

USER MANUAL

PyroMote

V1.0

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Showven Technologies Co., Ltd.

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Thanks for choosing SHOWVEN® PyroMote, we wish it will bring you lots of exciting moments. Please read the following manual carefully before operating this product.

Δ Product Description

PyroMote is a handheld intelligent system dedicated to controlling PyroSlave for fireworks displays. It uses a touch screen to complete the setting operation and a physical keyboard to realize the ignition operation. It can not only realize manual firing with buttons, but also running auto ignition files. Besides, it supports LTC time code function. It is a handy and powerful tool for small to medium-sized fireworks displays.

Δ Features

- \ 433M and 868M dual band wireless, stable wireless signal output
- \ 5 inch high resolution capacitive screen, clear and easy operation
- \ Support FXcommander_Editor Software for flexible effects programming and auto fire
- \ Fast and convenient manual firing
- \ Dual-core processor, smooth operation
- \ Support LTC to realize precise synchronization of effects with music
- \ Built-in synchronous output AUDIO signal, achieve precise synchronization of output music
- \ Support USB back up of files and software update
- \ Support simple DMX operation
- \ 18650 battery powered, easy replacement
- \ Multi languages

Δ Technical Specifications

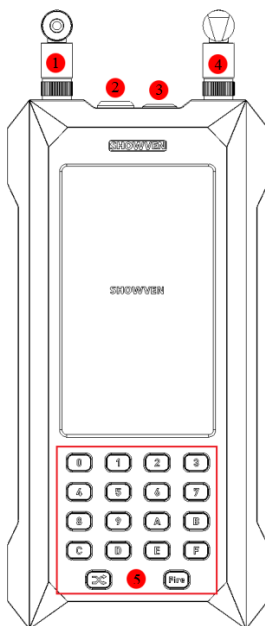
- \ Dimension: 218 × 107 × 40mm
- \ Weight: 0.5 kg
- \ Input: 5V 2A
- \ Battery: 2*18650 Lithium battery
- \ Standby Time: Appr. 5h
- \ Charging Time: 3h
- \ Work Power: 10W
- \ Work Temp.: -20℃-50℃
- \ Interface: 1*USB,
 - 1* 3.5mm Audio Output,
 - 1*LTC IN,
 - 1* DMX OUT

Δ **Safety Considerations**

1. Necessary precautions should be taken when using fireworks, FX products to ensure the safety of the operator, crew, and audience.
2. Do not operate PyroMote, fireworks or any special effects product without proper knowledge and training.
3. Keep PyroMote dry and do NOT use in rain or snow.
4. Never use anything sharp to operate the touch screen. Scratching hard will damage the screen. During operation, the touch screen may change due to temperature, please adjust it in Settings menu.
5. Pull out power plug during thunderstorm or not use for a long time.
6. When cleaning, unplug the power plug, clean with a soft cloth, do not use liquid or cleanser to spray on it.
7. Unauthorized repair are prohibited, it may cause serious incident.

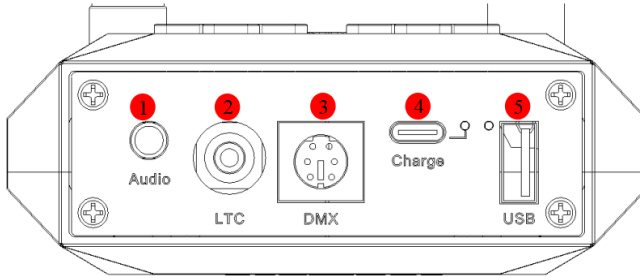
Δ **Structure**

1. Operation Area



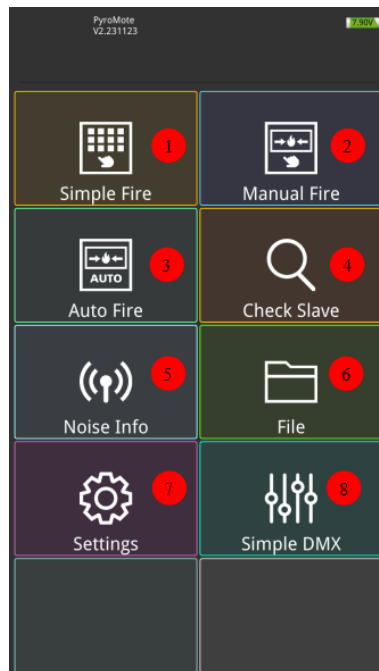
1. **Ant.L:** 433M Low Frequency Antenna for Pyro Signal.
2. **Power:** Power switch.
3. **Pyro Arm**
4. **Ant.H:** 868M High Frequency Antenna for Pyro Signal.
5. **KEY 0-KEY F:** Manual firing button.

2. Cable Connection Panel



1. **Audio:** Audio Signal Output.
2. **LTC In:** Linear Timecode Input
3. **DMX:** DMX Output.
4. **DC Input:** DC power input, indicator light RED means charging, WHITE means charging completed.
5. **USB**

3. Main Interface



1. **Simple Fire:** manual firing with firing button.
2. **Manual Fire:** Pyro manual programming and firing, multi editable firing rules.

3. **Auto Fire:** Cooperate with FXcommander™_Editor to realize effects synchronization with music. Support both DMX and Pyro.
4. **Check Slave:** Check pyro slave status.
5. **Noise Info:** Check interference of pyro wireless signal.
6. **File:** File backup, Device Lib and Software update.
7. **Settings:** Parameters setting.
8. **Simple DMX:** Equal to a simple DMX console, 128 channels DMX value output.

Δ Simple Fire

Click “Simple Fire” enter simple fire interface as below.

Main function of this interface is manual firing with related firing button on panel. Switch the Pyro Arm key to ON status, choose SLAVE address, and any one or multi igniter point(s) from 0-F, press “Fire” button to firing selected igniter point(s). or operators can press any of the button from 0 to F to firing related igniter point directly.



1. **Back:** back to the main interface.
2. **Status ID:** Green means ready, Red mean firing completed
3. **Igniters**
4. **Select all / Clear selected**
5. **PyroSlave address switch**

▲ **Manual Fire**

Click “Manual Fire” enter manual fire interface as below.



Region 1: Menu setting area.

SCENE0, SCENE1, SCENE2, SCENE3: switch between different scene. Can’t change scene when “Pyro Arm” at ON status. Each scene corresponding to a file, which can be copied through USB. For more details please check “File” menu.

Check: switch to “Check Slave” interface to check igniter status of current scene.

00:00:00:000: Timing, timing starts when the first CUE is triggered.

Add: Add a Cue file to the end of CUE list.

Insert: Insert a cue in current position.

Delete: Delete current selected Cue.

Delete All: Delete all Cue file.

X4: PyroSlave X4

X16: PyroSlave X16, X32 or C16

Region 2: Cue list area.

Up / Down: press the corresponding keypad button 0/1 on panel to switch Cue.

Cue: sequence No. of Cue.

Status: Status of Cue, “Ready” means the cue is ready; “active” means it is running; “Down” means firing completed.

Address start: Start address of Slave.

Address end: End address of Slave.

Point start: Start point of ignition position on Slave.

Point end: End point of ignition position on Slave.

For X4 there are only 4 ignition position; for X16, X32 or C16 there are 16 ignition position for each address.

Below 3 setting example will help to understand the Address start, Address end, Point start and Point end.

Example 1:

Parameters Setting: Address start=0; Address end=2; Point start=4; Point end=5;

Triggered firing position: include Slave 0 position 4 to F, Slave 1 position 0 to F, Slave 2 position 0 to 5.

Example 2:

Parameters Setting: Address start=0; Address end=2; Point start=4; Point end=4;

Triggered firing position: Slave 0 position 4, Slave 1 position 4 and Slave 2 position 4.

Example 3:

Parameters Setting: Address start=0; Address end=0; Point start=2; Point end=9;

Triggered firing position: Slave 0 position 2 to 9.

Effect: set the firing running rules of the slave. There are five preset firing running rules Left to Right, Right to Left, Synchronous, Sides to Middle, Middle to Sides.

Interval time (ms): firing time interval between two igniter on slave.

Group: Divide Cue list into group.

Select any of the Cue, click to choose this Cue in "Group" column (it will show "v" after selected), only adjacent Cue can be divided into same group.

Background color is the same for a group Cue.

Cues in different groups will appear in alternative grey and white.

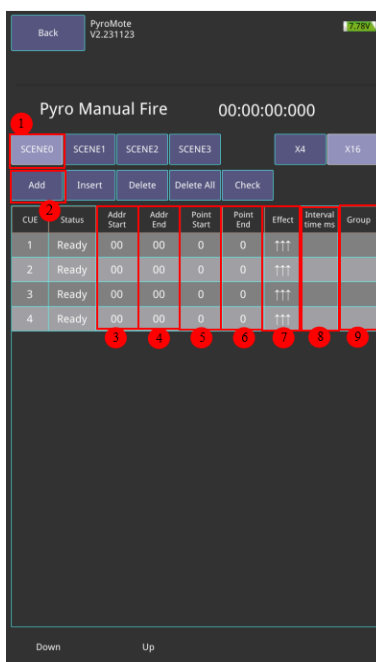
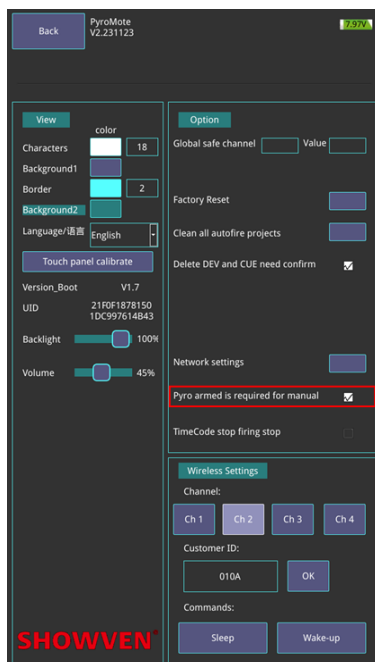
The Cue in same group will triggered together.

Click the "v" to ungroup.

After setting manual fire file, select a CUE, switch ON "Pyro Arm", press "Fire" button, the CUE start firing, and timing start from the moment press "Fire" button. When current CUE finished, it will jump to next CUE, if want to firing next CUE please press "Fire" again.

Switch off the "Pyro Arm" can terminate the firing CUE.

Note: When not select "Pyro armed is required for manual fire" in settings menu, operators can running CUE file when Pyro Arm switch stay in OFF status to check the CUE file status. There is no wireless signal send out after press "Fire".



Δ Manual Fire Programming

Click "Manual Fire" enter manual fire interface and programming according to below steps. (above right picture)

1. Select scene, eg: "SCENE 0"
2. Click "Add" to add cue
3. Set start slave address
4. Set last slave address
5. Set start point of ignition position on start slave
6. Set end point of ignition position on last slave
7. Set firing running rules
8. Set firing intervals (if firing rules is not synchronous)
9. Set firing group if needed. For example if set Cue 1, 2, 3 in the same group, this three cues will be triggered together

Δ Auto Fire

Auto Fire interface and explanations.



1. Back to main interface
2. LTC timecode
3. Current DOT file run time
4. Total time of DOT file
5. WAVE file current run time
6. Total time of WAVE file
7. Music progress bar
8. CUE distribution in the whole DOT file
9. Current music file name
10. Trigger source: manual
11. Music progress reset
12. Rewind the DOT file output time -40ms
13. Trigger source: LTC
14. Forward the DOT file output time +40ms
15. fps display of trigger source
16. Music file list
17. CUE list of selected music file
18. Import / Delete file
19. Offset between the DOT file and WAVE file

All music project file are programmed on WINDOWS software FXcommander™_Editor, download to PyroMote via USB disc; A complete music project file consist of three files: DOT file (control the device); CSV file (display CUE list); WAVE file (play music).

NOTE: Project file can with or without WAVE file, for the project with WAVE file there is a [W] before the file name. File with WAVE can output music when running.

CUE list parameter information:

CUE: CUE number.

Device: Device type, including DMX and PYRO two types.

Name: Device name.

State: Current CUE status, there are four status: Queued, Ready, Active, Done.

Addr: Device address.

Mode: preset running mode. There are five modes: "→←", "←→", "→", "←", "↑↑↑↑".

Effect: The effect of the device.

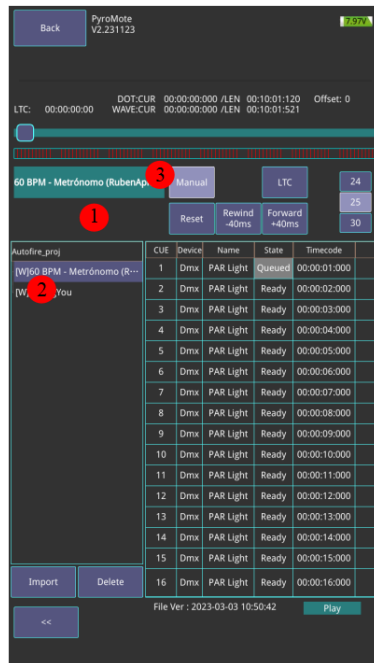
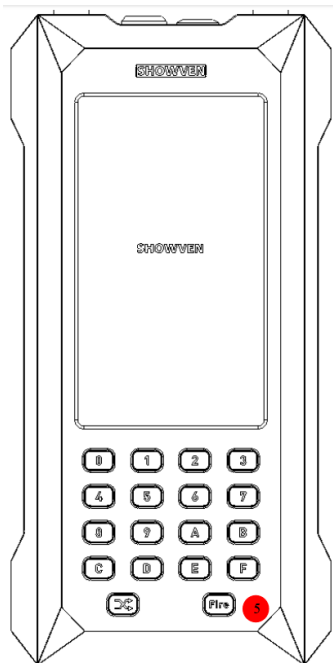
Duration: Effect duration.

Prefire: Current CUE advanced trigger time.

Trigger: Device trigger intervals.

Drag the music progress bar to fast forward or rewind. The length of progress bar is from the music start to last device trigger, that means sometimes when the music progress bar already to the last, there is no device will be triggered, but can still output music.

Δ Run Auto Fire



Trigger manually

1. Click "Reset" to reset the running time to start point.
2. Select music project file.
3. Select trigger source. Here we select "Manual".
4. Switch ON "Pyro Arm" (it will shows "PYRO ARMED" "DMX ARMED" on screen).
5. Press "Fire" to start the project. if there is WAVE file included in music file, it will show"WAV"on the screen.

Press "Fire" again during firing, the auto fire sequence will stop running, press "Fire" again to continue. Click "Reset" will rewind the running time back to start point.

Trigger by LTC

1. Click "Reset" to reset the running time to start point.
2. Select music project file.
3. Select trigger source. Here we select "LTC".
4. Switch ON "Pyro Arm" (it will shows "PYRO ARMED" "DMX ARMED" on screen).
5. Input LTC time code by conenct PyroMote with LTC signal through LTC IN, the background color of LTC icon on screen turns to red, and LTC time code will also shows on screen. If there is any abnormal please increase the time code volume. The fps of LTC time code will also displayed automatically.

Δ Check Slave

Check Slave is to check the status of igniter connection on slave.

Region 1: check the igniter status of the set file.

"BPM Metro...": shows corresponding current file name.

If enter this interface through Manual Fire interface it shows scene name of the manual fire;

If enter this interface through selected music project, it shows the name of music project.

If no selected music project and enter this interface through main interface, it shows "no project".

Rescan Universe: Only works if there are project files. When "Pyro Arm" is turned on, click rescan universe to display the status of the slave and igniter used in the corresponding file in the table (the Slave and igniter that not used in the file will not be displayed even if they are in an abnormal state).

"Up" and "Down": switch from slaves. Address range for 00~FF.

Region 2: check the detailed status of Pyro Slave.

Bat: 98% shows the battery volume.

Two small circles in the middle shows the high frequency and low frequency wireless signal respectively (Green – signal good, White – no signal).

Line between each group of black and red dot shows igniter status:

Green: used in the cue, connected.

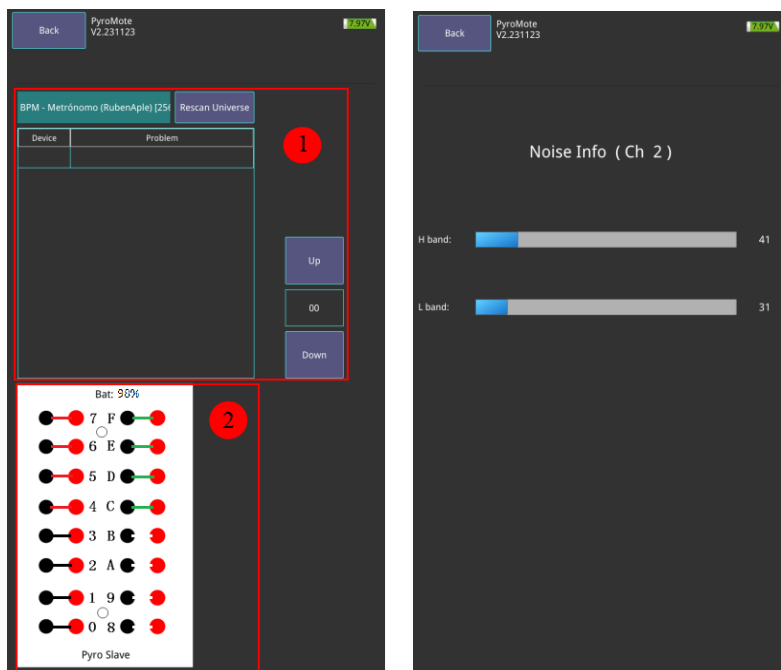
Red: used in the cue, not connected.

Black: not used in the cue, but connected.

White: not used in the cue, not connected.

Note:

To match the PyroMote and Slave, the “customer ID” and channel should be the same. If there is no signal, please set in “settings” interface. Check the Slave igniter status need to switch ON “Pyro Arm”.

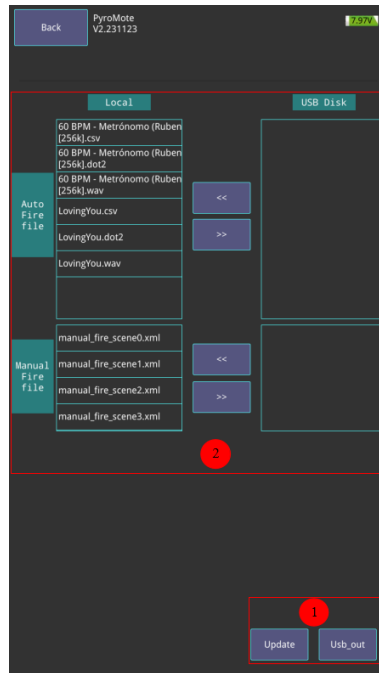


Δ Noise Info

Check interference of pyro wireless signal. The shorter the blue bar the weaker the signal interference, the better the signal. Check above right picture.

Δ File

File menu interface.



Region 1:

Software update through USB flash disc.

Update: firmware update. Put USB flash disc to the USB port, click "update" it will pop up a dialog box, click "YES". Device will restart automatically after finish firmware update. When update please place the update folder in the root directory of the USB flash disc.

Usb_out: Exit USB flash disc.

Region 2:

Files transfer between PyroMote and USB flash disc. There are 2 file groups: AutoFire file, ManualFire file.

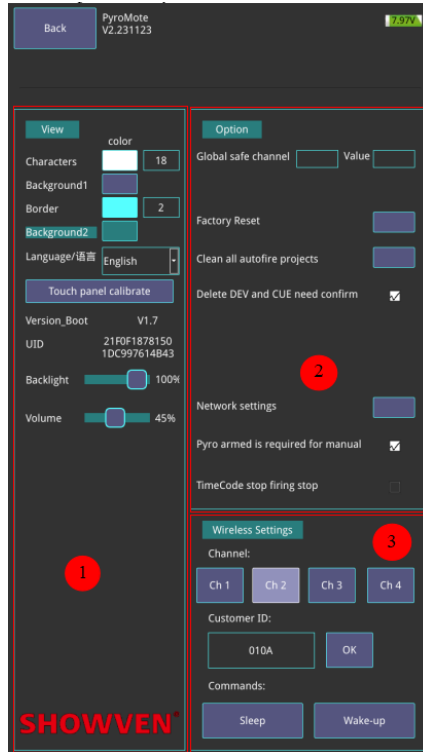
AutoFire file: including project file under "Auto Fire" menu. Normally a project file will include dot2, wav and csv three types of file. No music will be played if there is no wav file.

ManualFire file: including 4 scene file under "ManualFire".

Plug in USB flash disc, select files need to upload or download, click ">>" or "<<" of corresponding file group to realize file upload and download.

△ Settings

Parameters setting interface.



Region 1:

Settings for software appearance, wireless etc.

Characters: modify color and size of font. (size range 10~18).

Background1: modify the color of the background that can operate.

Border: modify the frame color and rounding (rounding value range is 0~8, the large the value the rounder the frame).

Background2: modify the color of the background that can't be operated.

Language: language switch

Touch panel calibrate: calibrate for the touch screen.

Backlight: drag sliding block to adjust the brightness of screen.

Volume: drag sliding block to adjust the volume output in Auto Fire.

Region 2:

Global safe channel and **Value:** Set overall safe channel and DMX value. Safe channel value will keep sending after switch on "Pyro Arm".

Factory Reset: reset to default setting.

Clean all autofire projects: all autofire projects will be cleared after click the block

Delete DEV and CUE need confirm: if select this item, whenever delete DEV and CUE there will pop up to reconfirm the operation.

Network settings: check and set the PyroMote IP etc parameter.

	Network	RNDIS
IP	10.171.3.120	10.171.4.120
Netmask	255.255.255.0	255.255.255.0
Gateway	10.171.3.1	
DNS	8.8.8.8	
Tcp Port	9175	

Save

Pyro Armed is required for manual fire: For check the CUE file without switch on Pyro Arm. When not selected, operator can run the CUE file under Manual Fire interface when Pyro Arm is at OFF status, for test of CUE file only so there is no wireless signal output.

TimeCode stop firing stop: when a music file in Auto Fire is firing through timecode, the firing stop when timecode stops if this item is selected.

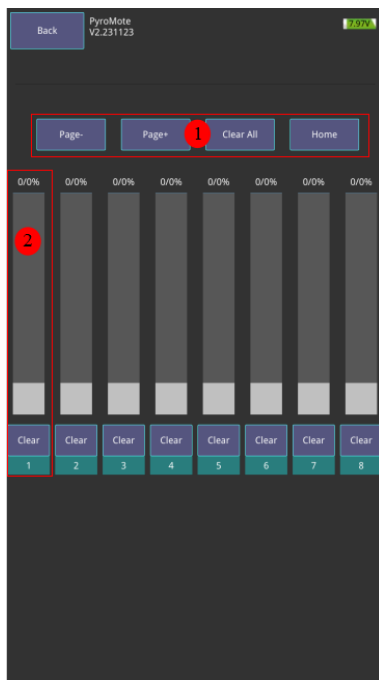
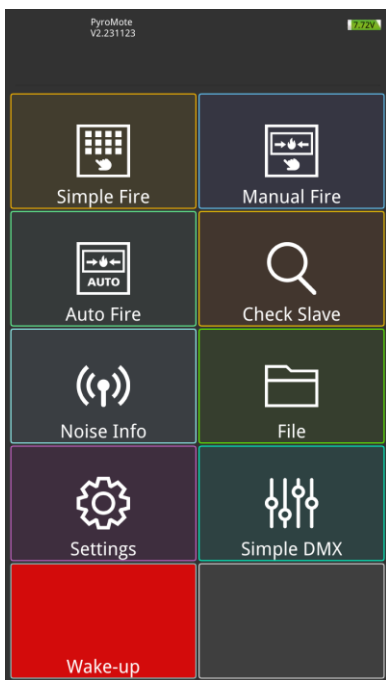
Region 3:

Channel: channel modify, there are four channels optional, ensure the same channel as pyro slave.

Customer ID: modify customer ID, ensure the same ID as pyro Slave.

Commands: include "Sleep" and "Wake-up", realize remote sleep and wake up of pyro slave to save batteries. Also can used to test whether slave wireless is normal or not.

Note: when PyroSlave is under sleep mode, there will be a Wake-up interface shows in main interface of PyroMote to remind operator. Click wake-up interface and enter Settings interface to wake-up slaves.



Δ **Simple DMX**

Simple DMX used to output a DMX value of a fixed channel. Check above right picture.

Region 1: operations towards “Simple DMX” page

Page -: page down

Page +: page up

Clear All: Clear all DMX

Home: Back to first page

The existing DMX output will not cleaned up during page switch.

Region 2: DMX output information.

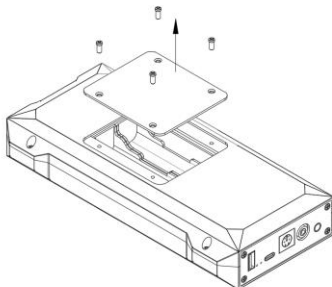
Each column together with corresponding keypad on panel is a group, there are 128 groups in total, means it can output 128 DMX address. Slide the white block of each column will output the related DMX value of the corresponding DMX address. Press the keypad on PyroMote panel will output DMX value of 255, release the DMX value back to 0. Key 0-7 on keypad corresponding to 8 channels on screen.

Before operate please switch the “DMX Arm” to ON status.

Δ **Battery**

PyroMote uses 2 pcs flat end 18650 lithium battery at the bottom of device as below picture shows. Tips for battery:

1. Please install battery in the right direction;
2. Please use a 5V adapter with a TYPE-C cable to charge the battery.;
3. To elongate battery service life, no matter use it or not, please charge the battery once per month;
4. Fully charged battery can support PyroMote work about 5h.



Δ **Warranty Instructions**

- | Sincere thanks for your choosing our products, you will receive quality service from us
- | The product warranty period is one year. If there are any quality problems within 7 days after shipping out from our factory, we can exchange a brand new same model machine for you
- | We will offer free of charge maintenance service for machines which with hardware malfunction (except for the instrument damage caused by human factors) in warranty period. Please don't repair machine without factory permission

Below situations NOT included in warranty service:

- | Damage caused by improper transportation, usage, management, and maintenance, or damage caused by human factors;
- | Disassemble, modify or repair products without permission;
- | Damage caused by external reasons (lightning strike, power supply etc.)
- | Damage caused by improper installation or use;

For product damage not included in warranty range, we can provide paid service. Invoice is necessary when applying for maintenance service from SHOWVEN®.

SHOWVEN[®]



Showven Technologies Co., Ltd.

Tel: +86-731-83833068

Web: www.showven.cn E-mail: info@showven.cn

Add: No.1 Tengda Road, Liuyang Economic & Technical Development Zone, 410300, Changsha, Hunan, P.R.China