

A63 User Quick Setup Guide

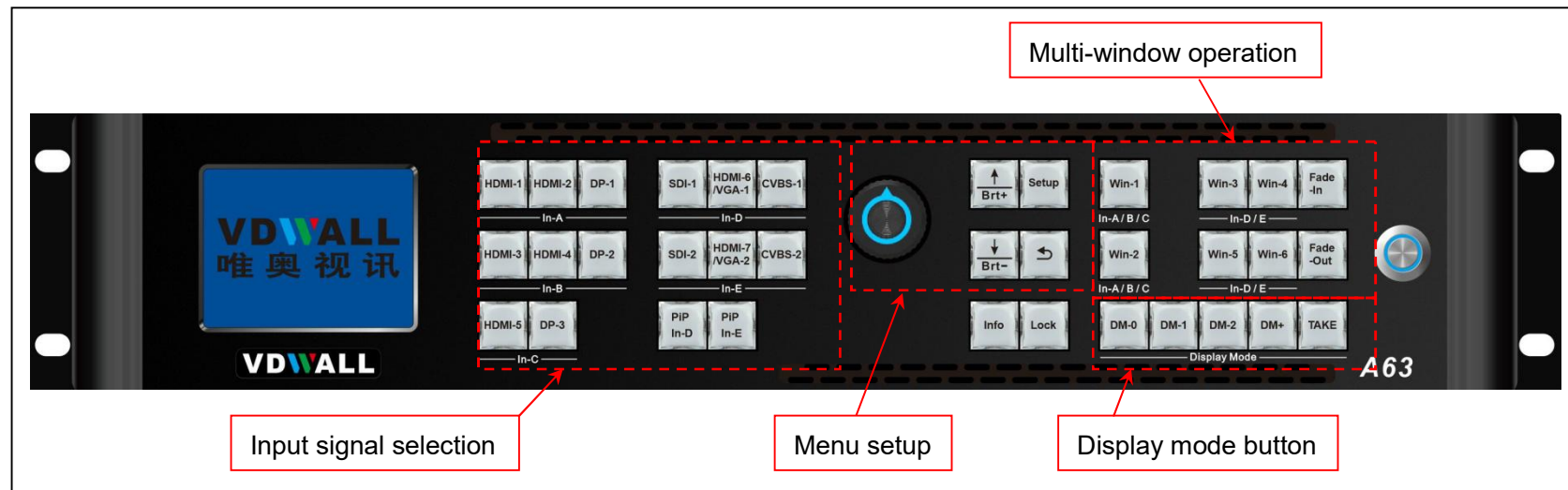
@Configure Mode 0 (CfgM0)

(Version 1.1)



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2020.03

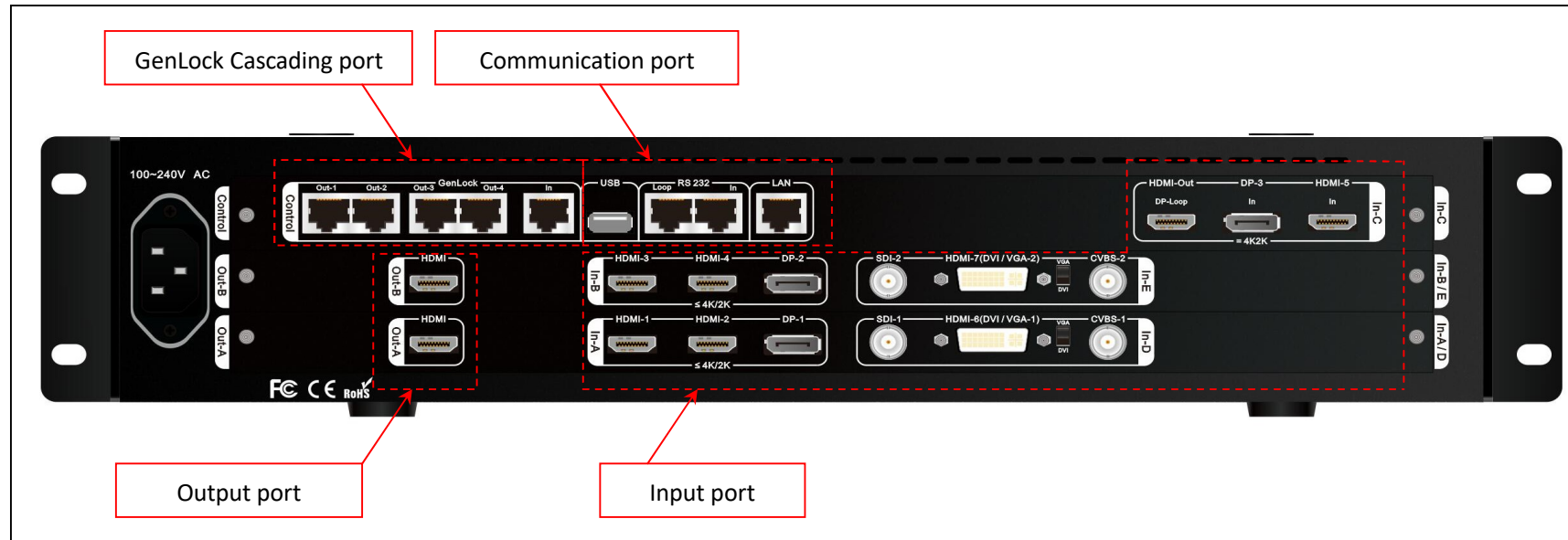
1. Front Button Description



Category	Buttons	Description
Input signal selection	<u>HDMI-1</u> 、 <u>HDMI-2</u> 、 <u>DP-1</u> 、 <u>SDI-1</u> 、 <u>HDMI-6</u> 、 <u>CVBS-1</u> 、 <u>HDMI-3</u> 、 <u>HDMI-4</u> 、 <u>DP-2</u> 、 <u>SDI-2</u> 、 <u>HDMI-7</u> 、 <u>CVBS-2</u> 、 <u>HDMI-5</u> 、 <u>DP-3</u>	A63 contains 5 input cards, identified as: In-A 、 In-B 、 In-C 、 In-D and In-E . In-A 、 In-B can access 4K or 2K signal, In-C only support 4K2K signal, In-D 、 In-E support 2K signal. Press corresponding button to select input channel for each input card, if selected channel have valid signal, button light indicator on, or else, light indicator flicker
	<u>PIP In-D</u> 、 <u>PIP In-E</u>	In-D、In-E card support PIP/POP(dual image) function. Press this button directly, button indicator will light up, PIP/POP function will be activated for associated input card. Henceforth, select the sub-image signal.
Multi-win operation button	<u>Win-1</u> 、 <u>Win-3</u> 、 <u>Win-4</u> 、 <u>Win-2</u> 、 <u>Win-5</u> 、 <u>Win-6</u>	Window selection button. A63 provides 6 windows display simultaneously, identified as Win1、Win2、Win3、Win4、Win5、Win6. In CfgM0 , user just configure Win2、Win5 and Win6 essentially
	<u>Fade-In</u> 、 <u>Fade-Out</u>	<u>Fade-Out</u> , assign window on top; <u>Fade-In</u> , assign window at bottom. In CfgM0 , both buttons are invalid
Lock Info button	<u>Lock</u>	Button lock. When this button light up, all button will be invalid except <u>Lock</u> button itself, hence avoid misoperation. Press this button 3 times continually to exit button lock mode, button indicator will light off.
	<u>Info</u>	Information button, display A63 configuration data and software version etc, press this button to turn page. In Cascading mode, when slave A63 GenLock successfully locked, Info button light up, or else flicker

Category	Buttons	Description
Menu setup button	Setup	Menu button. When A63 in operation mode, press this button to enter menu setup
	 Ok	Knob button, rotate this button to change configuration value or press this button to confirm and apply configuration
		Up and Down selection button. After enter menu setup , press this button to select menu item. When A63 in operation mode , press this button directly to adjust output image brightness.
		Return button. Press this button to exit present menu and return to previous menu, until A63 exit menu setup and enter operation mode .
Display mode select button	DM-0 、 DM-1 、 DM-2	Display mode selection button. Preset display mode parameters include: <i>window composition, window signal source, window overlay sequence, window size&position</i> , In operation mode , press DM-0 、 DM-1 、 DM-2 to switch different display mode; In menu setup mode , press DM-0 、 DM-1 、 DM-2 so as to save present setup parameters automatically at target mode.
	DM+	Extended display mode selection button, press this button to enter more preset mode selection menu, the menu includes: DM0、DM1、DM2、DM3、DM4、DM5、DM6、DM7、DM8、DM9、DM10、DM11. Select target display mode by pressing  、  button.
	TAKE	When A63 in switcher mode(CfgM0), " Preselect+TAKE " switching is available. In Take switching mode, user can quickly switch display mode between main output(Out B) and preview output(Out A) without latency.

2. Back Panel Port Description



1) Input signal port

A63 can build in 5 input cards utmost:

- In-A、In-B is 4K input card, each card contains HDMI2.0×2 and DP1.2×1, support 4K2K_60Hz UHD Signal and 2K HD signal access in
- In-C is 4K input card, contains HDMI2.0×1 and DP1.2×1, only support 3840*2160_60/50/30/25/24 Hz UDH signal
- In-D、In-E is 2K input card, each card consists of CVBS×1、3G-SDI×1、HDMI (DVI / VGA) ×1, HDMI version is 1.3. HDMI input port is compatible with DVI、VGA signal, when access in VGA signal, set the DIP switcher to VGA side.

2) Output signal port

- **A63** provides 2 HDMI output port, identified as OUT-A、OUT-B. Both ports support output resolution 3840*2160_60Hz or 3840*2160_50Hz
- **In configuration mode 0 (CfgM0)**, Out-A is preview output, Out-B is main output

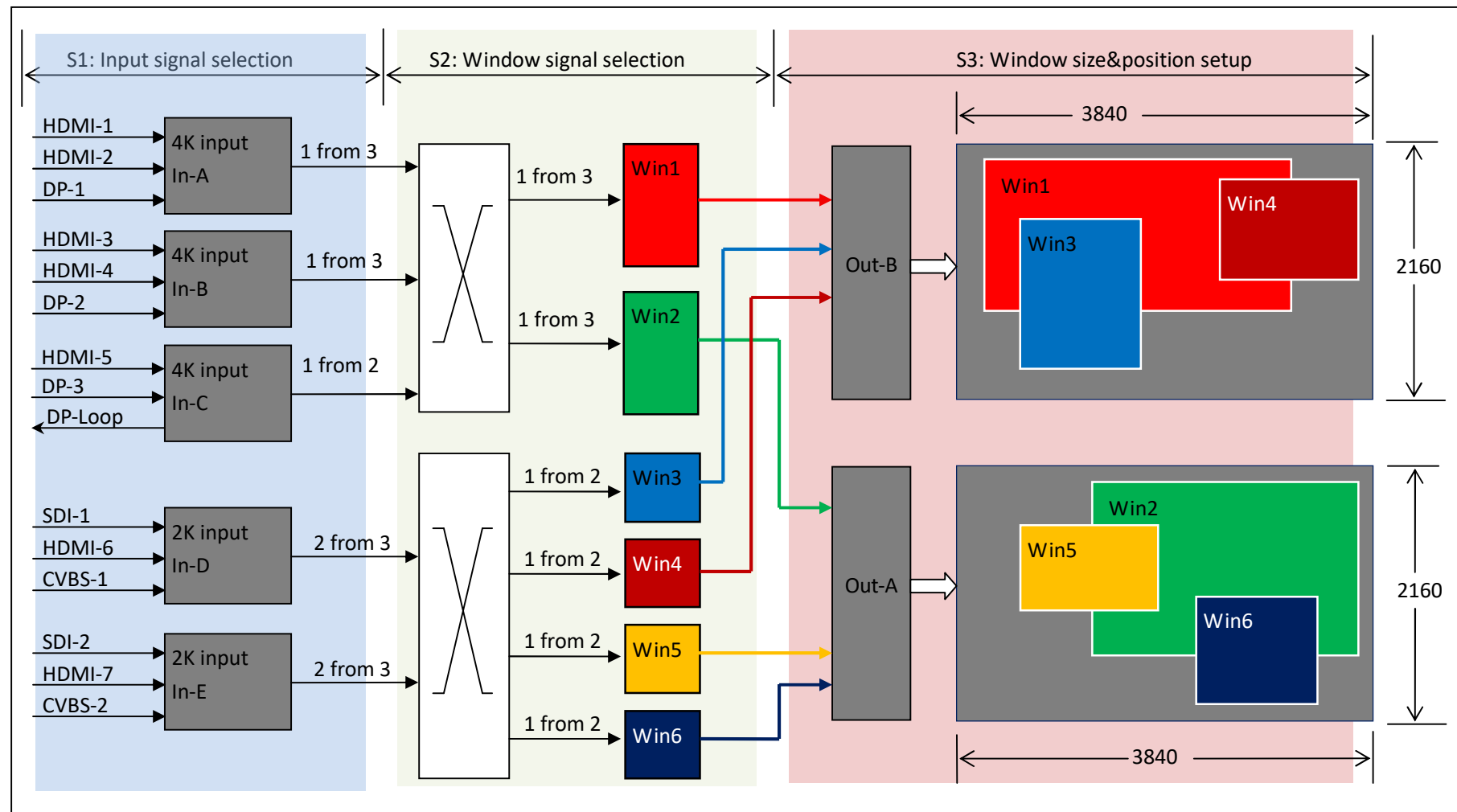
3) Communication port

- LAN: TCP / IP Ethernet control port
- USB and RS232 control port

4) GenLock Cascading port

- A63 support multi-device cascading, realize extended input and output resolution driving
- In cascading mode, slave A63 receive synchronous command from master A63 VIA GenLock In port, master A63 send out synchronous command VIA GenLock Out port .
- A63 provides Out-1、Out-3、Out-3、Out-4 total 4 GenLock output, supports 5 device cascading.

3. In CfgM0 Mode, A63 Image Processing Procedure



Description:**1) A63 image processing procedure is divided into 3 main steps:**

- S1: Select input signal channel for input card
- S2: Select signal source for Multi-window
- S3: Adjust size&position of Multi-window

2) Select input signal channel for input card (S1)**2.1) A63 contains 3 types of input card:**

- 4K input card: In-A 、In-B
- 4K direct input card: In-C
- 2K input card: In-D、In-E

2.2) In-A support both 4K and 2K input, select one channel from HDMI-1、HDMI-2 or DP-1 for In A

2.3) In-B support both 4K and 2K input, select one channel from HDMI-3、HDMI-4 or DP-2 for in B

2.4) In-C is direct 4K input, can only access in 3840×2160_60Hz/50 Hz/30 Hz/25 Hz/24Hz/23Hz standard 4K UHD signal, select HDMI-5 or DP-3 for In C

2.5) In-D is 2K input card, can select signal from SDI-1、HDMI-6 or CVBS-1. when open PIP-D, can select one another channel as sub image

2.6) In-E is also 2K input card, can select signal from SDI-2、HDMI-7 or CVBS-2. when open PIP-E, can select one another channel as sub image

2.7) All the signals mentioned above can be selected by A63 front panel button

3) Select signal source for each window (S2)

3.1) A63 supports 6 windows display, identified as: Win1、Win2、Win3 、Win4、Win5 、Win6

3.2) Win1、Win2 can select signal source from In-A、In-B or In-C

3.4) Win3、Win4、Win5、Win6 can select signal source from In-D or In-E

4) Adjust size&position of each window (S3)

4.1) Out – A display Win2、Win5、Win6 image

4.2) Out – B display Win1、Win3、Win4 image

4.3) In **CfgM0** mode, just set Win2、Win5、Win6 image size&position, among which:

- Win2 can randomly set image size&position within 4K2K
- Win6 can set image size&position within 2K2K
- When Win6 is open, Win5 can only set size& position within 2K2K on left side of Win 6
- When Win6 is closed, Win5 can randomly set image size&position within 4K2K

4. Menu Setup

A63 supports 3 configuration mode:

Configuration mode 0 (CfgM0) ----- Switcher mode

Configuration mode 1 (CfgM1) ----- Mosaic mode

Configuration mode 2 (CfgM2) ----- 4 image mode

- Detailed description of 3 configuration mode please refer to
《A63 configuration mode definition》
- When A63 in operation mode, Press **Setup** button to enter setup menu,
press **↑** 、 **↓** and **Setup** enter “8.1 Config Mode”
Rotate **Knob** to select target configuration mode

Then press **↓** button, enter “8.3 Reset Data”, press **OK** to apply,
A63 will automatically reboot and apply the selected configuration mode

- Usually no need change A63 configuration mode unless in essential
- Usually, user need adjust “8.2 Resolution”. A63 provides 2 output resolution:
3840×2160_60Hz、3840×2160_50Hz

When apply “8.3 Reset Data”, all existed configuration data in A63 will be initialized and reset to default values.

- In the following paragraph, we will illustrate **configuration mode 0 (CfgM0)** step by step

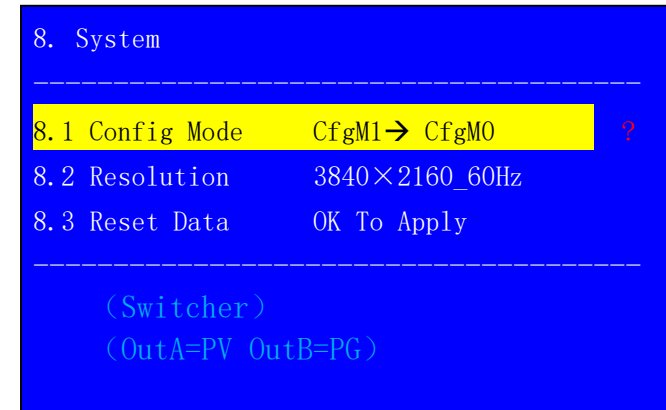


Figure 4-1

(Step1) : Input And Output Signal Connection

- 1.1) Connect input signal to **A63** input card
- 1.2) Connect OUT-B to main display device (LED 4K controller or 4K LCD etc,)
- 1.3) Connect OUT-A to 4K LCD monitor
- 1.4) Usually, system connection as Figure 4-2:

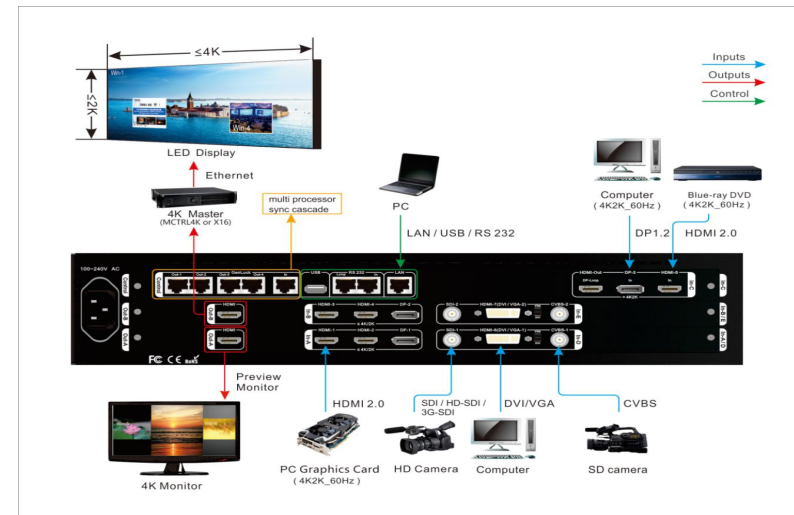


Figure 4-2

(Step2) : PowerOn Processor

- 2.1) A63 power on, wait for boot up
- 2.2) As Figure 4-3, **Configuration mode 0** boot up image
- 2.3) “Win-M4 ” is the window group of current display, Out-A output image is composed of Win2 + Win5 + Win6
- 2.4) Win2 select In-A as signal source
Win5 select In-D as signal source
Win6 select In-D as signal source
- 2.5) “PV=DM1 ” stands for preview (Out-A) , display mode 1 (DM1)
“PG=DM0 ” stands for main output (Out-B) , display mode0 (DM0)

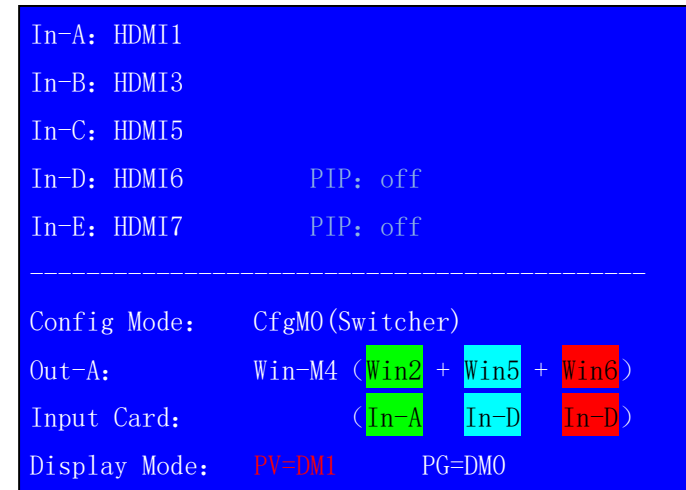


Figure 4-3

(Step3) : Select Input Signal

- 3.1) Press signal selection button to select input signal channel
- 3.2) If selected channel have valid signal, button indicator will light up, or else, button indicator will flicker
- 3.3) If selected signal channel have valid signal, A63 LCD will display the input signal format
- 3.4) Press **PIP In-D** button to activate In-D PIP/POP function, select the sub image signal source for In-D
- 3.5) Press **PIP In-E** button to activate In-E PIP/POP function, select the sub image signal source for In-E

(Step4) : Window Composition Setup

- 4.1) Press **Setup** 、**↓**、**↑** button enter menu **3.1 Win Mode** ”
- 4.2) Press **DM-0** 、**DM-1** or **DM-2** to select target display mode,
As the Figure 4-4, A63 current display mode is “DM-0” ,
Press **M+** button for more display mode
- 4.3) Rotate **Knob** to select display mode
A63 provides 5 multi-window display mode:

Multi-win mode	Window group (PIP or POP)	Remarks
Win-M0	Win2	Win5 /Win6 Off
Win-M1	Win5	Win2/Win6 Off , Win5 can set size&position within 4K2K
Win-M2	Win2 + Win5	Win6 Off, Win5 can set size&position within 4K2K
Win-M3	Win5 + Win6	Win2 Off, Win5 on left side 2K2K, Win6 on right side 2K2K
Win-M4	Win2 + Win5 + Win6	All 3 windows activated, Win5 on left side 2K2K, Win6 on right side 2K2K

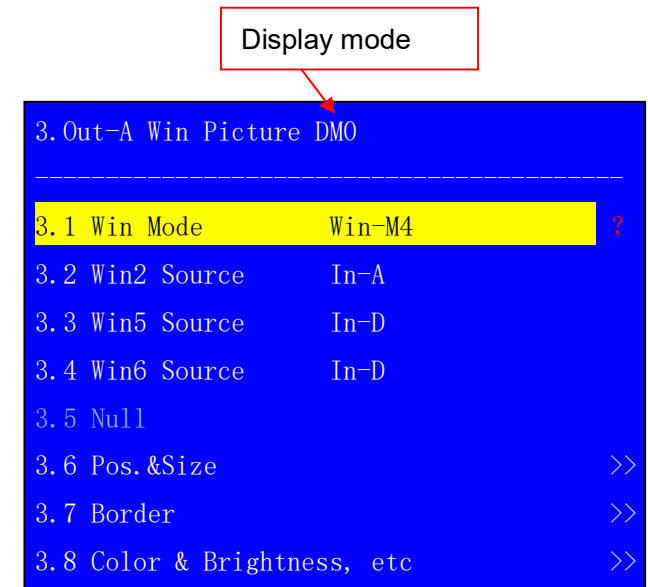


Figure 4-4

(Step5) : Multi-Window Signal Source Selection

- 5.1) Enter menu “3.2 Win2 Source”,
rotate **Knob** to select Win2 signal source
- 5.2) Enter menu “3.3 Win5 Source”,
rotate **Knob** to select Win5 signal source
- 5.3) Enter menu “3.4 Win6 Source”,
rotate **Knob** to select Win6 signal source
- 5.4) All above configuration data is saved in “DM-0” , As Figure 4-5
red frame show, current display mode is “DM0” ,
press **DM-1** 、 **DM-2** or **DM+** button to select other display mode

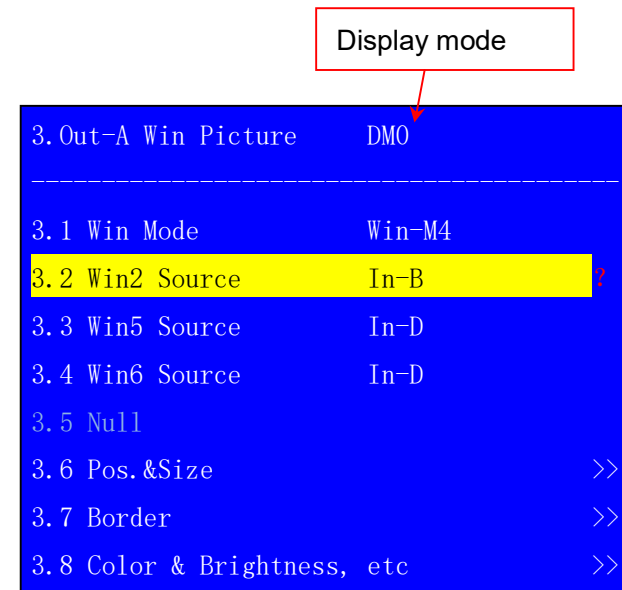


Figure 4-5

(Step6) : Multi-Window Size&Position Setup

- 6.1) A63 in display mode 0 (CfgM0), can adjust Win2、Win5、Win6 size&position
- 6.2) Window position is identified by coordinates, the start point is top left(0.0), position range within 3840×2160, defined as H_Start (Horizontal start), V_Start (vertical start)
- 6.3) window size defined as Width and Height
- 6.4) As Figure 4-6, Win6 size and position setup
- 6.5) Refer to Figure 4-6, Win2 position is (0, 0), size is 3840×2160, whole image display

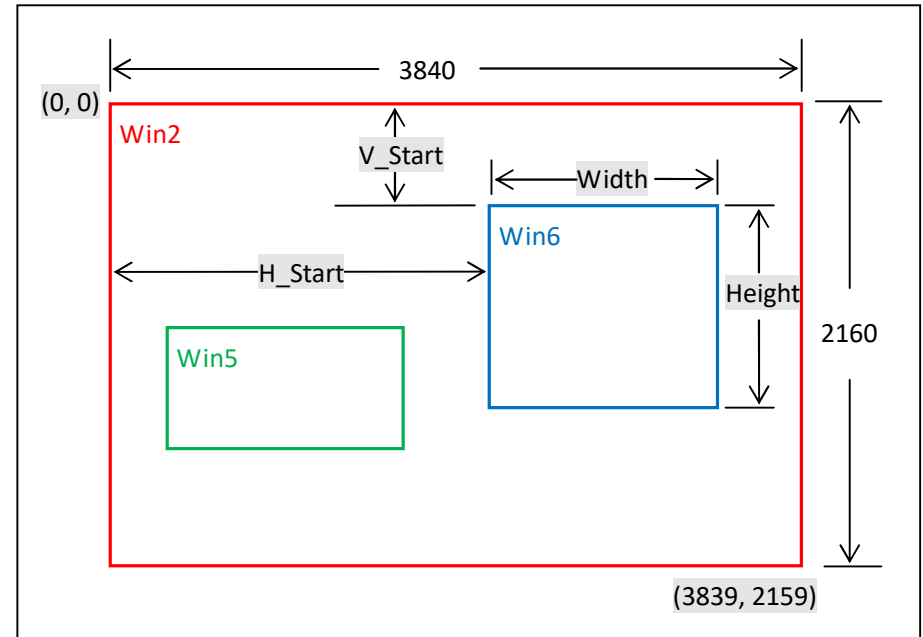


Figure 4-6

- 6.6) Enter menu “**3.6 Pos.&Size**”, as Figure 4-7
- 6.7) press **Win-2**、**Win-5**、**Win-6** button to select target window
(As Figure 4-7: the selected window is Win2)
- 6.8) Press **DM-0**、**DM-1**、**DM-2**、**DM+** to select display mode
As the right picture, the red arrowhead select DM0)
A63 can preset 13 display modes
- 6.9) Enter menu “ **3.6.1 Out Width**”, rotate **Knob** to adjust value,
press **OK** to save setup value
- 6.10) Enter menu “**3.6.2 Out H_Start**”, rotate **Knob** to adjust value,
press **OK** to save setup value
- 6.11) Enter menu “ **3.6.3 Out Height**”, rotate **Knob** to adjust value,
press **OK** to save setup value
- 6.12) Enter menu “ **3.6.4 Out V_Start**”, rotate **Knob** to adjust value,
press **OK** to save setup value
- 6.13) Repeat procedure 6.7) -6.12) , adjust the other window's size&position (**Win n**)
save more multi-window display mode **DM-n**

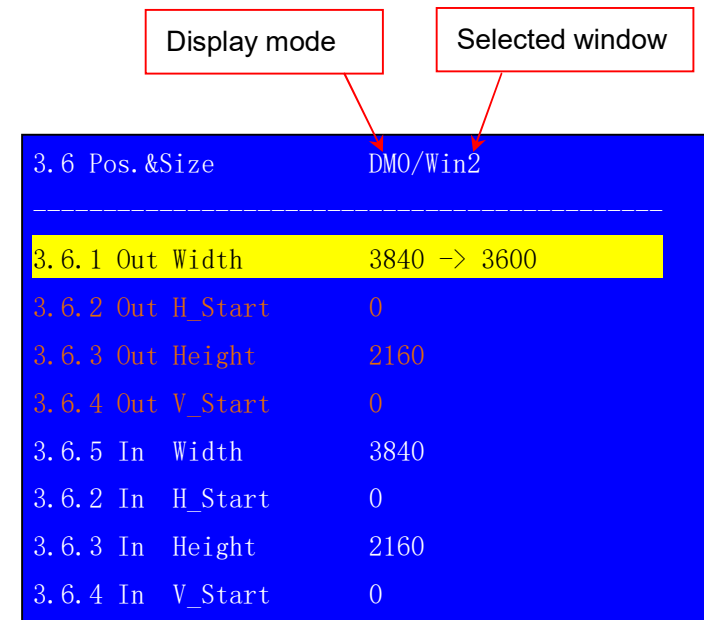


Figure 4-7

(Step7) : Input Signal Image Cropping

7.1) Win2 can arbitrarily crop 4K2K input image at any size&position

7.2) As the Figure4-8, the input image size in red frame is 3840×2160, the size&position of cropped image in red dot frame are defined by the following 4 parameters:

Input width	(In_Width)
Input horizontal start	(In_H_Start)
Input height	(In_Height)
Input vertical start	(In_V_Start)

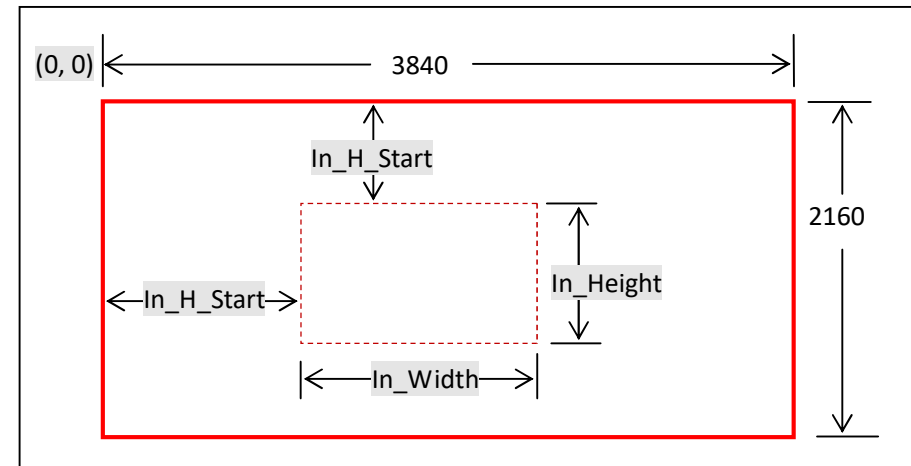
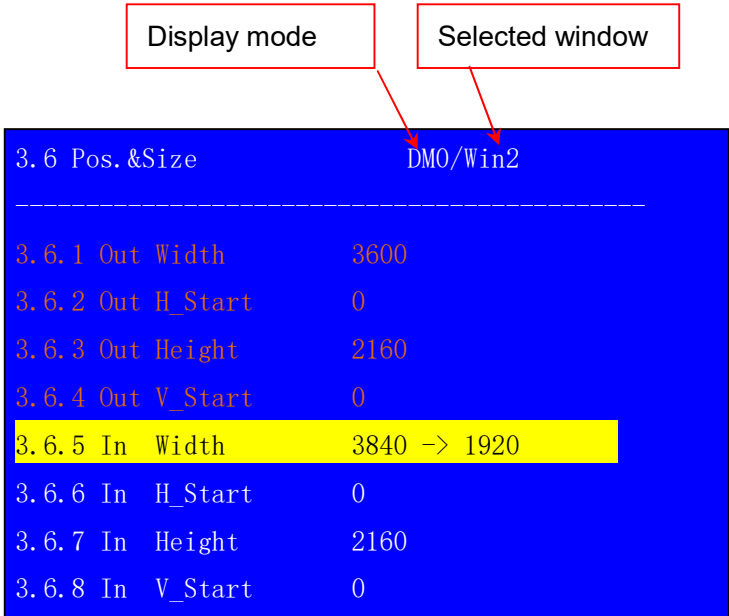


Figure 4-8

- 7.3) Enter menu “3.6 Pos.&Size”, as Figure 4-9
- 7.4) Press **Win2** button to set target window, (as the Figure 4-9: win2)
A63 can crop any size&position of input signal
- 7.5) Press **DM-0**、**DM-1**、**DM-2**、**DM+** to select the target preset mode,
all parameters will be automatically saved in this mode
(As the right picture, the selected mode is DM0)
A63 can preset maximum 12 display modes
- 7.6) Enter menu “3.6.5 In Width”, rotate **Knob** to adjust value,
press **OK** to save setup value
- 7.7) Enter menu “3.6.6 In H_Start”, rotate **Knob** to adjust value,
press **OK** to save value
- 7.8) Enter menu “3.6.7 In Height”, rotate **Knob** to adjust value,
press **OK** to save value
- 7.9) Enter menu “3.6.8 In V_Start”, rotate **Knob** to adjust value,
press **OK** to save value
- 7.10) Repeat procedure 7.5) -7.9) , adjust the other window size&position (**Win-n**)
save more multi-window display mode **DM-n**



3.6 Pos.&Size		DM0/Win2

3.6.1 Out Width	3600	
3.6.2 Out H_Start	0	
3.6.3 Out Height	2160	
3.6.4 Out V_Start	0	
3.6.5 In Width	3840 -> 1920	
3.6.6 In H_Start	0	
3.6.7 In Height	2160	
3.6.8 In V_Start	0	

Figure 4-9

5. A63 Display Mode Operation

(1) A63 Display Mode Switching

The main operation to A63 is Display Mode switching in switcher mode

1.1) “Seamless switching” operation illustration

- Press button **DM-0**、**DM-1**、**DM-2**， Out-A and Out-B will instantly apply new display mode without latency. Out-B is main output， Out-A is preview output
- Press **DM+** button for more display mode selection， press **↑**、**↓** button to select DM0、DM1、DM2、DM3、DM4、DM5、DM6、DM7、DM8， then press **OK** button to apply the selected mode, Out-A and Out-B will apply the new display mode without latency.

1.2) “Preselect+TAKE” switching:

- Directly press **DM-0**、**DM-1** or **DM-2** button， preview Out-A will instantly apply the new display mode
- Or press **DM+** button for more display mode selection， press **↑**、**↓** button to select DM0、DM1、DM2、DM3、DM4、DM5、DM6、DM7 or DM8， then press **OK** button to apply the selected mode, Out-A will apply the new display mode.
- Finally， press “**TAKE**” button， Out-B will shift to Out-A(preview) without latency or image cracking. **Take** switching provides seamless and Fade in/Fade out switching effect, user may enter menu “**6. Switch Time**” for switching duration setup.

(2) Display Mode Duplication

- Display mode can preset parameters that consists of window composition、signal source and overlay sequence
- A63 in switcher mode, usually need preset several display modes. Refer to chapter [4 Menu Setup](#) to configure different display mode. In pursuit of fast save and apply new display mode, we may use mode duplication function to copy current DM to target DM, then modify current mode efficiently
- Press **DM+** and **↑** 、 **↓** button, select “ *Source Mode DM0* ”, rotate **Knob** to select source mode
- Press **↓** button, enter “ *Destination mode DM1* ”, rotate **Knob** to select destination mode
- Press **↓** button, enter “ *Copy OK To Apply* ”, press **OK** button, mode duplication accomplish
- Source Mode and Destination Mode can be selected from DM0-DM11, be aware that DM9-DM11 as backup mode can't be edited directly, but permit being modified by duplication, hence to avert important display mode destroyed by mis-operation