☆ Media Player ☆

THD003

User Manual

Movie   **Photo**   **Music**

Full HD
1080

Content

THD003 is a high performance 1080p Full HD media player.

I. Main Features

1.1 Applications

✧ Ideal replacement for Blue Ray and DVD video players.

✧ Ideal playback unit for Large LCD and Plasma display.

✧ 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.

1.2 Display format

1.2.1 Supported audio code:

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

1.2.2 Supported audio files:

MP3, WAV, OGG, FLAC, AAC, LC-AAC

1.2.3 Supported picture format:

JPEG, BMP, GIF, PNG

1.2.4 Supported subtitles format:

SRT, SMI, SUB, SSA, IDX+SUB

1.2.5 Supported video code:

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

1.2.6 Supported video files:

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

1.2.7 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 THD003 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
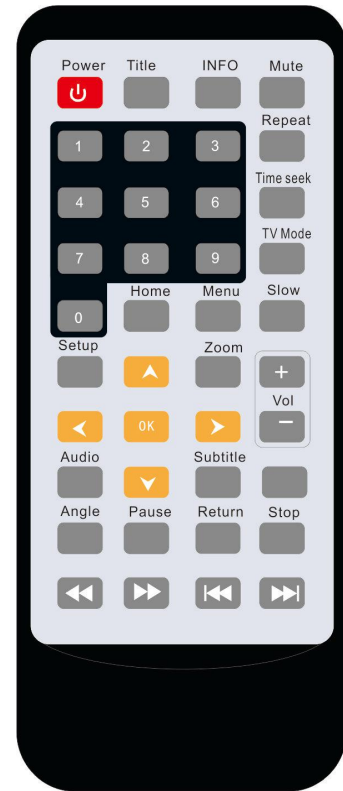
being played

1.3 Supported Languages

English, Espaňol, 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	Function
1	**Power**	Power button: Press to POWER on or off the device
2	**Title**	Title button: Press to view the title of DVD
3	**Info**	Info button: Press to view the current channel information.
4	**Mute**	Mute button: Press to mute audio output, and press again to resume.
5	**Numeric**	Numeric button: Press to enter channel numbers or numeric input when changing settings
6	**Repeat**	Repeat button:

		Press REPEAT 1 / ALL to set repeat option - Chapter, Title or Off.
7	**Time seek**	Time seek button; Press to jump to a specific point on the disc or title. Specify the point using Title, Chapter and Time.
8	**TV Mode**	TV Mode button; Press to switch between NTSC Interlaced, NTSC Progressive, PAL Interlaced, and PAL Progressive.
9	**Home**	Home button; Press to Return the main menu
10	**Menu**	Menu button; Press to enter the main menu
11	**Slow**	Slow button: 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.
12	**Setup**	Setup button: Press to access the Setup Menu directly to change system settings.
13	**Zoom**	Zoom button: 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 button to navigate the menus
15	**Right (Arrow)**	Press the arrow button to navigate the menus
16	**Up (Arrow)**	Press the arrow button to navigate the menus
17	**Down (Arrow)**	Press the arrow button to navigate the menus
18	**OK**	OK button: Press to select confirm in menus.
19	**Vol -**	Vol - button: Press to reduce the volume.

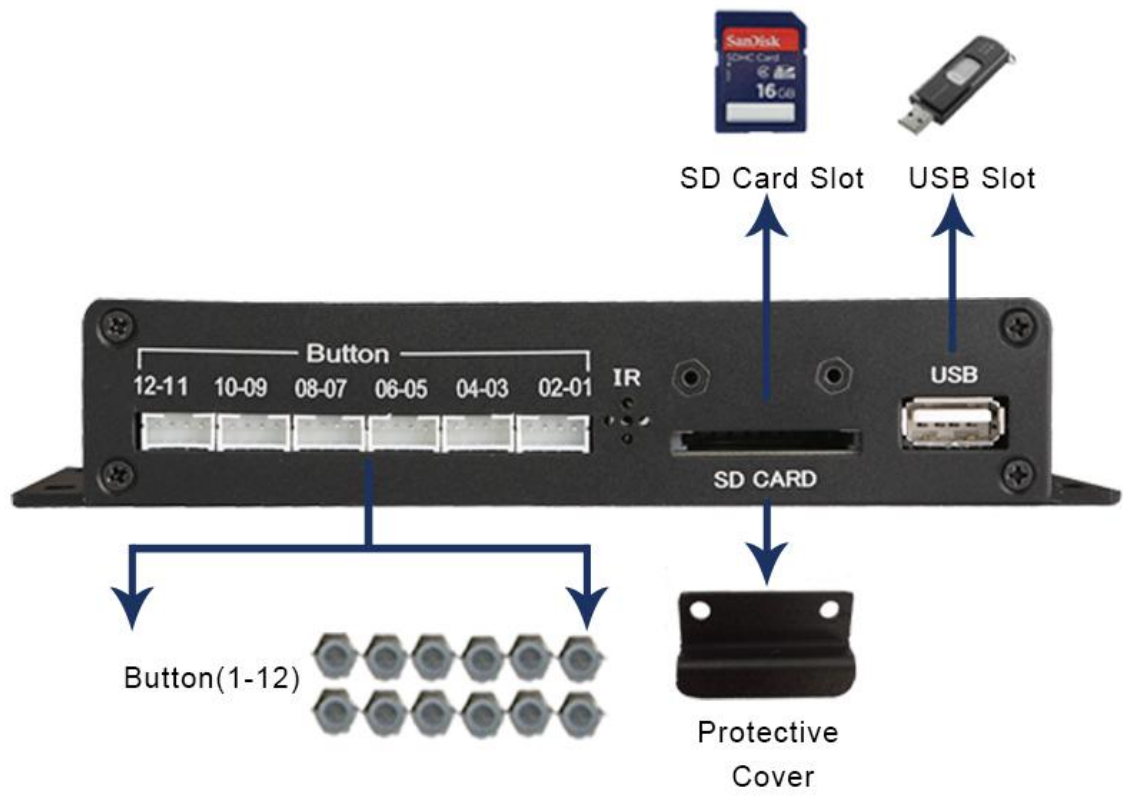| 20	Vol+	Vol + button: Press to increase the volume.
21	Audio	Audio button: Press to select an audio track on a HDD or USB file.
22	Subtitle	Subtitle button: Press to activate available subtitles when play the DIVX file. DivX subtitle supported: SRT,SMI,SUB,SSA format file
23	Resume	Resume button; Press to resume play
24	Angle	Angle button: Press to view angle of DVD
25	Pause	Pause button: Press to pause playback of a DVD or HDD title.
26	Return	Return button: Press to return to the previous screen when navigating the menus.
27	Stop	Stop button: Press to stop playback.
28	FR	Fast Rewind button: Press to fast rewind the current playback. Press repeatedly to select faster rewind speeds.
29	FF	Fast Forward button: Press to fast forward the current playback. Press repeatedly to select fast forward speeds.
30	Previous	Previous button: 1. Press to go the prev. on a HDD or USB file when playing music. 2. Press to page up the file list at Browser. 3. When play photo, the button is enable; play Movie and Mp3 file, the button is disable.
31	Next	Next button: 1. Press to go the next on a HDD or USB file when playing music. 2. Press to page down the file list at Browser. 3. When play photo, the button is enable; play Movie and Mp3 file, the button is disable.

III.   SETUP MENU
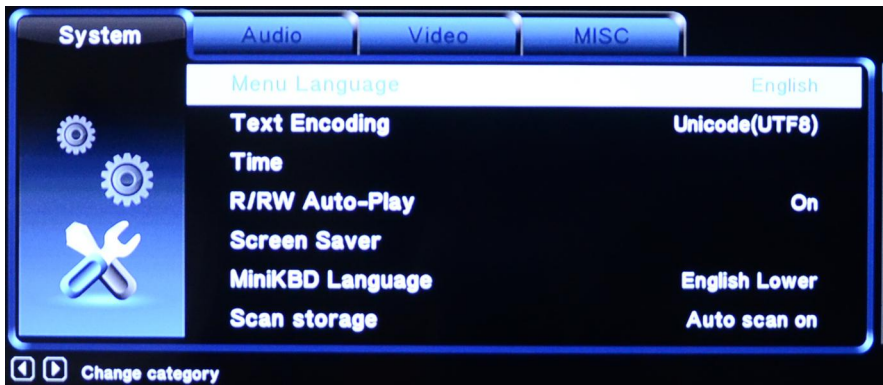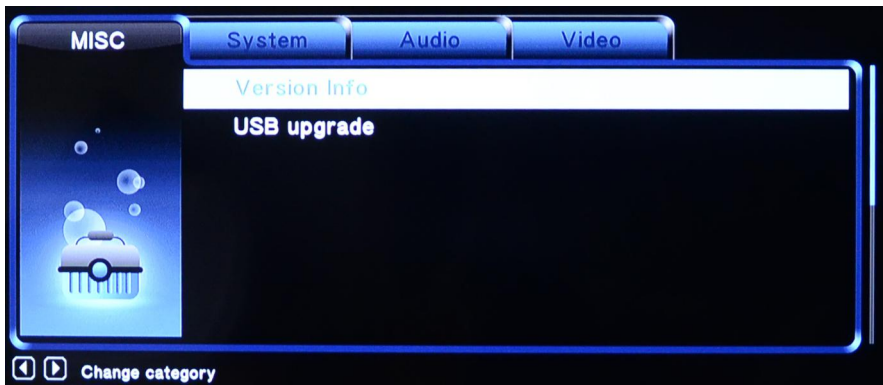
IV.Interface port

4.1 THD003 ports：

SD Card Slot   USB Slot

Button
12-11 10-09 08-07 06-05 04-03 02-01   IR   USB

SD CARD

Button(1-12)

Protective
Cover

4.2 THD003 ports：

V. Operation Manual

5.1 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.

5.2 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 2：02=02/

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

Example 3： 03_03=aa/

Instruction：Loop files in folder aa upon pressing button 3

5.3 Pictures Sync playback (BGM)

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

5.3.1 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 pls: Do not change the name of this audio folder.

5.3.2. 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.

5.3.3 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.)

5.4 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

5.5 Other functions' operation manual (only specific models have these functions)
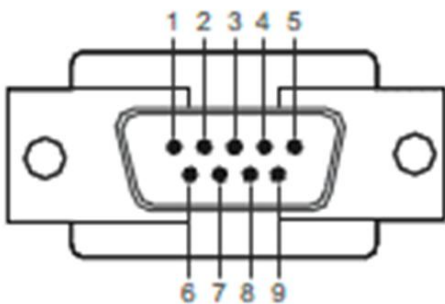
5.5.1 RS232 control display

A. The THD003 provides a DB9 female port for communication with control PC

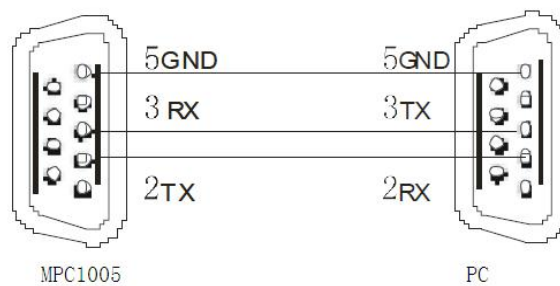and program download. The pins are defined as below:

Interface	RS232(9 pins)
RS-232 Pin	**Description**
Pin 2	TxD (transmit data)
Pin 3	RxD (receive data)
Pin 5	GND (signal ground)
Bit rate	**9600 bps**
Data bits	**8 bit**
Parity	**None**
Stop bit	**1 bit**
Flow control	**None**

B. PORTS:

Pin assignment: Connection:

connection sketch

PROGRAM

PC

DB9 female port straight connection cable

C. Instruction of RS232 commands

a. Examples of command format:

    ① @00:VOL+$ Represents: Volume up

    ② @00:NEXT$ Represents: Next file

    ③ @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).

    ④ @00:03$ Represents: Play the files that stored in folder 03.

b. The RS232 command consists of 5 parts, for example: "@00:VOL+$"

    ① "@": Beginning sign of the command.

    ② "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".

③ ":" : This delimiter is placed after address code.

④ "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- …

⑤ "$" 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. RS232 control tool

All the commands will be sent via a RS232 control tool, it is something like serial debugging assistant on PC.

E. Commands List (take broadcast address "00" as example)

No.	Command	Description
1	@00:OK$	Enter
2	@00:UP$	Direction key, up
3	@00:REV$	Playback
4	@00:FWD$	Fast forward
5	@00:REP$	Repeat play
6	@00:MUTE$	No sound
7	@00:VOL+$	Volume up
8	@00:VOL-$	Volume down
9	@00:STOP$	Stop and restart playback
10	@00:PREV$	Previous file
11	@00:NEXT$	Next file
12	@00:ENTER$	Enter
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

F. Software Download

a. Download link: https://docklight.de/downloads/

b. Choose "Docklight V2.2" to download the RS232 controlling software:

Software Download	
Docklight V2.2	Download Docklight RS232 Terminal / RS232 Monitor V2.2.8 for Windows 10, Windows 8, Windows 7, Windows Vista, Windows XP (4.7 MB)
Docklight Scripting V2.2	Download Docklight Scripting V2.2.8 for Windows 10, Windows 8, Windows 7, Windows Vista, Windows XP (5.9 MB)
Docklight Pro Monitor V0.6	Download Docklight Pro Monitor V0.6 for Windows 10, Windows 8, Windows 7 (9.4 MB)
Docklight DLL	Download Docklight DLL Automation API V2.1.15 for Windows 10, Windows 8, Windows 7, Windows Vista, Windows XP (2.5 MB)
Release Notes	Release Notes and Version History for Docklight Products, text format (22 KB)

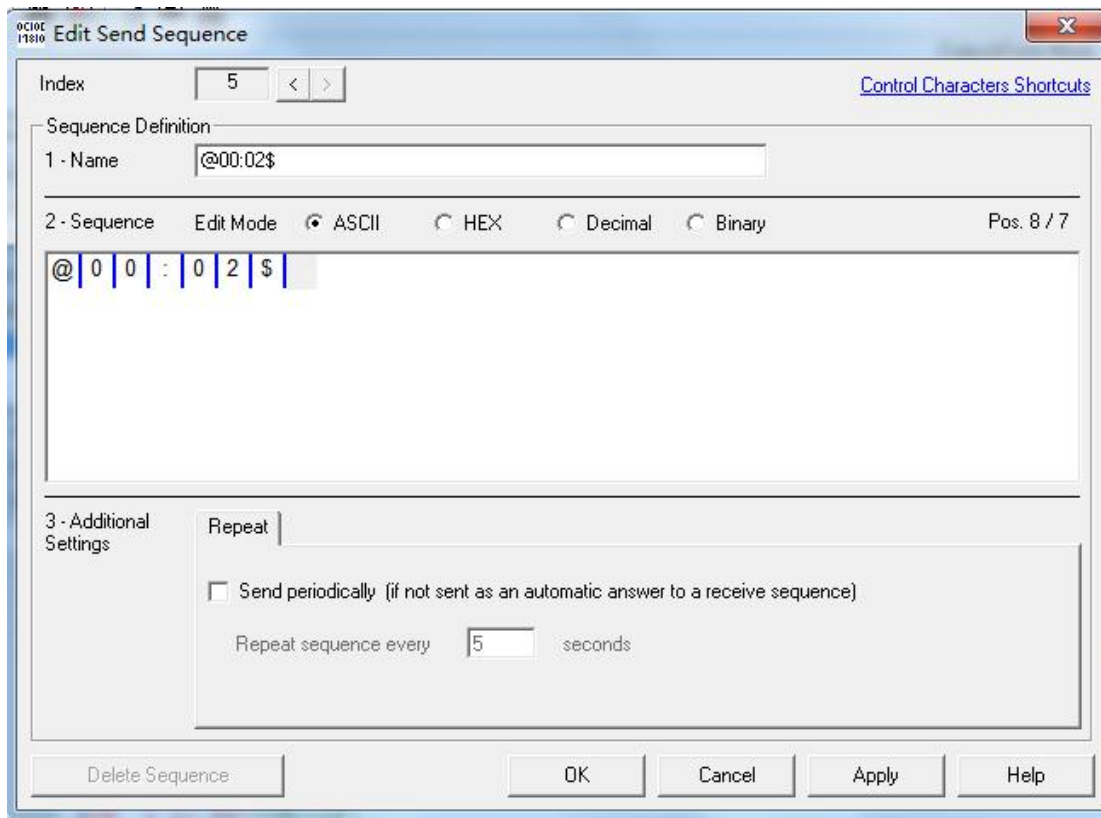c. Click "Docklight" on PC , the window shows:
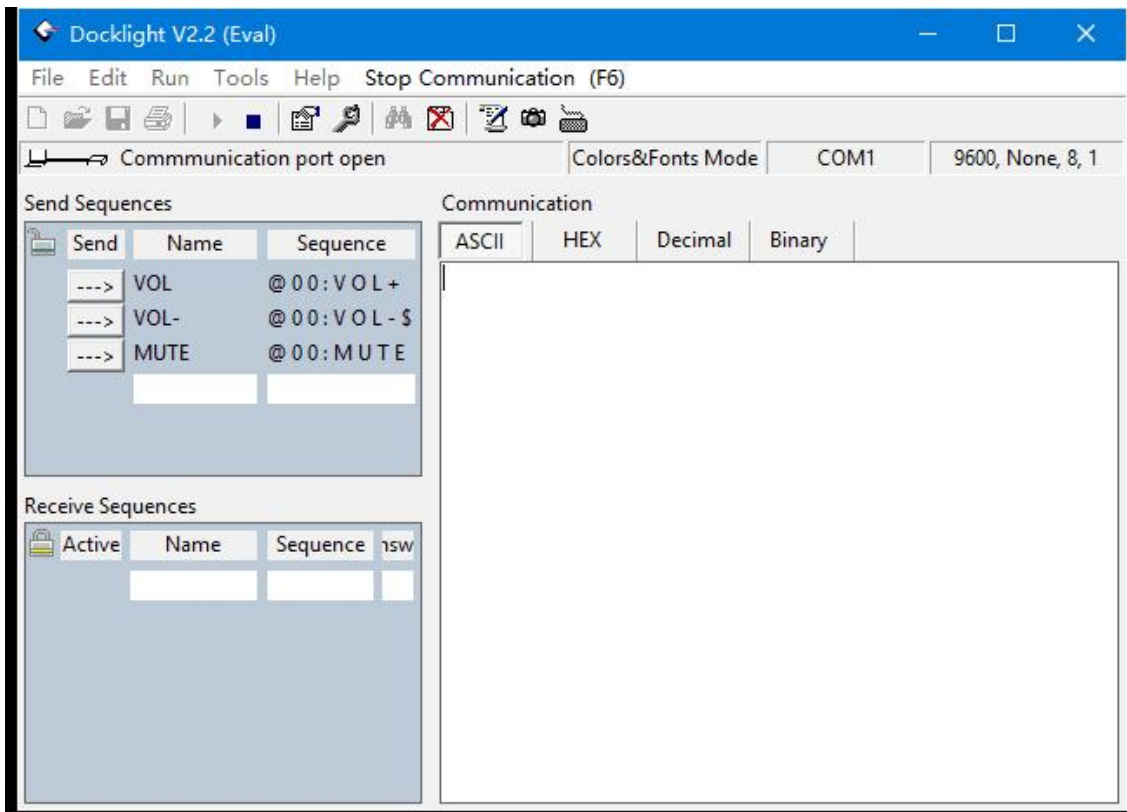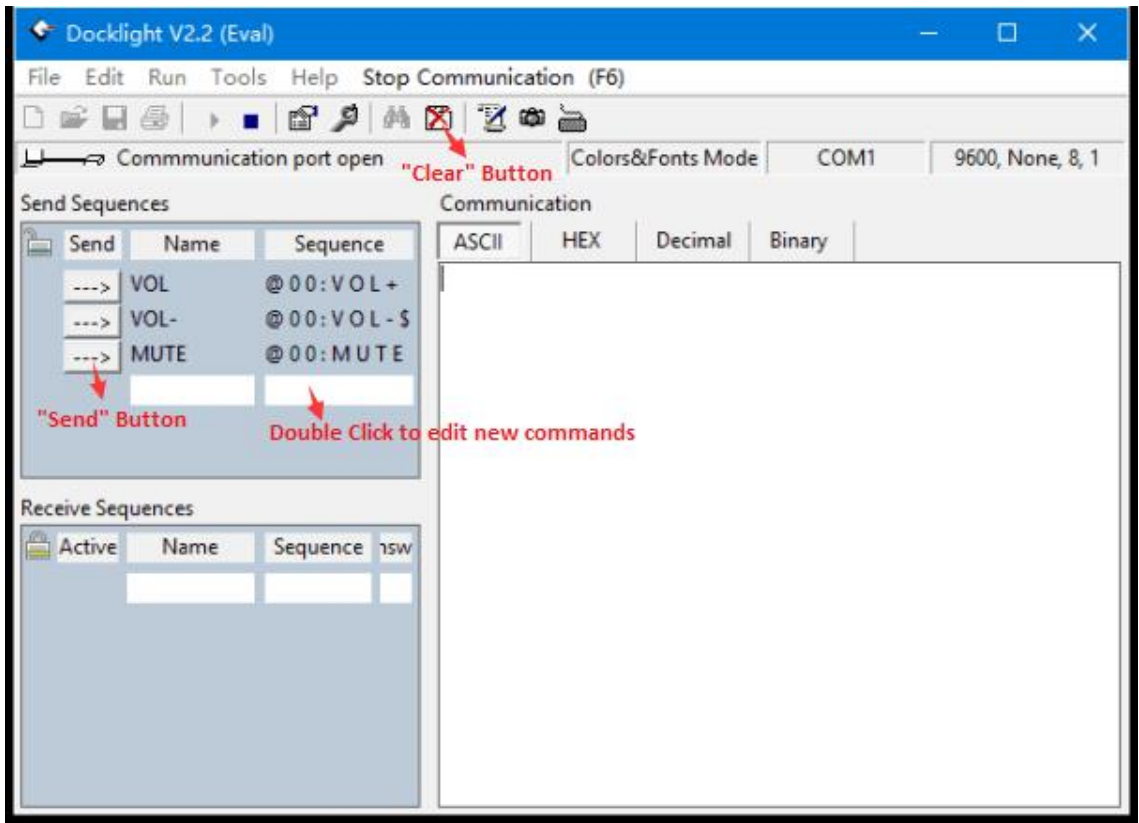
Button : Clear

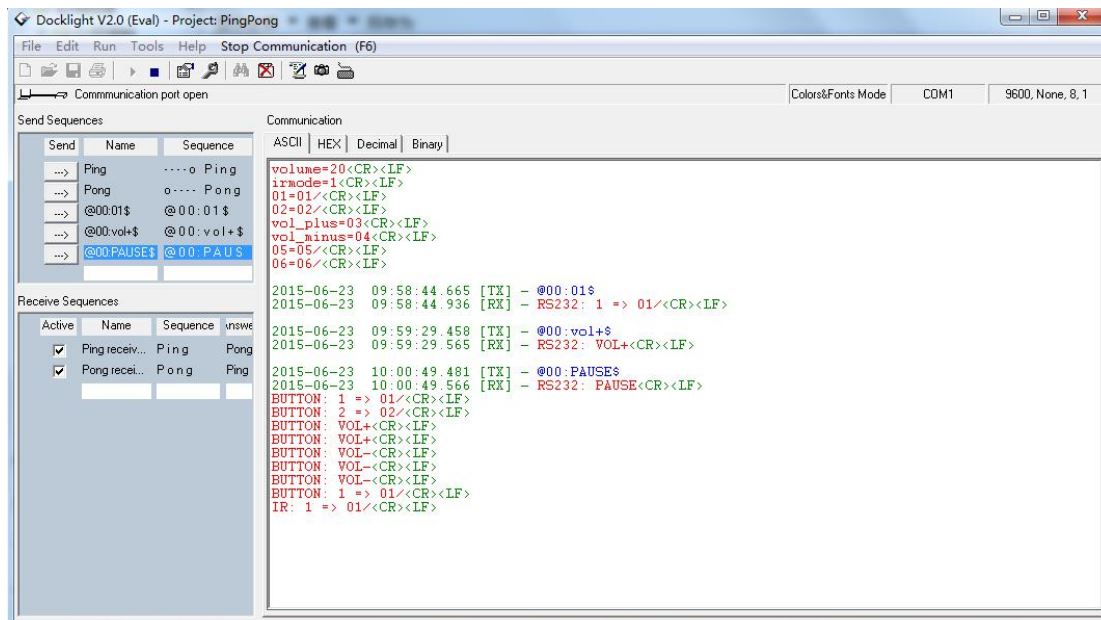Button : Send

Button : Edit RS232 commands
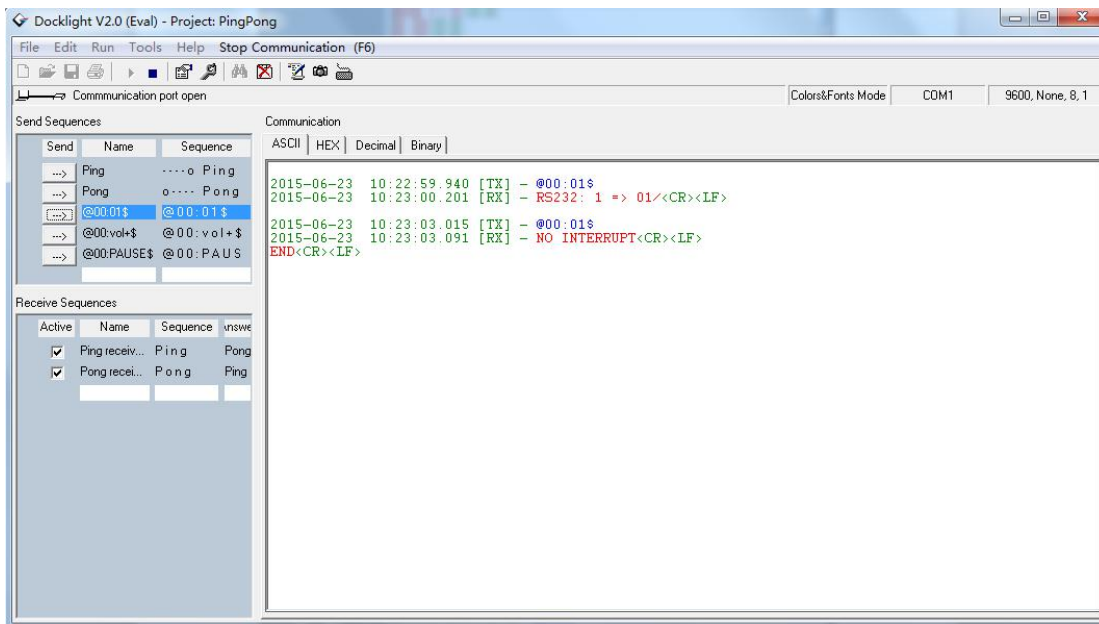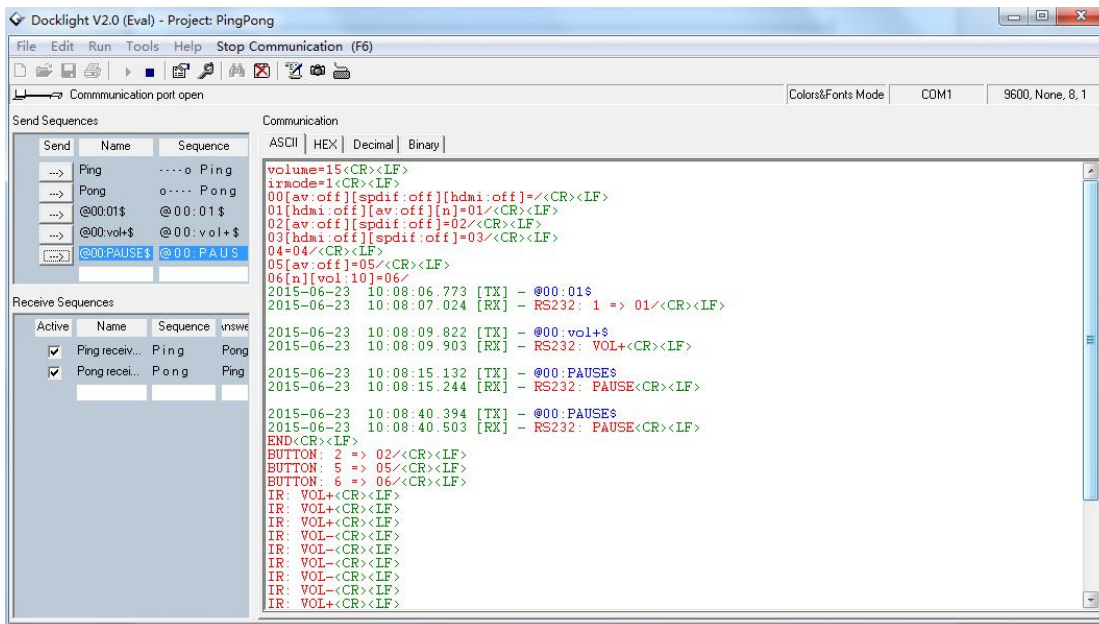
Take care of these settings:

d. Edit RS232 commands

G. RS232 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. RS232 Return Message Format

① RS232 command format

```
2015-06-23  10:49:13.878 [TX] - @00:01$
2015-06-23  10:49:14.118 [RX] - RS232: 1 => 01/<CR><LF>

2015-06-23  10:49:16.377 [TX] - @00:01$
2015-06-23  10:49:16.468 [RX] - NO INTERRUPT<CR><LF>

2015-06-23  10:49:19.327 [TX] - @00:vol+$
2015-06-23  10:49:19.438 [RX] - RS232: VOL+<CR><LF>

2015-06-23  10:49:22.064 [TX] - @00:PAUSE$
2015-06-23  10:49:22.158 [RX] - RS232: PAUSE<CR><LF>
```

② Remote control format

```
IR: 1 => 01/<CR><LF>
NO INTERRUPT<CR><LF>
IR: VOL+<CR><LF>
IR: VOL-<CR><LF>
IR: PAUSE<CR><LF>
IR: PAUSE<CR><LF>
IR: PAUSE<CR><LF>
IR: PAUSE<CR><LF>
END<CR><LF>
```

③ Push button control format

```
BUTTON: 1 => 01/<CR><LF>
END<CR><LF>
```

c. Description

Here take "RS232 command format" as an example:

① Send RS232 command "@00:01$", start to play folder 01, the RS232 Return Message is as below:

```
2015-06-23  10:54:59.979 [TX] - @00:01$
2015-06-23  10:55:00.237 [RX] - RS232: 1 => 01/<CR><LF>
```

② When folder 01 is displaying, send RS232 command "@00:01$" again, the display content will not change and RS232 Return Message is as below:

```
2015-06-23  10:55:02.260 [TX] - @00:01$
2015-06-23  10:55:02.347 [RX] - NO INTERRUPT<CR><LF>
```

③ When the current file is finished, RS232 Return Message is as below:

```
END<CR><LF>
```

H. 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$".

5.5.2   Button control display(Specific model has this function)

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

01   02   autoplay   Avatar   flowers

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．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):

25

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:

Command	Definition	Command	Definition
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

5.5.3   Motion Sensor Display(Specific model has this function)

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

A.   The motion sensor mode:

A. 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.

B.   Define configuration file in "autoplay.txt":

a. THD003

Sensor_mode=Nextfile

01=01/

b. THD003

Sensor_mode=Nextfile

Sensor_file=01/

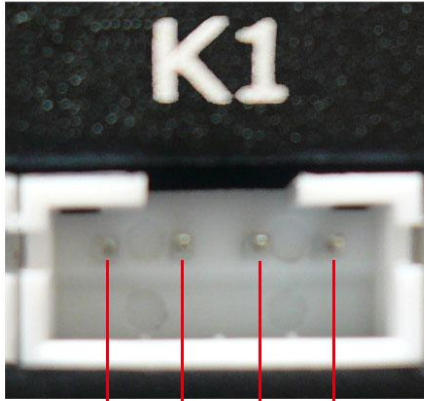### C. Store the displaying files in root directory as follows:

a. Files stored in root will be displayed as homepage;

b. Files in folder "01" will be displayed as next files when IR body sensor detects passer-by.

c. "autoplay.txt" is a configuration file.

VI. Pin definition of button interface

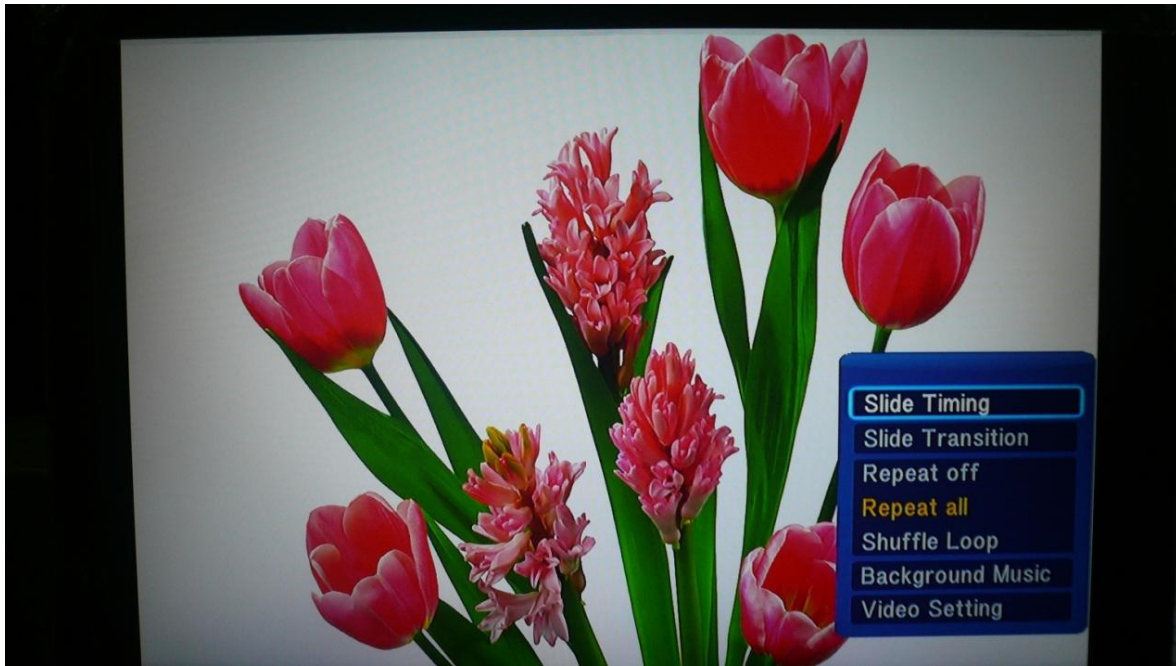## 6.1 Pin definition of LED button interface: THD003

① 12V/LED+
② KEY
③ GND
④ LED-

LED Button(1-6)

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: