

# CP803 Multi Format Video Processor

## Operation Manual

Version number : V1.01.01

March .2015

### Safety Reminder

To protect the equipment and operating personnel from electrostatic discharge, you should check and ensure it is properly grounded before powering on. Please observe the following before you install, operate or perform maintenance.

Ensure equipment is properly grounded

Ø Please use single-phase three wire system AC 220V power supply, and ensure all transmission system is properly grounded.

Ø For the safety of operating personnel and the equipment, please turn off all power supplies and remove the plug before moving or performing physical task. Turn off main power switch on rainy days or when not in use for a long period of time.

Ø Please do not obstruct cable being plugged on the equipment, it should be properly tied

and managed.

Ø To avoid damaging the equipment, please turn off power supply before plugging or removing power cable from equipment.

Ø When equipment in operation, it will dissipate heat. Please keep the working environment at normal temperature by providing good ventilation, so as not to damage equipment or cause malfunction.

Ø Do not store the equipment under extreme cold or hot environment. Chemical or liquid in the vicinity of the equipment should not be exposed.

Ø Non professionals without authorized, do not attempt to open the box, or repair.

## **1. Product Introduction**

CP803 is a high performance multi format video processor. It allows user to switch seamlessly with any types video input and display on a single screen. Designed with robust high processing technology, it allows user to manipulate main and picture in picture through pixel by pixel adjustment on its size and positioning, therefore eliminate the concerns on fitting customized resolutions. Switching effect such as fading and cutting with adjustable transitions timing, 0s increment of 0.5s till 1.5s is achievable to fit customer requirement. Application: Large LED video wall, command control centre and many more.

## **2. Product Index**

- a. DVI input, supports VESA standards up to 1920x1200@60Hz
- b. HDMI input, 480i/p, 676i/p, 720p, 1080i/p
- c. VGA input, supports VESA standards up to 1920x1200@60Hz
- d. Video input, PAL, NTSC, PAL-M/N, SECAM
- e. Color depth rate 8, 10, 12 bits

## **1. Product Features**

- a. Inputs: Composite video (x3), VGA (x2), DVI (x1), HDMI (x1)
- b. Outputs: Simultaneous DVI (x2), VGA (x1)

- c. Adjustable switch time: 0s, 0.5s, 1s, 1.5s
- d. Pixel to pixel adjustment: up to 2560 horizontal pixels
- e. Pixel to pixel adjustment: up to 1920 vertical pixels
- f. Preset resolution: Predefined 20 sets
- g. User preset: User defined 4 sets, saved custom resolution
- h. Signal availability detection capability
- i. Main picture: adjustable width, height, position
- j. Picture in picture: adjustable width, height, position and transparency
- k. Image turn off and freeze capability
- l. Image zoom technology: 64 to 2560 pixel outputs
- m. Auto brightness and color adjustment
- n. Ability to store parameters and configuration settings after long power disconnection
- o. 34 gamma rate, capable to suits different environment
- p. Built with ACC and ACM image filter technology for color fidelity

## 1. Specification

<b>Model:</b>	CP803	
<b>Descriptions:</b>	Multi Format Video Convertor	
<b>Supported Resolution :</b>		
<b>Input Interface:</b>	CVBS (x3), DVI (x2), HDMI (x1), VGA (x2)	
<b>Output Interface:</b>	Simultaneous Output: DVI (x2), VGA (x1)	
<b>Video Format :</b>	PAL/NTSC/PAL-M/N/SECAM	
<b>Protection:</b>	± 8kV (Air gap discharge) ± 4kV (Contact discharge )	
<b>Input Voltage:</b>	100-240 VAC, 50-60Hz	
<b>Control:</b>	Front control panel, RS232	
<b>Video Impedance:</b>	1V ( p_p ) / 75Ω	
<b>VGA Format:</b>	PC (VESA)	<2048x1152@60Hz

<b>VGA Impedance:</b>	R、 G、 B = 0.7 V ( p_p ) / 75Ω	
<b>DVI Format:</b>	SD/HD ( CEA -861 )	≤1920x1080P @60Hz
	PC ( VESA )	≤2304x1152 @60Hz
<b>HDMI Format:</b>	SD/HD ( CEA -861 )	≤1920x1080P @60Hz
	PC ( VESA )	≤2304x1152 @60Hz
<b>Physical Dimension (WxDxH) in mm :</b>	484 x 280 x 60	
<b>Weight :</b>	3.0Kg	
<b>Humidity Temperature :</b>	15 - 85%	
<b>Power:</b>	35W	

## 2. Package List

Please check package before using this product. Do contact us if the product is found faulty or not intact.

No.	Description	Quantity	Unit
1	CP803 Processor	1	Pcs
2	Power Cable	1	Pcs
3	Operation Manual	1	Pcs

## 3. Function Description

### 6.1 Device Connection

- a. The CP803 has 8 inputs (HDMI x1, DVI x2, VGA x2, Composite x3). Connect the source (e.g. DVD player) to these inputs.
- b. The CP803 has 3 simultaneous outputs (DVI x1, VGA x2). Connect the display to these outputs. (Note: DVI and VGA outputs are the same output, act as redundancy).
- c. Connect straight serial cable to CP803 if required to control via RS232 commands.

- d. Connect the supplied power cord to the processor.
- e. Refer to figure below for connectivity illustrations. (See figure 6.1-1)

Figure 6.1-1

## 6.2 Front Panel

Controlling the CP803 is through the front panel buttons made the video processor user friendly. Source inputs and image manipulation can be managed from the front panel interface. (See figure 6.2-1)

Figure 6.2-1

Interface	Descriptions
1	LCD Display. Shows the current configuration and setup information.(LCD Resolution 128x64)
2	Input Buttons. Select input, freeze, black screen, VGA automatic adjustment
3	Menu Buttons
4	Function keys: Display mode, restore default, PIP, Switch effect

## 6.3 Front Panel (Inputs)

- When depressed, LED flash about 1s
- If LED keeps flashing, indicate input signal is not detected
- If LED remains lighted up, indicate input signal is active

- AV1, AV2, AV3 button: Composite or CVBS input selection
  
- VGA1, VGA2 button: VGA input selection
  - Press VGA1 to select VGA input 1
  - Press VGA2 to select VGA input 2
  - Press “VGA1” again to perform automatic image correction, this is also known as “AUTO”
  
- DVI, HDMI button: Full HD or HD input selection
  
- TEST button: Test pattern generator (10 test patterns for image test)
  
- Black button: To display black or freeze screen

#### **6.4 Front Panel (Menu Button)**

- Menu button: Access the menu, this also act as the “ENTER” key
  - a. Press MENU button to navigate
  
- Exit button: Exit or move to previous menu
  
- “↑” button: Navigate the menu through “↑” button
  - a. Press menu
  - b. Press “↑” to navigate bottom menu
  
- “↓”button: Navigate the menu through “↓”button
  - a. Press menu
  - b. Press “↓”to navigate top menu

- “←”button: Decreasing parameters.
  - a. Press menu
  - b. Navigate to menu
  - c. Press “←”to decrease parameters
  - d. If in Default Menu, Press “←”to decrease brightness
  
- “→”button: Increasing parameters
  - a. Press menu
  - b. Navigate to menu
  - c. Press “→”to increase parameters
  - d. If in Default Menu, Press “←”to increase brightness

## **6.5 Front Panel (Function Buttons)**

- CROP button: Remove of outer part of an image and adjustment  
(More details in section 7.9)
  
- FULL button: Full display mode. In normal circumstances, image will fill the entire display, if it does not, utilize this button
  
- PRESET button: To save and load present  
(More details in section 7.15)
  
- PIP button: Enable Picture In Picture mode  
**When this mode is active, BLACK, CUT & FADE effect will be disabled**  
(More details in section 7.10)
  
- CUT & FADE button: Video or images transitioning effects

## 6.6 Rear Panel

Connectivity of the CP803 rear interface is described below. (See figure 6.3-1)

Figure 6.3-1

Interface	Descriptions
1	Composite Video inputs (x3).
2	DVI loop output. Connect this to local monitor.
3	DVI input (x2), HDMI input (x1), VGA input (x2).
4	VGA output (x1), DVI output (x2).
5	RS232 interface. For the purposes of 3 <sup>rd</sup> party controller, programming
6	AC power interface. Connect the power cord to this location.

## 6.7 Input Interface

The video processor accepts analog, digital and 3G signals inputs. (See figure 6.7-1)

Figure 6.7-1

- AV1, AV2 Analog Input: Composite analog input via BNC interface, supports PAL, PAL-M/N, NTSC and SECAM standards
- DVI Digital Input: Digital input via DVI-I interface, supports DVI-D and VESA standards
- HDMI Digital Input: HDMI input via HDMI-A interface, supports HDMI 1.3 and VESA standards
- VGA1, VGA2 Analog Input: VGA analog input via DB15pin interface, supports PAL, PAL-

M/N, NTSC and SECAM standards

## **6.8 Output Interface**

The video processor accepts analog and digital outputs. (See figure 6.8-1)

Figure 6.8-1

- VGA Out, DVI 1, DVI 2 Output: Supports 3 simultaneous output from VGA and DVI. VGA out is normally used for local monitor output.

- **Operation**

### **7.1 Menu Tree**

Navigate the functions through the “MENU” button.

- a. Press menu
- b. Press ↑,↓,←,→ to navigate
- c. To quit, press menu to return to Default Menu

Figure 7.1-1

### **7.2 Default Menu**

Once the processor is power up, the LCD will show the default menu.

(See below figure 7.2-1)

Figure 7.2-1

Default Menu will show information of current setting. (See figure 7.2-2)

Figure 7.2-2

INPUT : Display signal input type and detect presence

OUTPUT : Display signal output type and detect presence

MODE : Display full screen

BRIGHTNESS : Degree of brightness

PIP MODE : Display ON or OFF

### **7.3 Main Menu**

Once the "MENU" button is pressed, it will show the following. (See figure 7.3-1).

Figure 7.3-1 Output (Description)

There are 2 way to adjust the output resolutions. Refer to the specification of fixed resolutions that were supported by the processor. Customized resolutions can be made through the user define output resolutions.

### **7.4 Output (Resolution)**

- OUTPUT: Adjust output resolutions
  - a. Press MENU
  - b. Select OUTPUT
  - c. Select Output Resolution
  - d. MENU → OUPUT → OUTPUT RESOLUTION → Confirm

### **7.5 Output (User Define Resolution)**

- OUTPUT: Adjust user define output resolutions
  - Using this mode will not increase the native (original) resolutions**
  - a. Press MENU

- b. Select OUTPUT
- c. Select Output Resolution
- d. MENU → OUPUT → User Define Output Resolutions
  - o Width
  - o Height
  - o Horizontal starting point
  - o Vertical starting point

## **7.6 Output (Test Pattern)**

There are 2 ways to utilize the test pattern.

- Through front panel button
- Through the MENU

Access through front panel:

- a. Press "TEST" twice
- b. Press ↑ or ↓ to chose test pattern

**When this mode is activated, PIP effect is disabled.**

Access through MENU:

- a. MENU → OUTPUT → TEST PATTERN → 100%color

**When this mode is activated, PIP effect is disabled.**

## **7.7 Language**

- LANGUAGE: Select language
  - a. Press MENU
  - b. Select LANGUAGE
  - c. MENU → LANGUAGE → Chinese or English

## **7.8 Splice (Configure LED Video Wall)**

- **SPLICE:** Use this mode to configure LED video wall. The processor is able to fit pixel to pixel of a customize resolutions.

**If this mode is activated, switching effect for CUT and FADE will be disabled.**

Scenario: we have the below LED video wall configurations.

Equipment Description	Specification	Resolution
LED Panel	P3.9	128x128
LED Video Wall	20x16 LED Panel	2560x2048
LED Transmitter Card	N/A	Support 1280x1024
LED Video Wall Processor	Video Wall Processor	Support 2304x1152

Referred to above requirement, we will require 4 sets of CP803 to configure the LED Video Wall, respectively L1, L2, L3 and L4.

**Operating Steps For L1:**

- a. Setup Output Resolution

Set to 1280x1024/60

MENU → OUTPUT → RESOLUTION → 1280x1024/60

- b. Setup SPLICE

MENU → SPLICE → DISPLAY MODE → SPLICE

MENU → SPLICE → SPLICE MODE → PATTERN

MENU → SPLICE → SPLICE → SYNCHRONIZE → ON

MENU → SPLICE → STITCHING SETTING → HORIZONTAL SPLICE → 2

MENU → SPLICE → STITCHING SETTING → VERTICAL SPLICE → 2

MENU → SPLICE → STITCHING SETTING → SPLICE START POSITION → 1

### Operating Steps For L2:

a. Setup Output Resolution

Set to 1280x1024/60

MENU → OUTPUT → RESOLUTION → 1280x1024/60

b. Setup SPLICE

MENU → SPLICE → DISPLAY MODE → SPLICE

MENU → SPLICE → SPLICE MODE → PATTERN

MENU → SPLICE → SPLICE → SYNCHRONIZE → ON

MENU → SPLICE → STITCHING SETTING → HORIZONTAL SPLICE → 2

MENU → SPLICE → STITCHING SETTING → VERTICAL SPLICE → 2

MENU → SPLICE → STITCHING SETTING → SPLICE START POSITION → 2

### Operating Steps For L3:

a. Setup Output Resolution

Set to 1280x1024/60

MENU → OUTPUT → RESOLUTION → 1280x1024/60

b. Setup SPLICE

MENU → SPLICE → DISPLAY MODE → SPLICE

MENU → SPLICE → SPLICE MODE → PATTERN

MENU → SPLICE → SPLICE → SYNCHRONIZE → ON

MENU → SPLICE → STITCHING SETTING → HORIZONTAL SPLICE → 2

MENU → SPLICE → STITCHING SETTING → VERTICAL SPLICE → 2

MENU → SPLICE → STITCHING SETTING → SPLICE START POSITION → 3

### Operating Steps For L4:

a. Setup Output Resolution

Set to 1280x1024/60

MENU → OUTPUT → RESOLUTION → 1280x1024/60

b. Setup SPLICE

MENU → SPLICE → DISPLAY MODE → SPLICE

MENU → SPLICE → SPLICE MODE → PATTERN

MENU → SPLICE → SPLICE → SYNCHRONIZE → ON

MENU → SPLICE → STITCHING SETTING → HORIZONTAL SPLICE → 2

MENU → SPLICE → STITCHING SETTING → VERTICAL SPLICE → 2

MENU → SPLICE → STITCHING SETTING → SPLICE START POSITION → 4

## **7.9 Splice (Full and Crop)**

It is possible to achieve Full mode or Crop mode through SPLICE functions. (See figure 7.9-1)

Figure 7.9-1

### Operating Steps:

- a. Select the input (e.g. DVI)
- b. MENU → SPLICE → DISPLAY MODE → SPLICE
- c. MENU → SPLICE → SPLICE MODE → NO PATTERN
- d. MENU → SPLICE → SPLICE → SYNCHRONIZE → OFF
- e. MENU → SPLICE → STITCHING SETTING → HORIZONTAL PIXELS → 4200
- f. MENU → SPLICE → STITCHING SETTING → VERTICAL PIXELS → 3000
- g. MENU → SPLICE → STITCHING SETTING → HORIZONTAL START POSITION → 0
- h. MENU → SPLICE → STITCHING SETTING → VERTICAL START POSITION → 0

## **7.10 Image (Brightness and Contrast)**

There are 2 ways to adjust the brightness and contrast.

- Through front panel button
- Through the MENU

### Access through front panel:

- a. In Default Menu
- b. Press ← (Decrease) or → (Increase)

### Access through MENU:

- a. Press MENU → IMAGE → BRIGHTNESS → 50
- b. Press MENU → IMAGE → CONTRAST → 50

## **7.11 PIP (Description)**

There are 2 ways to access the PIP mode.

- Through front panel button
- Through the MENU

Access through MENU:

MENU → PIP → PIP Mode → PIP

**When this mode is activated, cut and fade effect is disabled.**

**7.12 PIP (Input Select)**

Input Select:

MENU → PIP → PIP Setup → Output Source

**7.13 PIP (Conflict Table)**

PIP Input Conflict Table:

A list of source will conflict between the Main and PIP Channel.

Please note the below table.

Main Channel								
	AV1	AV2	AV3	VGA 1	VGA2	DVI		HDMI
PIP Channel	AV1		x	x	√	√	√	√
	AV2	x		x	√	√	√	√
	AV3	x	x		√	√	√	√
	VGA1	√	√	√		x	√	√
	VGA2	√	√	√	x		√	√
	DVI	√	√	√	√	√		x
	HDMI	√	√	√	√	√	x	

**7.14 PIP (Image Setup)**

PIP Image Setup:

- a. MENU → PIP → PIP Setup → HORIZONTAL START POSITION
- b. MENU → PIP → PIP Setup → VERTICAL START POSITION
- c. MENU → PIP → PIP Setup → HORIZONTAL WIDTH
- d. MENU → PIP → PIP Setup → VERTICAL HEIGHT

### **7.15 PIP (Merge Effect)**

Picture in picture mode allows the merging of PIP and Main Channel together.

Below example is merging a power point image and a video image. (See below)

PIP Channel

Main Channel

Merge Effect

#### PIP Merge Setup:

- a. MENU → PIP → PIP Mode → Merge
- b. MENU → PIP → Merge Setup → Input Source → DVI
- c. MENU → PIP → Merge Setup → Key Color → Black

### **7.16 Preset (Save)**

The processor has 4 slots for saving the predefined configuration. It allows user to save and load the presets.

#### Saving Preset:

MENU → Preset → Save Mode → Preset 1 → Confirm

### **7.17 Preset (Load)**

The processor has 4 slots for saving the predefined configuration. It allows user to save and load the presets.

There are 2 ways to load the presets.

- Through front panel button
- Through the MENU

#### Access through front panel:

- a. MENU → Preset
- b. Press ↑ or ↓ to load saved presets

#### Access through MENU:

- a. MENU → Preset

MENU → Preset → Load Preset → (Preset 1 to 4) → Confirm

Switch (Effect)

- SWITCH (Effect): Adjust transition effects
  - a. Press MENU
  - b. Select SWITCH
  - c. Select EFFECT
  - d. MENU → SWITCH → EFFECT (CUT or FADE)

## **7.18 Switch (Fade Time)**

- SWITCH (Fade Time): Adjust fade transition time
  - a. Press MENU
  - b. Select SWITCH
  - c. Select FADE TIME
  - d. MENU → SWITCH → FADE TIME → (0.5s to 1.5s)

## **7.19 Switch (Black & Freeze)**

- SWITCH (Black & Freeze):

Black screen can be activated through the switch manual

**When this mode is activated, PIP mode is disabled.**

  - a. Press MENU
  - b. Select SWITCH
  - c. Select BLACK
  - d. MENU → SWITCH → BLACK

## **7.20 Switch (Preview Switch)**

This function allows user to preview the source before sending to output.

### Preview Switch Operation:

- a. Press FADE or CUT repeatedly
- b. LCD screen show below information

## **7.21 Switch (Pre Cut Operation)**

### Pre Cut Operation:

- a. Select the input source (AV1 to HDMI)
- b. Press FADE or CUT button to switch

**If unable to switch, it will show “invalid channel”, that means channel conflict.**

**Refer to the conflict table of Main channel and PIP channel to prevent conflict.**

### **7.22 System (Panel Lock)**

It is possible to lock the front panel from user who accidentally disrupt the settings.

Access through MENU (To Lock):

- a. Press MENU → SYSTEM → PANEL LOCK → OPEN

Access through MENU (To Unlock):

- a. Press FADE and hold 2s to unlock

### **7.23 System (VGA Input Image Correction)**

The VGA input has the automatic image correction features. It means that when input is plugged in, it automatic fit to the screen.

The VGA button is also known at the “AUTO” button.

Access through front panel (VGA):

- a. Press VGA twice to automatic image correction

Access through MENU:

- a. Press VGA (Select this input)
- b. Press MENU → SYSTEM → VGA Setup → Horizontal Position
- c. Press MENU → SYSTEM → VGA Setup → Vertical Position
- d. Press MENU → SYSTEM → VGA Setup → Clock Level
- e. Press MENU → SYSTEM → VGA Setup → Clock Phase

**If there is no signal detected for VGA, correction cannot be done.**

### **7.24 System (Factory Default)**

- a. Press MENU
- b. Select system

- c. Select restore
- d. MENU → System → RESTORE → Confirm **Communication Protocol And**

## Instruction Code

### 8.1 Serial Setting

- a. Baud rate: 115200
- b. Parity : None
- c. Flow Control : None
- d. Data bits : 8
- e. Stop Bit : 1

**Use a straight RS232 serial cable for connecting CP803 serial port.**

### 8.2 Serial Command (Strings)

Sending command example:

appstest 55 53 XX (Key Value)

appstest 55 53 0 (Stop)

appstest 49 xx(Key Value) Up, down, left, right

appstest 55 53 0 (Stop)

Key Value	Command	Functions
enqueueing=68	appstest 49 68	UP
enqueueing=67	appstest 49 67	DOWN
enqueueing=66	appstest 49 66	EXIT
enqueueing=65	appstest 49 65	RIGHT
enqueueing=64	appstest 49 64	LEFT
enqueueing=63	appstest 55 53 63	PRESET
enqueueing=62	appstest 55 53 62	CORP
enqueueing=61	appstest 55 53 61	FULL
enqueueing=60	appstest 55 53 60	FADE
enqueueing=59	appstest 55 53 59	CUT
enqueueing=58	appstest 55 53 58	PIP
enqueueing=47	appstest 55 53 47	MENU
enqueueing=48	appstest 55 53 48	AV1
enqueueing=49	appstest 55 53 49	AV2
enqueueing=50	appstest 55 53 50	AV3
enqueueing=51	appstest 55 53 51	VGA1

enqueueing=52	appstest 55 53 52	VGA2
enqueueing=53	appstest 55 53 53	DVI1
enqueueing=54	appstest 55 53 54	DVI2
enqueueing=55	appstest 55 53 55	HDMI
enqueueing=56	appstest 55 53 56	TEST
enqueueing=57	appstest 55 53 57	BLACK
enqueueing=0	appstest 55 53 0	停止

Important Note:

- If processor is set to “Black” mode, please exit or else commands cannot be execute.
- Please send “appstest 55 53 0” first before sending a new string.

### 8.3 Serial Command (HEX)

For example to send “UP” command:

08 11 01 00 00 00 35 B1 08 11 02 00 00 00 44 A1 04 12 37 B3

Command	Function	Command	Function
08 11 01 00 00 00 35 B1 08 11 02 00 00 00 44 A1 04 12 37 B3	UP	08 11 01 00 00 00 35 B1 08 11 02 00 00 00 30 B5 04 12 37 B3	AV1
08 11 01 00 00 00 35 B1 08 11 02 00 00 00 43 A2 04 12 37 B3	DOWN	08 11 01 00 00 00 35 B1 08 11 02 00 00 00 31 B4 04 12 37 B3	AV2
08 11 01 00 00 00 35 B1 08 11 02 00 00 00 42 A3 04 12 37 B3	EXIT	08 11 01 00 00 00 35 B1 08 11 02 00 00 00 32 B3 04 12 37 B3	AV3
08 11 01 00 00 00 41 A5 04 12 31 B9	RIGHT	08 11 01 00 00 00 35 B1 08 11 02 00 00 00 33 B2 04 12 37 B3	VGA1
08 11 01 00 00 00 40 A6 04 12 31 B9	LEFT	08 11 01 00 00 00 35 B1 08 11 02 00 00 00 34 B1 04 12 37 B3	VGA2
08 11 01 00 00 00 35 B1 08 11 02 00 00 00 3F A6 04 12 37 B3	PRESET	08 11 01 00 00 00 35 B1 08 11 02 00 00 00 35 B0 04 12 37 B3	DVI1
08 11 01 00 00 00 35 B1 08 11 02 00 00 00 3E A7	CORP	08 11 01 00 00 00 35 B1 08 11 02 00 00 00 36 AF	DVI2

04 12 37 B3		04 12 37 B3	
08 11 01 00 00 00 35 B1 08 11 02 00 00 00 3D A8 04 12 37 B3	FULL	08 11 01 00 00 00 35 B1 08 11 02 00 00 00 37 AE 04 12 37 B3	HDMI
08 11 01 00 00 00 35 B1 08 11 02 00 00 00 3C A9 04 12 37 B3	FADE	08 11 01 00 00 00 35 B1 08 11 02 00 00 00 38 AD 04 12 37 B3	TEST
08 11 01 00 00 00 35 B1 08 11 02 00 00 00 3B AA 04 12 37 B3	CUT	08 11 01 00 00 00 35 B1 08 11 02 00 00 00 39 AC 04 12 37 B3	BLACK
08 11 01 00 00 00 35 B1 08 11 02 00 00 00 3A AB 04 12 37 B3	PIP	08 11 01 00 00 00 35 B1 08 11 02 00 00 00 00 E5 04 12 37 B3	STOP
08 11 01 00 00 00 35 B1 08 11 02 00 00 00 2F B6 04 12 37 B3	MENU		

Important Note:

- a. If processor is set to "Black" mode, please exit or else commands cannot be execute.
- b. Please send "appstest 55 53 0" first before sending a new string.

## 8. Troubleshooting

### 9.1 Frequently Asked Questions

- a. **No image on the LCD and buttons does not lit up**

Solution: Check and ensure power is properly connected and switch is turned on.

- b. **Panel LCD screen display but does not display any output**

Solution: Check if the correct signal is connected, the resolutions and refresh rate that processor supports. If none of these help, perform factory default restoration.

c. **VGA input does not fill up entire screen**

Solution: Check VGA cable length whether is too long, press "AUTO" (VGA1 or VGA2) button, enter MENU → SYSTEM → VGA Setup for adjustment.

d. **HDMI/DVI output does not fill up entire screen**

Solution: Reconfigure output resolution, check PC or source output match resolutions, desktop wall paper is too small.

e. **Splice on LED Video Wall is not complete**

Solution: Reconfigure output resolution, reconfigure LED system software, turn off LED system built in player, reload LED module sequence

f. **Accidental Damage**

Please send to us for repair or analysis.

Conditions applies, please refer to warranty terms and conditions.

## **10. Warranty And Maintenance**

### **1.1. Maintenance**

Clean the equipment using a soft and dry cloth. Use of alcohol, paint thinner or gasoline is prohibited. Liquid or chemicals should not be exposed in the vicinity of the equipment. Without user processing component, all service and repair related matters, please contact seler or other authorized distributors.

### **1.2. Warranty Information**

12 yers

# 11 Appendix

## 11.1 Version Information

<b>Description of version</b> ( Document number : CP803 )		
<b>Date</b>	<b>Version number</b>	<b>Description</b>
March 2015	V1.01.01	First version