

# PN-B501 PN-B401

LCD MONITOR

SOFTWARE GUIDE

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# Introduction

# By changing the input mode of the monitor to "APPLICATION", you can use Android applications. The following applications can be used with the monitor. (Factory default)

Media Player (see page 7)	Play an image file or video file. This lets you use the monitor for simple signage. You can also distribute files from a computer on the same network that has SHARP Content Distributor ver. 1.3 or later installed. (For details, see the manual for SHARP Content Distributor.)
SHARP e-Signage S Player A1	Show programs distributed from LCD monitor management software SHARP e-Signage S. For details, see the manual for SHARP e-Signage S.
SHARP Digital Signage Software 4.7 Android Viewer	Show programs distributed from LCD monitor management software SHARP Digital Signage Software 4.7 (optional). For details, see the manual for SHARP Digital Signage Software 4.7.
HTML5 Browser	Show Web-based content (HTML5). In some cases, the appearance of the content may be different from a Web browser on a computer or other device.
FileExplorer	Manage a file or a folder.

We do not guarantee the operation of applications installed by the customer.

#### Caution

• It may take longer for some types of content to appear or play, or the content may not be displayed or play correctly. When using for signage, check the operation and display quality in advance.

# Change this monitor to APPLICATION mode

- 1. Turn on this monitor power.
- 2. Change the input mode to "APPLICATION" with the input mode selection, or press the CONTENT MENU button. The basic screen of APPLICATION mode (CONTENT MENU screen) appears.



#### 1. Applications

Select the application you want to use.

The application will start.

#### 2. Startup

When the input mode is changed to APPLICATION, you can set applications to start automatically.

#### 3. Setup

You can configure settings for APPLICATION mode. (See page 15.)

#### 4. System Settings

You can configure settings for Android.

#### 5. Update

Update the APPLICATION mode OS and factory-installed applications. (See page 16.) (A network environment that allows access to the internet is required.)

# LAN terminal / USB port / SD card slot

USB devices (memory device, keyboard, mouse) and an SD memory card can be used in APPLICATION mode. You can also connect to a network.



#### 1. LAN terminal

• You can connect the monitor to a network.

#### 2. USB port

- · Connect USB devices (memory device, keyboard, mouse) that you want to use in APPLICATION mode.
- Insert a USB flash drive to be used with Media Player in one of the USB ports indicated by "\*" above.

#### Supported USB flash drives

File System	FAT32
Capacity	Up to 32 GB (maximum file size 4 GB)

- A USB flash drive that is encrypted or has a security function cannot be used.
- Use a USB flash drive with a shape that can be inserted in the USB port. Some USB flash drives with special shapes cannot be inserted. Do not forcibly insert a USB flash drive. This may damage the connector or cause failure.
- · Android system restrictions may prevent writing to a USB flash drive from an application that you have installed.

#### 3. SD card slot

• Insert an SD memory card.

#### Supported SD memory cards

File System	FAT32	
	<ul> <li>SD memory card : Up to 2 GB</li> </ul>	
Capacity	<ul> <li>SDHC memory card : Up to 32 GB</li> </ul>	
	<ul> <li>Maximum file size : Up to 4 GB</li> </ul>	

• Do not use with write protection enabled. Do not use a security function.

· Android system restrictions may prevent writing to an SD memory card from an application that you have installed.

#### How to remove a USB flash drive or a SD memory card

- 1. Select "System Settings" on the CONTENT MENU screen of APPLICATION mode.
- 2. Select "Storage".
- 3. Select "Unmount USB storage" or "Unmount SD card" according to the removing device.
- 4. When displaying the confirmation message, select "OK".

# **Basic actions in APPLICATION mode**

Use the remote control unit to perform actions in APPLICATION mode.



#### 1. Numeric input buttons

Use to enter numbers.

#### 2. ENTER

Enter the selected item.

#### 3. CONTENT MENU

If the input mode is set to a mode other than APPLICATION, change the input mode to APPLICATION. When the input mode is set to APPLICATION, pressing this button displays the CONTENT MENU screen.

#### 4. Cursor

These buttons are used to perform operations such as selecting applications or items, and moving the cursor.

#### 5. RETURN

Returns to the previous screen.

TIPS

· Buttons used vary by application.

# **Using Media Player**

Select "Media Player" from the CONTENT MENU screen of APPLICATION mode.

#### TIPS

- You can set Media Player to start when the input mode is changed to APPLICATION. Select "Startup" on the CONTENT MENU screen and set Media Player.
  Multiple LISB flash drives cannot be used at the same time with Media Player.
- Multiple USB flash drives cannot be used at the same time with Media Player.
   If you insert multiple USB flash drives, only the flash drive inserted first can be used.

# About the screen



- Select the media to display the file list. Internal storage....Internal memory used in APPLICATION mode (Android) USB drive.....USB flash drive inserted in a USB port SD card .....SD memory card inserted in the SD card slot
- 2. A file list appears.
- 3. Play All (see page 8)
  - Play all files in the folder in the order set in the playlist or slideshow.
- 4. Playlist (see page 8)
  - Create a playlist for the displayed folder.
- 5. Edit (see page 9) Edit files.
- 6. Autoplay/Schedule play
  - Start playing the Autoplay or Schedule play content.
- 7. Setting (see page 10) Configure settings for Media Player.

## **Using Media Player**

For the file formats that can be played, see page 13.

#### Changing a media

To connect media, see page 5.

- 1. Press the  $\blacktriangle$  or  $\blacktriangledown$  button to select the media.
  - Internal Storage ... Internal memory used in APPLICATION mode (Android)
  - USB Drive .....USB flash drive inserted in a USB port
  - SD Card ......SD memory card inserted in the SD card slot

## Playing a file

- **1. Select the file you want to play, and press the ENTER button.** The file is selected.
- 2. Press the ENTER button. The selected file is played.

## Playing all files in the current folder

 Select "Play All", and press the ENTER button. Or, press the F1 button. Play all files in the folder in order of file names. If playlist exist, play in order of playlist.

## Creating a playlist (F2 button)

Create a playlist for the displayed folder.

1. Select "Playlist", and press the ENTER button. Or, press the F2 button.

Play List Setting				
/mnt/internal_sd/mediaplayer		Duration	Date	Size
-	 	œ		MENU

- 2. Select files in the order you want them to play, and press the ENTER button.
- 3. Select "Save", and press the  $\ensuremath{\mathsf{ENTER}}$  button.

# Or, press the F2 button.

- The playlist is saved.
- Playlist play (F1 button) ...... Play files in the order of the playlist.
- Clear all (F4 button)..... Cancel the displayed folder playlist.

## Editing a file (F3 button)

#### Copying a file

- (1) Select the file you want to copy.
- (2) Select "Edit", and press the ENTER button. Or, press the F3 button.
- (3) Select "Copy".
- (4) Show the file list of the copy destination folder.
- (5) Select "Edit", and press the ENTER button.
- Or, press the F3 button.
- (6) Select "Paste".

#### Copying all files in a list

- (1) Select "Edit", and press the ENTER button.
- Or, press the F3 button.
- (2) Select "Copy all".
- (3) Show the file list of the copy destination folder.
- (4) Select "Edit", and press the ENTER button.
- Or, press the F3 button. (5) Select "Paste".

#### Deleting a file

- (1) Select the file you want to delete.
- (2) Select "Edit", and press the ENTER button. Or, press the F3 button.
- (3) Select "Delete" with the  $\blacktriangle$  or  $\blacktriangledown$  button.

## Start the Autoplay or Schedule play (F4 button)

#### 1. Select "Autoplay/Schedule play", and press the ENTER button. Or, press the F4 button.

Start Autoplay according to the setting of Autoplay media. If currently valid schedule is exist, Schedule play will start. If both of Autoplay and schedule exist, Schedule play will start. If both of Autoplay and schedule does not exist, play does not start.

# Settings

1. Select "MENU", and press the ENTER button. Or, press the MENU button (square) on the remote control unit.



2. When you have completed the settings, press the RETURN button.

#### Autoplay media

To use Autoplay (see page 9), set the media you want to play.

Files in the following folder of the selected media will play.

/mediaplayer/AutoPlay

#### **Use SHARP Content Distributor**

Set whether or not you will use SHARP Content Distributor.

#### Slideshow

Set the play method.

#### <u>Shuffle</u>

Set whether or not play is shuffled during continuous play.

#### ON ..... Shuffle

OFF ..... Do not shuffle

#### <u>Repeat</u>

Set whether or not play of files in a folder, is repeated.

ON .....Play repeatedly

OFF ..... Do not repeat

**Duration** 

Set the play interval.

Autoplay and Schedule Play will also play at the set interval.

#### **Picture transition**

Set whether the display changes when images are played.

#### <u>Status display</u>

Set whether the title, size, and date of the content are shown or hidden.

The status disappears when play stops.

ON ..... Show

OFF ..... Hide

Schedule A playlist can also be played at a specified time. Up to 7 schedule items can be registered. Schedule play Enable/disable the SCHEDULE. Start time Specify the time when playing of the playlist will start. Set the time on a 24-hour basis. If this monitor is in standby mode, this monitor turns power on and then start play. End time Specify the time when playing of the playlist will stop. Set the time on a 24-hour basis. <u>Repeat</u> Only once ...... The Schedule will be executed once only. The Schedule setting is cleared after the schedule is executed. Repeat ...... Executes the Schedule on the specified time every day. Select content folder

Specify the playlist you want to play.

# Operations during play



- (1) PLAY: Restart play the paused file.
- (2) PAUSE: Pause play.
- (3) RETURN: Return to the file list.
- (4) STOP: Stop play.

## Formats supported by Media Player

File formats that can be played in Media Player are indicated below. The operation of formats not indicated in the table is not guaranteed.

#### TIPS

- Some files may not play even if the format is supported.
- Some content types and conditions may cause a longer time until play starts, dropped frames, or delays.
- When using for Media Player, check the operation and display quality in advance.

#### Image files

Extension	Display capability
*.jpg (*.jpeg)	Color mode 444, Size 32768x16128 pixels or less
	Color mode 422v, Size 16384x16128 pixels or less
*.bmp	4096x3072 pixel (4bit),
*.png	2730x2500 pixel (8bit),
*.gif	2048x1536 pixel (16bit),
	1500x1200 pixel (32bit)

#### Audio files

Extension	Sample rate	Maximum bit rate	Audio coding	
*.mp3	32	384	MPEG-1, 2, 2.5 L3	
*.asf	32, 44.1	192	WMA	
*.wma	32, 44.1	192	WMA	
	96	768	WMA, WMA Pro	
*.wav (PC)				
*.aif (mac)	192	768	LPCM	
*.aiff (mac)				
*.aac				
*.mp4	48	1024	AAC, HE-AAC (v1&v2)	
*.m4a				
*.pls				
*.m3u	] -	-	-	

#### Video files

Extension	Video coding	Max. resolution	Frame rate
*.mpg *.mpeg	MPEG2	1920x1080	30
*.mp4	MPEG-4 (SP/ASP)	1920x1080	30
	H.264/AVC (BP/MP/HP)	3840x2160	30
		1920x1080	60
	H.265/HEVC (Main)	3840x2160	30
		1920x1080	60
*.wmv	VC-1	1920x1080	30

# Showing Web-based content (HTML5 browser)

## Setting the start page

When first using the HTML5 browser, you must set the content that is shown initially.

- 1. Select "Startup" from the CONTENT MENU screen of APPLICATION mode.
- 2. Select "HTML".
  - Or, press the F2 button.
- 3. To show content in local storage
  - (1) Select "File".
  - (2) Specify the HTML content you want to show.

#### To show content on the Web

- (1) Select "Web URL".
- (2) Enter the URL.
- (3) Select "Confirm".

#### Starting the browser

Select "HTML5 Browser" from the CONTENT MENU screen of APPLICATION mode. The specified Web content is shown.

#### TIPS

• You can set the HTML5 browser to start automatically when the input mode is changed to APPLICATION. Select "Startup" in the CONTENT MENU screen and set "HTML5 Browser".

# Settings

You can configure settings for APPLICATION mode. Also check the "Menu Items" in the Operation Manual such as video and audio settings. Select "Setup" from the CONTENT MENU screen of APPLICATION mode.

#### Setup

Date & time

#### Set the date and time.

#### Screen resolution (HDMI Mode)

Set the screen resolution of APPLICATION mode. Set the screen resolution on HDMI Mode.

#### Ethernet (LAN)

Set whether or not to use LAN terminal.

Set the IP address, subnet mask, and other settings.

#### Wi-Fi (Wireless LAN)

This setting is effective when the optional wireless adapter is connected.

#### **Network priority**

Set priority of LAN and wireless LAN.

### Telnet server

Terriet Server	
Configure settings to use a Telnet se	erver.
User name	Set an account name when connecting to this monitor.
Password	Set a password when connecting to this monitor.
Port	Set the port number to be used.
Auto logout time (minutes)	Set the time to logout automatically by minutes.
FTP server	
Configure settings to use a FTP ser	ver.
FTP server	Set whether or not to use FTP server function.
User name	Set an account name when connecting to this monitor.
Password	Set a password when connecting to this monitor.
Port	Set the port number to be used.
Auto logout time (minutes)	Set the time to logout automatically by minutes.
HTTP server	
Configure settings to use a HTTP set	erver.
HTTP server	Set whether or not to use HTTP server function.
User name	Set an account name when connecting to this monitor.
Password	Set a password when connecting to this monitor.
Port	Set the port number to be used.
Auto logout time (minutes)	Set the time to logout automatically by minutes.

# **Updating the Software (Update)**

You can update the APPLICATION mode OS and factory-installed applications. (A network environment that allows access to the internet is required.)

Select "Update" from the CONTENT MENU screen of APPLICATION mode.

The first time you run the Update, a region selection screen will appear. Select your region.



#### 1. Information area

Shows information on already downloaded software and software that can be downloaded.

#### 2. Refresh

Refresh the information in the information area.

#### 3. Download

Download the selected software.

#### 4. Install

Install the selected software.

#### 5. Settings

- Configure settings for Update.
- Show warning messages ......Set whether or not to display warning message.
- · Check new versions and new applications...Set whether or not to check the new version application or new application exist.
- Notify new applications......Set whether or not to notify new application.
- Hide latest applications ...... Set whether or not to hide the updated applications in infommation area.
- Download latest version automatically ....... Set whether or not to download the latest application automatically.
- Scheduled install time ......Set the time to install the latest application automatically.

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