



Retro Shooter

User Manual

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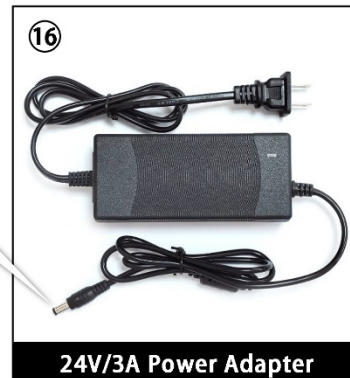
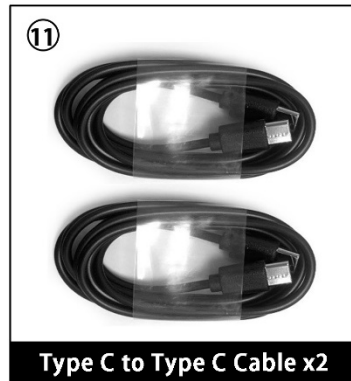
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1. Light Gun Specification

	Device Type	Mouse, Keyboard
	Connectors Size	3.5 x 1.35mm male
	Buttons	5
	Voltage/Current	12V/One Light Gun Max 1A
	Light Gun Weight	0.25Kg(0.6 lb)
	Light Gun with Cable Weight	0.4Kg(0.9 lb)
	Cable Length	3.5M
	Size(Length, Width, Height)	21.5cm x 13.6cm x 3.7cm (8.5 x 5.4 x 1.5 in)
	Device Type	Mouse, Keyboard
	Connectors Size	3.5 x 1.35mm male
	Buttons	7
	Voltage/Current	24V/One Light Gun Max 1.5A
	Light Gun Weight	1.2Kg(2.7 lb)
	Light Gun with Cable Weight	1.35Kg(3 lb)
	Cable Length	3.5M
	Size(Length, Width, Height)	60cm x 22cm x 5.5cm(23.7 x 8.7 x 2.2 in)
	Device Type	Mouse, Keyboard, Joystick (Gamepad)
	Connectors Size	3.5 x 1.35mm male
	Buttons	7
	Voltage/Current	24V/One Light Gun Max 1.5A
	Light Gun Weight	0.5Kg(1.2 lb)
	Light Gun with Cable Weight	0.75Kg(1.7 lb)
	Cable Length	3.5M
	Size(Length, Width, Height)	24cm x 17cm x 3.6cm(9.5 x 6.7 x 1.5 in)

2. Retro Shooter Light Gun Full Items

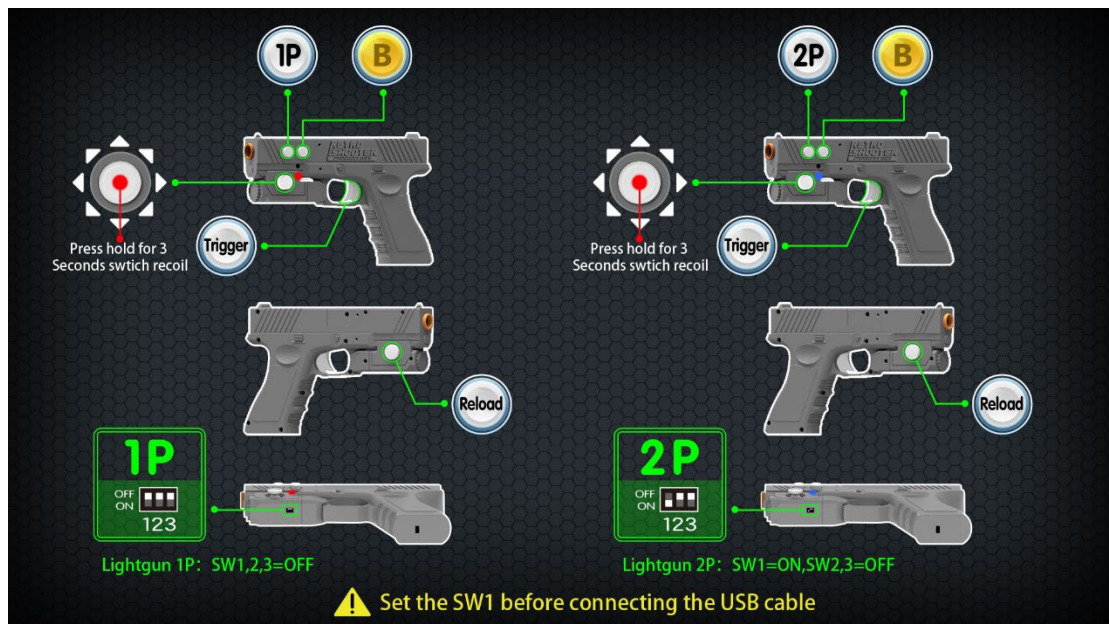
①  1P Retro Shooter Lightgun-Red	 Connectors: 3.5 x1.35mm(Male)	②  2P Retro Shooter Lightgun-Blue
③  1P Retro Shooter Mx24	 Connectors: 3.5 x1.35mm(Male)	④  2P Retro Shooter Mx24
⑤  1P RS3 Reaper Black	 Connectors: 3.5 x1.35mm(Male)	⑥  2P RS3 Reaper Grey
⑦  Pedal x2	⑧  Hub	⑨  Sensors x4



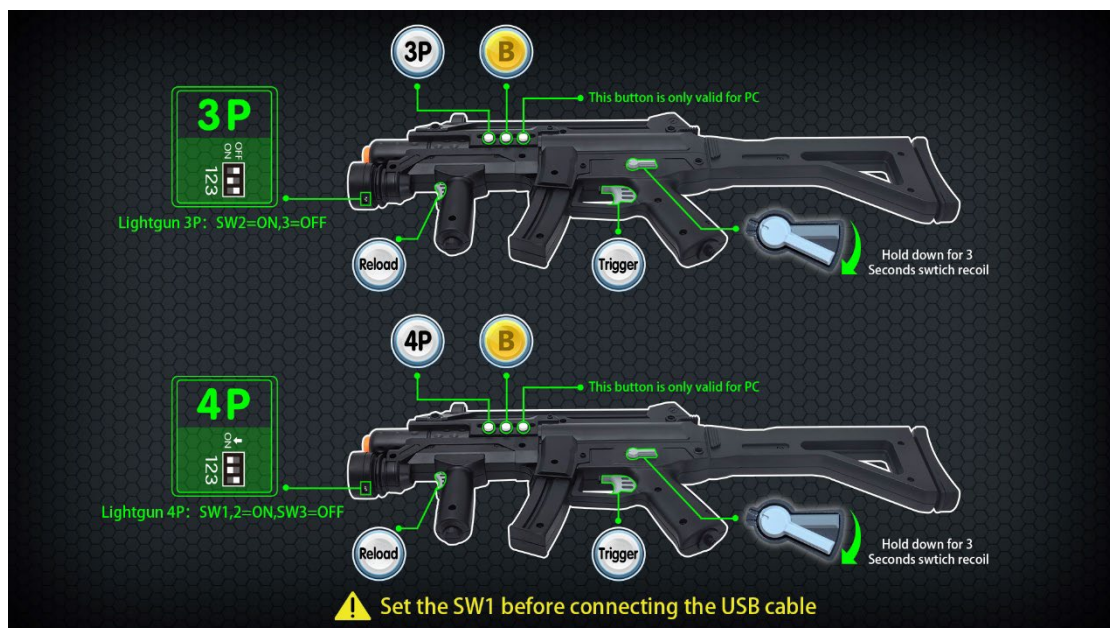
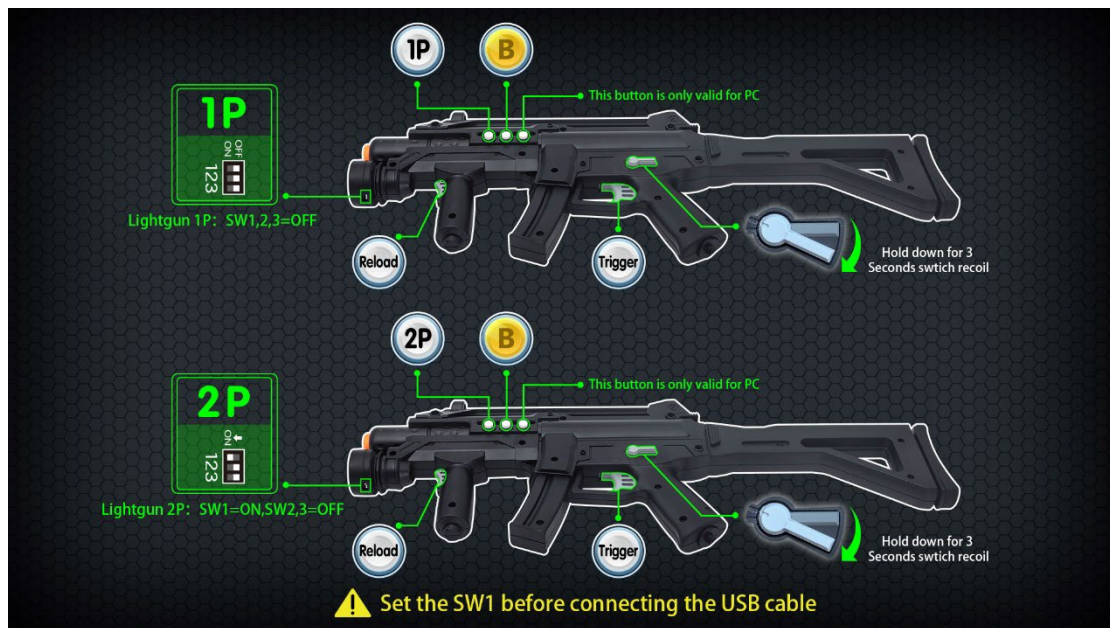
3. Retro Shooter Button Instructions & Connection instructions

3.1 Retro Shooter with Master Shooter Button Instructions

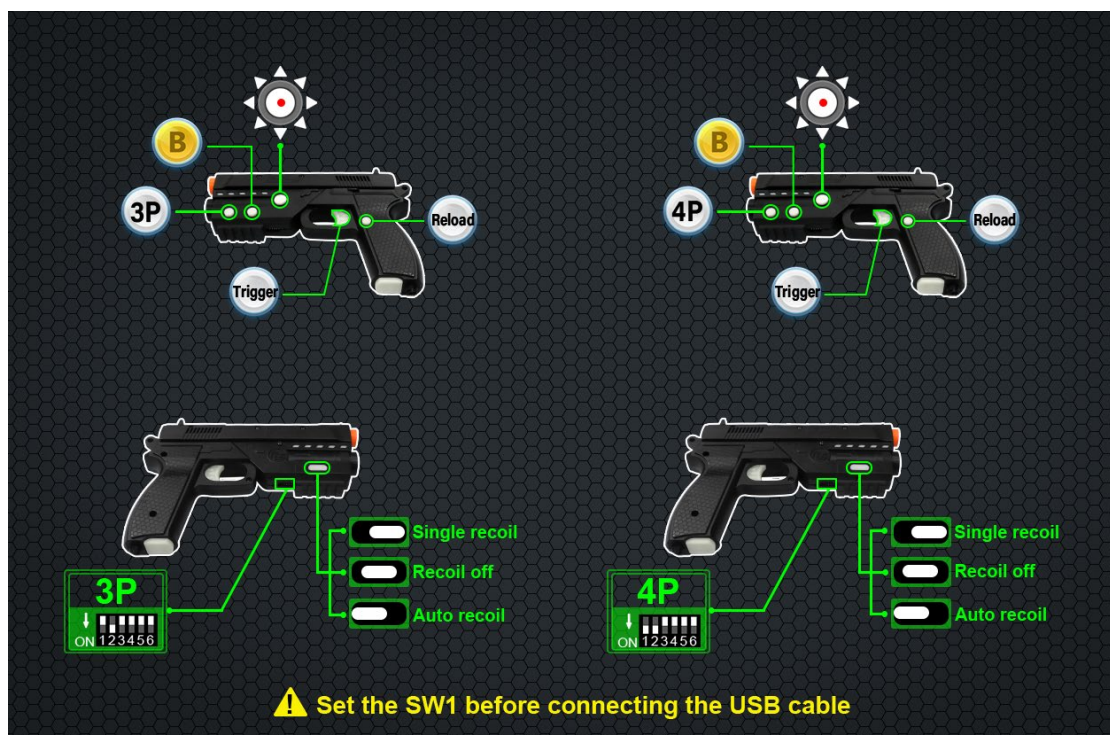
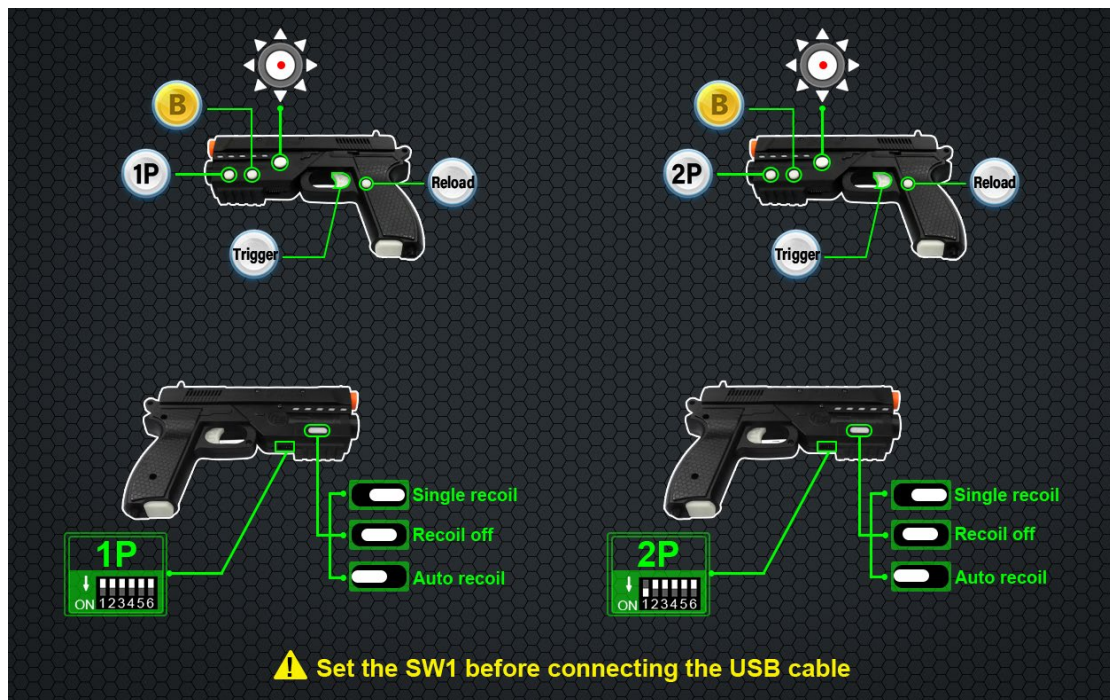
3.1.1 Retro Shooter Pistol Button Instructions



3.1.2 MX24 Button Instructions

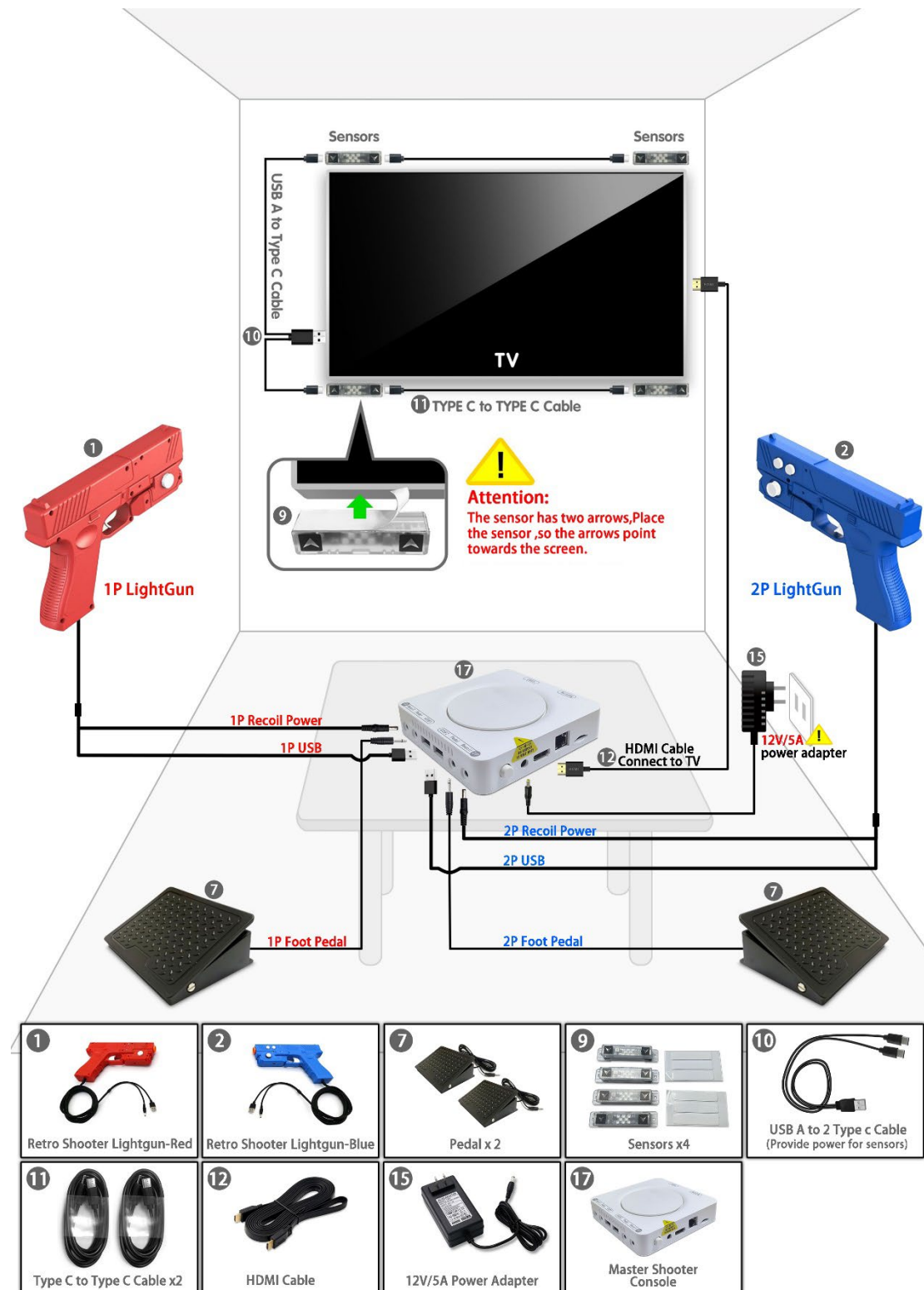


3.1.3 RS3 Reaper Button Instructions

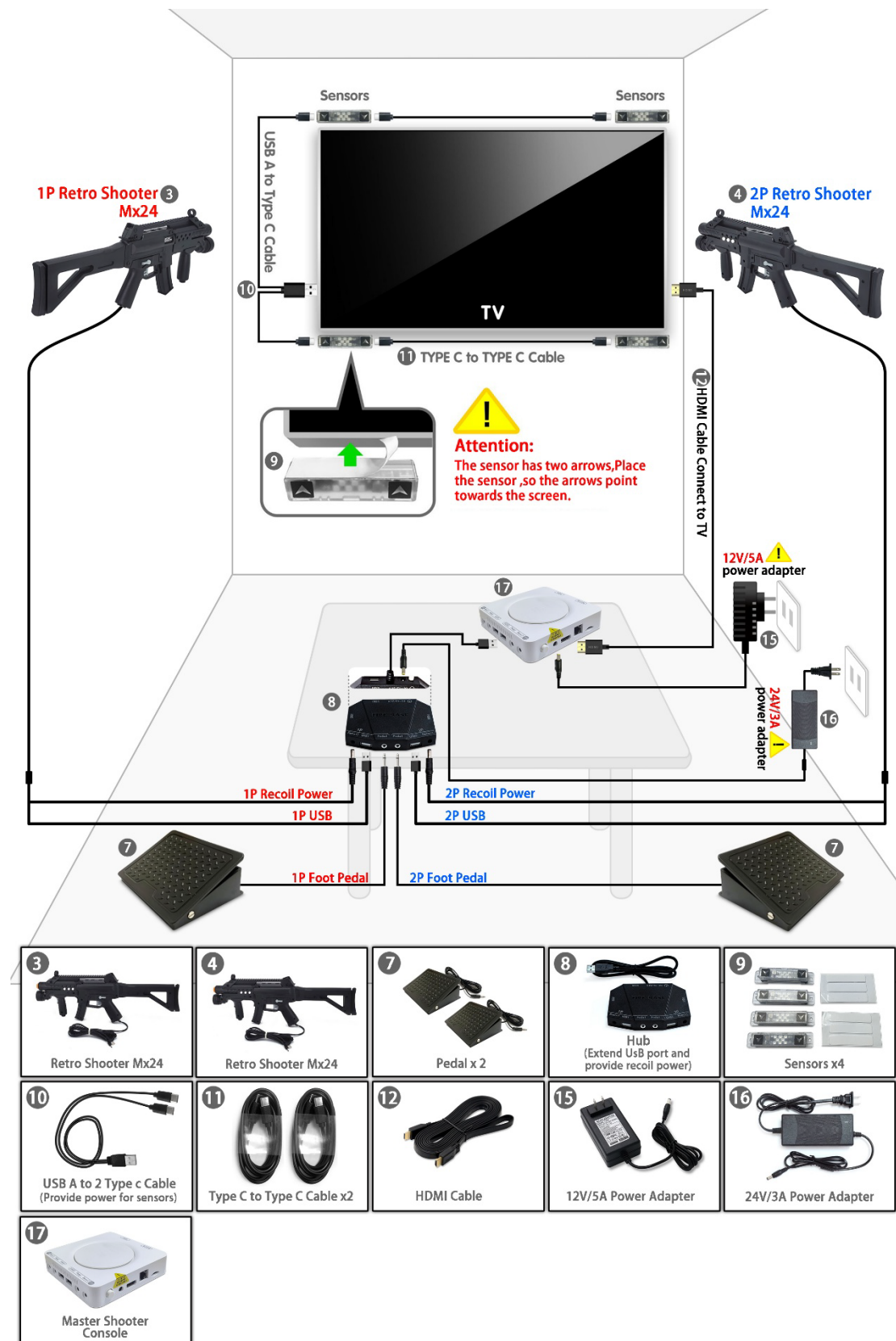


3.2 Retro Shooter with Master Shooter Console Connection instructions

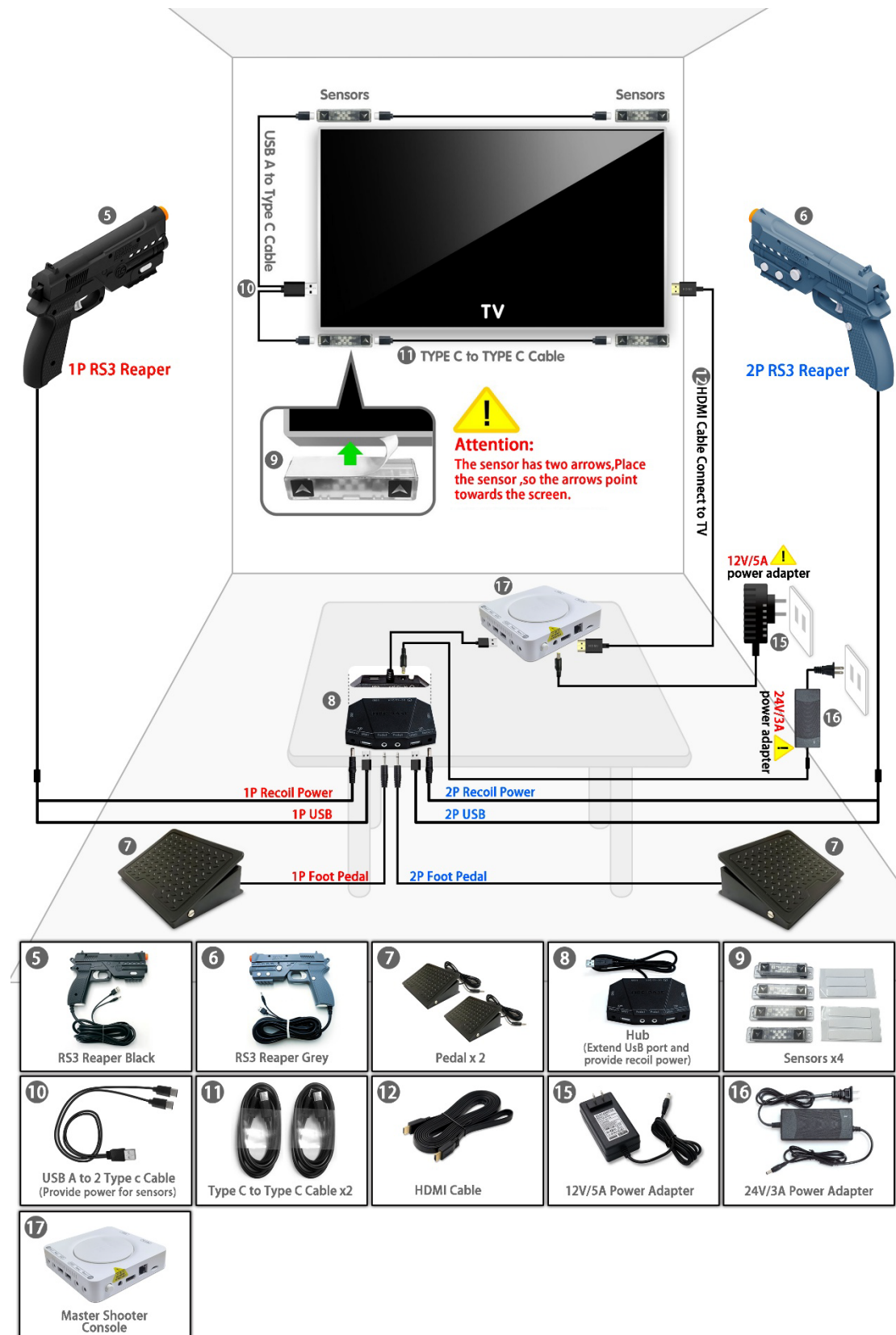
3.2.1 Retro Shooter Pistol Connection instructions



3.2.2 MX24 Connection instructions

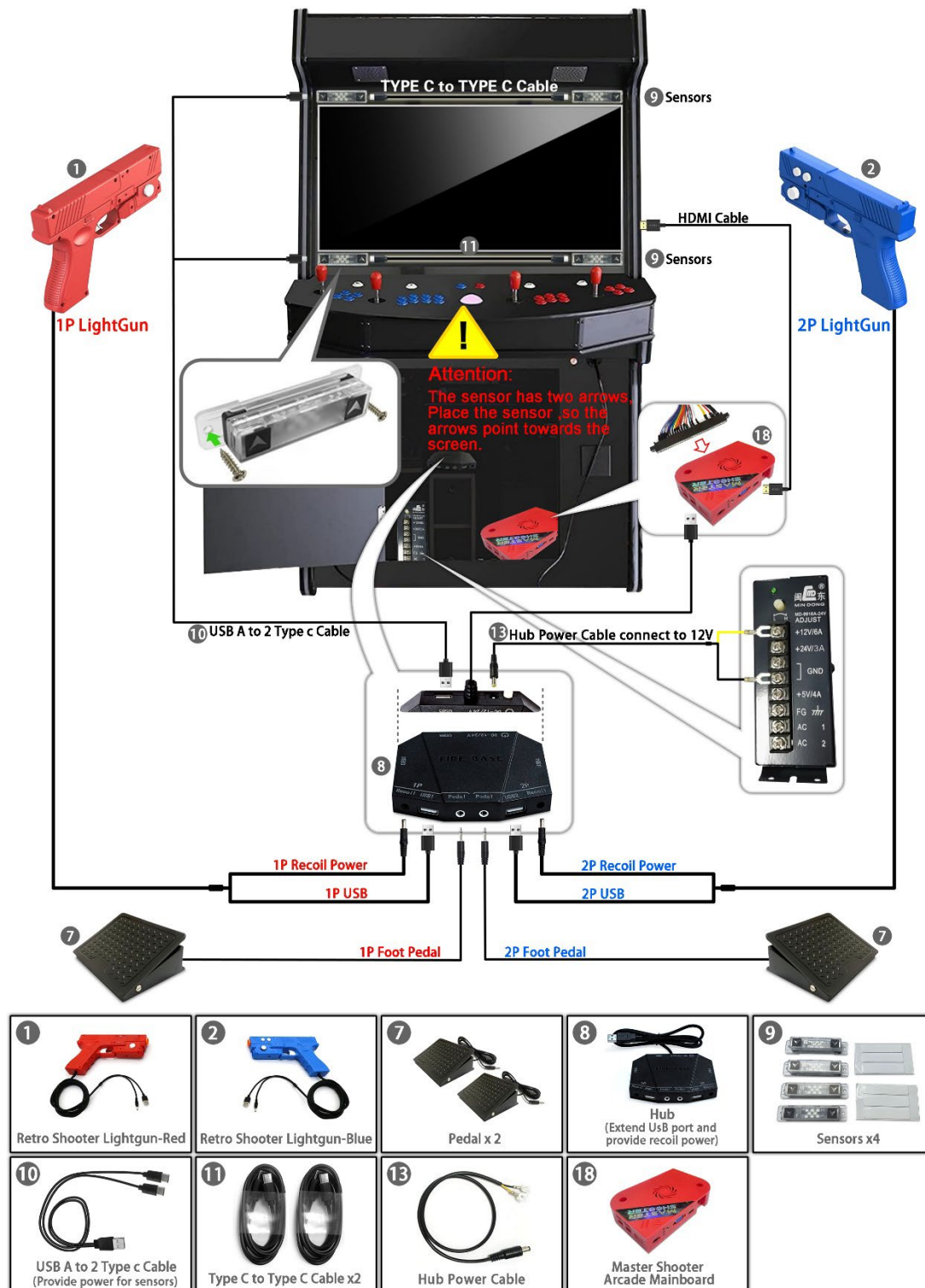


3.2.3 RS3 Reaper Connection instructions

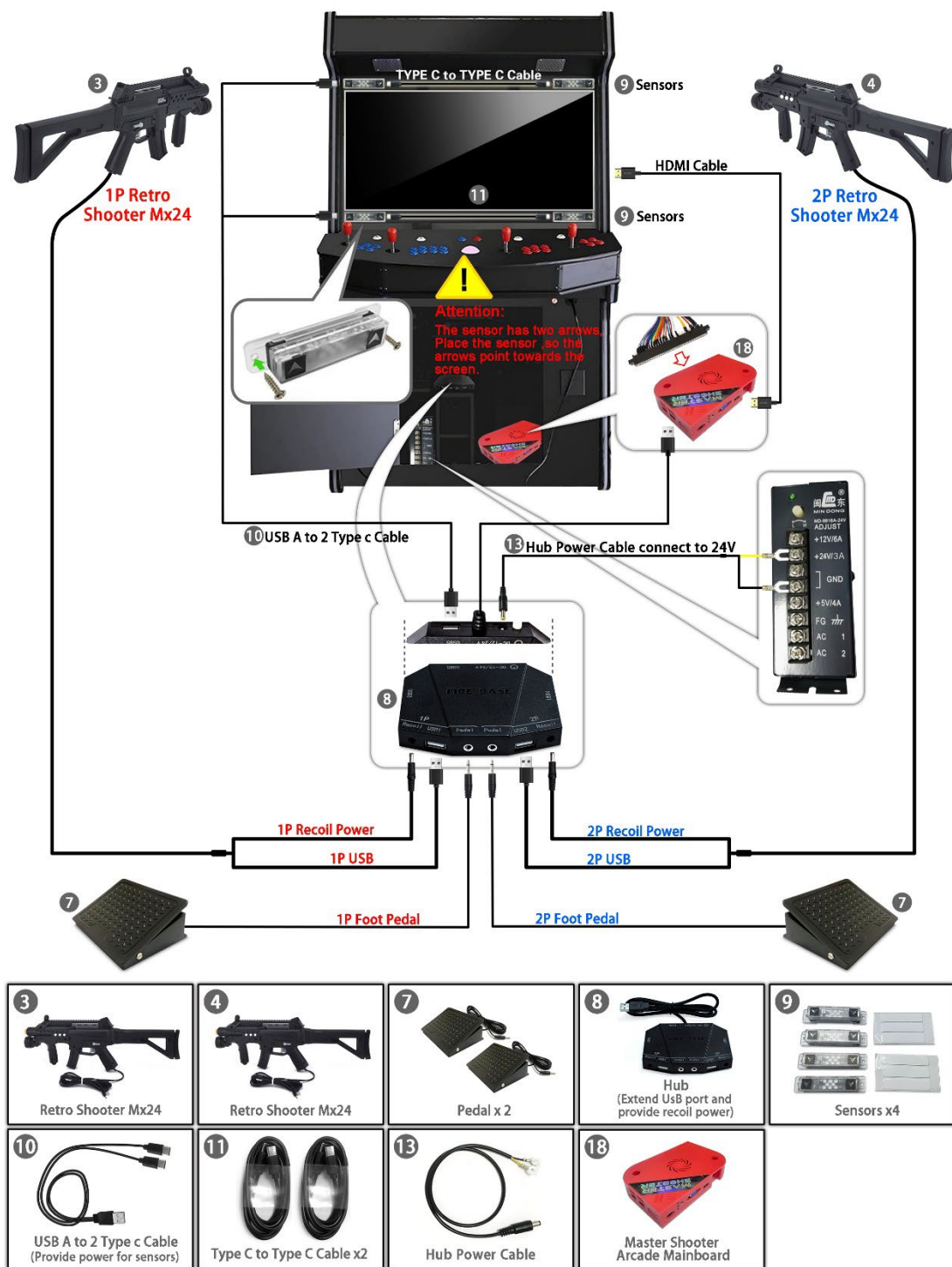


3.3 Retro Shooter With Master Shooter Arcade Version Connection instruction

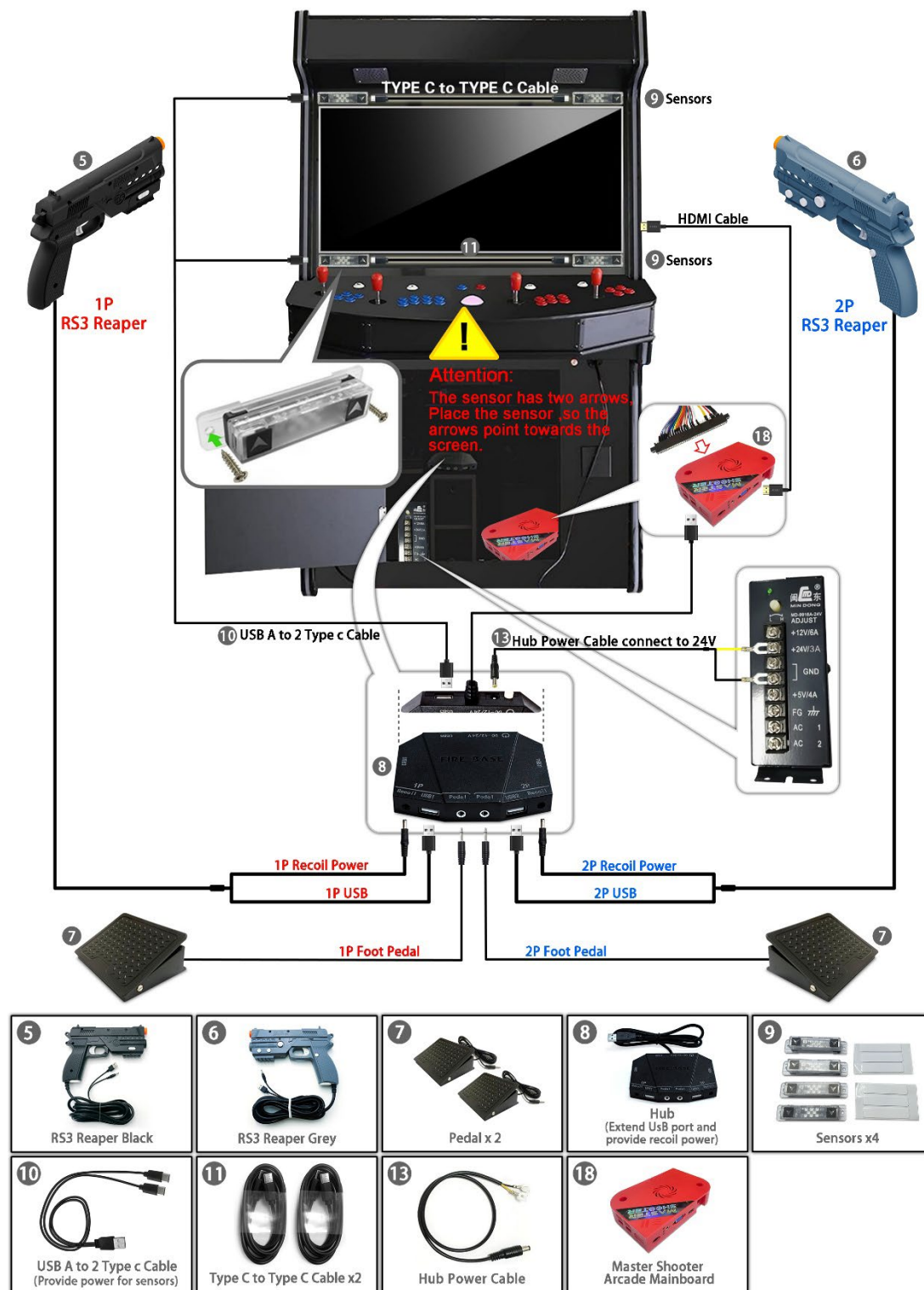
3.3.1 Retro Shooter Pistol Connection instructions



3.3.2 MX24 Connection instructions

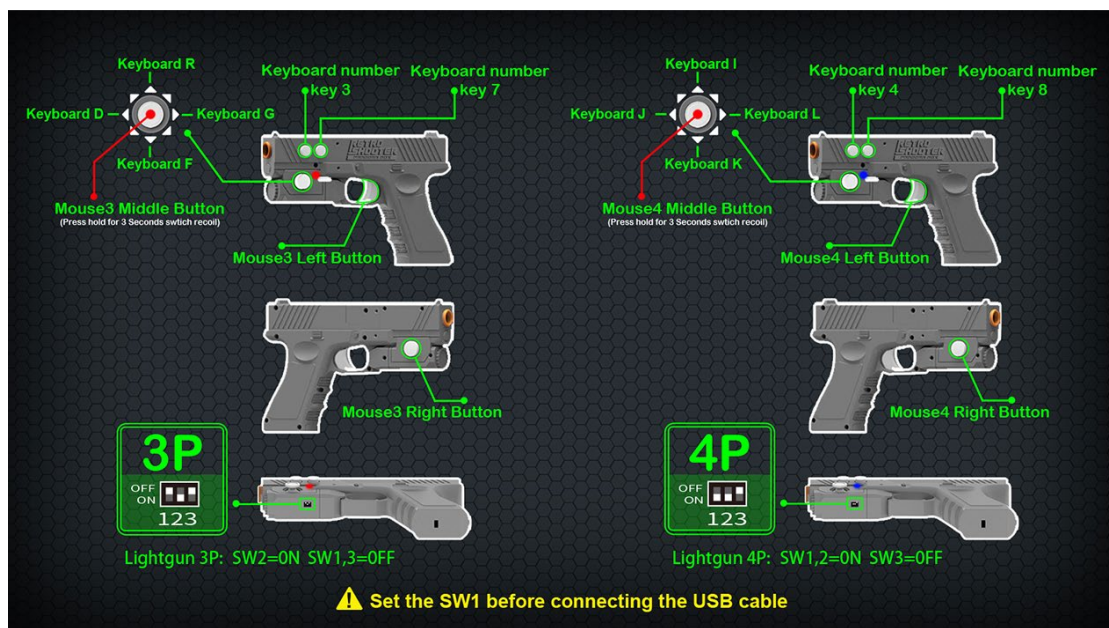
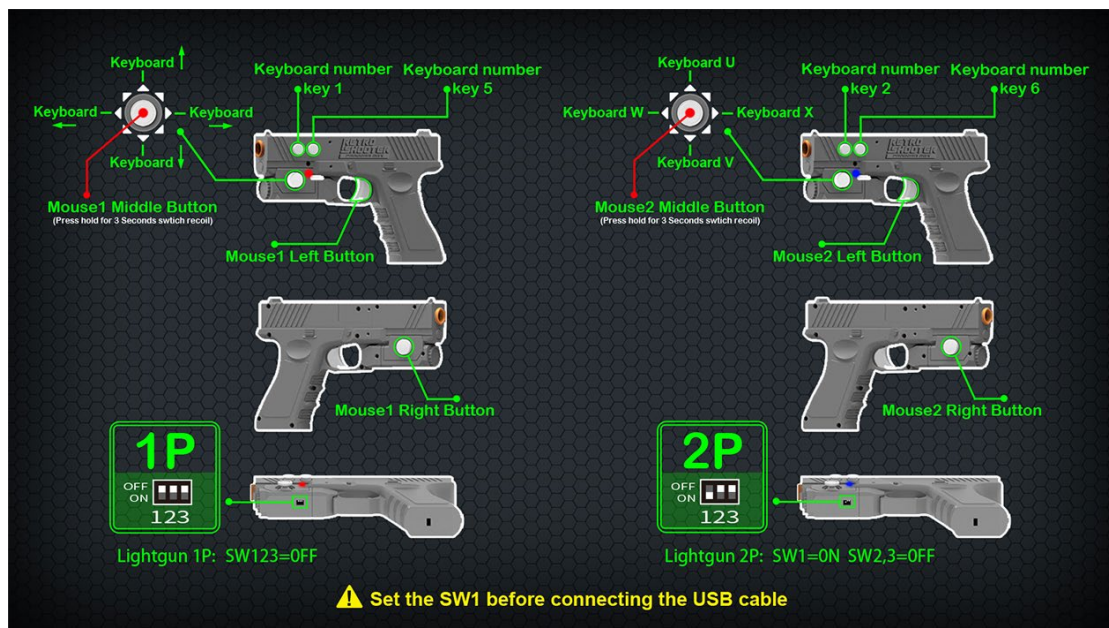


3.3.3 RS3 Reaper Connection instructions

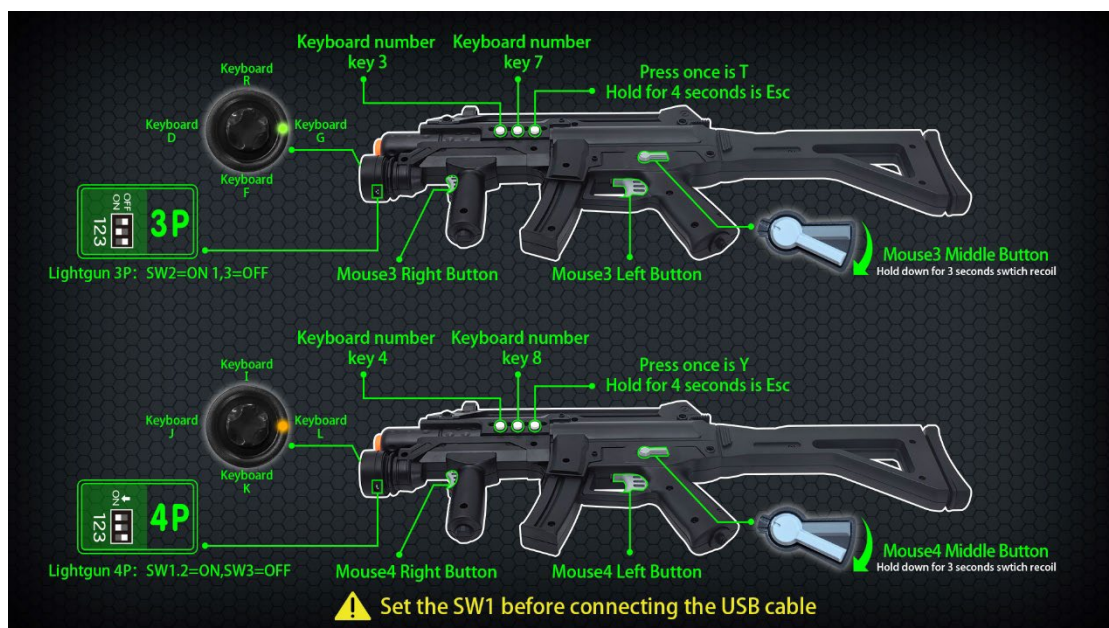
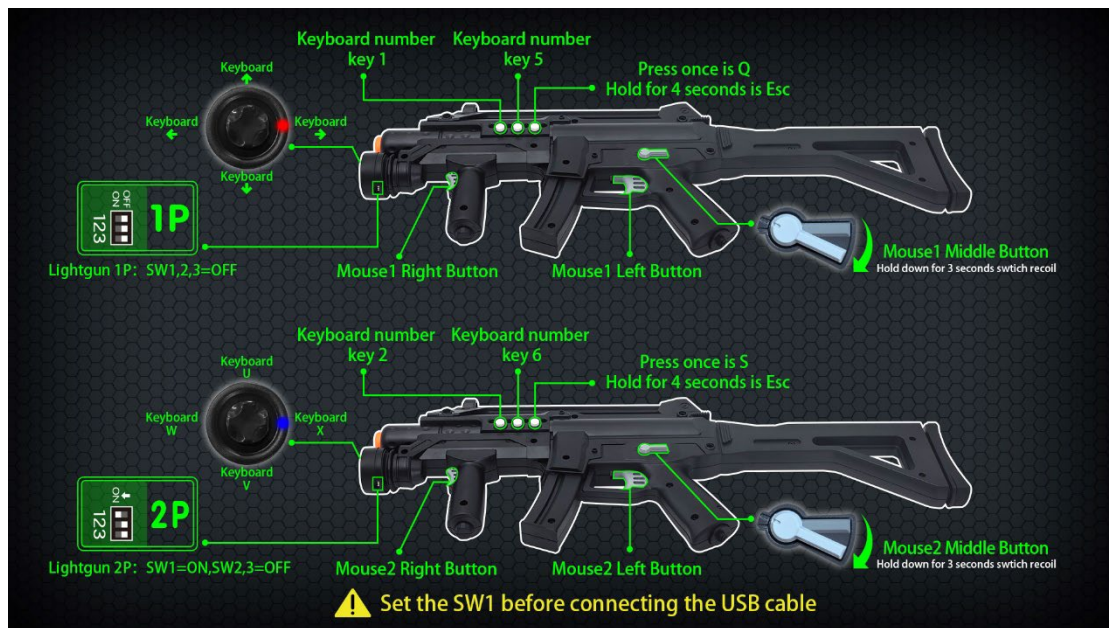


3.4 Retro Shooter With Computer Button Instructions

3.4.1 Retro Shooter Pistol Connection instructions



3.4.2 MX24 Button Instructions

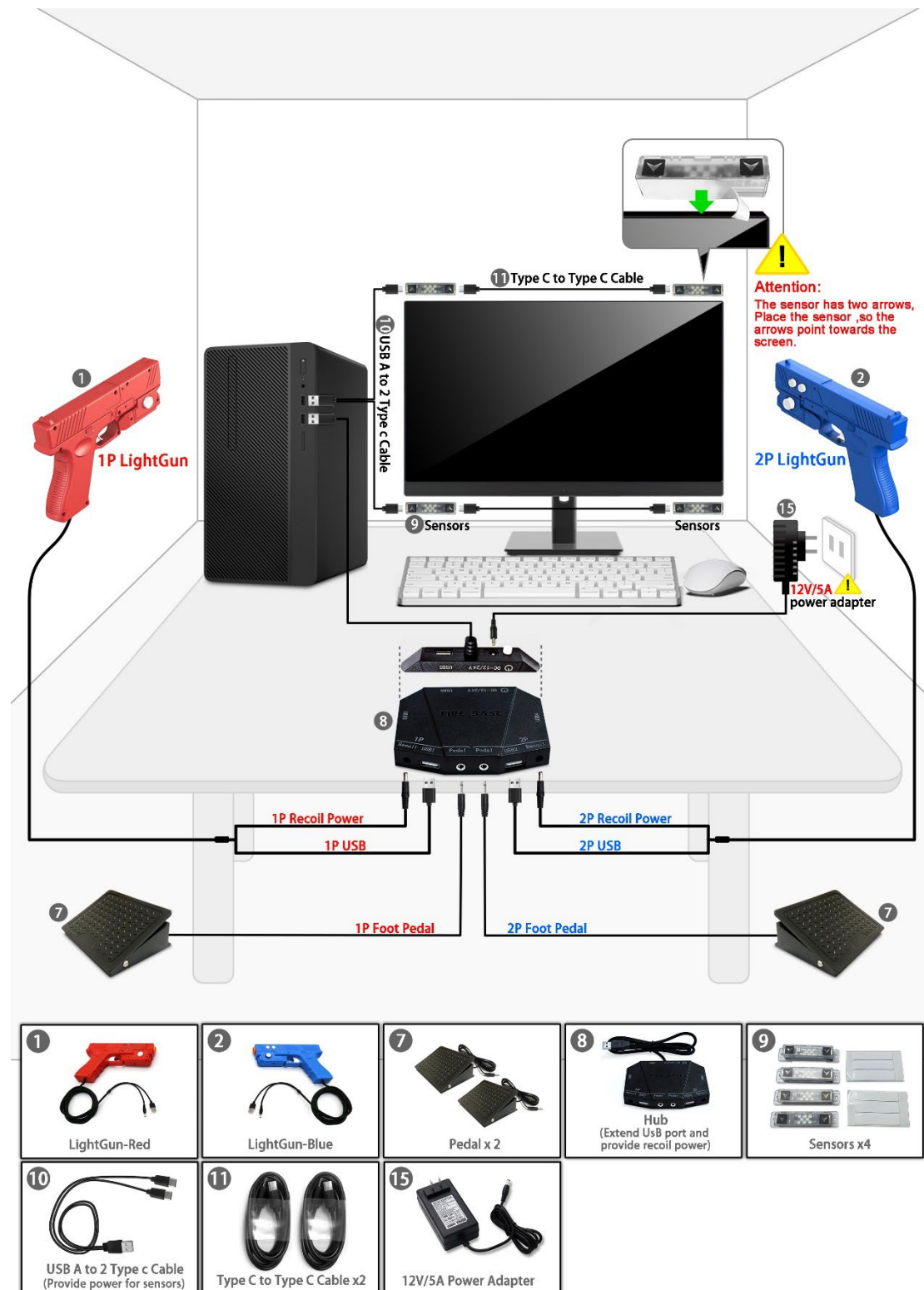


3.4.3 RS3 Reaper Button Instructions



3.5 Retro Shooter with Computer Connection instructions

3.5.1 Retro Shooter Pistol Connection instructions



Attention:
The sensor has two arrows, Place the sensor, so the arrows point towards the screen.

1P Retro Shooter Mx24

2P Retro Shooter Mx24

1P Recoil Power

2P Recoil Power

1P USB

2P USB

1P Foot Pedal

2P Foot Pedal

24V/3A power adapter

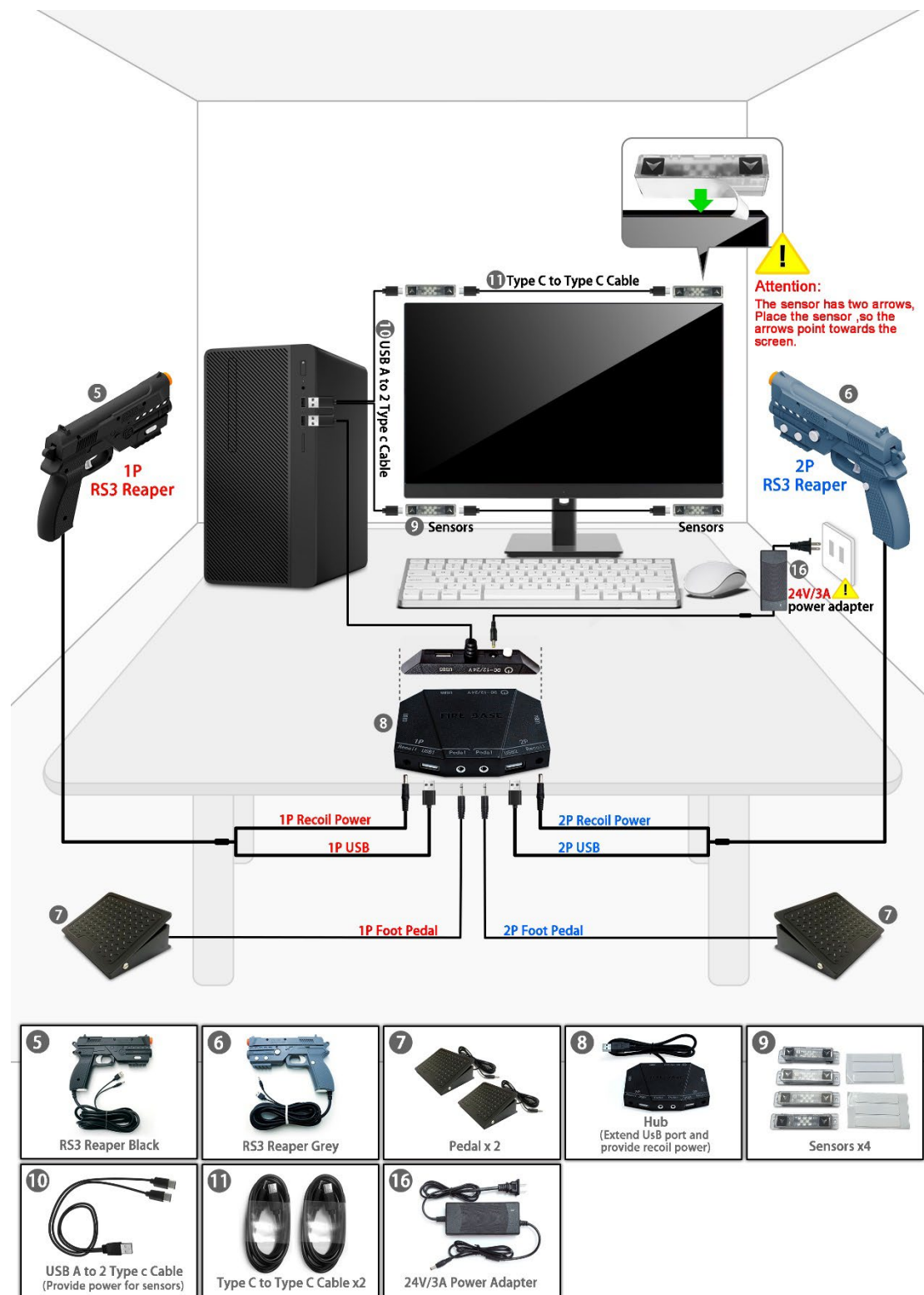
Hub
(Extend USB port and provide recoil power)

Sensors x4

Legend:

- 3 Retro Shooter Mx24
- 4 Retro Shooter Mx24
- 7 Pedal x 2
- 8 Hub (Extend USB port and provide recoil power)
- 9 Sensors x4
- 10 USB A to 2 Type c Cable (Provide power for sensors)
- 11 Type C to Type C Cable x2
- 16 24V/3A Power Adapter

3.5.3 RS3 Reaper Connection instructions



4. Light Gun Crosshair Settings

When you have connected all the items, use the PC calibration software to calibrate your light guns on your PC (Pic1)



Pic1

4.1 Light Gun IO TEST

Open the crosshair setting and press the reload button to enter the IO test. The screens of the Light Gun IO test in the Master Shooter console and the PC IO test are different. The IO test on the Master Shooter console only matches the buttons it uses, and the IO test on the PC is for the full button. The following is the IO test displayed on the PC. (Pic2)



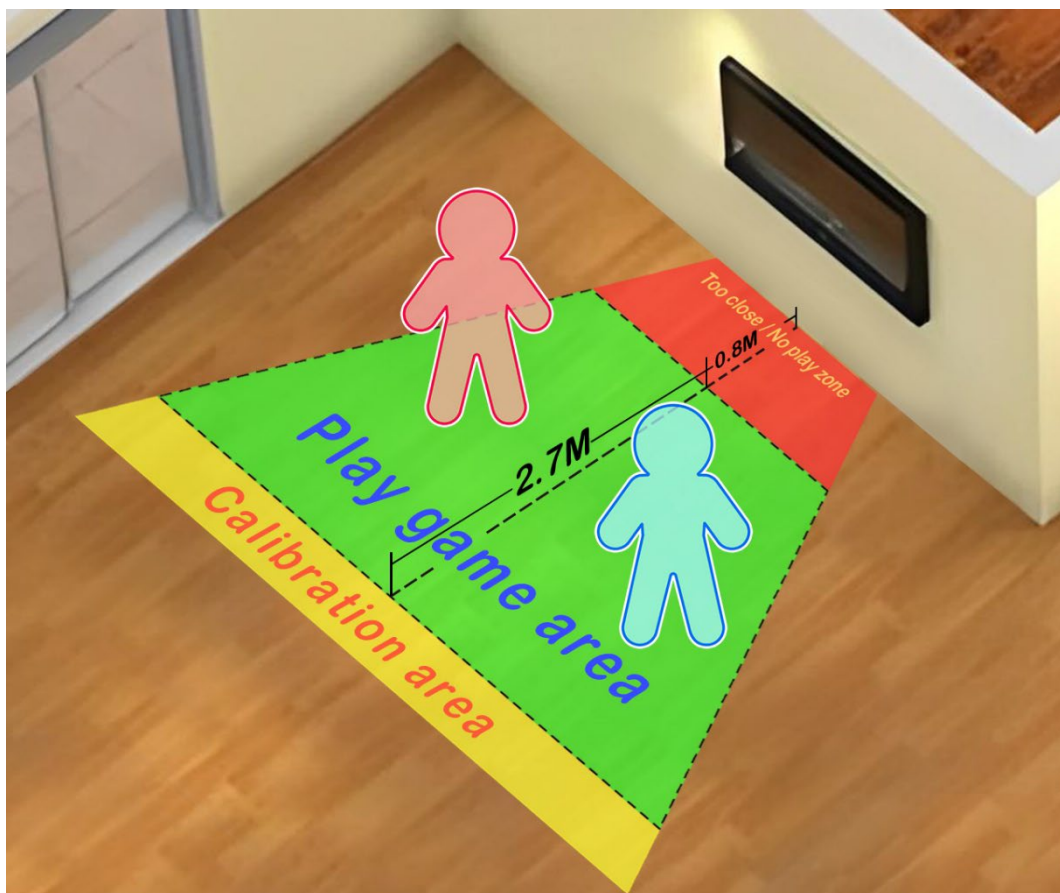
Pic2

4.2 Light Gun Crosshair Setting

4.2.1 Play light gun area prompt

If the screen is larger than 27 inches, it is recommended that you calibrate your light guns at the maximum distance from the screen (the light gun cable is about 3.5m or 10ft). Example: enter the crosshair setting screen, stand as far back as you can, calibrate your crosshairs. After calibrating the crosshairs, use the light gun to play between 1 meter (3ft) and 3.5 meter (10ft). (Pic3)

If the screen is smaller than 27 inches, it is recommended that you calibrate the crosshairs while standing at a maximum distance of 2 meters (6ft) from the screen. After calibrating the crosshairs, use the light gun to play within 0.8 meters (2.5ft) and 2 meters (6ft)



Pic3

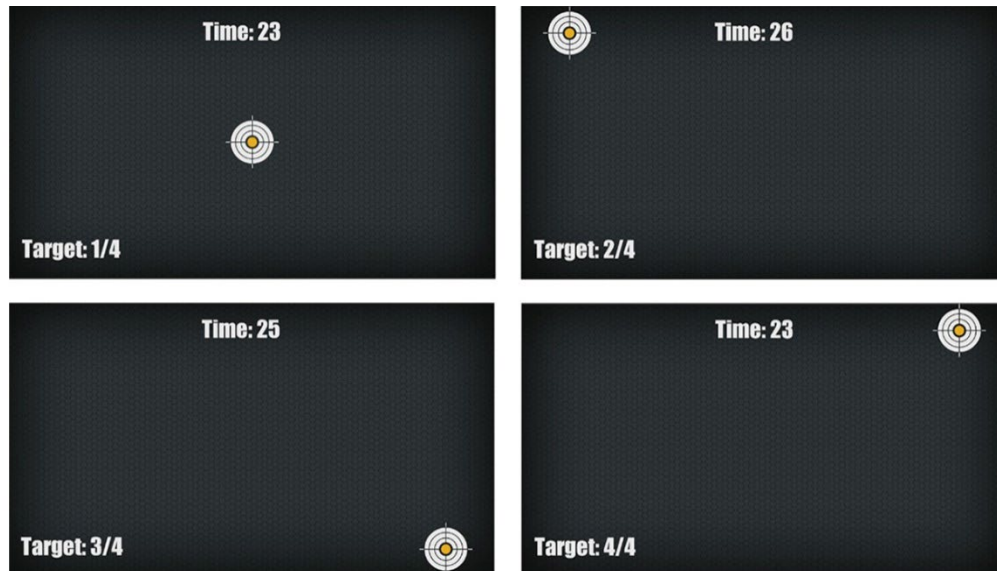
4.2.2 Crosshair Setting

The default setting of the light gun has completed the standard crosshair setting. It is still recommended to set the crosshair once you get it. If you have two light guns, please operate the crosshairs calibration one by one.

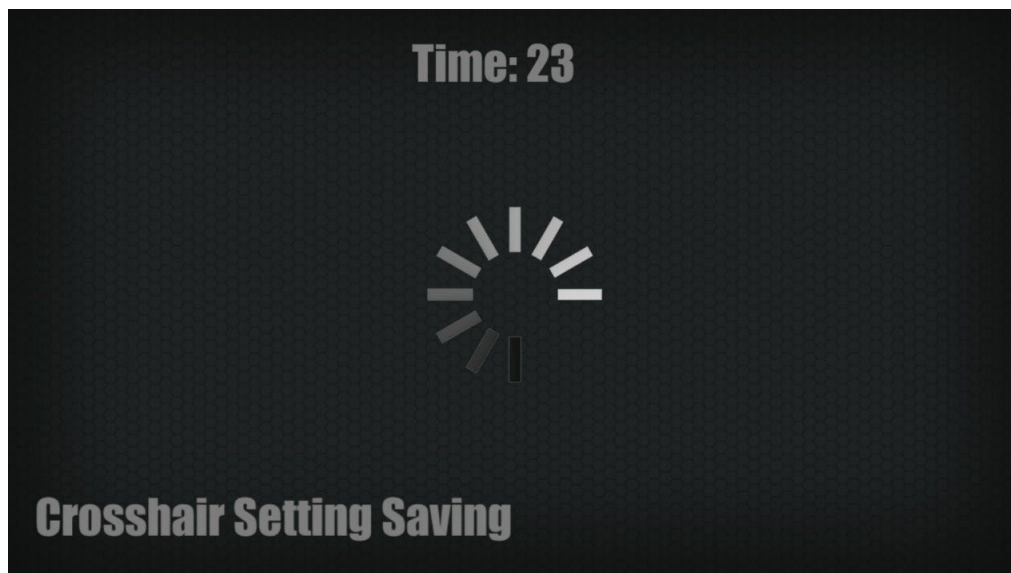
Press the 1P light gun start button to enter the 16:9 crosshair setting screen. Please use the light gun to aim at the bullseye and pull the trigger, aim and shoot 4 bullseyes, center position, upper left corner, lower right corner, upper right corner. (Pic4)

If you need to play light gun games in 4:3 screen, you need to select "4:3 screen" to operate the crosshair setting. Only the retro shooter Pistols and MX24 need to do this. RS3 REAPER does not need 4:3 crosshair setting.

Crosshair Setting is completed, the screen will prompt "Crosshair Setting Saving" (Pic5). Then you will see the crosshair, now you can move the Light gun to move the crosshair. 2P Crosshair Setting is the same as 1P.



Pic4



Pic5

5. Light Gun Settings and Function Instructions

5.1 Retro Shooter Pistol Settings and Function Instructions

5.1.1 Single/Auto Recoil

Retro Shooter Pistol default settings are single fire recoil, pull the trigger once and there will be a recoil. To enable semi/full auto recoil, press and hold the 8way joystick middle click button for 3 seconds. This swaps between full auto and semi auto recoil.

5.1.2 Turn OFF Recoil

To turn off recoil, press and hold the trigger before plugging in the light gun USB cable to the port, if the light gun is already plugged in press and hold trigger before powering on the console or hub. To enable the recoil again, unplug the light gun and plug it back in or power off and on the console or hub without holding the trigger.

<https://youtu.be/mlVBkzyX1lc>

5.2 MX24 Settings and Function Instructions

5.2.1 Single/Auto Recoil

Press and hold the toggle switch above the trigger to swap semi and full auto recoil.

5.2.2 Turn OFF Recoil

Same as Retro Shooter Pistol

5.2.3 Added ESC key to exit the game

MX24 adds a button function. When you hold it for 4 seconds, it becomes the ESC key to exit the game. (Please see the MX24 Button Instructions above)

5.2.4 MX24 external control com command list

Developer games or PC can send commands to MX24 via Com to control recoil. But it needs to be used with hub. The following is the command list!

Command list:

Format:115200,8,1,n

Host->hub (2 characters per command)

"0A"	1P exit external control mode and enable self-control mode. (Blaze away as default)
"aB"	2P exit external control mode and enable self-control mode. (Blaze away as default)
"0C"	1P and 2P exit external control mode and enable self-control mode at the same time. (Blaze away as default)
"0E"	1P vibrate once and enter external control mode.
"aF"	2P vibrate once and enter external control mode.
"0I"	1P disable self-control mode.
"0J"	1P disable self-control mode.

5.3 RS3 Reaper Settings and Function Instructions

5.3.1 RS3 DIP Switch Setting

		SW1=OFF, SW2=OFF, When Lightgun power is on, LED1 begins to flash in blue for 5 seconds, and finally stays at 1 blue LED. 1 blue LED means Light Gun= 1P
		SW1=ON, SW2=OFF, When Lightgun power is on, LED1 & 2 begin to flash in blue for 5 seconds, and finally stay at 2 blue LED. 2 blue LED means Light Gun= 2P
		SW1=OFF, SW2=ON, When Lightgun power is on, LED1 & 2 & 3 begin to flash in blue for 5 seconds, and finally stay at 3 blue LED. 3 blue LED means Light Gun= 3P
		SW1=ON, SW2=ON, When Lightgun power is on, LED1 & 2 & 3 & 4 begin to flash in blue for 5 seconds, and finally stay at 4 blue LED. 4 blue LED means Light Gun= 4P
	SW3=OFF, Slide recoil frequency normal	
	SW3=ON, Slide recoil frequency low	
	SW4=OFF, Slide recoil force normal	
	SW4=ON, Slide recoil force low	
	SW5=OFF, Press the trigger once, the slide barrel works once. press the reload once, the rumble motor works once	
	SW5=ON, Stop the slide barrel, press the trigger once, the rumble motor works once	
	SW6=OFF, Rumble motor is on (It works with reload button/trigger or receives a com command)	
	SW6=ON, Rumble motor turn OFF	

5.3.2 Switch reload button

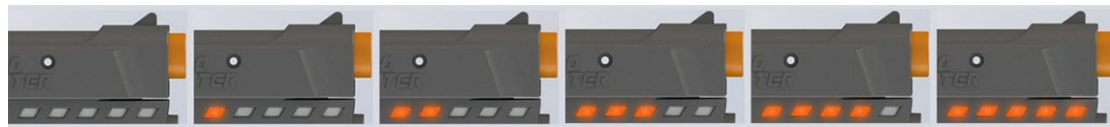
The small button on the handle and the big button at the bottom of the magazine (mouse middle button) can be switched as the reload button. To switch: press and hold the big button at the bottom of the magazine, then plug in the USB cable, wait 5 seconds and release it. the big button becomes the reload function, and the original small button on the handle will become the mouse middle button. Just press and hold the small button, then plug in the USB cable, wait 5 seconds and release it, the small button will become the reload button again. (Pic6)



Pic6

5.3.3 Switch 4 types LED display

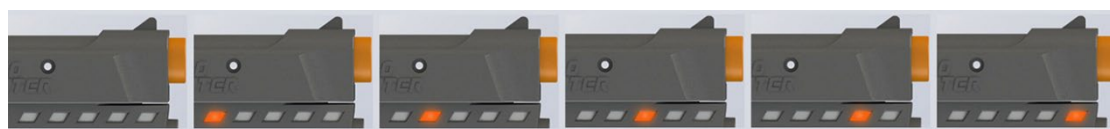
There are 5 LEDs on each side of the light gun. Press the trigger and it moves once. It has 4 display modes. The first is the default display type1. Press and hold the middle button of the joystick for 3 seconds, it will switch to the second LED display type2, do it again to change to LED display type3...and again for display type4. When you have changed the LED display type, the state will be saved, and the next time you turn on the light gun power, it will continue to use this type. To turn off the LEDs, please hold the middle button for 6 seconds!



Type1



Type2



Type3



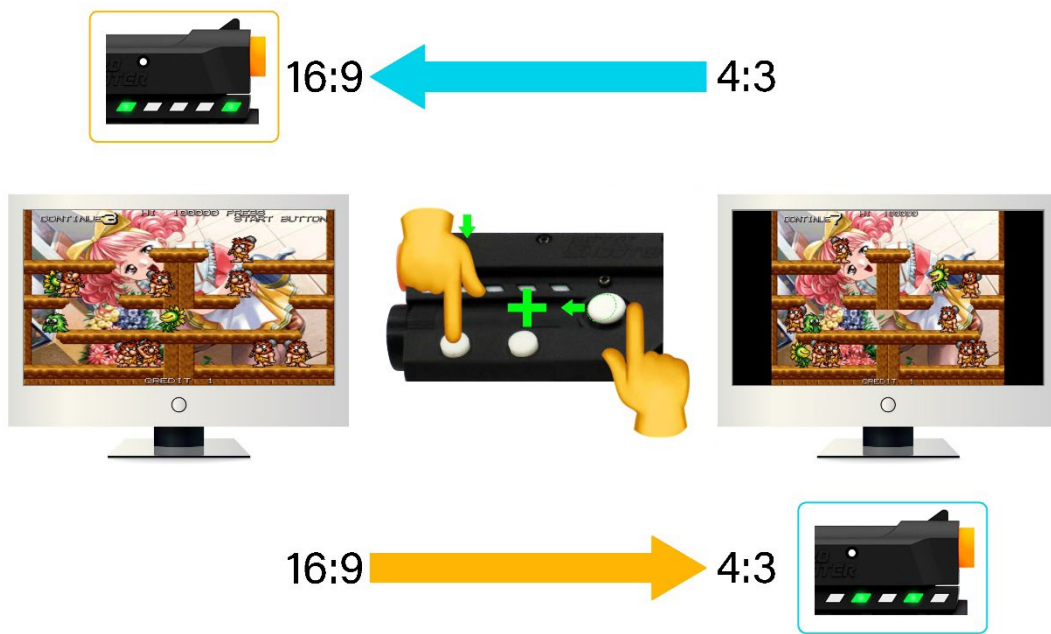
Type4

5.3.4 RS3 Reaper matches 4:3/16:9 screen to play games

RS3 Reaper light gun only needs to do crosshair setting on 16:9 screen, no need to do crosshair setting on 4:3 screen.

If you want to use the light gun to play the game on a 4:3 screen, but display it on a 16:9 screen with a black background on the left and right sides, please press and hold the start button, then move the joystick to the left, wait for 3 seconds, then LED2 and LED4 will light up green, you have successfully switched the light gun to match the 4:3 screen to play games. (Pic7)

Switch back to 16:9 screen to play games, please do the same operation, then LED1 and LED5 will light up green, you have successfully switched the light gun to match the 16:9 screen to play games.



Pic7

5.3.5 RS3 Reaper switches mouse + keyboard to joystick (Game controller)

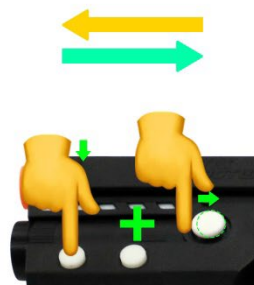
RS3 Reaper added a joystick device. When you plug the USB cable into the PC, it will recognize three devices in the PC: mouse/keyboard/game controller, but these three devices are not input to the PC at the same time. The default is mouse + keyboard input to the PC. You need to switch it to become a game controller input to the PC.

Switching operation:

Press and hold start button, then move joystick to the right and wait for 3 seconds, then LED3 lights up yellow, the light gun successfully switches to game controller input to PC. (Pic8)

Same operation again will switch game controller back to mouse + keyboard, then LED3 lights up green.

Mouse + Keyboard



**Joystick
(Game Controller)**



Pic8

6. RS3 Reaper external control com command list

RS3 Reaper controlled by game or com commands. Send "ZS" to enter external control mode and start command control. (Before sending a command, please check the serial port com number of the light gun in the console and match the serial port com number to send the command). RS3 Reaper command list please check below!

6.1 When the game prompts to reload, the game sends a "Z0" command to the light gun, and the barrel will slide back and stay there. (Pic9) --- "Z0" in command list.

6.2 When the barrel will slide back and stay, the player makes a reload, the game sends the command "Z6", and the barrel slides back to the standard position. --- "Z6" in command list.



But if the player does not reload, or the game does not send a reload command within 10 seconds, it will auto return to the standard position. It is a protective measure to prevent the solenoid from overheating and causing solenoid damage.

6.3 RS3 Reaper has 5 LEDs on both sides. If it is controlled by game or com commands, reload once and all 5 LEDs will light up orange. When there are 4 bullets left, the front LED turns red. Red means one bullet is reduced. All 5 LEDs turn red, indicating that it needs to be reload again. --- "Z1~Z5" of command list.

6.4 Send the "ZZ" command to make the rumble motor rotate. This command can be sent when being attacked in the game. --- "ZZ" of command list.

6.5 Send the "ZW" command to set the light gun to play the game on 16:9 full screen --- "ZW" of command list.

6.6 Send the "ZN" command to make the light gun play the game on a 4:3 screen, but display it on a 16:9 screen with a black background on the left and right sides. --- "ZN" of command list.

6.7 Send the "ZJ" command to switch the light gun to become a game controller --- "ZJ" of command list.

6.8 Send "ZM" command to switch light gun to mouse + keyboard --- "ZM" of command list.

6.9 "ZR" exits control LED no longer matches bullets, "ZX" exits external control mode, com command no longer controls light gun, light gun returns to self-control mode.



Pic9

Command list:

Format:115200,8,1,n

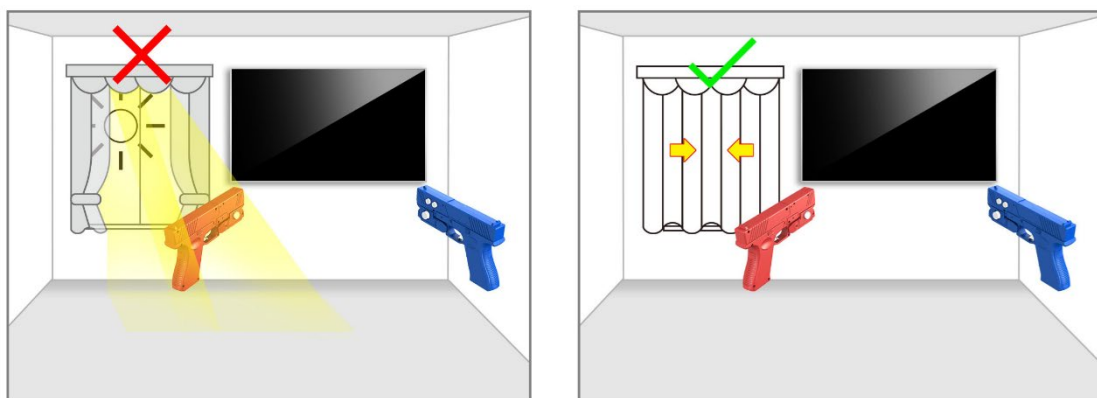
Host->gun (2 characters per command)

- 'ZS' Enter external control mode
- 'Z0' No bullets need to reload, (if no any command is received after 10 seconds)
- 'Z1' Slides and recoil once 1 orange LED 4 red LED
- 'Z2' Slides and recoil once 2 orange LED 3 red LED
- 'Z3' Slides and recoil once 3 orange LED 2 red LED
- 'Z4' Slides and recoil once 4 orange LED 1 red LED
- 'Z5' Slides and recoil once 5 orange LED
- 'Z6' Slide return, 5 orange LED
- 'ZZ' Rumble motor rotates once
- 'ZW' 16:9 screen mode
- 'ZN' 4:3 screen mode
- 'ZJ' Joystick mode
- 'ZM' Mouse + keyboard mode

- 'ZR' LED auto control mode
- 'ZX' Exit external control mode and enable Light gun self-control mode

7. Attention

- 1) Retro Shooter Pistol and MX24 plug into PC USB port, it will be recognized as a mouse & keyboard device, RS3 Reaper is recognized as mouse & keyboard & joystick (Game controller) device, they do not need to setup any software drivers, plug and play.
- 2) Retro Shooter Light Gun can be recognized in any emulator, in emulator, use light gun's mouse to map light gun's X and Y, also use light gun's keyboard number 1 map game start, keyboard number 5 map as game insert coin....
- 3) The Reload button on the Retro Shooter Pistol is the Reload function, and the pedal is also the Reload function.
- 4) Retro Shooter Pistol recoil uses 12v power. 1pcs R/S pistol requires about 1A current, 2 pcs R/S Pistol use total 2A. The Master Shooter mainboard uses the same 12V power adapter. It is recommended to use a 12V/5A power adapter with both the R/S Pistols and Mainboard. Master Shooter and Family version mainboards use the same 12V power adapter with the R/S light gun pistols. The Arcade (JAMMA) mainboard use the hub to provide recoil power, the 12V input of the hub can be connected to the 12V power supply inside your arcade cabinet.
- 5) MX24 & RS3 Reaper Light gun recoil use 24V power, 1pcs MX24 Light gun requires about 1A-1.5A current, 2pcs use total 2A-3A, it is recommended to use 24V/3A power adapter.
- 6) When you use a Retro Shooter light gun, if the monitor is against a window and the sun is shining, please close the curtains, the light outside the window will interfere with the light gun camera and affect the shooting accuracy! (Pic10)



Pic10