

2015 Multimedia Start Up Screen File Spec

		Picture Format			Prepare image File Size	File Size	Color	Ratio (R,G,B)	LCD dot Size	Program File
		JPEG (.jpg,.jpeg)	BMP (.bmp)	PNG (.png)						
DNN High	DNN9*	no	yes	no	921 x 480 pixels	800 x 480 pixels	16 Bit Full Color	(5,6,5)	0.19575mm(W) x 0.17mm(H)	Not necessary
DNX High/E	DNX8*/DNX7*/DNX7*W*	no	yes	no	921 x 480 pixels	800 x 480 pixels	16 Bit Full Color	(5,6,5)	0.19575mm(W) x 0.17mm(H)	Not necessary
DNX Entry	DNX69*/57*	no	yes	no	908 x 480 pixels	800 x 480 pixels	16 Bit Full Color	(5,6,5)	0.17025mm(W) x 0.15mm(H)	Not necessary
	DNX5*DAB/DNX5*BT									
	DNX4*DAB/DNX4*BT/DNX4*BTR									
DNR	DNR8**BT	no	yes	no	921 x 480 pixels	800 x 480 pixels	16 Bit Full Color	(5,6,5)	0.19575mm(W) x 0.17mm(H)	Not necessary
DDX MID	DDX70*BT	no	yes	no	908 x 480 pixels	800 x 480 pixels	16 Bit Full Color	(5,6,5)	0.19575mm(W) x 0.17mm(H)	Not necessary
	DDX59*/DDX50*DAB/DDX50*BT/DDX50*BTR/DDX5*BT	no	yes	no	908 x 480 pixels	800 x 480 pixels	16 Bit Full Color	(5,6,5)	0.17025mm(W) x 0.15mm(H)	Not necessary
DDX Entry	DDX67*/DDX60*BT/DDX60*BTR	yes	no	no	908 x 480 pixels	800 x 480 pixels	24 Bit Full Color (only jpeg)	(8,8,8)	0.19575mm(W) x 0.17mm(H)	Necessary: Conversion Tool
	DDX49*/DDX47*BT/DDX4*DAB/DDX39*/DDX37*/DDX40*BT/DDX4*BT/DDX27*/DDX30*/DDX3*	yes	no	no	908 x 480 pixels	800 x 480 pixels	24 Bit Full Color (only jpeg)	(8,8,8)	0.17025mm(W) x 0.15mm(H)	Necessary: Conversion Tool

MODELS>>

DNN992	DNN9150DAB	DNN9150BT
DNN9150BT		DNN9150BTM

File Specification>>

Prepare image Size	921 x 480 pixels	
File size:	800 x 480 pixels	
Picture Format:	BMP(.bmp)	
Color:	16 Bit Full Color	R.G.B. (5,6,5)
LCD dot Size:	0.19575mm(W) x 0.17mm(H)	

Program File >>

Not necessary

Units Feature >>

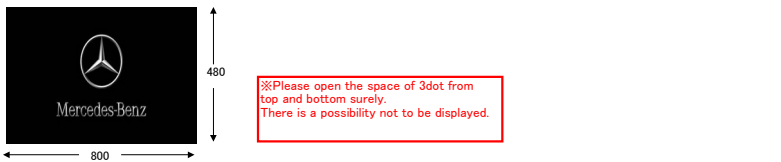
Size Adjustment	no
Rotation	no
Centering	no

Before change of picture

A: Adjust image size to (921x480 pixels)



B: Crush image size (aspect ratio) to meet Display Size.
(800x480 pixels)



※Please open the space of 3dot from top and bottom surely.
There is a possibility not to be displayed.

Changing Operate(Manual Setting Version)

1. Connect USB memory which contains image file.
2. Press 3 Keys at the same time (Volume Down + HOME + RESET) to enter setup Mode.



Vol Down
+
HOME
+
RESET

*First press and hold Volume Down & HOME Key, then press RESET Key.
Release reset key, and hold Volume Down & HOME Key until illumination gets on.

*First press and hold Volume Down & HOME Key, then press RESET Key.
*Release reset key, and hold Volume Down & HOME Key until illumination gets on.

2-1 11:03



If you want to change the opening image to OEM maker's opening, Press "OEM Image"	If you want to put original KENWOOD image to the opening, press " KENWOOD "
--	--

If you want to put on the
KENWOOD image button,
press " KENWOOD



Choose the image you want to use

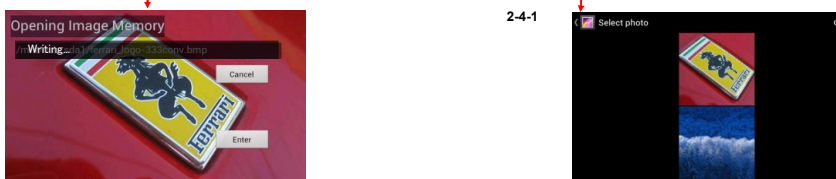
SD image" once,
opening.
ey.

2-3 Opening Image Memory



If the image is OK, press "Enter"

If you choose wrong, click
"Cancel" to go back to the



Choose File, and return to 2-3

Wait for a while.



Reset

*Be sure to get to Opening Image Change.
*If you press reset key before you arrive this

*Be sure to get to Opening Image Change.
*If you press reset key before you arrive this screen, the opening image won't change.

2-5



The Opening is shown for while, then goes to Initial SET-UP.



MODELS>>		
DNX892	DNX7150DAB	
DNX7150BT	DNX715WDAB	
DNX772BH		

File Specification>>		
Prepare image Size	921 x 480 pixels	
File size:	800 x 480 pixels	
Picture Format:	BMP(.bmp)	
Color:	16 Bit Full Color	
LCD dot Size:	0.19575mm(W) x 0.17mm(H)	
	R.G.B. (5,6,5)	

Program File >>		
Not necessary		

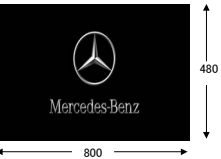
Units Feature >>		
Size Adjustment	no	
Rotation	no	
Centering	no	

Before change of picture

A: Adjust image size to (921x480 pixels)



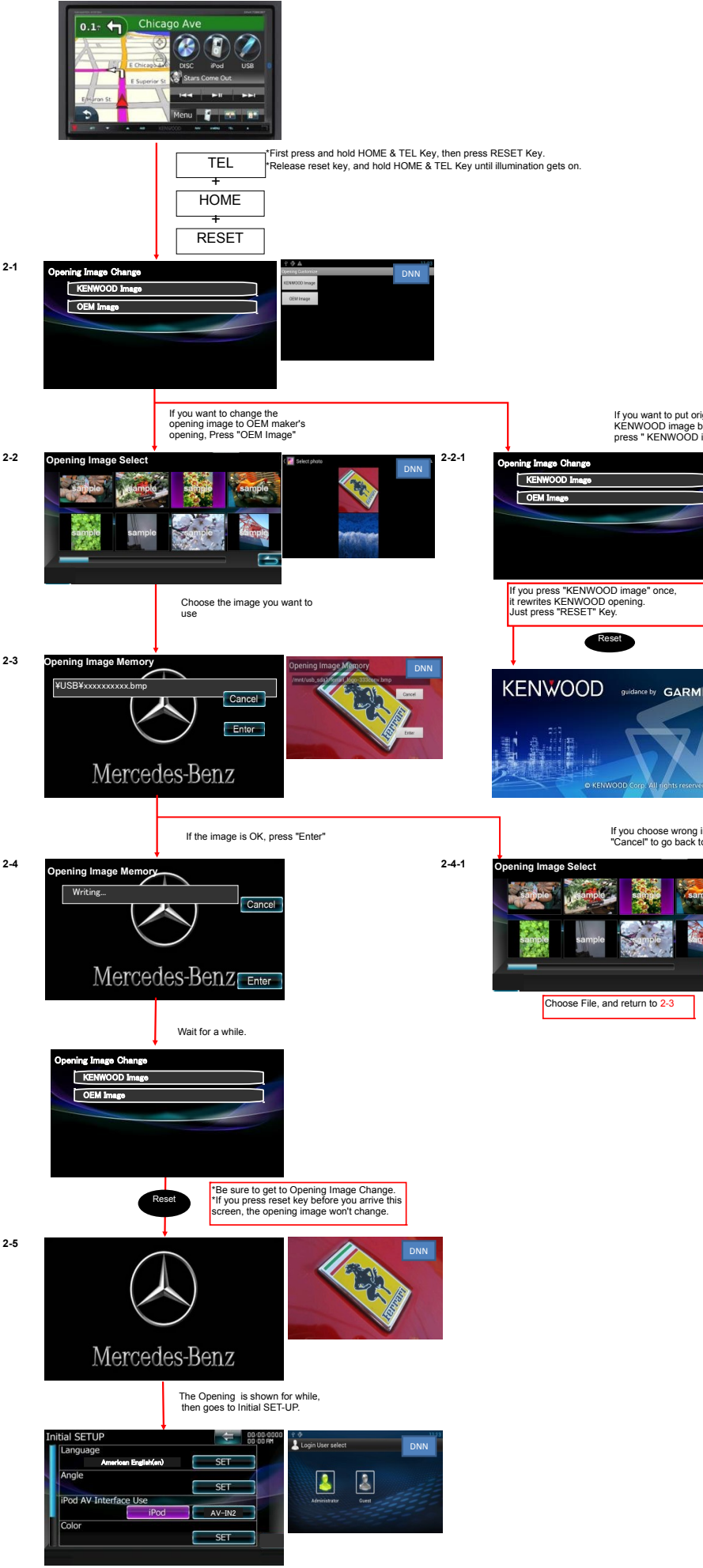
B: Crush image size (aspect ratio) to meet Display Size. (800x480 pixels)



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Changing Operate(Manual Setting Version)

1. Connect USB memory which contains image file.
2. Press 3 Keys at the same time (TEL + HOME + RESET) to enter setup Mode.



MODELS>>

DNX692	DNX4150DAB	DNX4150DAB
DNX572BH	DNX4150BT	DNX415BT
DNX4150BT	DNX4150BTR	DNX415BTM

File Specification>>

Prepare image Size	908 x 480 pixels		
File size:	800 x 480 pixels		
Picture Format:	BMP(.bmp)		
Color:	16 Bit Full Color		R.G.B. (5,6,5)
LCD dot Size:	0.17025mm(W) x 0.15mm(H)		

Program File >>

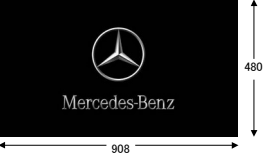
Not necessary

Units Feature >>

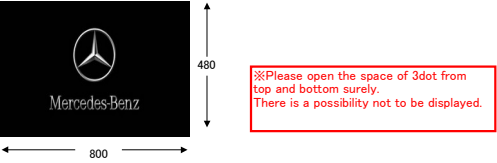
Size Adjustment	no
Rotation	no
Centering	no

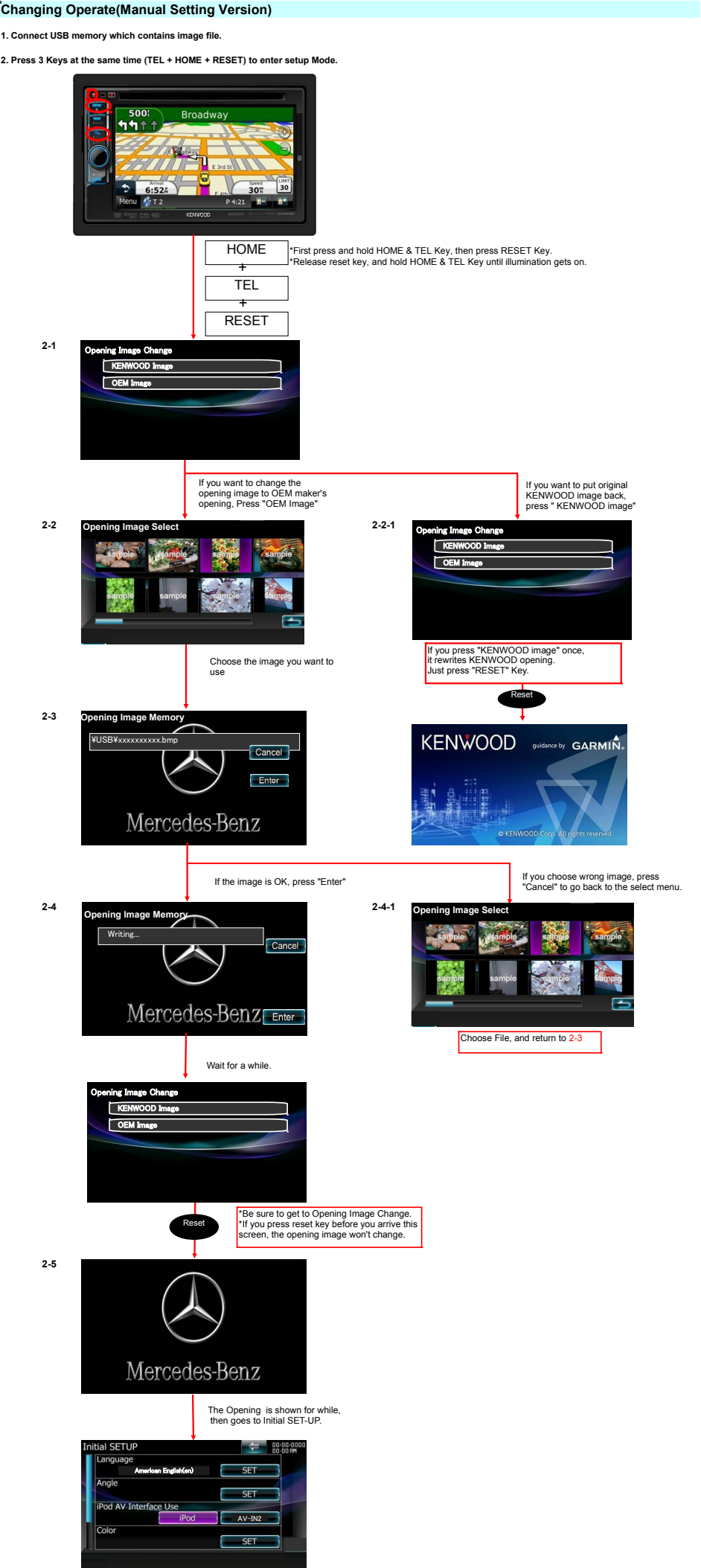
Before change of picture

A: Adjust image size to (908x480 pixels)



B: Crush image size (aspect ratio) to meet Display Size. (800x480 pixels)





MODELS>>	
DDX715WBT	DDX715WBT
	DDX715WBTM

File Specification>>		
Prepare image Size 908 x 480 pixels		
File size:	800 x 480 pixels	
Picture Format:	BMP(.bmp)	
Color:	16 Bit Full Color	R.G.B. (5,6,5)
LCD dot Size:	0.19575mm(W) x 0.17mm(H)	

Program File >>	
Not necessary	

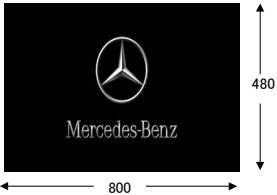
Units Feature >>	
Size Adjustment	no
Rotation	no
Centering	no

Before change of picture

A: Adjust image size to (908x480 pixels)



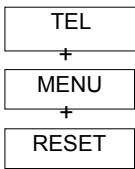
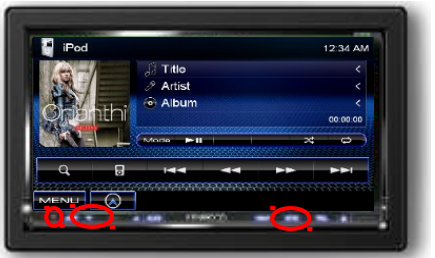
B: Crush image size (aspect ratio) to meet Display Size. (800x480 pixels)



※Please open the space of 3dot from top and buttom surely. There is a possibility not to be displayed.

Changing Operate

1. Press 3 Keys at the same time (TEL + MENU + RESET) to enter setup Mode.



*First press and hold TEL & MENU Key, then press RESET Key.
*Release reset key, and hold TEL & MENU Key until illumination gets on.

2. Display goes to Customize Mode



Press "Prev"



Connect USB Memory
Press "Opening Customize"

3. Writing



Put the following files in the USB Memory.

- Opening Image File
- OpeningCustomize.txt

The Contentes of the OpeningCustomize.txt file (Text file)
Wallpaper Customize
[FILE]xxxx.bmp ← xxxx.bmp is Opening Image File Name
[VERSION]1234
~END

MODELS>>		
DDX7015BT	DDX7015BT	DDX7015BT
		DDX7015BTM

File Specification>>		
Prepare image Size 908 x 480 pixels		
File size:	800 x 480 pixels	
Picture Format:	BMP(.bmp)	
Color:	16 Bit Full Color	R.G.B. (5,6,5)
LCD dot Size:	0.19575mm(W) x 0.17mm(H)	

Program File >>	
Not necessary	

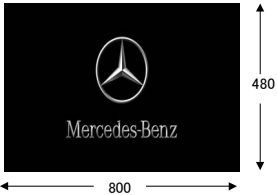
Units Feature >>	
Size Adjustment	no
Rotation	no
Centering	no

Before change of picture

A: Adjust image size to (908x480 pixels)



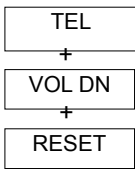
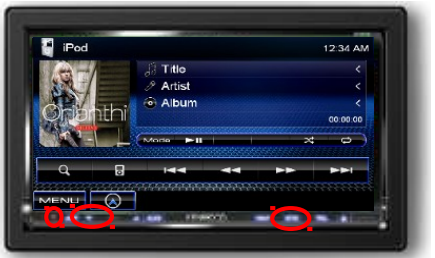
B: Crush image size (aspect ratio) to meet Display Size. (800x480 pixels)



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Changing Operate

1. Press 3 Keys at the same time (TEL + VOL DN + RESET) to enter setup Mode.



*First press and hold TEL & VOL DN Key, then press RESET Key.
*Release reset key, and hold TEL & VOL DN Key until illumination gets on.

2. Display goes to Customize Mode



Press "Prev"



Connect USB Memory
Press "Opening Customize"

3. Writing



Put the following files in the USB Memory.

- Opening Image File
- OpeningCustomize.txt

The Contentes of the OpeningCustomize.txt file (Text file)

Wallpaper Customize
[FILE]xxxx.bmp ← xxxx.bmp is Opening Image File Name
[VERSION]1234
~END

MODELS>>

DDX5902	DDX5015DAB	DDX515BT
	DDX5015BT	DDX515BTM
	DDX5015BTR	

File Specification>>

Prepare image Size	908 x 480 pixels	
File size:	800 x 480 pixels	
Picture Format:	BMP(.bmp)	
Color:	16 Bit Full Color	R.G.B. (5,6,5)
LCD dot Size:	0.17025mm(W) x 0.15mm(H)	

Program File >>

Not necessary

Units Feature >>

Size Adjustment	no
Rotation	no
Centering	no

Before change of picture

A: Adjust image size to (908x480 pixels)



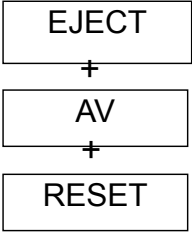
B: Crush image size (aspect ratio) to meet Display Size. (800x480 pixels)



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Changing Operate

1. Press 3 Keys at the same time (EJECT + AV + RESET) to enter setup Mode.



*First press and hold EJECT & AV Key, then press RESET Key.
*Release reset key, and hold EJECT & AV Key until illumination gets on.

2. Display goes to Customize Mode



MODELS>>		
DDX672BH	DDX6015BTR	DDX615WBT DDX615WBTM DDX6015BT

File Specification>>	
Prepare image Size	908 x 480 pixels
File size:	800 x 480 pixels
Picture Format:	JPEG(.jpg)
Color:	24 Bit Full Color (only jpeg) R.G.B. (8,8,8)
LCD dot Size:	0.19575mm(W) x 0.17mm(H)

Program File >>	
Necessary:	
Conversion Tool	JPEG file should be converted to the format for software update.
	USB are available to update the software.

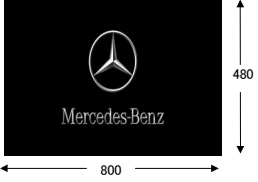
Units Feature >>	
Size Adjustment	no
Rotation	no
Centering	no

Before change of picture

A: Adjust image size to (908x480 pixels)



B: Crush image size (aspect ratio) to meet Display Size. (800x480 pixels)



※Please open the space of 3dot from top and bottom surely.
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※Maximum file size is 256kB.

C: Conversion to files.

Start the file conversion tool by double-clicking on the batch file.

Select the input file,output folder and output quality level for conversion. Press the Start button.

If three files have been output along with the "Success" message, the source file has been converted normally.

D: Files: "Opening.bin", "VUP_Info.cds" for USB.

E: Creation of update USB. Transfer the 2files to the root folder of the USB used for update. (Only 2files)

Refect: The contents of the batch file

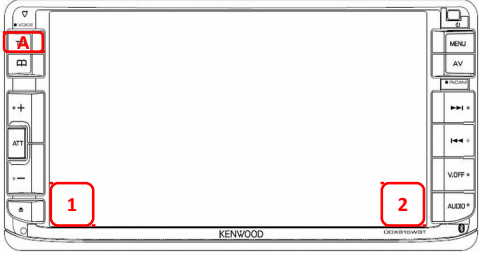
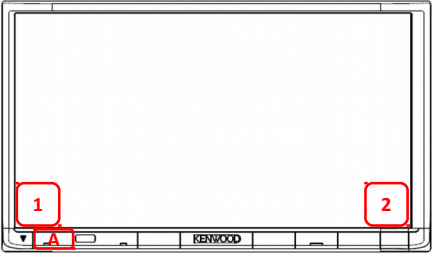
Opening_Image_Maker.exe	i	1	0x07	0x30	0x30	0x44DC0000	0
	ii		iii	iv	v	vi	vii

Item	Content	Description	
i	Tool name		
ii	The presence or absence of gamma correction	0: absence	1: presence
iii	Model Year	See the right	
iv	Fixed valie: Always 0x30	0x30	
v	Model identifier	0x30: DDX	0x31: KWV
vi	Start Address of opening image	0x44DC0000	
vii	Version	0: DOP	1: Default

Value	Year	
0x00	2008	2020
0x01	2009	2021
0x02	2010	2022
0x03	2011	2023
0x04	2012	2024
0x05	2013	2025
0x06	2014	2026
0x07	2015	2027
0x08	2016	2028
0x09	2017	2029
0x0A	2018	2030
0x0B	2019	2031

Changing Operate

1. Press key and touch screen to enter setup Mode.



A

+

lower left

↓

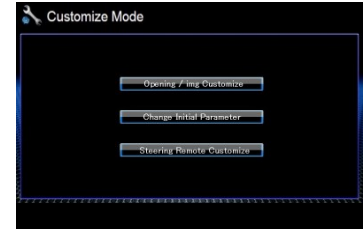
lower right

Model Name	A key
DDX672BH	
DDX6015BTR	TEL
DDX6015BT	
DDX615WBT	TEL
DDX615WBTM	

*First press and hold A Key, then touch screen in the order of "Lower left" → "Lower right".

*Please excute within 1 sec

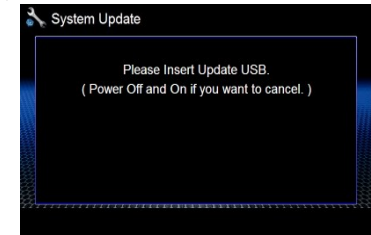
2. Display goes to Customize Mode



Press "Openning / img Customize"

*Head unit does not return to the normal mode unless reset.

3. Display goes to Update screen

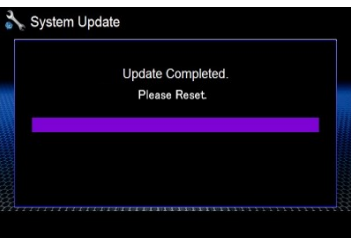


Insert USB with "Image file"

Display goes to processing mode.

It takes 4 or 5 minutes to complete updating the Image file with the size of 256KB max.

4. Displays "Update Complete". Turn the reset to return to the normal mode



MODELS>>

DDX392	DDX4015DAB	DDX4015BT
DDX372BT	DDX4015BT	DDX415BT
DDX415BT	DDX4015BTR	DDX415BTM
DDX272	DDX3015	DDX315
DDX315	DDX3015R	DDX315M
DDX320BT		

File Specification>>

Prepare image Size	908 x 480 pixels
File size:	800 x 480 pixels
Picture Format:	JPEG(.jpg)
Color:	24 Bit Full Color (only jpeg) R.G.B. (8,8,8)
LCD dot Size:	0.17025mm(W) x 0.15mm(H)

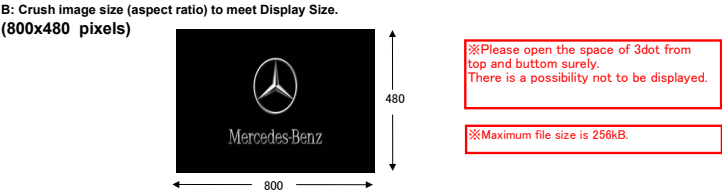
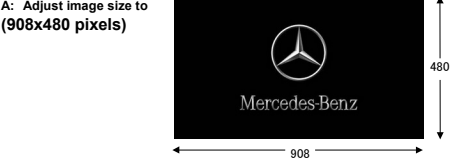
Program File >>

Necessary:
Conversion Tool
If the file should be converted to the format for software update.
USB are available to update the software.

Units Feature >>

Size Adjustment	no
Rotation	no
Centering	no

Before change of picture



C: Conversion to files.
Start the file conversion tool by double-clicking on the batch file.
Select the input file,output folder and output quality level for conversion. Press the Start button.
If three files have been output along with the "Success" message, the source file has been converted normally.

D: Files: "Opening.bin", "VUP_Info.cds" for USB.

E: Creation of update USB. Transfer the 2files to the root folder of the USB used for update. (Only 2files)

Reflect: The contents of the batch file

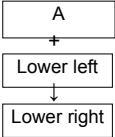
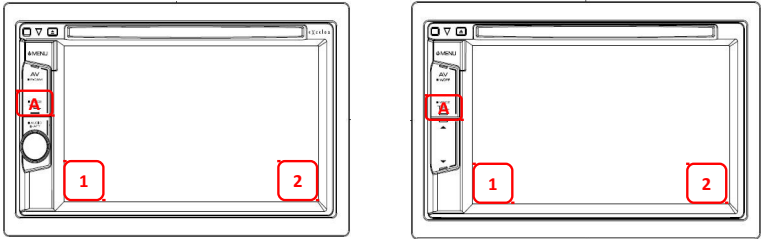
Opening_Image_Maker.exe	1	0x07	0x30	0x30	0x44DC0000	0
I	II	III	IV	V	VI	VII

Value	Year
0x00	2008 2020
0x01	2009 2021
0x02	2010 2022
0x03	2011 2023
0x04	2012 2024
0x05	2013 2025
0x06	2014 2026
0x07	2015 2027
0x08	2016 2028
0x09	2017 2029
0x0A	2018 2030
0x0B	2019 2031

Item	Content	Description
I	Tool name	
II	The presence or absence of gamma correction	0: absence 1: presence
III	Model Year	See the right
IV	Fixed valie: Always 0x00	0x30
V	Model identifier	0x30: DDX 0x31: KWV
VI	Start Address of opening image	0x44DC0000
VII	Version	0: DOP 1: Default

Changing Operate

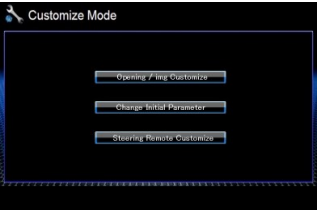
1. Press key and touch screen to enter setup Mode.



*First press and hold A Key, then touch screen in the order of "Lower left" → "Lower right".
*Please excute within 1 sec

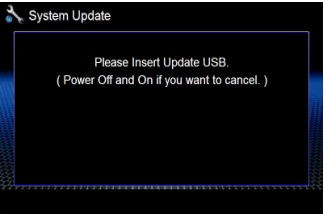
Model Name	A key
DDX392	TEL
DDX372BT	
DDX415BT	
DDX320BT	
DDX4015DAB	
DDX4015BT	
DDX4015BTR	AUD
DDX4015BT	
DDX415BT	
DDX415BTM	
DDX272	
DDX315	
DDX3015	
DDX3015R	
DDX315	
DDX315M	

2. Display goes to Customize Mode



Press "Openning / img Customize"
*Head unit does not return to the normal mode unless reset.

3. Display goes to Update screen



Display goes to processing mode.
Insert USB with "Image file"
It takes 4 or 5 minutes to complete updating the Image file with the size of 256KB max.

4. Displays "Update Complete". Turn the reset to return to the normal mode

