1.RS-232 Command:

Baudrate：115200

Data width：8bit

Parity: none

Stop: 1bit

Port switch command package length is 18byte:

[0x50+0x56+0x54+0x02+0x03+**inputport(1~5)**+0x00+0x01+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+**checksum**]

All you need to change is just “input port” , ”checksum”

Checksum=0x100–(0x50+0x56+0x54+0x02+0x03+**inputport(1~5)**+0x00+0x01+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00)

inputport(1~5): HDMI 1, HDMI 2, HDMI 3, HDMI 4, VGA

For example: Set output form input 2 command:

50 56 54 02 03 02 00 01 00 00 00 00 00 00 00 00 00 02

Port switch query package length is 18byte:

This is a query command which mean you must send query package and then receive an answer.

For example: Query output

Send package: 50 56 54 02 01 01 00 00 00 00 00 00 00 00 00 00 00 FE

Receive package: 50 56 54 02 01 01 00 02 00 00 00 00 00 00 00 00 00 00

The blue 02 mean the input port number, it should be 1~5.

Input auto configure package length is 18byte:

[0x50+0x56+0x54+0x24+0x01+**InputAutoON/OFF**+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+**checksum**]

All you need to change is just “**InputAutoON/OFF**”,, ”checksum”

For example: Set Input Auto OFF command:

50 56 54 24 01 F0 00 00 00 00 00 00 00 00 00 00 00 0F

Input auto query package length is 18byte:

This is a query command which mean you must send query package and then receive an answer.

For example: Query input auto

Send package: 50 56 54 24 02 00 00 00 00 00 00 00 00 00 00 00 00 20

Receive package: 50 56 54 24 02 F0 00 00 00 00 00 00 00 00 00 00 00 10

The blue F0 mean input auto OFF, if 0F mean input auto ON;

Aspect ratio configure package length is 18byte:

[0x50+0x56+0x54+0x24+0x11+**AspectRatioIndex**+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x0

0+0x00+**checksum**]

All you need to change is just "**AspectRatioIndex**",, "checksum"

For example: Set Aspect Ratio 4:3 command:
50 56 54 24 11 01 00 00 00 00 00 00 00 00 00 00 30

Aspect ratio query package length is 18byte:

This is a query command which mean you must send query package and then receive an answer.
For example: Query Aspect ratio
Send package: 50 56 54 24 12 00 00 00 00 00 00 00 00 00 00 00 00 30
Receive package: 50 56 54 24 12 01 00 00 00 00 00 00 00 00 00 00 00 31

The blue 01 mean Aspect ratio 4:3, if 02 mean Aspect ratio 16:9;

Enable Beep configure package length is 18byte:

[0x50+0x56+0x54+0x06+0x01+**EnableBeepON/OFF**+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+**checksum**]

All you need to change is just "**EnableBeepON/OFF**",, "checksum"

For example: Set Enable Beep OFF command:
50 56 54 06 01 F0 00 00 00 00 00 00 00 00 00 00 F1

Enable Beep query package length is 18byte:

This is a query command which mean you must send query package and then receive an answer.
For example: Query Enable Beep
Send package: 50 56 54 01 0B 00 00 00 00 00 00 00 00 00 00 00 06
Receive package: 50 56 54 01 0B 00 00 FF 00 00 00 00 00 00 00 00 05

The blue FF mean Enable Beep OFF, if 00 mean Enable Beep ON;

Resolution configure package length is 18byte:

[0x50+0x56+0x54+0x0A+0x06+**resolution(1~13)**+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+**checksum**]

All you need to change is just "iresolution", checksum"

Checksum=0x100 – (0xa5+0x5b+0x02+0x03+**resolution(1~13)**+0x00+0x00+0x00+0x00+0x00+0x00+0x00)

resolution(1~13)

3840x2160@60,
3840x2160@30,
1920x1080@60,
1920x1080@50,

1280x720@60,
1280x720@50,
1920x1200@60,
1680x1050@60,
1400x1050@60,
1360x768@60,
1280x800@60,
1024x768@60,
AUTO

For example: Set output resolution 1920x1080@60 command:
50 56 54 0A 06 03 00 03 00 00 00 00 00 00 00 00 00 10

Resolution query package length is 18byte:
This is a query command which mean you must send query package and then receive an answer.
For example: Query **Resolution**
Send package: 50 56 54 90 06 00 00 00 00 00 00 00 00 00 00 00 00 90
Receive package: 50 56 54 90 06 03 00 00 00 00 00 00 00 00 00 00 00 93
The blue 03 mean the resolution is 1920x1080@60, it should be 1~13.

PQ regulate package length is 18byte:
[0x50+0x56+0x54+0x08+**TYPE(1~4)**+**DATA**+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+**checksum**]
All you need to change is just "TYPE", "DATA", "checksum"
Checksum=0x100 – (0x50+0x56+0x54+0x08+**TYPE(1~4)**+**DATA**+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00)

TYPE（1~4）: Contrast，Brightness，Color，Sharpness
Contrast and Brightness **DATA from 0 to 100;** Color **DATA from 0 to 60**;Sharpness **DATA from 0 to 20**

For example: Set Contrast 72 command:
50 56 54 08 01 48 00 48 00 00 00 00 00 00 00 00 00 93

PQ **query package length is 13byte:**
This is a query command which mean you must send query package and then receive an answer.
For example: Query Contrast
Send package: 50 56 54 09 01 00 00 00 00 00 00 00 00 00 00 00 00 04
Receive package: 50 56 54 09 01 48 00 00 00 00 00 00 00 00 00 00 00 4C
The red 01 mean **query** the Contrast , it should be 1~4(Contrast，Brightness，Color，Sharpness)
The blue 48 mean the Contrast is 72 , it should be 0~100.

Reset sys configure package length is 18byte:

50 56 54 08 0A 00 00 00 00 00 00 00 00 00 00 00 0C

USB Upgrade configure package length is 18byte:

50 56 54 07 07 00 00 00 00 00 00 00 00 00 00 00 08

EDID configure package length is 18byte:

[0x50+0x56+0x54+0x03+0x02+**EDIDindex**+0xF0+0x01+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x0
0+**checksum**]

All you need to change is just "**EDIDindex**",, "checksum"

For example: Set EDID 2.0 command:

50 56 54 03 02 02 F0 01 00 00 00 00 00 00 00 00 F2

EDID query package length is 18byte:

This is a query command which mean you must send query package and then receive an answer.

For example: Query EDID

Send package: 50 56 54 01 0C 01 00 00 00 00 00 00 00 00 00 00 08

Receive package: 50 56 54 01 0C 01 00 01 00 00 00 00 00 00 00 00 09

The blue 01 mean EDID 1.4

EDID（1~3）EDID 1.4，EDID 2.0，EDID AUTO

Audio Mute configure package length is 18byte:

[0x50+0x56+0x54+0x17+0x08+**MuteON/OFF**+0x00+0x01+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0
x00+**checksum**]

All you need to change is just "**MuteON/OFF**",, "checksum"

For example: Set Mute ON command:

50 56 54 17 08 0F 00 0F 00 00 00 00 00 00 00 00 37

Audio Mute query package length is 18byte:

This is a query command which mean you must send query package and then receive an answer.

For example: Query **Audio Mute**

Send package: 50 56 54 17 09 00 00 00 00 00 00 00 00 00 00 00 1A

Receive package: 50 56 54 17 09 F0 00 00 00 00 00 00 00 00 00 00 0A

The blue F0 mean Audio Mute OFF,if 0F mean Audio Mute ON.

Audio + configure package length is 18byte:

50 56 54 17 07 01 00 00 00 00 00 00 00 00 00 00 19

Audio - configure package length is 18byte:

50 56 54 17 07 02 00 00 00 00 00 00 00 00 00 00 1A

Audio value configure package length is 18byte:

[0x50+0x56+0x54+0x17+0x17+**AudioValue**+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x00+0x0
0+**checksum**]

All you need to change is just "**AudioValue**",, "checksum"

For example: Set Audio value 81 command:
50 56 54 17 17 51 00 00 00 00 00 00 00 00 00 00 79

Audio value query package length is 18byte:

This is a query command which mean you must send query package and then receive an answer.
For example: Query Audio value
Send package: 50 56 54 17 18 00 00 00 00 00 00 00 00 00 00 00 29
Receive package: 50 56 54 17 18 51 00 00 00 00 00 00 00 00 00 00 7A

The blue 51 mean Audio value = 81;

IR command:
NEC code
#define SYSTEM_CODE 0x08

#define IR_KEY_POWER 0x4D
#define IR_KEY_Mute 0x0B

#define IR_KEY_HD_1 0x09
#define IR_KEY_HD_2 0x54
#define IR_KEY_HD_3 0x47
#define IR_KEY_HD_4 0x42
#define IR_KEY_VGA 0x08
#define IR_KEY_AUTO 0x48
#define IR_KEY _LEFT 0x4B
#define IR_KEY _RIGHT 0x43

#define IR_KEY_ADJ 0x0C
#define IR_KEY_RES 0x0F

#define IR_KEY_UP 0x19
#define IR_KEY_DOWN 0x0D

```
#define IR_KEY_LEFT          0x55
#define IR_KEY_RIGHT         0x4E
#define IR_KEY_OK            0x57
#define IR_KEY_Menu          0x4C
#define IR_KEY_Exit          0x56

#define IR_KEY_VOL-          0x40
#define IR_KEY_ VOL+         0x10
#define IR_KEY_MIC-          0x11
#define IR_KEY_ MIC+         0x52
```