during its installation or handling.
- When selecting the spot for installation of the player, ensure that it is not exposed to a high source of heat, humidity or dust. There should not be any cables lying around as they might jeopardise your & others safety.

## **B. PRODUCT INFORMATION**

### **B.1 Correct usage**

The player is used to broadcast audio/video files automatically.

Correct usage involves compliance with the instructions given in this manual as well as with the requirements concerning installation.

### **B.2 Incorrect usage**

Any other usage or usage beyond the scope of this application is considered as incorrect usage. The manufacturer shall not be liable for the damages ensuing from it. The user shall bear full responsibility for the risks incurred.

### **B.3 Delivery details**

VP100HDi player

External power supply and its power supply cable

Remote control

User's manual

### **B.4 Specifications**

Audio/video Player model : VP100HDi

Nominal electrical values of the power supply connection

Voltage (V) 100 to 240

Frequency (Hz) 50-60

For details see Annex B

### **B.5 Installation**

The device must be installed in a dust free area.

**Do not install the device directly against a wall. To avoid overheating, the ventilation openings must not be blocked. Take care to leave an empty space above the ventilation slits.**

### **B.6 Electrical connection**

Before activation, check whether the mains voltage matches with the voltage indicated on the rating plate.

## 1 - Product presentation

The VP100HDi is an Audio/Vidéo full HD player. The files are stored on a SD/SDHC Card or USB device, stick or hard disk. This standalone player can read files automatically when switch on.

Using the trigger input, you can play the selected files. The output contact will switch on/off lamps, relays and all external electric products.

With the RS232 link, you will send command to the player. (select folder, play, stop ...)

VP100HDi is used in digital signage market or integration projects for museums, exhibitions, retail, theme parks & tourist attractions...

## 2 - Fonctionnalités

**Autoplay:** VP100HDi starts automatically on powering on. This feature can be disabled. (see page 14)

**Vidéo output\* :**

- HDMI output v1.2 (digital audio and video out) for a TVHD, a HD videoprojector, computer display with HDMI or DVI input.

- VGA output (analog) for a computer display with analog VGA or DVI input, videoprojector or TVHD YUV compatible.

**Audio output\* :**

- HDMI output v1.2 (digital audio and video out) for a digital amplifier with HDMI input.

- RCA output (analog) Line level for an analog amplifier ou mixign table.

**Infra red remote control :**

- With the remote control you can setup the player and select the media/files to read.

**SD connector :** Use this connector to read your files from a SD/SDHC memory card.

**USB connector :** Use this connector to read your files from a USB memory. (Key, HDD ...)

**Volume :** Press buttons + and - in front face to set the volume. You can also use the infra red remote control.

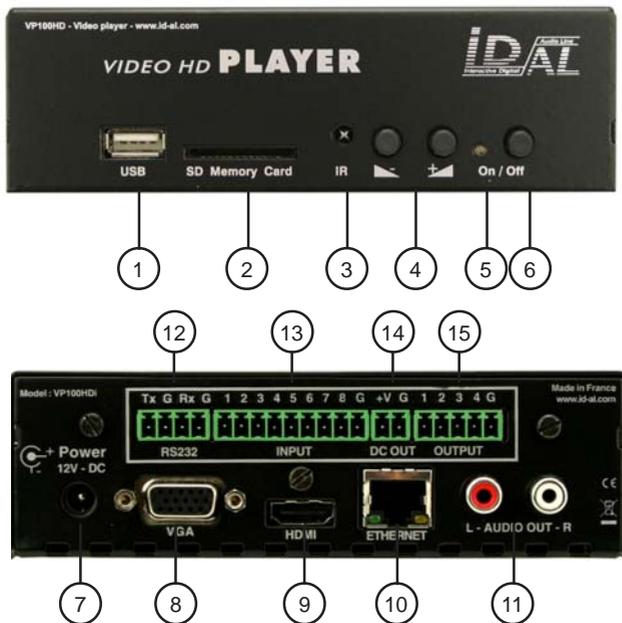
**Ethernet connector :** Use this RJ45 link to update the files from your 10/110 base network.

**FTP server :** With the internal FTP server, you will access to your media (SD, USB ...) to move, rename, copy, delete all your files.

**Power supply :** The VP100 is supplied with a desktop switching power supply. The power supply operates from 120VAC to 240VAC at 50 –60Hz. Output is 12VDC, power draw is 20 watt minimum.

*\* Digital and analog output are can be used simultaneously.*

### 3 - INSTALLATION



1 - USB Host connector to use a USB flash memory or external hard disk or all other media with «mass storage» compatibility.

2 - SD connector to use a SD/SDHC memory card.

3 - Infrared sensor

4 - Volume buttons

5 - Status LED (red = sleep, orange = initialising, green = operational)

6 - Sleep / wake up

7 - Power supply input

8 - VGA output (analog)

9 - HDMI output (digital)

10 - Ethernet RJ45

11 - Analog stereo audio output

12 - RS232 link

13 - Trigger input

14 - Power supply out

15 - Trigger output

### 4 - Operating mode

#### 4.1 -First use

The VP100HDi is delivered with default parameters. You need to change some parameters for an optimal use like video out resolution, Ethernet link, time and date ...

1 -Connect the VP100HDi to a display using HDMI or VGA out. Connect the power supply but don't insert a media (SD or USB). Status LED change from red to orange and green for about 1 minute. Main menu is now displayed.

2 -With the remote control, select «Setup» and change the parameters you want. (see the Setup chapter)

Note : By default, the VP100HDi is set in Full HD output resolution (1920x1080). If your display is not compatible with this resolution, you need to change the resolution. At this moment, may be, you can't see anything on the screen. Don't worry, you can change dynamicaly the resolution using the «ACT» key on the remote control.

## 4.2 - Play manually the audio/video files

1 - Use a SD card or USB flash memory already formatted in FAT32\* and copy one or more video, audio or images files (see annex B for compatibility).

2 - Insert the SD card or USB flash memory in front of the player and connect the power supply. The player start and the status LED change from red to orange.

3 - When player is ready, status LED change to green. With the remote control, select your media, (SD card or USB1) and press OK. You can see now the transport menu.



Note : HDD and USB2 are reserved to internal connector for options. Please, contact us for more informations.

4 - With the remote control, select a file and press OK to play. Press ESC to stop and see the menu screen.

Note : In this menu, press «ACT» to select VIDEO, AUDIO, IMAGE ou FILE tab. Press «ESC» to display main menu.



## 4.3 - Sleep and waking mode

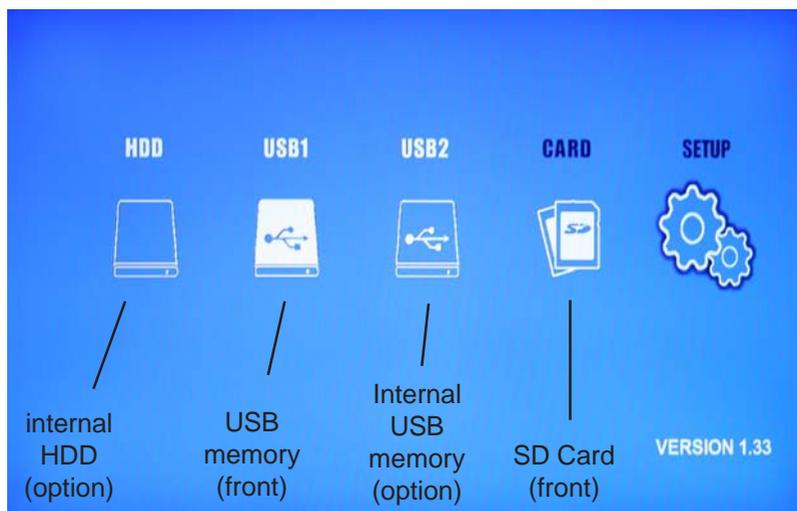
To stop the player and place in sleep mode, press on/off push button from the front face or press on/off key from the remote control. (see annex D) The status LED change from green to orange during 5 seconds and to red when the player is in sleep mode.

In sleep mode, the consumption is only 50mA. You can wake up at any time when you press the On button.

\* NTFS and EXT3 file system are also supported, but don't offer the same possibilities. (see annex C)

## 5 - Configuration

You can change some parameters to adapt the uses to your requirement. All the parameters are included in the Setup menu. From the main menu, select «Setup» with the remote control and press OK.



Note : To select an option, use the arrow key to move to your selection. Use OK key to valid your choice. Use ESC key to exit from a menu.

### 5.1 - RTC - Setup time and date

In this menu, you can set date and time.

- Current Time : Set the actual date and time. (Year / Month / Day - Hour : Minute : Second)

- Auto Power Set : Automatic power on/off selection

- Auto Power On Time : Time when VP100HDi booting up automatically

- Auto Power Off Time : Time when VP100HDi shutting down automatically

- Time Display : Display or not the time on the screen. ("On" = displayed, "Off" = not displayed)



\* When you select the "Auto Power Set" function, be sure that "Auto Power On Time" and "Auto Power Off Time" are not at the same value.

## 5.2 - Network - Setup Ethernet parameters

In this menu, you can set the Ethernet parameters.

- NetMon Info\* : Display DNS, IP and PORT information of the NetMon server.
- Wireless/Wired : Activate or deactivate the cable or wireless mode.
- Wired : activate the cable mode.
- Wireless\* : activate the wireless mode.

### ● Network IP Settings\*\* :

- DHCP : Set IP parameters automatically if you network use the DHCP mode.

- Static IP : Set manually the network parameters when you have not selected the DHCP mode.

IP Address : The VP100HDi IP address

Subnet : network mask

Gateway : network gateway

DNS1 : network DNS 1

DNS2 : network DNS 2



\* Not available with the VP100HDi model.

\*\* If you are not familiar with the network parameters, please, contact your administrator.

## 5.3 - Auto Play - Setup autoplay mode

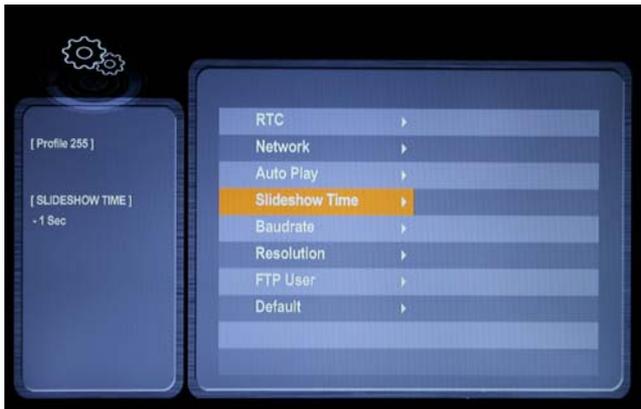
Not available in the VP100HDi model.

See page 14



#### 5.4 - Slideshow Time

In this menu, you can set the time between image from 1 up to 255 seconds, using the slide show mode.



#### 5.5 - Baudrate - Setup RS232 internal link

With the VP100HDi model, don't change the baudrate fixed at 115200 Bauds  
External RS232 link is fixed to 19200 Bauds

#### 5.6 - Resolution - Set video resolution output

In this menu, you can set the size of the video output (VGA and HDMI)



- XGA (1024 x 768) : eXtended Graphics Array (4:3)
- WXGA (1280 x 768) : Wildscreen eXtended Graphics Array (5:3)
- SXGA (1280 x 1024) : Super eXtended Graphics Array (5:4)
- WXGA+ (1440 x 900) : Wildscreen eXtended Graphics Array Plus (16:10)
- WSXGA+ (1680 x 1050) : Wildscreen Super eXtended Graphics Array Plus (16:10)
- UXGA (1600 x 1200) : Ultra eXtended Graphics Array (4:3)
- HD (1280 x 720) : HD ready for HD TV (16:9)
- HD (1366 x 768) : HD ready for computer display (16:9)
- FHD (1920 x 1080) : Full HD for HD TV (16:9)

### 5.7 - FTP User - Réglage des paramètres FTP

In this menu, you can set the FTP parameters.

- User : Name of the user. Default is "admin".

- Password : Password of the user. Default is "admin".

Note : User and Password are 8 characters maximum. Space characters are not supported by the VP100HDi FTP server.



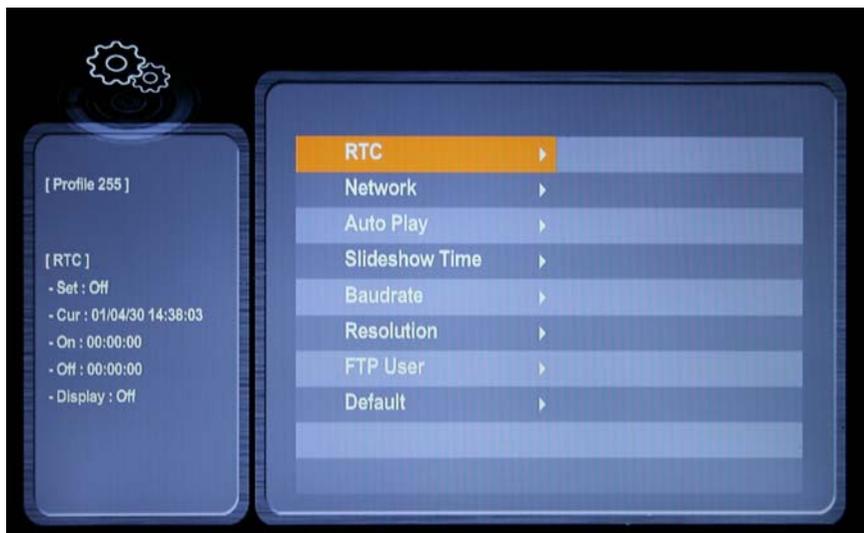
### 5.8 - Default parameters

In this menu, you can restore all parameters as default. Select the option and «Yes», then press «OK» . Else, select «no» to do not restore the parameters.

## 6 - Automatic power on/off

You can wake up or put on sleep the player automatically using the power on/off function.

In the Setup menu, select RTC tab.



- Set «Auto Power Set» to «ON»
- «Auto Power On Time» Change the wake up time
- «Auto Power Off Time» Change the sleep time

## 7 - Ethernet link

Via the Ethernet link, the VP100HDi communicates to update content via FTP.

You can use the player in a local network. An adequately configured Modem/Router will allow access of the player via the Internet.



Ethernet link

Caution! Network administration requires good computer skills.

In a local network installation, the player requires an IP address. This address is set in the Option menu (see option menu chapter). The player is then recognised on the network as a FTP server with a FTP software such as Filezilla.

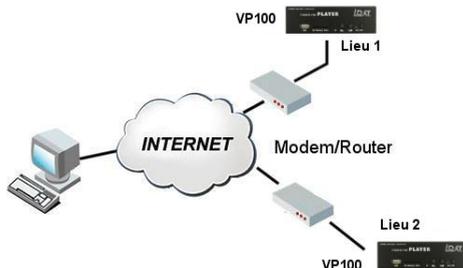
In an installation where only the player is present or in a local network with external access, you must use a Modem/Router to create a gateway between the player and the Internet. Since the Modem/Router is configured with an IP gateway, you must declare this gateway to the VP100 so that it can communicate (configured in the Option menu).

### 7.1 - Connection of VP100HDi to the Internet through an ADSL link, without local network nor computer

Hardware required:

VP100HDi + ADSL Modem / Router

Connect your player to your ADSL Modem/Router with a RJ45 cable and connect your Modem to a telephone jack with ADSL filter.



#### **A - You have an IP address provided by your service provider**

Configure your Modem/Router entering the player IP address, access data to provider (account, password ...), Gateway used and the various configurations related to your Modem. Also set the IP and Gateway of your player.

Open the FTP communication ports (21) and the HTTP ports (80) in the Modem.

On a computer connected to the Internet and a browser, type the IP address of your connection. The window of your player should be displayed.

#### **B - You don't have a permanent IP address**

This is a solution to make your player visible over the internet without using a permanent IP address. We suggest you to use a service provider offering "DynDNS" service. It's a dynamic DNS service modifiable with every change in the IP of your service provider. For example, you can use the free service on [www.dyndns.org](http://www.dyndns.org).

At first, you must open an account with a service provider and obtain your Host name, User name and password. Caution! Your Modem / Router must have this feature.

Configure your Router Modem accordingly and validate the DynDNS option.

The principle is as follows:

When the IP address changes, the Modem sends this information to the DynDNS server. The service immediately carries out the modification in its database to point out the new address on the host name.

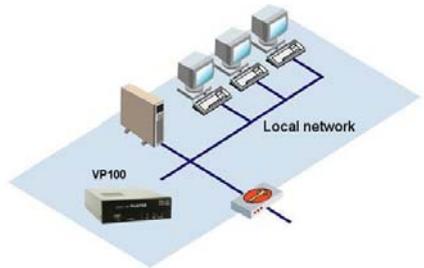
Therefore, the player remains visible over the Internet even in case of change in the IP address of the service provider or in case of a cut-off.

## **7.2 - Linking a player to an internal network**

Hardware required:

- EventPlayer
- Ethernet Hub
- One or several computers can be present

Connect the player to the network hub. The player is comparable to a computer. It has its own IP address and will be seen over the network like a machine. It will be able to communicate with various network stations. If the network itself is connected to the outside, then the player will be seen from external machines.



## 8 - Operating mode and naming of files.

Folder names define the playing mode.

### **8.1 Organisation of the folders:**

Only one folder level is allowed at the root. The folder names are made of 3 digits (000 to 999) followed by optional parameters and a name of your choice.

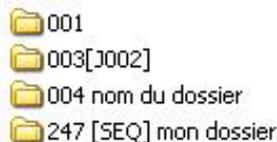
Example :

001

003 [J002]

034 folder name

247 [SEQ] my folder



- **The first three digits represent the folder No. and thereby its main name.**

Example :

000 : Folder N°000 - Folder «Autoplay» Play when switch on.

001 : Folder N° 001

034 : Folder N° 034

The folder number is used to define the playback sequence, it identifies the folder when a folder jump is required and on triggering of an input. You can use any number between 000 & 255.

**IMPORTANT:** The 8 input contacts allow trigger of folders identified by these 3 digits, as per a binary sequence from 001 to 255 (See table in the annex).

Input 1 : Folder 001

Input 2 : Folder 002

Input 3 : Folder 004

Input 4 : Folder 008

Input 5 : Folder 016

Input 6 : Folder 032

Input 7 : Folder 064

Input 8 : Folder 128

The simultaneous use of several input contacts offers up to 255 different combinations. No. 001 to 255 corresponds to the 8 input contact combinations.

### **Special case: AUTOPLAY MODE**

Folder 000 is the folder which will be played by default on powering on (autoplay). On powering on, presence of this folder is checked ; if it is present, the player plays files of this folder. If this folder is missing, the player switches to wait mode.

To loop the Autoplay folder, create this folder: 000[J000]

Copy in this folder all the files you want to play in loop when switch on.

## **Optional parameters**

To modify the behaviour of the player, you can add optional parameters to the folder name. These parameters are boxed with the "[ " "]" symbols. You can add several parameters to the folder name.

[Jxxx] - Jump to another folder after reading the current folder.

[RND] or [SEQ] - Specifies random or sequential playback mode for the current folder.

[Rxyzt] - Action output contacts.

[NT] or [DT] - This option defines the interruption mode of the current folder

***Note: If no optional parameter has been indicated, the player reads randomly the current folder in full and stops.***

- **[Jxxx] - Names the folder No. to JUMP to after reading the current folder.**

By adding this parameter to the folder name after the folder No., you define the behaviour of the player after reading the current folder so that it starts reading another folder or loop in this folder.

Example:

xxx [J002]: Jump to folder 002 after reading folder xxx

001 [J023]: Jump to folder 023 after reading folder 001

034 [J034]: Jump to folder 034 after reading 034 -> Loops in folder 034

xxx represents a folder number between 000 & 255

- **[SEQ] or [RND] - Specifies the playback mode for the current folder. Default is sequential mode.**

Example:

001 [SEQ]: SEQ for sequential numerical order

001 [RND]: RND for random playback

By choosing [SEQ] you select sequential mode. Sorting is done in numerical order of file names (for naming details, see next chapter related to files organisation).

In the Sequential mode [SEQ], files which are not numbered are ignored.

Directories which do not comply to naming rules are ignored.

By choosing [RND] you select random mode.

**The default mode is the sequential mode SEQ.** The files are not read again as long as all the files have not been read at least once. This information is not stored during a directory jump.

- **[Rxyzt] - Enables or disables one or several output contacts**

A folder can activate different output contacts without any additional programming. You can switch on lamps, activate motors or any other action automatically when a folder is read.

**Caution! Status of the outputs does not change whilst the file is read.**

x,y,z,t = 0 - Output is deactivated

x,y,z,t = 1 - Output is activated during the time to play the folder then become deactivated at the end of the folder.

x,y,z,t = 2 - The output contacts are commutated at the beginning of the folder playback and stay activated

while a new change is not executed.

Example:

001 [R1000] - Enables output 1 while reading folder 001

001 [R1111] - Enables all 4 outputs while reading folder 001

001 [R0000] - Disables all outputs while reading folder 001

001 [R2222] - Enables all 4 outputs permanently

001 [R2001] - Enable output 4 during folder 001, enables output 1 permanently, disables output 2 and 3

The output contacts are commutated at the beginning of the folder playback.

● **[NT] or [DT] - This option defines the interruption mode of the current folder**

If these options are registered in the folder name, the file cannot be interrupted and commands received are ignored or executed at the end of the file.

**Without this option, reading of the current file can be interrupted at any time by an external action. (input, RS232 ...)**

Example:

001 [NT] - The folder is NOT interruptible.

In that case, an action on one of the input contacts or RS232 link is ignored and the reading of the current file is not stopped. Caution! The action is not memorised and the triggering information is lost.

001 [DT] - Interruption instruction is memorised and will be executed at the end of the file.

In that case, an action on one of the input contacts or RS232 link is memorised and the reading of the current file is not stopped. Caution! If several actions occur while reading the file, history of actions is not memorised and triggering information is lost. Only the last action is memorised and executed.

● **Specific behaviour :**

- If an action refers to a folder which is absent, the command is ignored.

- If an empty folder (no file) is called but the folder name includes an option, this option will be executed. If no option is indicated, the player goes to stop mode.

## **8.2 Organisation of files inside folders.**

Like for folders, file names define their playback pattern.

**Note: You may not have to use this notation if the files are read randomly ("RND" option or no option in the folder name). In this case, all the files shall be read in random.**

The file names are made up of 3 digits (000 to 255) and a name of your choice.

Example:

001 my video.mpg

063 nom du fichier.mp4

**Note: In sequential mode (SEQ), if numbered and non-numbered files are present, only the numbered files will be read. In random mode, all the files be read.**

- **The first three digits represent the file number file and thus its primary name from 000 to 255**

Example:

001.mp4 - file No.001

063.mp3 - file No.063

158.mpg - file No.158

If the folder indicates random mode [RND], the files don't have to be numbered and playback will be in random mode. If the folder indicates definite sequence [SEQ], the non-numbered files are ignored.

## 9 - RS232 serial link protocol

The VP100HDi can communicate with other devices. It receives commands on the Rx input and sends data through the Tx output. The player complies with the RS232 norm (19200 bauds - 8 bits / 1 start bit / 1 stop bit / no parity).

### 9.1 - Reception Protocole

VP100HDi can receive commands to start reading a file or change volume. If the same link is used to control several players, each player will only execute commands addressed to its own number.

The reception protocole is made of a 3 bytes frame.

#### **Byte 1 (status) + Byte 2 (command) + Byte 3 (data)**

*Note :*

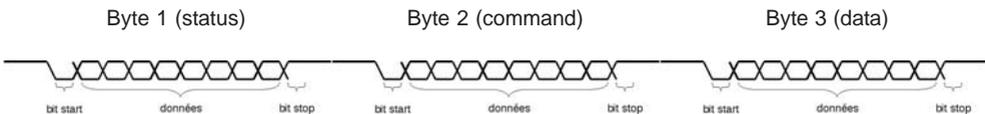
- One byte is 8 bits : b7 b6 b5 b4 b3 b2 b1 b0
- A binary symbol for 8 bits is : xxxxxxxxb
- A Hexadecimal symbol is : xxh

#### **Byte 1 : Status - 1xxxxxxb**

- > b7 = 1: refer to a status byte
- > b6 - b0: player identification to be addressed to from 001 to 127 (000001b - 1111111b)
- The default player address (ID) is 001. You can change it. (see next command)
- Several players may have the same identification number to create groups.
- Identification 000 is the "global" code, all players are concerned by the command

#### **Byte 2 (Command) + Byte 3 (Data) - 0xxxxxxb**

- Byte 2: command (command byte is always followed by a byte of data).
- > b7 = 0 : refer to a byte of command or data
- > b6, b5, b4, b3, b2, b1, b0 : command code sent to the player



## List of commands:

- **0000000b(00h) : not used**

- **0xxx0001b (01h) : Jump and play a folder**

The folder is referred to by the range number and the byte of data which follows.

Example:

Byte 1 : 10000001b (81h) : Status, Player ID 001

Byte 2 : 00000001b (01h) : Jump to folder command

Byte 3 : 00000011b (03h) : Play folder N° 003

Only first 128 folders are used.

- **00000010b (02h) : Transport bar command**

The function is defined by the byte of data as follows:

Value of data for byte 3:

00000001b (01h) : Play (from current folder)

00000010b (02h) : Stop

00000011b (03h) : Next file in the current folder

00000100b (04h) : Previous file in the current folder

Note: the other values are ignored.

At the last file, the next file is the logic next file in normal play mode. Option are executed. (Jump ...)

At the first file, previous file is the first file.

Example:

Byte 1 : 10000001b (81h) : Status, Player ID 001

Byte 2 : 00000001b (02h) : Transport bar command

Byte 3 : 00000001b (01h) : Play command

- **00000011b (03h) : setting of volume**

Value is defined by the following data byte:

Values of data for byte 3 included between 0 and 13

00000000b (00h) : Mute (0)

00100000b (0Dh) : Volume maximum (13)

Note : Any other value will be ignored

Example:

Byte 1 : 10000001b (81h) : Status, Player ID 001

Byte 2 : 00000011b (03h) : Volume command

Byte 3 : 00001000b (08h) : Volume at 8

Note : you can't change volume in stop mode but only during play mode else command is ignored.

● **01111111b (7F) : Setting the ID of the player**

The ID is defined by the byte of data as follows:

Values of data for byte 3 included between 1 and 127

00000001b (01h) : ID = 001

01111111b (7Fh) : ID = 127

Note : Any other value will be ignored

Example to change the ID of the player from 001 to 002 :

Byte 1: 10000001b (81h) : status byte, player number 1

Byte 2 : 01111111b (7Fh) : Setting the new ID of the player

Byte 3 : 00000010b (02h) : New ID of the player = 002

Note : If you don't remember the ID of the player, use ID=000 in the status byte (broadcast) to change the ID of the player.

## **9.2 - Transmission Control Protocol**

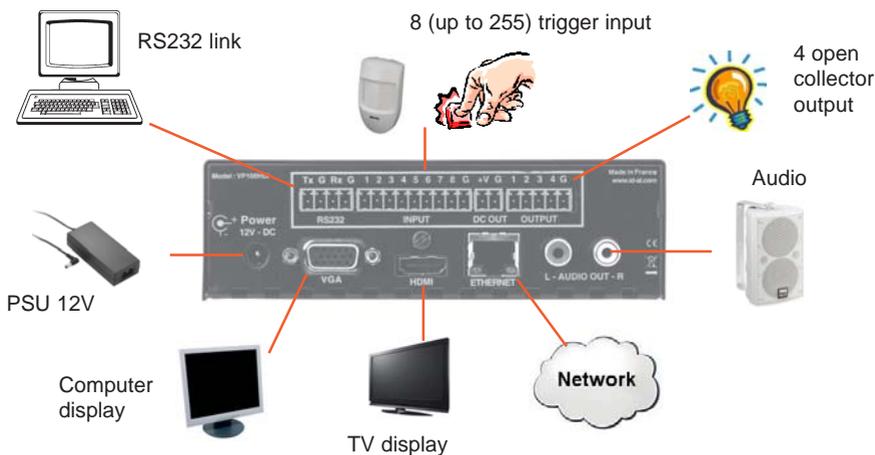
The EventPlayer provides a mode of information transfer, information which comes in, goes out identically (Daisy Chain)

Any information received on the Rx line is sent out as received on the line Tx. Several EventPlayers can be linked by connecting the Tx output of the first one onto the Rx input of the next one and so on... Data received by the first player on Rx are sent out on Tx and received on the Rx input of the next player in the chain.

Note: if a large number of players are connected this way, a slight delay may occur at the end of the chain.

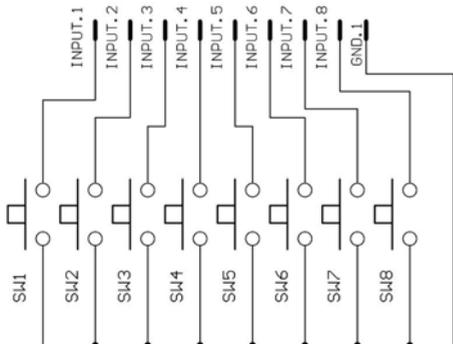
## 10 - Connections

### 10.1 - How to connect VP100HDi



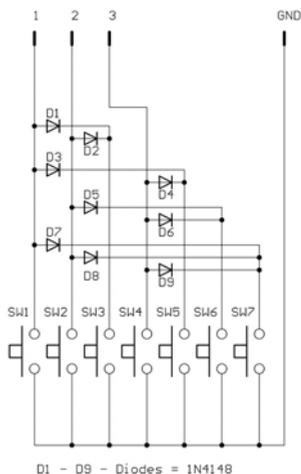
### 10.2 - Input connections

Using up to 8 triggers you can connect the contacts directly to the 8 inputs. Over 8 push button, you need to combine the input with some diodes. Input are a binary mapping of the number of folders.



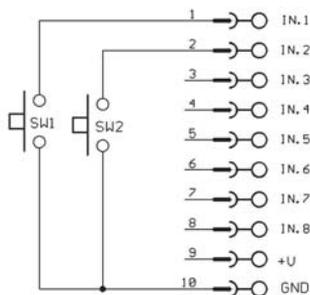
8 input -> 8 folders :

|                  |                  |
|------------------|------------------|
| SW1 = Folder 001 | SW5 = Folder 016 |
| SW2 = Folder 002 | SW6 = Folder 032 |
| SW3 = Folder 004 | SW7 = Folder 064 |
| SW4 = Folder 008 | SW8 = Folder 128 |

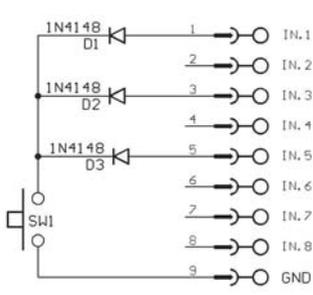


Example of 3 input with combination :

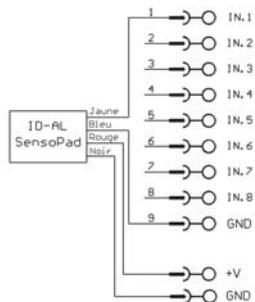
|                  |                  |
|------------------|------------------|
| SW1 = Folder 001 | SW5 = Folder 005 |
| SW2 = Folder 002 | SW6 = Folder 006 |
| SW3 = Folder 003 | SW7 = Folder 007 |
| SW4 = Folder 004 |                  |



Example with push buttons to start directory 1 or 2



Example of input combination to start directory 21

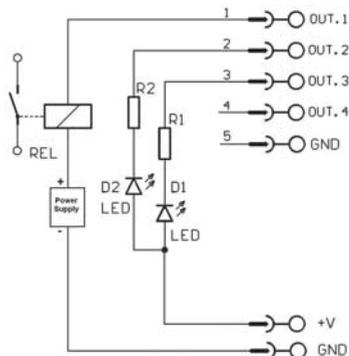
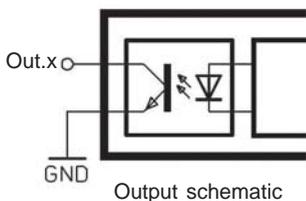


Example of external trigger using SensoPad and power supply of the player

### 10.3 - Output contacts

The VP100HDi can enable output contacts to operate various devices. You can switch on lamps, relays, motors ... The output contacts are activated through folders.

The output contacts of the VP100HDi are opto-couplers (see diagram below). The power output is limited (switching up to 60V/50mA max) and only low power devices can be controlled, LED or small relays. To switch high power devices you must use an interface between the outputs and the device to be controlled such as the ID-AL MicroSwitch.



Example of output to control LEDs and a relay with an external power supply.

**Note :** V+ is voltage output from the main power supply. With a 12V power supply, V+ will be 12V out. Max output is 300mA.



## **Annex A - Specifications**

**• Power supply :**

DC input : 12V DC

**• Consumption :**

- Sleep mode : 50 mA

- Play mode : 600 mA

**Taille :**

Width : 142mm (1/3 19" rack) - Height : 43mm

Depth without connector : 173mm

**Connectors :**

- Audio/Video :

1 x HDMI 1.2 - type A (Digital Audio + Video)

1 x VGA D-Sub 15 - type A (Analog Video)

2 x RCA analog left/right - line level -10dB

- Network :

1 x LAN RJ45 - Ethernet 10/100 Mbit/s - DHCP and static IP

- RS232 :

1 X External port - 19200 bauds - 8 bits / 1 start bit / 1 stop bit / no parity

- Infra red sensor for remote control

- Memory external :

1 x SD/SDHC memory card - SD (512Mo up to 2Go) and SDHC (4Go up to 16Go)

1 x USB host - type A - USB 1.1 and 2.0

- Memory internal\* :

1 x USB Host - type A - USB 1.1 and 2.0

1 x SATA for HDD

- Volume :

Push button +/-

13 steps - 00 (mute) to 13 (max)

- Status LED (red = sleep, orange = initialization, green = operational)

*\* Internal memory connectors are options. Contact us for all details.*

## **Annex B - Functions**

### **Resolutions :**

- XGA - 1024 x 768
- WXGA - 1280 x 768
- SXGA - 1280 x 1024
- WXGA+ - 1440 x 900
- WSXGA+ - 1680 x 1050
- UXGA - 1600 x 1200
- HD - 1280 x 720
- HD - 1366 x 768
- FHD - 1920 x 1080

### **Files format :**

- Play JPEG files : JIFF, EXIF - Max : 8000 x 5000
- Video files :
  - SD PAL 720x576 50i/25p (576p / 576i) (4:3 et 16:9)
  - SD NTSC 720x480 60i/30p (480p / 480i) (4:3 et 16:9)
  - HD 1280x720 30p/24p (720p)
  - HD 1440x1080 60i/50i/24p
  - HD 1920x1080 60i/50i/24p (1080i / 1080p)

Supported extension : .avi .mpg .mpeg .mov .wmv .mp4

### **Type of files :**

AVI (Video For Windows)  
MOV (QuickTime File Format - AVC / H.264)  
WMV\* (Windows Media Video)  
MPEG-1/2  
MPEG-2 Program Stream (VOB)  
MPEG-2 Transport Stream (TS, TP, M2TS, VOB)  
MP4 (MPEG-4)  
WAV (Audio for Windows)  
MP3 (MPEG Layer 3)  
AAC  
WMA\*

Formats de compression vidéo supportés :

MPEG-1  
MPEG-2 SD/HD  
WMV 7 / 8 / 9\*  
VC-1  
MPEG-4 ASP (DVIX / XVID)  
MPEG-4 AVC  
H.264

## Supported CODEC :

MPEG layer 1 et 2

MP3 (MPEG layer 3), 44.1KHz / 48KHz - 32kbit/s up to 320kbit/s CBR/VBR

AAC

PCM

AC3 (48kHz / 5 channels)

WMA\* 44.1KHz / 48KHz de 32kbit/s à 192kbit/s

Supported subtitle :

SRT, SMI, SSA, SUB

*\* WMA and WMV formats are partially supported. If you have some trouble to read this format, please, convert your files in other supported format.*

## Audio files :

Supported extension : .mp3 .wav

Audio format :

. MP3 (MPEG ½ layer 3), 44.1KHz / 48KHz - 32kbit/s up to 320kbits/s CBR/VBR

. WAV 44.1KHz / 48KHz

## Annex C : Type of memory storage

- SD flash memory card (512Mo up to 2Go)

- SDHC flash memory card (4Go up to 16Go)

- USB flash memory - USB 1.1 and USB 2.0\*\*

- External USB hard disk - USB 2.0

- External flash memory reader using "Mass storage" driver to use flash memory (CF/MMC/MS Pro).

USB 1.1 and USB 2.0\*\*

*\*\* Use USB 2.0 memory to read HD files.*

## Supported operating system :

FAT32, NTFS and EXT3 - long name and UTF8

| Type   | Play | Upd USB | Upd FTP | File > 4Go | Windows | Mac OS | Linux |
|--------|------|---------|---------|------------|---------|--------|-------|
| FAT 32 | yes  | yes     | yes     | no         | yes     | yes    | yes   |
| NTFS   | yes  | no      | no      | yes        | yes     | no     | yes   |
| EXT3   | yes  | yes     | yes     | yes        | no      | no     | yes   |

## Annexe D - Infra red remote control

You can send command to player using an infra red remote control.



| Touche     | Main menu /Setup  | Transport         | Autoplay mode | Manually play |
|------------|-------------------|-------------------|---------------|---------------|
| Power      | On/Off            | On/Off            | On/Off        | On/Off        |
| Up         | Up                | Up                | -             | Previous file |
| Down       | Down              | Down              | -             | Next file     |
| Left       | Left              | Left/Pg prev      | -             | Reward        |
| Right      | Right             | Right / Page next | -             | Forward       |
| OK         | Valid             | Play              | -             | Play/Pause    |
| VOL+       | -                 | -                 | Volume +      | Volume +      |
| VOL-       | -                 | -                 | Volume -      | Volume -      |
| PAGE+      | -                 | Next page         | -             | Previous File |
| PAGE-      | -                 | Previous page     | -             | Next File     |
| ESC        | Previous Menu     | Main Menu         | Main Menu     | Transport     |
| MENU       | -                 | Copy Menu         | -             | -             |
| OSD        | Reserved          | Reserved          | Reserved      | Reserved      |
| OSD_UP     | Reserved          | Reserved          | Reserved      | Reserved      |
| OSD_DOWN   | Reserved          | Reserved          | Reserved      | Reserved      |
| OSD_SELECT | Reserved          | Reserved          | Reserved      | Reserved      |
| ACT        | Change résolution | Trntransport      | -             | -             |
| ZOOM       | -                 | File Select       | -             | -             |
| INFO       | Reserved          | Reserved          | Reserved      | Reserved      |
| GOTO       | Reserved          | Reserved          | Reserved      | Reserved      |
| TIMER      | Reserved          | Reserved          | Reserved      | Reserved      |
| SENSOR     | Reserved          | Reserved          | Reserved      | Reserved      |



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