YUSHI INSTRUMENTS

VM series Flashlight type
LED Ultraviolet Lamp
Operation Manual

1· Instrument Introduction

VM10, VM30, VM50 and VM70 portable cold light source LED ultraviolet torches are developed by our company for fluorescent magnetic particle and fluorescent penetration inspection and other industrial areas. Feature all aluminum alloy construction, super high strength and very low power consumption. The products conform the National Pressure-bearing Equipment NDT Standard (NB/T 47013-2015).

2·Range of Application

2.1 Main Application

- Yushi VM Series adopts high-power 365nm Ultraviolet band LED Lamp Beads produced by Japanese NICHIA company, 100% free from UV-B and UV-C element, spectrum is pure.
- The lifetime of Lamp Beads reaches up to 20000 hours, efficient, energy conservation and environmental protection.
- High power output, quick start, reaches the maximum illuminance as soon as switched on.
- Ultra-low power consumption, high efficiency.
- Cold light source makes cold operation, outputs the illuminance lasted and steadily.
- Optical filter is black vitaglass.
- High strength aviation aluminum alloy shell with anodize surface.
- Enhance thermal design, can be used continuous for long time.
- Configure dedicated high speed charger for each lamp.
- Anti-magnetic field interference function makes it possible to work in the strong magnetic field.

2.2 Technical Parameters

Parameters \ Mode	VM10	VM30	VM50	VM70
Maximum Intensity of Ultraviolet Ray at 38cm Distance	10000 uW/cm2	13000 uW/cm2	L:8000 uW/cm2 H:20000 uW/cm2	20000 uW/cm2
Irradiated Area at 38cm Distance (≥1200 uW/cm2)	¢63mm	¢55mm	¢55mm	¢105mm
Visible Light Illumination	2.91 lux	3.4 lux	3.14 lux	5.8 lux
Black Light Filter	●	●	●	●
Light Source	365nm UV-A LED			
Number of Beads	1	1	1	3
ICR18650	●			●
ICR26650		●	●	
Battery Capacity	3.7V ≥2600mAh	3.7V ≥4800mAh	3.7V ≥4800mAh	3.7V ≥2600mAh
Number of Battery	1	1	2	4
Charging Time	5H	6H	7H	5H
Working Hours (Continuous)	4H	5H	L:18H H:8H	5H
Outline Dimension – Lamp Head Diameter	28 mm	40 mm	62 mm	60 mm
Outline Dimension – Diameter of Light Inlet Window	22mm	34mm	55 mm	50 mm
Outline Dimension – Length	128 mm	144 mm	240 mm	143 mm
Weight (including Battery)	140g	240g	520g	610g

Note:Product parameters are for reference only

2.3 Main Application

- Fluorescence Penetrant Testing
- Fluorescence Magnetic Particle Flaw Detection
- Fluorescence Leak Detection

2.4 Other Application

- Oil Stain, Blot Testing
- Special Gas, Oil and Gas Pipeline Testing
- Fluorescence Reflection Detection for Special Materials
- Criminal Investigation and Legal Medical Expert Survey
- Paper Money Authentication, Jewel Appreciation
- Agriculture, Foodstuff, Medical Treatment and other relevant industries.

3. Matters need Attention

- Do not use the charger which is not matched with this product.
- Keep away from child.
- Do not irradiate eyes and skin.
- Keep away from fire.
- Please store in low temperature, dry and ventilation.
- If long time no use, please take out the battery. It is suggested to charge and discharge every 3 months.
- Optimum charging environment: 18-30℃, humidity 25-62%.

Statement: To dismantle without authorization or man-made damage are outside the scope of warranty.

4. Related Data

The National Pressure-bearing Equipment NDT Standard (NB/T 47013-2015) requires Black Light Lamp / Ultraviolet Lamp as follows:

- Exposure intensity on the workpiece surface must be greater or equal to 1000 uW/cm².
- The wavelength should be 315nm~400nm, and the peak value wavelength should be 365nm.
- Light source should meet the specification of GB/T5097.

Packing List

- Main Unit
- Charger
- Rechargeable Battery
- Suit Case
- Manual
- Certificate
- UV Protective Glasses (Except VM10)

Company Information

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Worldwide Guaranty Card:

Model: _____ S/N Code: _____

Date of Purchase: _____ Customer Call: _____

Customer Company:_____

Note: Products in the warranty period due to normal use of