

SHARP®

PN-HM851

PN-HM751

PN-HM651

PN-HB851

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LCD MONITOR

SOFTWARE GUIDE

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Important Information

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- If you or a third party uses the product incorrectly, or if the product is subjected to the effects of static electricity or electrical noise, or if the product malfunctions or is repaired, there is a risk that saved data will be corrupted or lost.
- Always back up important data to a USB flash drive or microSD memory card.
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- As a part of our policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice.
- Language of OSD menu used in this manual is English by way of example.
- This manual does not contain basic operating instructions for Android.

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Introduction

By changing the input mode of this 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 version 1.4 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. To use the application, you must set "MONITOR CONTROL SELECT" to "APPLICATION". (When this is done, control via RS-232C or LAN is not possible.) |
| HTML5 Browser | Show Web-based content (HTML5). In some cases, the display of the content may be different from a Web browser on a computer or other device. |
| File Explorer | Manage a file or a folder. |

We only guarantee the operation of the CONTENT MENU screen and the applications indicated above.
We do not guarantee the operation of any other applications.

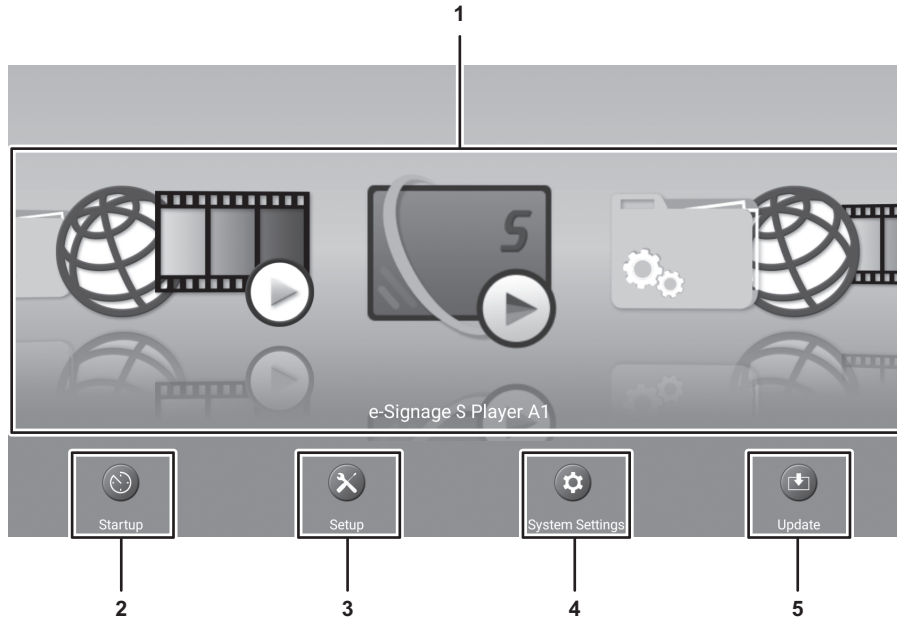
! Caution

- It may take longer for some types of content to display 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”.
3. Press the CONTENT MENU button.

The base screen of APPLICATION mode (CONTENT MENU screen) appears.



1. Applications

Select the application you want to use.

The application will start.

2. Startup

When APPLICATION mode start up, you can set applications to start automatically.

3. Setup

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

4. System Settings

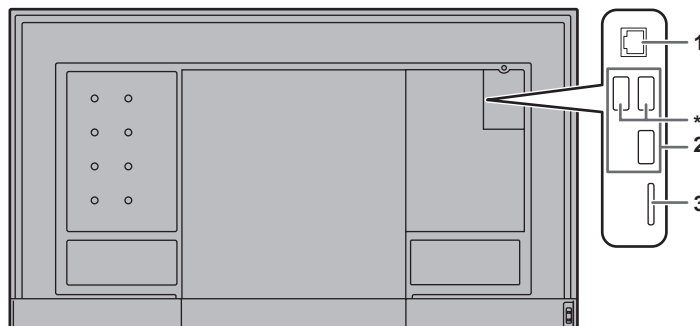
You can configure settings for Android.

5. Update

Update applications that is factory-installed in APPLICATION mode. (See page 17.)
(A network environment that allows access to the internet is required.)

LAN terminal / USB port / microSD card slot

USB devices (memory device, keyboard, mouse) and a microSD 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.
- Connect a USB flash drive to be used with Media Player or HTML5 Browser to one of the USB ports indicated by "*" above.

Supported USB flash drives

| | |
|-------------|---|
| File System | FAT32/NTFS |
| Capacity | Up to 64 GB (For FAT32, the maximum file size is 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.

3. microSD card slot

- Insert a microSD memory card.
Pay attention to the orientation of the memory card, and slowly push in until you hear a "click" sound.

Supported microSD memory cards

| | |
|-------------|---|
| File System | FAT32/NTFS |
| Capacity | <ul style="list-style-type: none"> microSD memory card: Up to 2 GB microSDHC memory card: Up to 32 GB microSDXC memory card: Up to 64 GB Maximum file size for FAT 32: 4 GB |

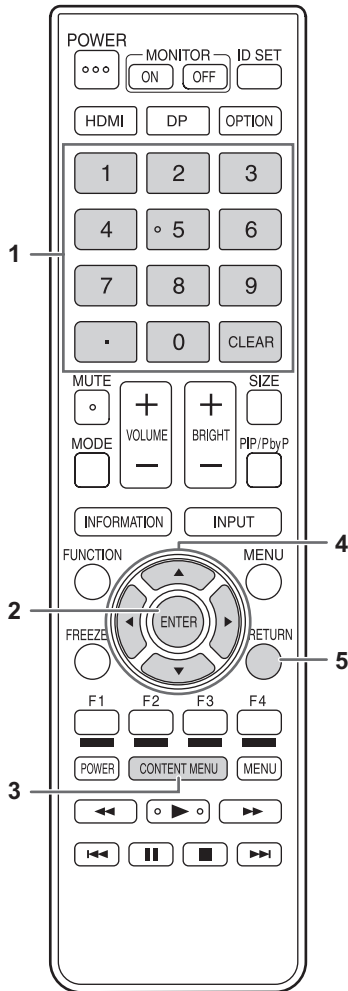
- Encrypted files and folders cannot be used.
- exFAT format is not supported.

■ How to remove a USB flash drive or a microSD memory card

- Select "File Explorer" on the CONTENT MENU screen of APPLICATION mode.
- Select  of the device you want to remove.

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

Confirm the selected item.

3. CONTENT MENU

Display 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.

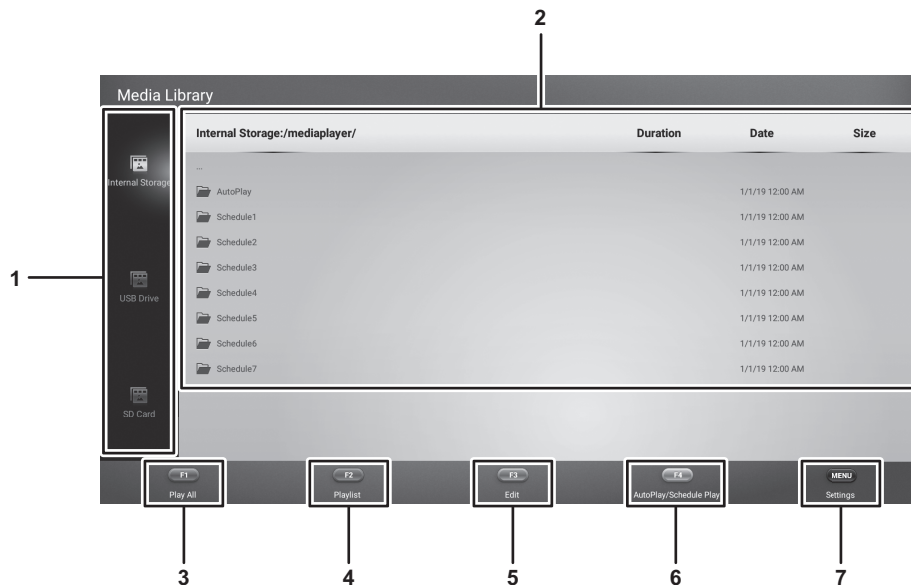
Using Media Player

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

TIPS

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

About the screen



1. Select the media to display the file list.
Internal Storage ...Internal memory used in APPLICATION mode (Android)
USB DriveUSB flash drive connected to a USB port
SD CardmicroSD memory card inserted in the microSD card slot
2. A file list appears.
3. Play All (see page 8)
Play all files in the folder in order of file names.
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. Settings (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 ▲ or ▼ button to select the media.

- Internal Storage Internal memory used in APPLICATION mode (Android)
- USB Drive USB flash drive connected to a USB port
- SD Card microSD memory card inserted in the microSD 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

1. Press the F1 button (Play All).

Play all files in the folder in order of file names.

■ Creating a playlist

Create a playlist for the displayed folder.

1. Press the F2 button (Playlist).

2. Select files in the order you want them to play, and press the ENTER button.



To set BGM, select the music file and press the F3 button (BGM).

3. Press the F2 button (Save).

The playlist is saved.

- Play a play list Press the F1 button (Playlist Play).
- Cancel a play list Press the F4 button (Clear All) and the F2 button (Save).

■ Editing a file

Copying the file to the Autoplay or Schedule play folder

- (1) Select the file you want to copy.
- (2) Press the F3 button (Edit).
- (3) Select "Direct copy".
The list of folders appears.
- (4) Select the folder.

Copying a file

- (1) Select the file you want to copy.
- (2) Press the F3 button (Edit).
- (3) Select "Copy".
- (4) Select "Selected File".
- (5) Show the file list of the copy destination folder.
- (6) Press the F3 button (Edit).
- (7) Select "Paste".

Copying all files in a list

- (1) Press the F3 button (Edit).
- (2) Select "Copy".
- (3) Select "All".
- (4) Show the file list of the copy destination folder.
- (5) Press the F3 button (Edit).
- (6) Select "Paste".

Deleting a file

- (1) Select the file you want to delete.
- (2) Press the F3 button (Edit).
- (3) Select "Delete".

Displaying the files in the Autoplay or Schedule play folder

- (1) Press the F3 button (Edit).
- (2) Select "Direct open".
The list of folders appears.
- (3) Select the folder.

■ Start the Autoplay or Schedule play

1. Press the F4 button (AutoPlay/Schedule Play).

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.

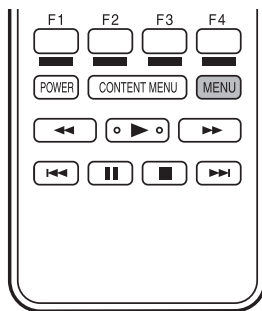
TIPS

Put the files to be played to the following folder in the media to be used for Autoplay in advance.

/mediaplayer/AutoPlay

Settings

1. 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.

When this setting is set to “Disabled”, the root directory of each media will initially be shown in Media Player.

Slideshow

Set the play method.

Shuffle

Set whether or not play is shuffled during continuous play.

ON Shuffle

OFF Do not shuffle

Folder Repeat

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

ON Play repeatedly

OFF Do not repeat

Slideshow Duration

Set the play interval.

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

Picture transition

Set how the display changes when images are played.

Reset

Initialize the “Slideshow” settings.

Schedule

A playlist can be played at a specified time.

Up to 7 schedule items can be registered.

The schedule list appears. Select "Reset" in this screen to initialize all schedules.

To set or change a schedule, select the schedule you want to set or change.

Schedule play

Enable/disable the "Schedule".

Start Time

Specify the time that will start playing of the playlist.

If this monitor is in standby mode, this monitor turns power on and then start play.

End Time

Specify the time that will stop playing of the playlist.

Duration

Displays the play time of the schedule.

Linked off setting

Set what the monitor power does when schedule playback ends.

Enabled..... Turn off the power.

Disabled..... Do not turn off the power.

Repeat Mode

Only Once..... The "Schedule" will be executed once only.

The "Schedule" setting is cleared after the schedule is executed.

Selected days..... Executes the "Schedule" on the specified day of the week every week.

Select Content Folder

Specify the playlist you want to play.

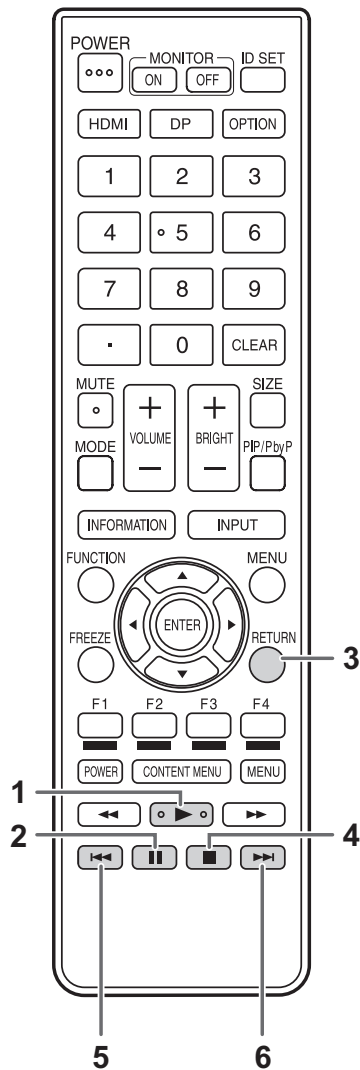
Reset

Initialize the settings of the selected schedule.

TIPS

- Set the POWER SAVE MODE to OFF when "Schedule" is used.
When POWER SAVE MODE is set to ON, "Schedule" is not executed in standby mode.

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.
- (5) **BACK:** Play the previous file.
- (6) **NEXT:** Play the next file.

TIPS

- Depending on the content, it may be displayed at low resolution when paused.

■ 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 | Format | Max. resolution |
|----------------|--------|-----------------|
| *.jpg (*.jpeg) | JPEG | 3840x2160 |
| *.bmp | BMP | |
| *.png | PNG | |
| *.gif | GIF* | |

* Animated GIF is not supported.

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 (MP) | 3840x2160 | 60 |
| 1920x1080 | | 60 | |
| *.wmv | VC-1 | 1920x1080 | 30 |

Audio files

| Extension | Sample rate | Maximum bit rate | Audio coding |
|-----------|--|------------------|-------------------|
| *.mp3 | 8/11.025/12/16/22.05/24/ 32/44.1/48 | 320 | MPEG-1, 2, 2.5 L3 |
| *.wma | 32/44.1/48 | 320 | WMA |

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 **“Setup”** on the **CONTENT MENU** screen of **APPLICATION** mode.
2. Select **“HTML5 Browser”**.
3. Select **“Default Site”**.
4. **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 **“OK”**.

If you want to display the PC site rather than the mobile site, set **“Desktop Site”** to **“Enabled”**.

TIPS

- Multiple USB flash drives cannot be used at the same time with HTML5 Browser.
If you insert multiple USB flash drives with local storage, only the flash drive inserted first can be used.

■ Starting the browser

Select **“HTML5 Browser”** on the **CONTENT MENU** screen of **APPLICATION** mode.
The specified Web content is shown.

TIPS

- You can set the HTML5 Browser to start automatically when **APPLICATION** mode start up.
Select **“Startup”** on the **CONTENT MENU** screen and set **“HTML5 Browser”**.

■ Exiting the browser

1. Press the **RETURN** button.

Setup

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

■ Setup

Date & Time

Set the date and time.

Ethernet (LAN)

Set whether or not to use LAN terminal.
Set the IP address, subnet mask, and other settings.

Wireless Region

Select the region to use this monitor.

Wireless LAN

Set whether or not to use wireless LAN.
To use wireless LAN, first set the “Wireless Region”.
Configure settings for wireless LAN.

Wireless LAN Profile Backup/Recovery

Save wireless LAN settings.
By saving the settings, you can return the settings to the saved settings in the event that the wireless LAN settings are lost.
The settings are returned when you turn on the power or change “Wireless LAN” from “Off” to “On”.

Bluetooth

Set whether or not to use a commercially available Bluetooth device.
Configure settings for Bluetooth.

Telnet Server

Configure settings to use a telnet server.
Telnet Server When using telnet server function, set to ON.
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.
Reset Initialize the telnet server settings.

FTP Server

Configure settings to use a FTP server.
FTP Server When using FTP server function, set to ON.
User Name Set an account name when connecting to this monitor. (The default setting is “admin”.)
Password..... Set a password when connecting to this monitor. (The default setting is “admin”.)
Port..... Set the port number to be used.
Auto Logout Time (minutes) Set the time to logout automatically by minutes.
Reset Initialize the FTP server settings.

Proxy Settings

Proxy Settings When using this monitor in the proxy environment, set to ON.
Address Set a proxy server's address.
Port..... Set a port number when connecting to the proxy server.
User Name Set an account name when connecting to the proxy server.
Password..... Set a password when connecting to the proxy server.
Exclusion List..... Set the address do not use proxy server.
Reset Initialize the proxy settings.

HTML5 Browser

Set the start page of the HTML5 Browser. (See page 14.)

Setup

Full Screen Mode

Enabled The navigation bar and status bar do not appear.

Disabled..... The navigation bar and status bar appear.

APPLICATION Mode Reboot

Set to restart the Android system.

A schedule is set by factory default in this monitor that restarts the system at 3:00 AM.

Reboot now Restart the Android system.

Schedule..... Set whether or not a schedule is used to restart the Android system.

Time..... Set a time to restart the Android system.

Software Information

Shows the software license agreement and open source license.

Status

Shows APPLICATION mode information.

Updating the Software (Update)

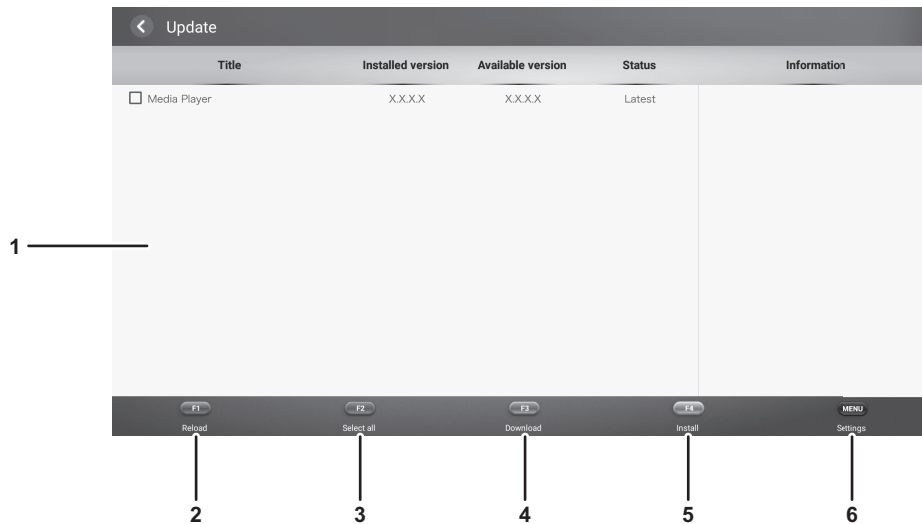
Update applications and firmware that are factory-installed in APPLICATION mode. (A network environment that allows access to the internet is required.)

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

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

The "Export Law Assurances" appears. Select "YES".

To use the software distributed by the "Update", you must agree to the "Export Law Assurances".



1. Information area

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

2. Reload

Refresh the information in the information area.

3. Select all

All software in the list are selected.

If already selected, the selection is canceled.

4. Download

Download the selected software.

5. Install

Install the selected software.

6. Settings

Configure settings for Update.

- Region Select region to be used.
- Show warning messages Set whether or not to display warning message.
- Hide updated items Set whether or not to hide updated items in the information area.
- Scheduled installation Set whether or not updates are automatically checked for and executed.
- Scheduled install time When "Scheduled installation" is set to "ON", set the time at which updates are executed. Update runs every day at the set time.
- Scheduled firmware installation When "Scheduled installation" is set to "ON", set whether or not the firmware is also updated automatically.
- Reset Initialize the "Settings".

Intellectual Property Rights and Other Matters

■ Information on the software license for this product

Software composition

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http://www.sharp.co.jp/business/lcd-display/support/download/source_e.html

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