

# Meicheng®

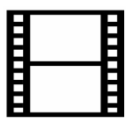
## Multi-Media Player (Automatic HD Player)

### HD-1080K12

# User manual



HD-1080K12 is a high performance 1080p Full HD media player.  
OS belong to Linux operate system.



**Movie**



**Photo**



**Music**





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# I. Main Features

## 1. Applications

- ◆ Ideal replacement for Blue Ray and DVD video players.
- ◆ Ideal playback unit for Large LCD and Plasma display.
- ◆ Ideal for pictures Sync playback (BGM)
- ◆ High Definition Information Display for Resorts, Hotels, Restaurants, Shopping Malls, Airports, etc.
- ◆ HD Video player for Museums and Science Center exhibits.
- ◆ HD Video player for Interactive traveling exhibit.
- ◆ HD Video information system for Theme Parks, Go-Kart tracks, Family Fun Parks.

## 2. Display format

### 2.1 Supported audio code :

LPCM, digital coaxial and optical 5.1 channels, stereo double track.

### 2.2 Supported audio files :

MP3、WAV、OGG、FLAC、AAC、LC-AAC、APE (below 128KHz)。

### 2.3 Supported picture forma :

JPEG、BMP、GIF、PNG、TIFF。

### 2.4 Supported subtitles format :

SRT、SMI、SUB、SSA、IDX+SUB。

### 2.5 Supported video code :

MPEG1/2/4、H.264、AVC、VC1、WMV、RM/RMVB、DivX3/4/5/6、Xvid3/4/5/6。

### 2.6 Supported video files :

RM/RMVB、AVI、TS、M2TS、MTS、MKV、MOV、FLV、DVD-ISO、BD-ISO、VOB、MPG、DAT、ASF、TP、TRP、WMV、IFO、SWF、3GP、EVO、DIVX、MP4、OGM。

### 2.7 Video Format :

**a. Apple quick time AVC (xxx.mov) at up to 35 mbps :**

The video size is up to 1080p (1920X1080) and average bit rate is 35mbps with peaks at up to 50mbps.

**b. Mpeg2 HD (xxx.ts, xxx.m2ts) at up to 40 mbps :**

The player supports Mpeg2-HD xxx.ts and xxx.m2ts files (main profile@high level).The video size is up to 1080p (1920X1080) and bit rate is 40mbps.The player supports both CBR and VBR encoding.

**c. Windows media HD (xxx.avi,xxx.wmv) at up to 35 mbps :**

The player supports windows media HD VC-1 files xxx.avi (AP@L3). The video size is up to 1080p (1920X1080) and average bit rate is 35mbps with peaks at up to 50mbps.For continuous 24/7 loop file only, limit the average bit rate to 25mbps.

**d. Panasonic and Sony HD camcorder (xxx.mp4) :**

The player plays files created by Panasonic and Sony HD camcorders. These HD camcorders record video using AVC-HD file format (h.264).

**e. Flip Video HD movie file (xxx.mp4) :**

The player supports movie files that have been created using Flip Video hand held HD recorder. Files created are mpeg4 HD, xxx.mp4.

**f. Digital camera movie file (xxx.mp4 、 xxx.avi) :**

The player supports movie files xxx.mp4,xxx.avi, xxx.mov that have been created using regular Digital cameras (with movie recording capability).

**g. DVD and Mpeg2 video :**

The player supports standard DVD file xxx.vob and also regular Mpeg2 file.

**h. VIDEO OUTPUT (all are ON simultaneously) :**

The player has 2 video output: HDMI and Composite. When playing, these video outputs are simultaneously ON regardless of the video setting and file being played.

### **3. Supported Languages**





English, Español, Français, Deutsch, Italiano, Dutch.








## II. Remote control



All procedures in this manual can be carried out using the remote control buttons.



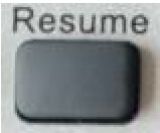





See the following for details on each button and its function:




No.	Name	Button	Function
1	Power		<b>Power button:</b> Press to POWER on or off the device
2	Title		<b>Title button:</b> Press to view the title of DVD
3	Info		<b>Info button:</b> Press to view the current channel information
4	Mute		<b>Mute button:</b> Press to mute audio output, and press again to resume.

No.	Name	Button	Function
5	Numeric		<p><b>Numeric buttons:</b> Press to enter channel numbers or numeric input when changing settings</p>
6	Repeat		<p><b>Repeat buttons:</b> Press REPEAT 1 / ALL to set repeat option - Chapter, Title or Off.</p>
7	Time seek		<p><b>Time seek buttons;</b> Press to jump to a specific point on the disc or title. Specify the point using Title, Chapter and Time.</p>
8	TV Mode		<p><b>TV Mode button;</b> Press to switch between NTSC Interlaced, NTSC Progressive, PAL Interlaced, and PAL Progressive.</p>
9	Home		<p><b>Home buttons;</b> Press to Return the main menu</p>
10	Menu		<p><b>Menu buttons;</b> Press to enter the main menu</p>
11	Slow		<p><b>Slow button:</b> Press to playback in slow motion. Three motion settings are available. Five slow motion levels (3/4, 1/2, 1/4, 1/8, 1/16x) are available. Press to resume regular playback.</p>

No.	Name	Button	Function
12	Setup		<b>Setup button:</b> Press to access the Setup Menu directly to change system settings.
13	Zoom		<b>Zoom button:</b> Press to zoom in/out when playing back photos or Video programs. Photo zoom levels: 2X, 4X, 8X, 16X; Video zoom levels: 2X, 3X, 4X, 8X.
14	Left (Arrow)		Press the arrow buttons to navigate the menus
15	Right (Arrow)		Press the arrow buttons to navigate the menus
16	Up (Arrow)		Press the arrow buttons to navigate the menus
17	Down (Arrow)		Press the arrow buttons to navigate the menus
18	OK		<b>OK button:</b> Press to select confirm in menus.
19	Vol -		<b>Vol - buttons:</b> Press to reduce the volume.
20	Vol+		<b>Vol + buttons:</b> Press to increase the volume.



No.	Name	Button	Function
21	Audio		<b>Audio button:</b> Press to select an audio track on a HDD or USB file.
22	Subtitle		<b>Subtitle button:</b> Press to activate available subtitles when play the DIVX file. DivX subtitle supported: SRT,SMI,SUB,SSA format file
23	Resume		<b>Resume buttons;</b> Press to resume play
24	Angle		<b>Angle buttons:</b> Press to view angle of DVD
25	Pause		<b>Pause button:</b> Press to pause playback of a DVD or HDD title.
26	Return		<b>Return button:</b> Press to return to the previous screen when navigating the menus.
27	Stop		<b>Stop button:</b> Press to stop playback.
28	FR		<b>Fast Rewind buttons:</b> Press to fast rewind the current playback. Press repeatedly to select faster rewind speeds.

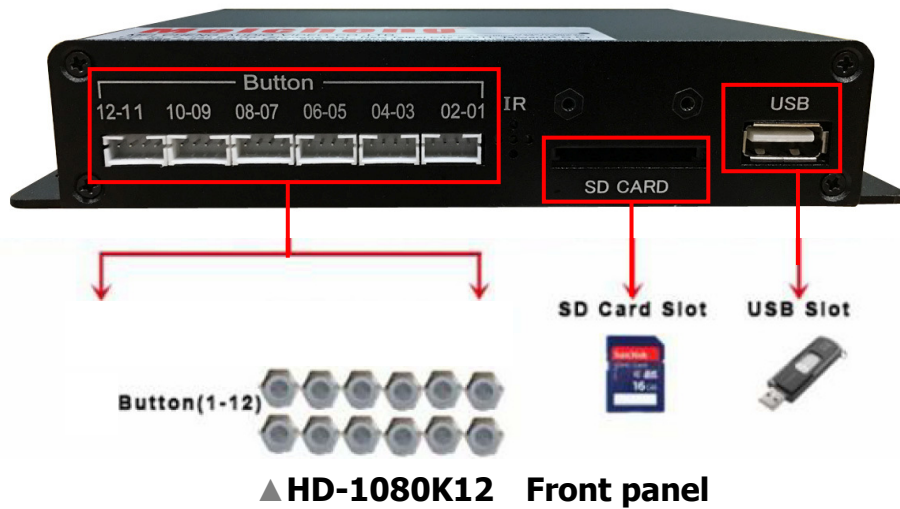
No.	Name	Button	Function
29	FF		<p><b>Fast Forward buttons:</b>  Press to fast forward the current playback.  Press repeatedly to select fast forward speeds.</p>
30	Previous		<p><b>Previous buttons:</b></p> <ol style="list-style-type: none"> <li>1. Press to go the prev. on a HDD or USB file when playing music.</li> <li>2. Press to page up the file list at Browser.</li> <li>3. When play photo, the button is enable; play Movie and Mp3 file, the button is disable.</li> </ol>
31	Next		<p><b>Next buttons:</b></p> <ol style="list-style-type: none"> <li>1. Press to go the next on a HDD or USB file when playing music.</li> <li>2. Press to page down the file list at Browser.</li> <li>3. When play photo, the button is enable; play Movie and Mp3 file, the button is disable.</li> </ol>

# III. Setup Menu





## IV. Interface port



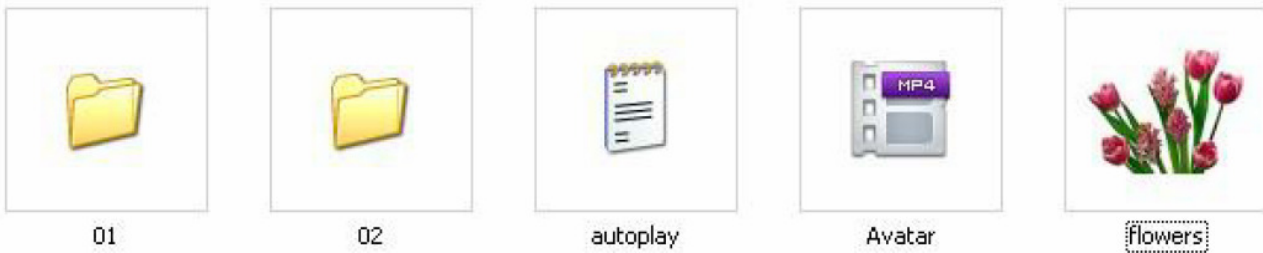
## V. Operation Manual

### 1. Boot auto-play

The media player will auto-play all the files in root directory of USB/SD CARD. But files that stored in the folder can't be auto-played. The display files can be: video files, picture files, and audio files.

Play sequence: video→picture→audio.

## 2. Custom control display



User can define the function of each button. Define in the configuration file "autoplay.txt" as below :

### Example 1 : **01=01/bird.avi**

Instruction : Single file playback ( play file "bird.avi" in folder 01 )

### Example 2 : **01=Avatar.mp4**

Instruction : Single file playback ( play file "Avatar.mp4" in root directory )

### Example 3 : **02=02/**

Instruction : Folder files playback ("02" represents folder name in memory card. "/" represents all files in folder)

### Example 4 : **01\_01=01/**

Instruction : Loop play files in folder 01

## 3. Pictures Sync playback (BGM)

For pictures' playback, you can define a background music folder. Here are two ways.

### 3.1 The first way :

Music folder stored in the root directory, it will boot auto-play. In this case, background music will play once playing pictures.

First, create a folder named "audio" in the root directory. Then copy the MP3 music files to folder "audio". When pictures in the root directory are played, it will auto-play the music in folder "audio".

**Attention please: Do not change the name of this audio folder.**

### 3.2 The second way :

If the displaying folder files are pictures, you can define a folder to play the background music of these pictures.

**For example, 05=photo/**

In this case, you can create a folder named "photo\_audio". When you play the pictures in folder "photo/", music in "photo\_audio" will be played at the same time.

### 3.3 When displaying pictures, two parameters can be set as well. :

#### a. Picture playing time and transition model from one picture to the next. Set as follows:

Add below programme at the beginning of the configuration file "autoplay.txt":

**Transition=9** (Setting the transition model from one picture to another, parameter range 1-9)

**Slide\_time=5** (Setting the playing time of each picture)

#### b. Custom volume level

Define at the beginning of "autoplay.txt", as below:

**Volume=10** (Here "10" represents the boot volume level when power on. Effective volume setting range is from 1 to 31.)

## 4. Custom function

First, define "irmode=1" at the beginning of "autoplay.txt".

**Format:** [function key name]=[number key], this format should not be reversed.

For example, we define the keys "stop", "return", "next", "prev" as below:

STOP=1, RETURN=3, NEXT=4, PREV=5

In this case, push button input 1, 3, 4, 5, they will be function keys.

The definable function keys are as follows (it is for the definition of button keys):

NEXT, PREV, STOP, RETURN, PLAY, UP, DOWN, LEFT, RIGHT, SETUP,  
MENU, VOL\_PLUS, VOL\_MINUS, MUTE

## 5. Other functions' operation manual (only specific models have these functions)

( Kindly reminding: Please turns off the antivirus software in the computer during RS-232 order operating. )

## 5.1 RS-232 control display

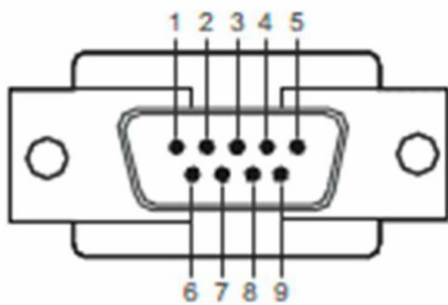
a. The MPC1005 provides a DB9 female port for communication with control PC and program download.

The pins are defined as below:

<b>Interface</b>	<b>RS-232(9 pins)</b>
<b>RS-232 Pin</b>	<b>Description</b>
Pin 2	TxD (transmit data)
Pin 3	RxD (receive data)
Pin 5	GND (signal ground)
<b>Baud Rate</b>	9600 bps
<b>Data Bit</b>	8 bit
<b>Parity Check</b>	None
<b>Stop Bit</b>	1 bit
<b>Flow Control</b>	None

### b. Ports

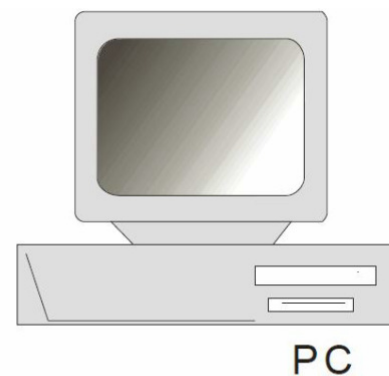
Pin assignment :



Connection :



connection sketch





### c. Instruction of RS-232 commands

#### a.) Examples of command format:

A: @00:VOL+\$ Represents: Volume up

B: @00:NEXT\$ Represents: Next file

C: @01:PREV\$ Represents: Previous file (this command can only be accepted by media player that set the address as "01", all other media players will not act on this command).

D: @00:03\$ Represents: Play the files that stored in folder 03.

#### b.) RS-232 command consists of 5 parts, for example: "@00:VOL+\$"

A: "@" : Beginning sign of the command.

B: "00" : Address code.

There are 2 kinds of address code: broadcast address "00" and user address "01-99".

Broadcast address is the one that all the media players on the total data can act on the commands sent out from broadcast address. If it is user address, only defined media player can act on this command. There is only one broadcast address "00", and addresses range from 01 to 99 is user address. User address can be defined in the "autoplay.txt". For example, add "address=5" into "autoplay.txt", then the address of media player is "5".

C: ":" This delimiter is placed after address code.

D: "VOL+" is command input, you can also use number input.

Number input: 0, 1, 2,...99(the numbers represent playing folder 0-99)

Command input: You can refer to the **command list**. For example: STOP, NEXT, VOL+, VOL- ...

E: "\$" is the end mark of command.

**Note:** There is another command format, the beginning sign can be "#", and the end mark of command can be "0x0d(HEX)". For example: "#00:VOL+0x0d(HEX)".

**d. Commands List (take broadcast address "00" as example ) :**

No.	Command	Description
1	@00:OK\$	OK
2	@00:UP\$	Direction key, up
3	@00:REV\$	Playback
4	@00:FWD\$	Fast forward
5	@00:REP\$	Repeat play
6	@00:MUTE\$	Mute
7	@00:VOL+\$	Volume up
8	@00:VOL-\$	Volume down
9	@00:STOP\$	Stop
10	@00:PREV\$	Previous file
11	@00:NEXT\$	Next file
12	@00:ENTER\$	Next file
13	@00:LEFT\$	Direction key, left
14	@00:DOWN\$	Direction key, down
15	@00:SYNC\$	Special key, once trigger it player will turn to the beginning of file
16	@00:POWER\$	Power on/off
17	@00:AUDIO\$	Change the channel
18	@00:PAUSE\$	Pause
19	@00:RIGHT\$	Direction key, right
20	@00:01\$	Play files in folder 01
21	@00:02\$	Play files in folder 02
.....	.....	.....
118	@00:99\$	Play files in folder 99

**e. RS-232 Return Message**

**a). Auto read the definitions in "autoplay.txt" when power on :**

```
volume=15
irmode=1
00[av:off][spdif:off][hdmi:off]=/
01[hdmi:off][av:off][n]=01/
02[av:off][spdif:off]=02/
03[hdmi:off][spdif:off]=03/
04=04/
```

05[av:off]=05/

06[n][vol:10]=06/

(Here button 1 and folder 01 is defined "NO INTERRUPT" in configuration file "autoplay.txt": "01[hdmi:off][av:off][n]=01/")

**b). RS-232 Return Message Format.( Operated by external connect button)**

1. Press button 2 to playing the content in the folder 02, and RS-232 Return Message will shows as below,  
**BUTTON: 2 => 02/**
2. Press button 1 to playing the content in the folder 01, and RS-232 Return Message will shows as below,  
**BUTTON: 1 => 01/**
3. Press button 1 again during the folder 01 playing, the current file will not be interrupted , and RS-232 Return Message will shows as below,  
**NO INTERRUPT**
4. After the current file is finished playing. and RS-232 Return Message will shows as below,  
**END**

**c). RS-232 Return Message Format.( Operated by remote controller)**

1. Pressing the button 2 on the remote to playing the content in the folder 02, and RS-232 Return Message will shows as below,  
**IR: 2 => 02/**
2. Pressing the button 1 on the remote to playing the content in the folder 01, and RS-232 Return Message will shows as below,  
**IR: 1 => 01/**
3. Press button 1 on the remote again , during the folder 01 playing, the current file will not be interrupted , and RS-232 Return Message will shows as below,  
**NO INTERRUPT**
4. After the current file is finished playing. and RS-232 Return Message will shows as below,  
**END**

#### d). RS-232 Return Message Format.( Operated by serial debugging software)

1. Send"@00:02\$" to playing the content in the folder 02 , RS-232 and RS-232 Return Message will shows as below,  
RS-232: 2 => 02/
2. Send"@00:01\$" to playing the content in the folder 01 , RS-232 and RS-232 Return Message will shows as below,  
RS-232: 1 => 01/
3. Send "@00:01\$" again during the folder 01 playing, the current file will not be interrupted , and RS-232 Return Message will shows as below,

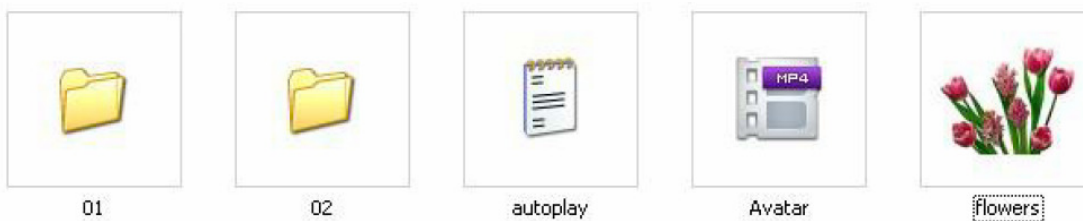
#### NO INTERRUPT

4. After the current file is finished playing. and RS-232 Return Message will shows as below,  
END

NOTE:"@0:WHO?": This is a signal that stand-alone media player ask the synchronization console to confirm if this player is host machine or slave machine. If the player is host machine, it will synchronize other machine. And if it is slave machine, it will wait for the sync signal. You can turn off this finding by sending the string "@00:SLAVE\$".

### 5.2 Button control display(Specific model has this function)

#### a. Store the displaying files in USB/SD CARD as follows:



- A · Folder "01", "02" must be controlled by push buttons;
- B · "autoplay.txt" is a configuration file;
- C · "Avatar" and "flowers" are root directory files. They are boot auto-play, or loop play after playing folder directory files (they can be displayed as homepage files). The displaying content is from where it broke off.

**b. "autoplay.txt" is a configuration file, as follows:**

```
volume=20
irmode=1
01=01/
02=02/
vol_plus=03
vol_minus=04
NEXT=05
PREV=06
```

**Description:**

**volume=20** (Define the default volume)  
**irmode=1** (Button function definition) ;  
**01=01/** ("01" before "=" represents button number. "01" behind "=" represents

the folder or file path ("/" must be added after folder name)

**vol\_plus=03** (Button 3:VOL+) ;  
**vol\_minus=04** (Button 4:VOL-) ;  
**NEXT=05** (Button 5: play next file)  
**PREV=06** (Button 6: play previous file)

**c. Supper function**

- a.) 2.3.1 Define "NO INTERRUPT" You can define the "NO INTERRUPT" or "INTERRUPT" function in "autoplay.txt" as below:

```
01=01/
```

```
02[n]=02/ (the "[n]" here represents "NO INTERRUPT".
```

When the file of folder 02 is displaying, you push the button 1, the player will not switch to folder 01, just continue the current file )

```
03=03/
```

- b.) Define sound output mode and volume, You can define the sound output mode and volume of each file folder in "autoplay.txt" as below(default is all output):

```
volume=15
```

```

irmode=1
00[av:off][spdif:off][hdmi:off]=/
01[hdmi:off][av:off][n]=01/
02[av:off][spdif:off]=02/
03[hdmi:off][spdif:off]=03/
04=04/
05[av:off]=05/
06[n][vol:10]=06/

```

**Instruction:**

Here "av" represents "audio output", "spdif" represents "optical and coaxial output", "hdmi" represents "HDMI output" , "off" represents no sound output.

1. volume=15(Define the default volume)
2. irmode=1 ( Button function definition )
3. 06[n][vol:10]=06/

The "[n]" here represents "NO INTERRUPT". When the file of folder 06 is displaying, you push the button 1, the player will not switch to folder 01, just continue the current file.

4. "00[av:off][spdif:off][hdmi:off]=/" , here says folder "00" is no sound from audio&hdmi&optical&coaxial ports.
5. "06[n][vol:10]=06/" represents the folder 06 default volume is "10".

**d. More button function definition in "autoplay.txt" , take button 1 as an example:**

<b>Command</b>	<b>Definition</b>	<b>Command</b>	<b>Definition</b>
PLAY	PLAY=01	UP	UP=01
PAUSE	PAUSE=01	DOWN	DOWN=01
RETURN	RETURN=01	SETUP	SETUP=01
PREV	PREV=01	STOP	STOP=01
NEXT	NEXT=01	VOL_PLUS	VOL_PLUS=01
LEFT	LEFT=01	VOL_MINUS	VOL_MINUS=01
RIGHT	RIGHT=01	MUTE	MUTE=01

### 5.3 Motion Sensor display(Specific model has this function)

The motion sensor can detect the approaching viewer within 118inches.

The motion sensor mode:

DISPLAY NEXT FILE---The player auto loop play root directory files when power on, it switches to the next file ( files in folder 01 ) when the IR body sensor detects passer-by. When the file is finished, it switches to root directory files.

Define configuration file in "autoplay.txt":

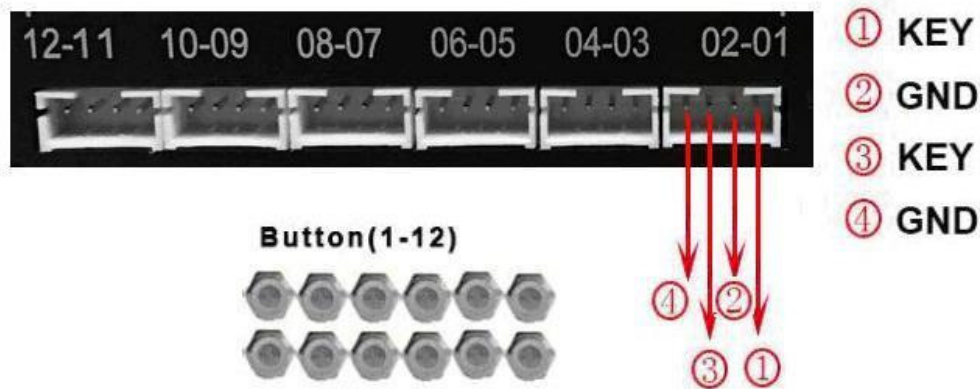
```
Sensor_mode=Nextfile  
01=01/
```

### 5.4 Store the displaying files in root directory as follows:



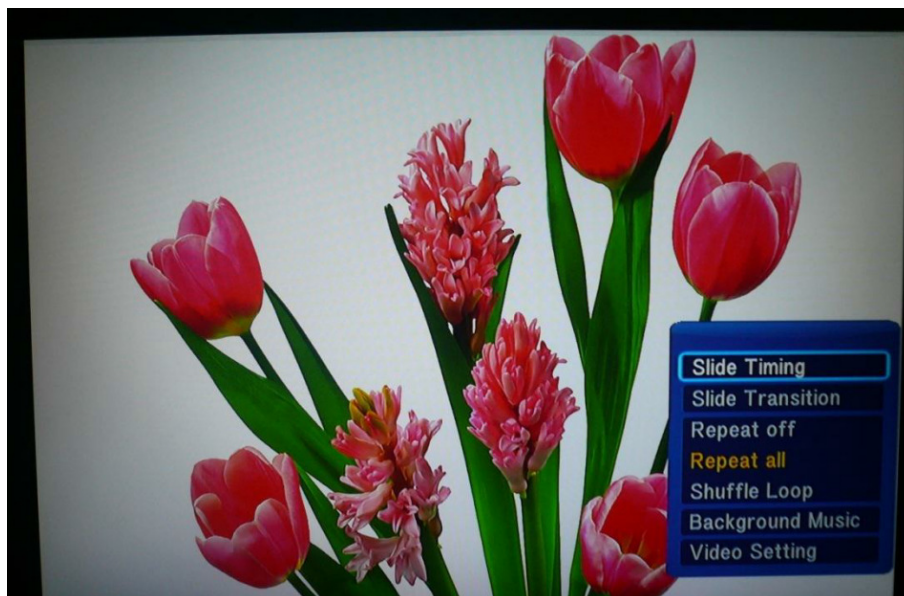
- Files stored in root will be displayed as homepage;
- Files in folder "01" will be displayed as next files when IR body sensor detects passer-by.
- "autoplay.txt" is a configuration file.

## VI. Pin definition of button interface



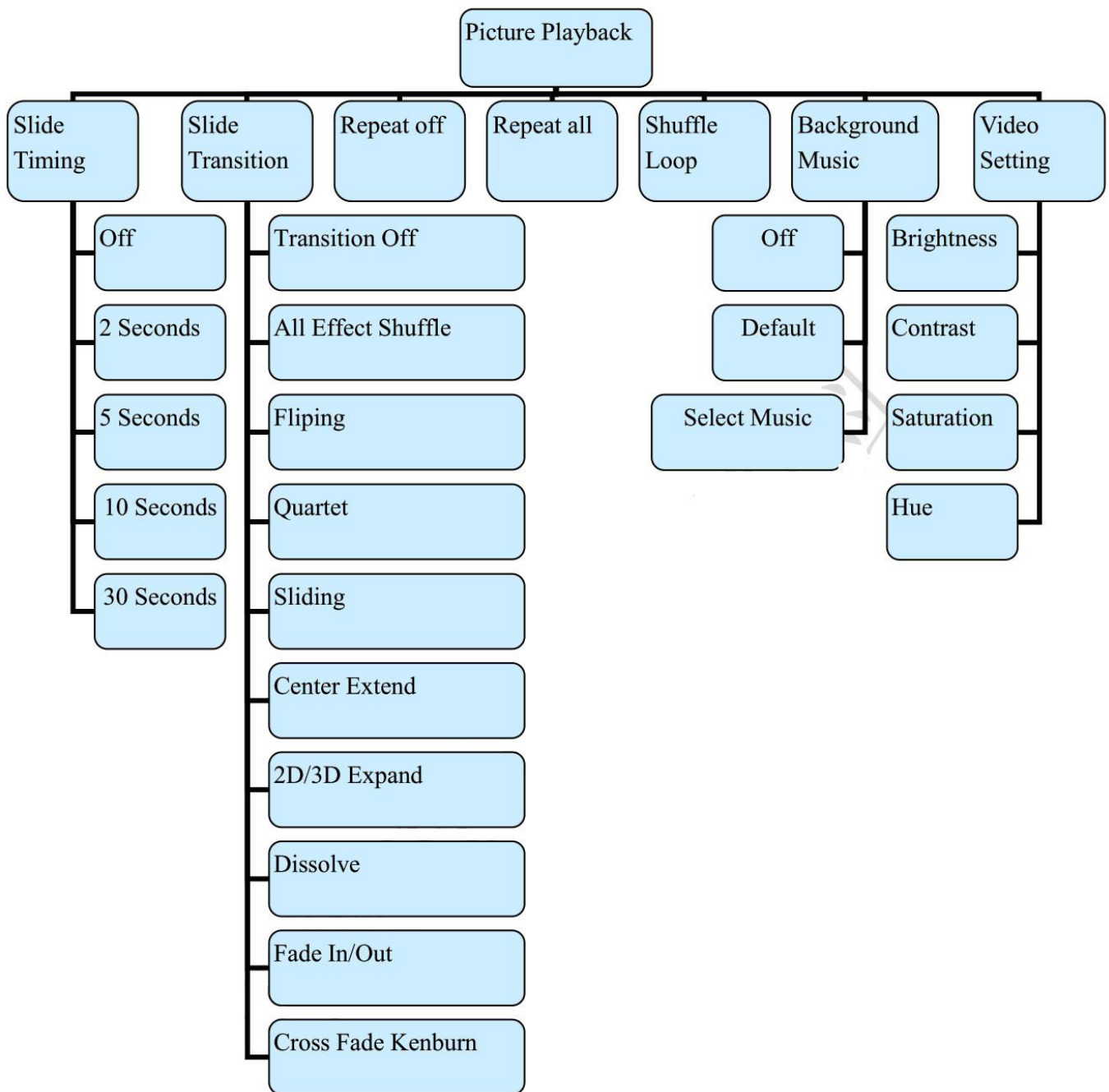
## VII. Setting of picture playback

When picture is displaying on the screen, you can set picture playback by pressing button "MENU" on remote control, and then use direction key and button "OK" to carry on.





## Description:



## Statement:

\* All product and brand names may be trademarks or registered trademarks of the corresponding manufacturer. TM and R may be omitted in this manual.

The picture and the picture of the product mentioned in this manual may be slightly different, the effect of the demonstration and schematic diagram for reference only (picture for the synthesis, schematics), the appearance of the product (including but not limited to color) please prevail in kind.

**Meicheng** Always strive to provide the best quality products to customers, so the product software and hardware will keep upgrading. The information contained in this manual is subject to change without notice.

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