

USB Media Player User Guide

Ver. 1.0

















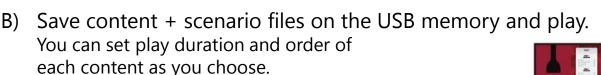








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6. Deliver content on USB memory via LAN

6-1. Deliver content

- A) Single-Playback
 Plays on a single display
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- B) Multi-Playback Synchronize a maximum of four displays and play
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6-2. Set date/time of delivery/playback and deliver

For both Single and Multi-Playback - Page 15

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Series	Model Number
LFE Series *1	TH-43LFE8 TH-49LFE8 TH-55LFE8 TH-65LFE8
EF Series	TH-32EF1 TH-65EF1 TH-75EF1 TH-84EF1
SF series	TH-42SF1H TH-49SF1H TH-55SF1H TH-43SF2 TH-49SF2 TH-55SF2 TH-65SF2
LF Series	TH-42LF8 TH-49LF8 TH-55LF8 TH-42LF80 TH-49LF80 TH-55LF80
LFV Series	TH-55LFV6 TH-55LFV60 TH-55LFV70*2
VF Series	TH-55VF1H
AF Series*2	TH-42AF1J TH-49AF1J TH-55AF1J

<Content delivery via LAN>

Refer to the website about how to verify the version.

 $\underline{https://panasonic.net/cns/prodisplays/download/software/multi/}$

^{*1:} Main microcomputer versions of 2.02 and later on displays are compatible with the LFE series.

^{*2:} AF series and TH-55LFV70 are not compatible.

2. Supported devices and formats

<Supported devices>

- ➤ Commercially available USB memory devices are supported. (Those with security functions are not supported. Operation is not guaranteed.)
- ➤ USB memory devices other than those formatted in FAT16 or FAT32 cannot be used.
- ➤ Up to 32 GB of USB memory in size are supported.
- Only single partition configuration is supported.
- Depending on the type of a USB memory device, it may come in contact with the periphery such as a back cover, and cannot be attached. Use a commercially sold extension cable, or use a small type of a USB memory device connectable to this unit.

<Still pictures>

Extension	Format	Limitation
Jpg/jpeg/jpe	JPEG	Number of pixels: Maximum 4096 x 4096 (supports baseline only) YUV format: supports YUV444, YUV442 and YUV440 Colour mode: supports RGB only
Bmp (65/75/84EF1, VF1H and SF2 series only)	Windows Bitmap	Number of pixels: Maximum 4096 x 4096 (1 bit, 4 bits, 8 bits, 24 bits) Following formats are not supported: Run-length encoding, bit field, top-down, transparent Data

Only jpg files (except progressive JPEG) can be used for still images when using multiple monitoring & control software.

<Motion pictures>

Extension	Codec		
	Video	Audio	
avi	MPEG4 AVC/H.264, MPEG-4 Visual	MPEG-1/2 Audio Layer-3(MP3), Linear PCM	
mkv	MPEG4 AVC/H.264, MPEG-4 Visual	MPEG-1/2 Audio Layer-3, Linear PCM, AAC, HE-AAC	
Asf/wmv	MPEG4 AVC/H.264, MPEG-4 Visual, VC-1 Advanced, VC-1, Simple & Main	MPEG-1/2 Audio Layer-3, WMA Standard, WMA9/10Pro	
Ts/mts	MPEG4 AVC/H.264, MPEG-4 Visual	MPEG-1/2 Audio Layer-3, HE-AAC	
Мр4	MPEG4 AVC/H.264, MPEG-4 Visual	MPEG-1/2 Audio Layer-3, AAC, HE-AAC	
3gp	MPEG4 AVC/H.264, MPEG-4 Visual	AAC, HE-AAC	
mov	MPEG4 AVC/H.264, MPEG-4 Visual	MPEG-1/2 Audio Layer-3, Linear PCM, AAC, HE-AAC	
Flv/f4v	MPEG4 AVC/H.264	MPEG-1/2 Audio, Layer-3, AAC, Linear PCM	

3. Limitaion on compatible formats

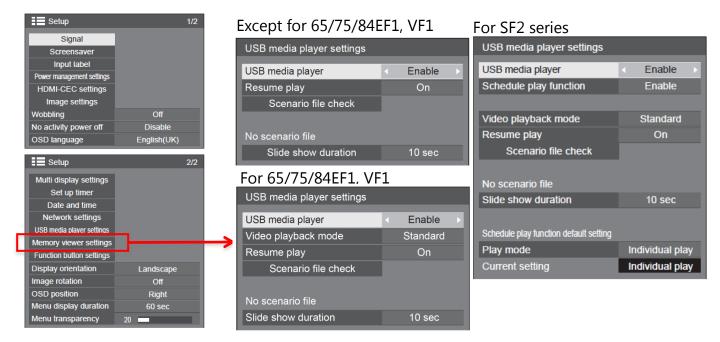
<Limitation>

Video Codec	
MPEG-4, AVC/H.264, High Profile	Resolution: maximum 1920 x 1080 Frame rate: maximum 30fps (progressive) Bit rate: maximum 30Mbps - Level 4.2 or less - MVC (multi-view) is not supported.
MPEG-4 Visual, Simple Profile and Advanced Simple Profile	Resolution: maximum 1920 x 1080 Frame rate: maximum 30fps (progressive) Bit rate: maximum 30Mbps - Only 1 warp-point GMC supported - Data Partitioning is not supported.
VC-1, Simple Profile and Main Profile	Resolution: maximum 1920 x 1080 Frame rate: maximum 30fps (progressive) Bit rate: maximum 20Mbps
VC-1, Advanced Profile	Resolution: maximum 1920 x 1080 Frame rate: maximum 24fps (progressive) Maximum 30fps (interlaced) Bit rate: maximum 30Mbps - Level: L3 or less supported

Audio Codec	Sampling frequency (kHz)	Bit rate (kbps)
MP3	8/10.025/12/16/22.05/24/32/44.1/48	8 - 320
WMA Standard		32 - 384
WMA 9		32 - 384
WMA 10 Pro		32 - 384
LPCM		64 - 1536 Corresponding quantization bit: 8/16/24/32
AAC		8 - 1440
HE-AAC		8 - 256

- Maximum size per one file is 2 GB.
- > Some files may not be played back even if their formats are supported as described here.
- Files protected by Digital Rights Management (DRM) cannot be played back.
- Make sure that both audio codec and video codec are supported. If the audio codec of motion picture
- ➤ file is incompatible in format, the pictures may not be correctly displayed. In addition, files which contain only audio cannot be played back.
- Playback is not possible if the maximum bit rate specified in the codec Profile or Level is exceeded. Also, depending on the USB memory device, playback may be impossible even if the bit rate is less than the indicated maximum bit rate.

Select [Setup] → [USB media player settings] on the second page with the remote control.



- (1) USB media player *Factory setting is [Enable]. Set [USB media player] to [Enable].
- (2) Schedule play function (SF2 series only) *Factory setting is [Disables].

 Enables/Disables the schedule playback function using "Content Management Software".

 If the schedule file which made by "Content Management Software" is stored in USB memory, it should be set to [Disables].
- (2) Video playback mode (SF2 series, 65/75/84EF1, VF1 only) *Factory setting is [Standard]. Sets the video playback mode.

 Standard: Plays without a black image at the joint between video files.

 Adjust: Plays with a black image (approx. 2 seconds) inserted at the joint between video files.

 *Depending on format some moving image files may not make correct transitions between files.
 - *Depending on format, some moving image files may not make correct transitions between files. In this case, set to [Adjust].
- **(3) Resume play** *Factory setting is [On].

[On]: When the media player finishes by being switched off, the content playing at the finish time will be played next time it is switched on.

[Off]: First content is always played in alphanumeric order by file name.

*This function does not work when the display is turned off or the USB memory is unplugged.

(4) Slide show duration *Factory setting is [10 sec].

Select the display duration for still images. From 10 – 600 sec.

For moving image files, the duration of the moving image playback is prioritized.

5. Insert USB memory and use

A) Save content on USB memory and play.

<What to prepare>

USB memory	PC	Multi Monitoring & Control Software	LAN cable	Divider
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Necessary	Necessary	Unnecessary	Unnecessary	Unnecessary

1. Save content on USB memory.

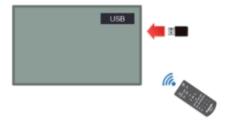
Save prepared content of still or moving images on USB memory using a computer.

- * Files are played in alphanumerical order in the USB memory. (Smaller number → bigger number → alphabetical order)
- * When the portrait setting, please check direction of rotation for using display before create the content.
- * Save the content in the root directory (e.g. E:\) and not in a folder.



2. Insert USB memory into display.

- (1) Insert USB memory with content saved into the USB port on the display.
- (2) Change to [USB] input of the display.



Play the content in alphanumeric (character code) order.

5. Insert USB memory and use

B) Save content + scenario files on the USB memory and play

<What to prepare>

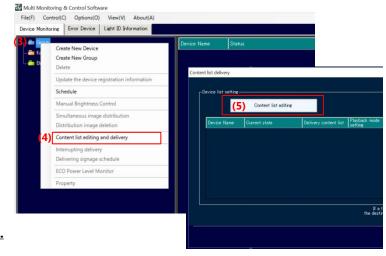
USB memory	PC	Multi Monitoring & Control Software	LAN cable	Divider
-		National Nat		
Necessary	Necessary	Necessary	Unnecessary	Unnecessary

1. Activate multi monitoring & control software.

(1) Download Multi Monitoring & Control Software (MMCS) from the Website and install it on a computer.

Download from here ⇒ https://panasonic.net/cns/prodisplays/download/software/index.html

- (2) Activate MMCS.
- (3) Right-click on Group and display the menu.
- (4) Select [Content list editing and delivery].
- (5) Select [Content list editing].



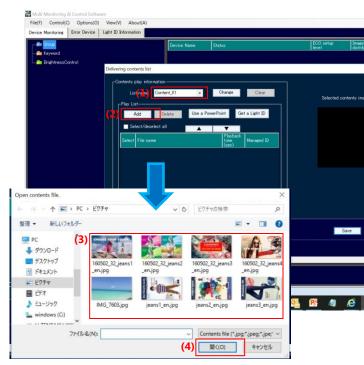
2. Create the content list.

*Save the content on a computer beforehand.

- (1) Select the content list name.
 - Maximum of 50 content lists can be created.
 - List names can be arbitrarily changed. (Within 16 alphanumeric characters)
- (2) Click [Add].

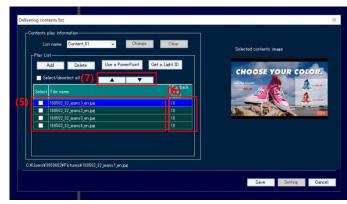
The explorer will open and select the folder where the content was saved.

- (3) Select the content you want to play.
- (4) Click [Open]..



5. Insert USB memory and use

- (5) Selected content will be displayed in the play list.
- (6) Set the play time for one content item.
 Still images: Set within from 3 86,400 sec.
 Moving images: The play time for the moving image is displayed.
- (7) Set up the play order for the content. Select content for which you want to change order, move it using the ▼or ▲ button.



3. Save content list on USB memory.

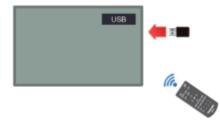
- (1) Set the USB memory on which content is to be saved in the USB port of the computer.
- (2) Click [Save] and select a device of your choice.
- (3) A message will appear when saving is completed.





4. Insert USB memory into display.

- (1) Insert the USB memory on which the content is saved in the USB port on the display.
- (2) Change to [USB] input of the display.



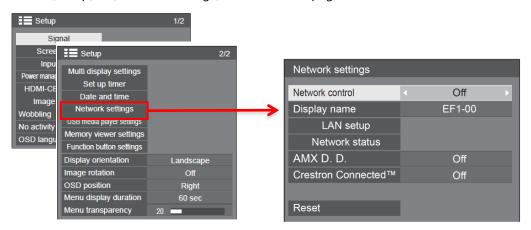
Play the content according to the created content list.

<What to prepare>

USB memory	PC	Multiple Monitoring & Control Software	LAN cable	Divider
ä		Nation Machinery Nation Machinery National Notice		
Necessary	Necessary	Necessary	Necessary	Necessary

1. Set up network.

Select [Setup] → [Network settings] on the second page with the remote control.



(1) **Network control** *Factory setting is [Off]. Set network control to [On].

(2) **Display name** *Factory setting is [Name of "series-00"].

This name is displayed on the network. When you operate more than one computer, changing the name is recommended.

(3) LAN set up *Factory setting is as the right figure shows.

When using an existing network, set up the LAN on this screen.

The display to be connected and the computer operated should

be in the same network.

(4) Network status

This screen is to confirm the network settings.



Check the following before connection!

Check 1: LAN cable

• Use LAN cables compatible with CAT5 and later.

*Note that LAN cables compatible with CAT5e and later are necessary for delivery via DIGITAL LINK.

Check 2: Settings for wired LAN

- · For computers built-in wired LAN function,
 - set the wired LAN to [Enable].
- · For computers without wired LAN function,
 - confirm that the wired LAN adaptor is correctly identified and enabled.

Check 3: Supported OS Windows PC only

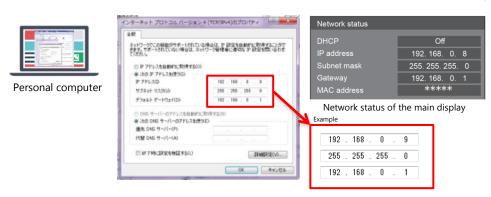
2. Connect display and PC with a LAN cable.

- (1) Connect the PC that will run MMCS, and the display to be used, with the LAN cable.
- (2) When using multiple displays, connect them via HUB.
- (3) Plug the USB memory into the display beforehand.



3. Set up computer.

Access [Network and sharing center] and set the IP address of the wired LAN. Set the IP address to be in the same network as that shown on the network status of the display.



4. Activate Multi Monitoring & Control Software (MMCS).

(1) Download <u>Multi Monitoring & Control Software</u> (MMCS) from the Website and install it on the computer.

Download from here

⇒https://panasonic.net/cns/prodisplays/download/software/index.html

(2) Activate MMCS.

5. Register the display.

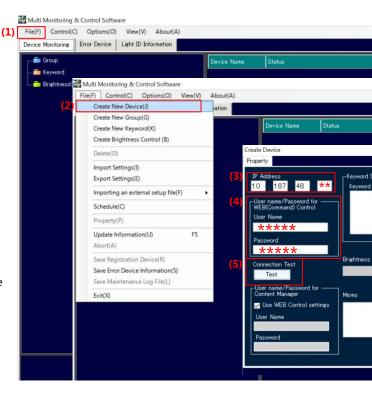
- (1) Click [File].
- (2) Click [Create New Device].
 - ⇒Device creation screen will appear.
- *After MMCS is activated, it will take a little time before [Create New Device] becomes active.
- (3) Enter the IP address to be used for the display.
- (4) Enter the user name and password.

Default settings

	Except for SF2 series	SF2 series
User name	admin1	dispadmin
Password	panasonic	@Panasonic

- (5) Click Test.
- (6) When successfully completed, the following message will appear. Click OK.



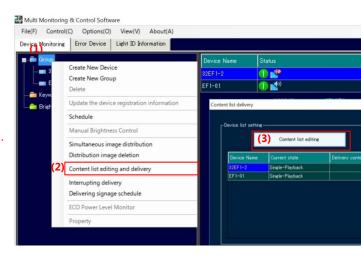


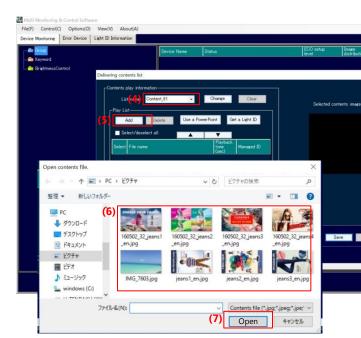
6. Create content list.

- (1) **Right-click** on Group or registered device number and display the menu.
- (2) Click [Content list editing and delivery], and the following message will appear.
 - * When you have necessary data into the USB memory, click Cancel and save the data beforehand.



- Click [Content list editing].
- (4) Select the name of the content list.
 - Maximum of 50 content lists can be created.
 - The list names can be arbitrarily changed.
- (5) Click [Add]. When the explorer opens, select the folder in which the content was saved.
- (6) Select the content you want to play. More than one content item can be selected at a time.
- (7) Click [Open].





- (8) Selected content will be displayed in the play list.
- (9) Set up the play time for one content. Still images: Set up within from 3 – 86,400 sec. Moving images: The play time for the moving image is displayed.
- (10) Set up the playing order for the content.
 Select the content of which you want to change order, move it by ▼or ▲ button.
- (11) Click [Setting] to complete.



7-1. Deliver content list. (Single-Playback) *Refer to 7-2 (page 14) for Multi-Playback

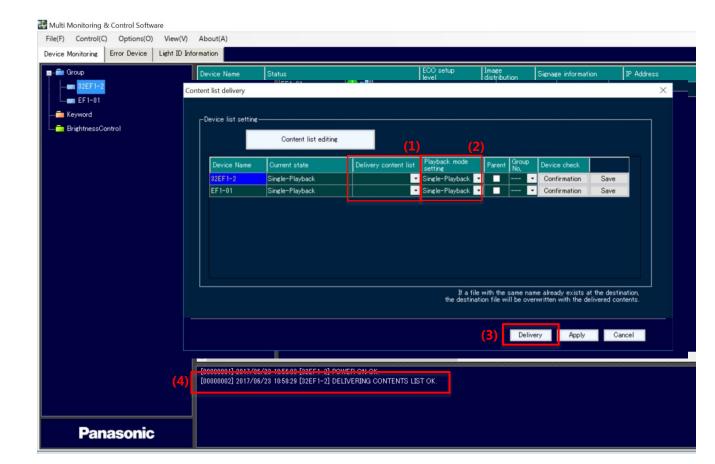
- *While the content is being delivered, the display screen will go black and the message [Content is being rewritten] will appear on the upper right.
- *When the data size of the content list is large, it takes time to deliver. We recommend you to set an earlier time, calculating back from the time you want to start playback.

Set up delivery on each registered display.

- Select [Delivery Content list].
 Registered content lists can be selected from the pull-down menu.
- (2) Set [Playback mode setting].
 - Single-Playback: No synchronous play on each display
 - Multi-Playback: Synchronous play on each display Select Single-playback at this time.
- (3) Click [Delivery].
- (4) When delivery is completed, a "successful" message will appear on the bottom of the screen. *When it fails, an "error" message will appear.

The maximum number of devices for content delivery at one time is 128.

If you want to deliver to more devices, complete delivery to the first 128, and then start the rest.



When the content list delivery is completed, play will start.

7-2. Deliver content list. (Multi-Playback) *Refer to 7-1 (page 13) for Single-Playback

- *While the content is being delivered, the display screen will go dark and the message [Content is being rewritten] will appear on the upper right.
- *When the data size of the content list is large, it takes time to deliver. We recommend you to set an earlier time, calculating back from the time you want to start playback.
- *Light ID transmission function for SF1H series is not supported.

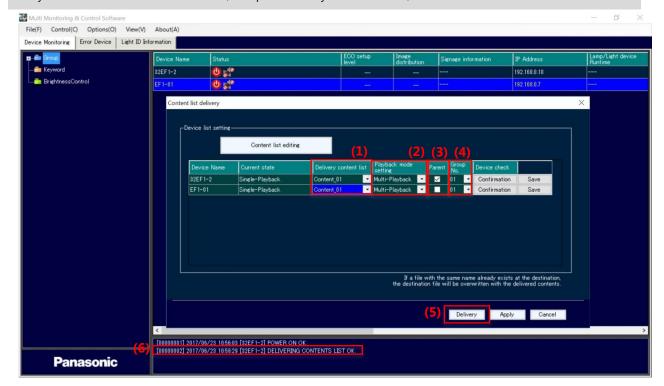
Set up delivery on each registered display.

- (1) Select [Delivery content list].

 Registered content lists can be selected from the pull-down menu.
- (2) Set [Playback mode setting].
 - Single-Playback: No synchronous play on each display
 - Multi-Playback: Synchronous play on each display Select Multi-Playback at this time.
- (3) Under "Parent", put a check the display that will be the parent.

 Content changes according to the play duration of the parent display.
- (4) Select "Group number".Set the display for synchronized playback to the same group.
- (5) Click [Deliver].
- (6) When delivery is completed, a "successful" message will appear on the bottom of the screen. When it fails, an "error" message will appear.
- *When there are different content lists to be distributed in the same group, the play duration (sec.) of the parent display set in step (3) is prioritized as the play duration of each content item.
- *The maximum number of devices for content delivery at one time is 128 units.

 If you want to deliver to more devices, complete delivery to the first 128, and then start the rest.



6. Deliver content on USB memory via LAN 6-2. Set date/time of delivery/playback and deliver

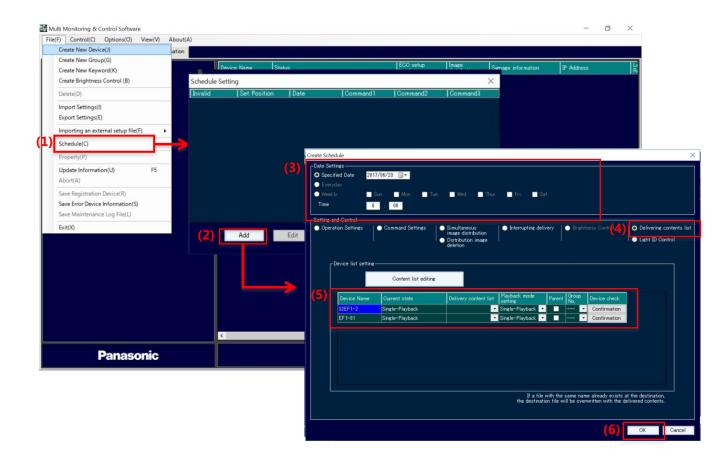
A maximum of 100 lists can be set on the schedule.

1. Set schedule.

- (1) Click [File] and select [Schedule] from the menu.
- (2) Click [Add] on the schedule setting screen.
- (3) On the schedule creation screen, specify the date and time **to deliver** the content list. It can be set by date/time, day of the week, and date.

*When the data size of the content list is large, it takes time to deliver. We recommend you to set an earlier time, calculating back from the time you want to start playback.

- (4) In the control settings, select [Delivering content list].
- (5) On the device list setting screen, set the content list to be delivered and the play mode.
- (6) Click [OK] when setting is completed.

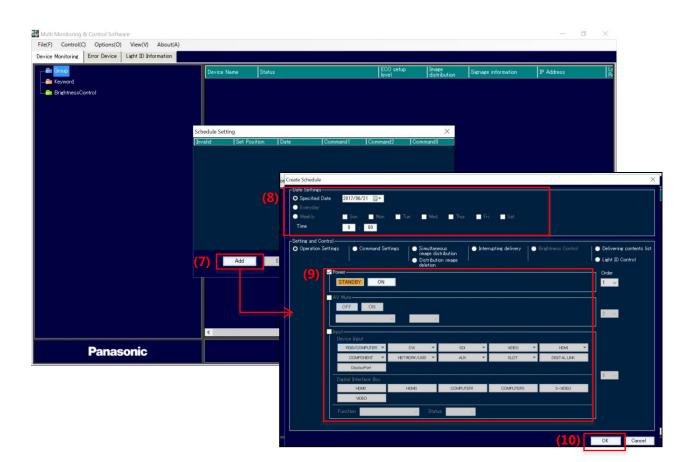


6. Deliver content on USB memory via LAN 6-2. Set date/time of delivery/playback and deliver

- (7) You will return to the schedule setting screen. Click [Add] again.
- (8) On the schedule creation screen, specify the date and time **to start** the content list It can be set by date/time, day of the week, and date.
- (9) In the control settings, select [Operation Settings]. Power supply: Select [On]. Input: Select [USB].
- (10) Click [OK] when the setting is completed.

The schedule setting screen will be displayed. Click [Close] to close the screen. The set schedule can be verified on the $[Option] \Rightarrow [Schedule List]$ screen.

*When delivering and configuring operational settings according to schedule, please keep the computer's power turned on. The display(s) should be set to Network Standby mode ([Off] with the remote control).



7. Convert PowerPoint data to still/moving images

Files created with PowerPoint can be converted to still or moving images and delivered as content.

■Configure PowerPoint page settings in advance!

- * Compatible with Microsoft PowerPoint 2010/2013.
- * Depending on settings, resolution may be lost when converting from PowerPoint, so we recommend that you configure these settings beforehand.
- These settings are for PowerPoint 2010. Depending on the version, the size may be slightly different. In that case, please fine-tune the width and height.

Start PowerPoint and open [Design] ⇒ [Page Setup]. In the case of Configure the settings as follows.

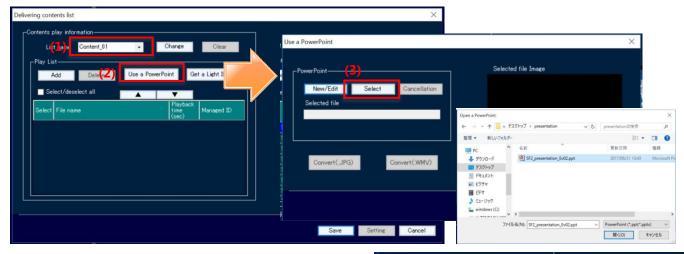
Slide size	Slide size settings (S)	Width (W)	Height (E)
16:9	User setting	67.73cm	38.11cm
4:3	User setting	50.80cm	38.10cm



(Caution) If there is a PowerPoint file being edited, please save it in advance.

1. Import PowerPoint data.

- (1) Select [Content list name] to save the converted PowerPoint data.
- (2) Click [Use a PowerPoint].
- (3) Click [Select], select the PowerPoint data to be converted, and click [Open].



2. Convert the imported PowerPoint data.

- To convert to a still image: Click [Convert (.JPG)].
 To convert to a moving image: Click [Convert (.WMV)].
- (2) When conversion is completed, a [Process complete] message will be displayed under the image.
- (3) Click [Close] to close the screen.
- (4) The converted data will be displayed on the content list. Click [Save] to save to USB memory.



Even when not saving to USB memory, click [Save] to save the content list. (The explorer screen will open, but close it without performing any operations.)

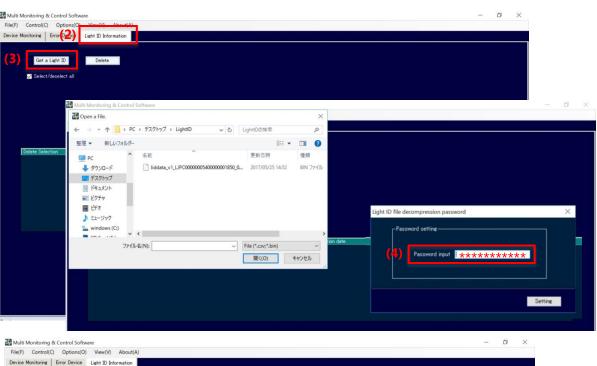
- * When converting to still images, animation effects, etc. will be discarded.
- * When converting to moving images, conversion may take time depending on set conditions such as animation effects, number of slides, etc.

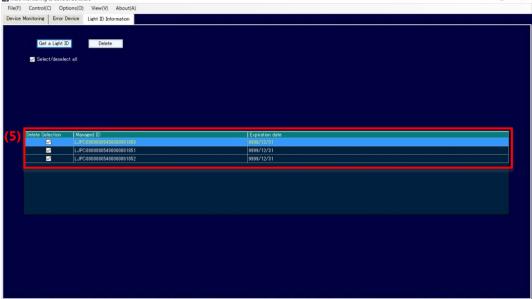
8. Light ID setting (SF1H series only)

• A separate contract for a Light ID license (requiring a fee) must be concluded to configure a Light ID system.

1. Import the Light ID on MMCS

- (1) Save the Light ID file (***.bin) on your PC
- (2) Select [Light ID Information] tab
- (3) Select [Get a Light ID], and Import ***.bin data on MMCS
- (4) Input the password(HEXKEY) obtained from LinkRay portal site or administrator for light ID
- (5) Imported Managed ID of the Light ID will be displayed on the screen.

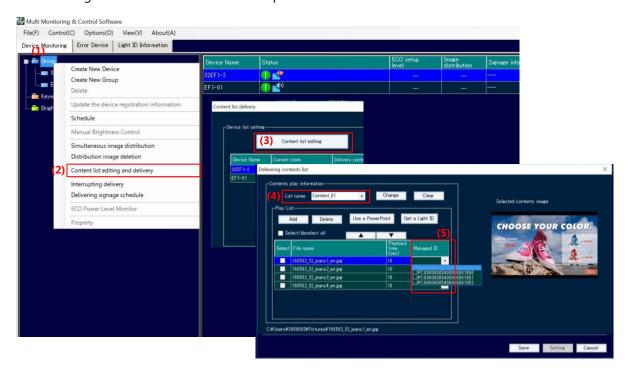




8. Light ID setting (SF1H series only)

2. Link the ID to Content

- (1) **Right-click** on Group or registered device number and display the menu.
- (2) Click [Content list editing and delivery], and the following message will appear.
 - * When you have necessary data into the USB memory, click Cancel and save the data beforehand.
- (3) Click [Content list editing].
- (4) Select the name of the content list.
- (5) Select "Managed ID" linked to contents from pulldown menu.



Please refer the following page regarding how to save contents on the USB memory or delivery contents via LAN.

- Save content + scenario files on the USB memory and play page8~
- Delivery content via LAN page10~
 - *When using Light ID, Multi-playback is not possible...

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