

# **LED Industrial Film Viewer**

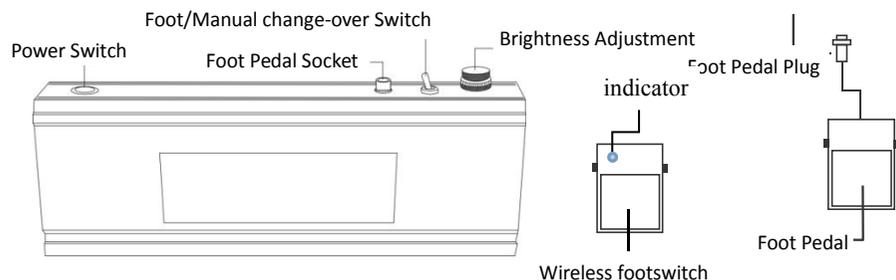
## **User's Manual**

**YUSHI INSTRUMENTS**

## Instruction

The LED Industrial X-Ray Film Viewer

FM1000/FM2000/FM2000PRO combine advantages of both domestic and overseas film viewers, overcome various defects of traditional fluorescent lamp film viewers, such as low luminance, poor contrast and short lifetime. Meet requirements of EN25580:1992; ASTM E1390-90 and ISO5580:1995. The portable and sturdy design making it extremely suitable for working in the field of outdoor.



## Features

### 1. Ultra-high brightness

FM1000 > 100000cd/m<sup>2</sup> (300000 LUX)

FM2000 > 170000cd/m<sup>2</sup> (500000 LUX)

FM2000PRO > 300000 cd/m<sup>2</sup> (800000 LUX)

### 2. High uniformity

Even when the brightness is set to the lowest, there are no bright or dark areas on the light surface.

### 3. Long life-time

LED light source, Working time > 60000 hours, 10 times longer than ordinary fluorescent lamps. Good shock resistance, do not need to worry about long-distance transportation or field work.

### 4. Stepless Dimmer

Using PWM pulse width modulation method to achieve 2%-100% ultra wide range dimming.

### 5. Real cold light source

The aluminum alloy shell is used for easy heat dissipation, low heat generation and no damage to the film. Imported high-efficiency LEDs are selected to achieve low power and high brightness.

### 6. No warm-up time is required, Fast startup

Suitable for frequent switching, and the number of startup times will not affect the life of the light source.

### 7. Low Noise

Japan imported bearing fan, high speed, low noise and fast heat removal to ensure a good working environment.

### 8. Wireless Foot-switch (Optional)

Improve operation convenience and get rid of cables.

## Main Specification



FM1000



FM2000



FM2000 PRO

Model	FM1000	FM2000	FM2000PRO
LED No.(pc)	140	280	280
Max. Light Intensity	>300000LUX (100000cd/m <sup>2</sup> )	>500000LUX (169000cd/m <sup>2</sup> )	>800000LUX (300000cd/m <sup>2</sup> )
Observable film blackness	<4.0D	>4.0D	>4.5D
Size of Viewing Area	220*60MM	200*75MM	200*75MM
Power	170-250VAC 50/60HZ	100-240VAC 50/60HZ	100-240VAC 50/60HZ
Power Consumption	50W	100W	150W
Dimension	456x142x68mm	456x154x68mm	456x154x68mm
Weight	3.2KG	3.5KG	3.5KG

### Usage Tips:

Turn the brightness adjustment knob clockwise to turn it from dark to bright. Please adjust the knob to the darkest before use to avoid glare when turning on the light.

**Working mode:** intermittent working mode

### Manual Mode

Toggle the switch to manual, turn on the power, then press the power switch to light up the window, the viewing light is steplessly dimmed by the dimming knob. Place the radiographic film in the observation window, manually adjust the brightness adjustment knob, and turn it clockwise to change from dark to bright, which is suitable for viewing the film.

### Foot Mode (Recommended)

Toggle the switch to the foot pedal to make the foot switch work, turn on the power, and press the main power switch to turn on the power, the film viewer lights up at the lowest brightness, which is convenient for you to check the film number, and can also be used as a desk lamp. The low brightness can prevent the strong light from directly irradiating the eyes, and avoid the glare effect of the users' eyes. Step on the foot switch and the film viewer lights up normally, the viewer light is steplessly dimmed by the brightness adjustment knob to meet the requirements of viewing. Choose a suitable brightness to observe the film, and release the pedal when you are done. Then the film viewer is at the lowest brightness, and you can replace the next film to repeat the above operation.

### Matters needing attention

The higher the brightness of the industrial LED film viewer, the greater the power, and the natural temperature will be relatively higher. During use, the light barrier and film should not be placed in the observation window for a long time, and the foot switch can be used to control the working status. Do not keep the film viewer in a

high-brightness working condition for a long time, so as not to affect the life of the film viewer.

Do not cover the observation window with any covers, or the surface heat will be conducted to the coverings. This is a physical property that cannot be avoided. The heat will accumulate and not be dissipated, and the temperature will get higher and higher for a long time. Being in a high temperature state will affect the service life of the instrument

**Standard configuration**

1	Main unit	1pc	2	Wired foot switch	1pc
3	Power cable	1pc	4	Instruction manual	1pc
5	Quality Certificate	1pc	6	Warranty card	1pc
7	Packing List	1pc	8	Light barrier (Except for FM1000)	1pc

**Optional accessories**

1: Wireless foot switch 2: Light barrier

**Troubleshooting 1:**

No matter how you turn the dimming knob, the viewing light is very dim.

Solution:

Check whether the switch is in manual mode. If it is at the pedal position, it means that you are currently in the pedal mode. At this time, the film viewer is in the lowest brightness display state. When you step on the pedal switch, the maximum point will be activated Bright, and the brightness can be adjusted by the dimming knob.

**Troubleshooting 2:**

In the foot pedal mode, press and hold the foot switch, the brightness of the film viewer does not change.

Solution:

Check whether the film viewer is at the lowest brightness, and adjust the brightness steplessly through the brightness adjustment knob to achieve the brightness required for the viewing.

**Troubleshooting 3;**

Plug in the power and press the power switch, the viewing light will not be on or the brightness will not change.

Solution:

1. If the brightness does not change, check the position of the switch and toggle it.

2. If the film viewer does not light up, please check the fuse under the power cord plug on the back panel, and remember to power off!

If it still does not light up, do not disassemble by yourself.

Please contact our customer service in time to troubleshoot the problem.