

Acme[®]

**VACUUM
TESTER**



User Manual

Please read the instruction carefully before use

CONTENTS

01/ Safety Instructions.....	2
02/ Technical Specifications	3
03/ Control Panel.....	4
04/ Connections.....	5
05/ Test Instructions.....	6
5.1 ACME luminaire pressure test	6
5.2 User-defined pressure test.....	8
5.3 Air leakage test	10
06/ System Setting.....	11
07/ System Upgrade.....	13
08/ Main Functions	14

01/ Safety Instructions





Please read the instruction carefully which includes important information about the installation, usage and maintenance.

Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction manual.

Important:

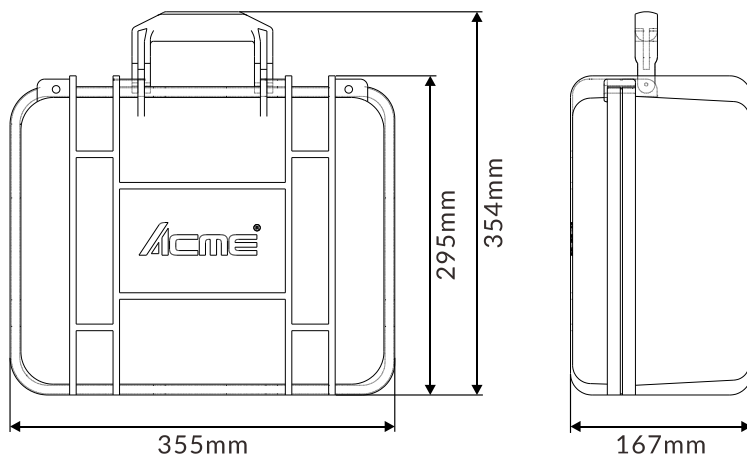
Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

- Unpack and check carefully to ensure that there is no transportation damage before using the unit.
-  This product is for indoor use only. Use only in a dry location.
-  CAUTION, possibility of electric shock.
- DO install and operate by qualified operator.
- DO NOT allow children to operate the fixture.
- Before operation, ensure that you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.
- Minimum ambient temperature TA: 0°C. Maximum ambient temperature TA: 40°C. Do not operate this product at a lower or higher temperature.
- Keep flammable materials away from the fixture while operating to avoid fire hazard.
- Make sure the power cord is not crimped or damaged; replace it immediately if damaged.
- Avoid any flammable liquids, water or metal from entering the unit. Once it happens, cut off the mains power immediately.
- DO NOT operate in a dirty or dusty environment. DO clean the fixture regularly.
- Avoid entanglement of the power cord with other wires.
- In the event of serious operating problem, stop using the unit immediately.
- DO NOT attempt to operate this unit if it becomes damaged. DO NOT attempt any repairs yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center if needed.
- Disconnect this product from its power source before servicing.
- DO use the original packaging if the device is to be transported.

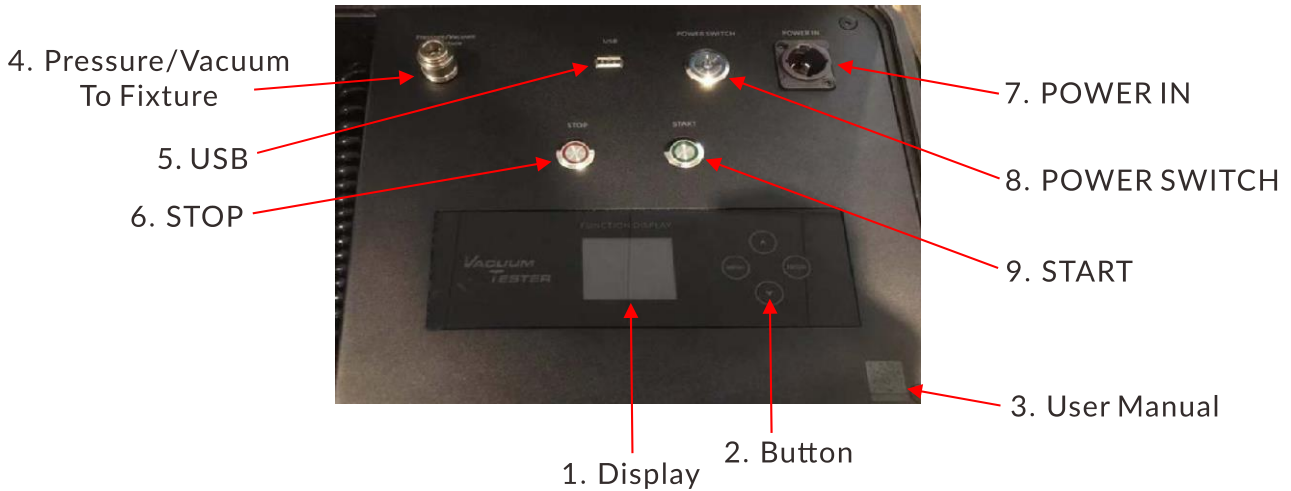
- Authorized maintenance personnel must refer to *MAINTENANCE TECHNICAL MANUAL* to conduct to maintenance.
- Altitude: Below 3000m. DO NOT operate the fixture at altitudes higher than 3000 meters.
- Humidity: Min. 0%RH. Max. 70%RH.
- Pollution degree: 1.

02/ Technical Specifications

Power Voltage	100-240V~ 50/60Hz	
Power Consumption	40W	
Lux	17L/minute	
Maximum Positive Pressure	80kpa	
Maximum Negative Pressure	-60kpa	
Control	Firmware Upgrade	Firmware Upgrade via USB disk
Construction	Display	LCD display
	Protection Rating	IP20
Features	Vacuum Tester is a portable air tightness tester designed for testing waterproof fixtures. It utilizes the pressure drop method to conduct non-destructive testing by using compressed air (or vacuum) as the medium for product inspection.	
Dimensions	355x167x354mm	14"x6.6"x13.9" in
Weight	7kgs	15.4lbs



03/ Control Panel



1. Display	To show the various menus and the selected function	
2. Buttons	MENU	To enter into move backward or leave the menu
	▲ UP	To go backward to move up in the menu
	▼ DOWN	To go forward to move down in the menu
	ENTER	To perform the desired functions
3. User Manual		
4. Pressure/Vacuum To Fixture	Used to connect the air hose to pump/transfer gas for the luminaire	
5. USB	Non-power output port, only use to upgrade the fixture's firmware or export the test record	
6. Stop	Press to stop testing	
7. Power In	To connect to supply power	
8. Power Switch	Turns on/off the power	
9. Start	Press to start testing	

04/ Connections

1. Connect the power cord to the Vacuum Tester (Figure 1) and plug it in.



Figure 1

2. Take out the air hose (Figure 2), which has a quick-connect fitting and a bigger nozzle at each end (Figure 3). Connect the air hose quick-connect fitting to the Vacuum Tester (Figure 4). Carefully insert the threaded end of the nozzle into the air relief valve hole of the luminaire and twist it until it is finger tight (Figure 5), then switch the Vacuum Tester on (Figure 6).



Figure 2



Figure 3



Figure 4

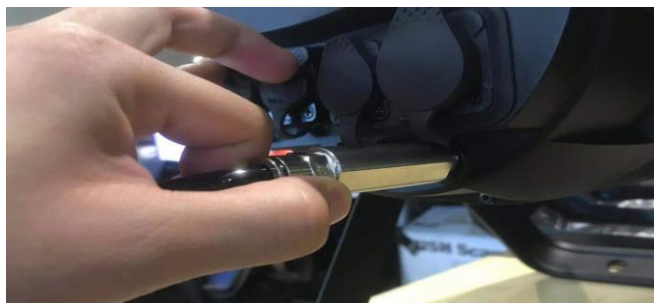


Figure 5



Figure 6

3. To switch the Vacuum Tester off, press the power switch again or directly unplug the power cord.

05/ Test Instructions

Attention: The Vacuum Tester should be hermetically connected with the luminaire, otherwise the test will be affected.

5.1 ACME luminaire pressure test

- ▶ To access the control menus, press the [MENU] button.
- ▶ Navigate the menu structure, using the [ENTER], [▲ UP] and [▼ DOWN] buttons.
- ▶ To select a menu option or to confirm a selection, press the [ENTER] button.
- ▶ To return to a higher level in the menu structure without making a change, press the [MENU] button, or wait 30 seconds.

1. Enter the **Main Menu** and use the UP/DOWN button to select **Air Pressure Test** (Figure 1), confirm your selection with ENTER.

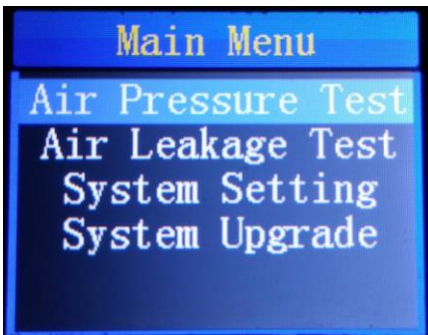


Figure 1

2. Enter the **Test Menu** and use the UP/DOWN button to select **Fixture Type** (Figure 2), confirm your selection with ENTER.

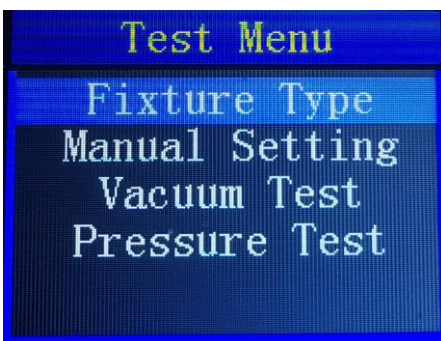


Figure 2

3. Enter the **Fixture Type** page and use the UP/DOWN button to select **Moving Lights**, **Arc. Lights** or **Static Lights** (Figure 3), confirm your selection with ENTER.



Figure 3

4. Enter into the test page (Figure 4, Figure 5) and press the green button to start testing.

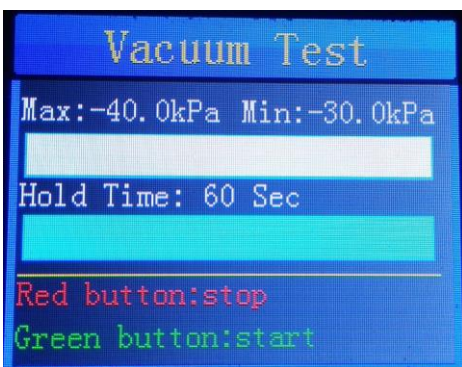


Figure 4

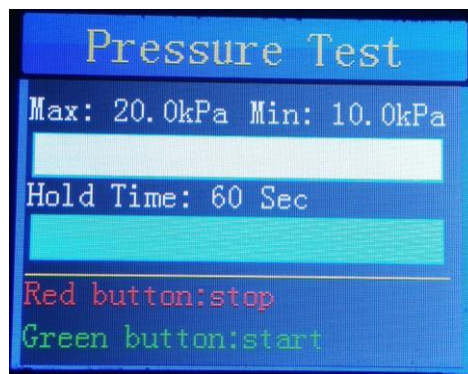
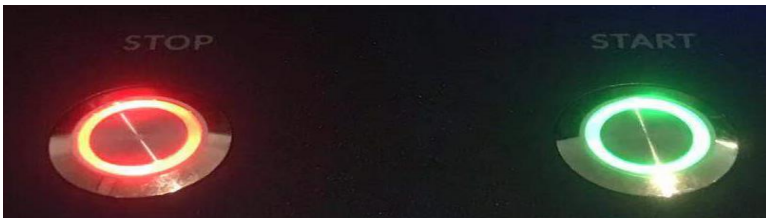


Figure 5

5. Press the red button to stop testing if there is any problem during the test.



6. "Test Pass" will be displayed when the test passes (Figure 6) and "Test Failed" will be displayed when the test fails (Figure 7).

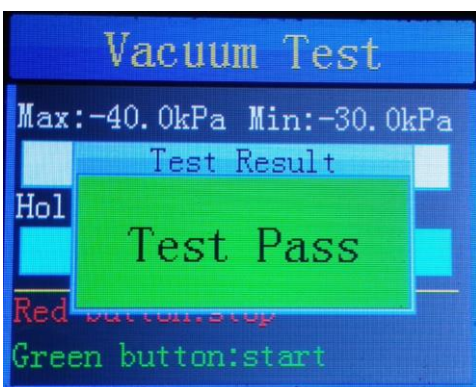


Figure 6

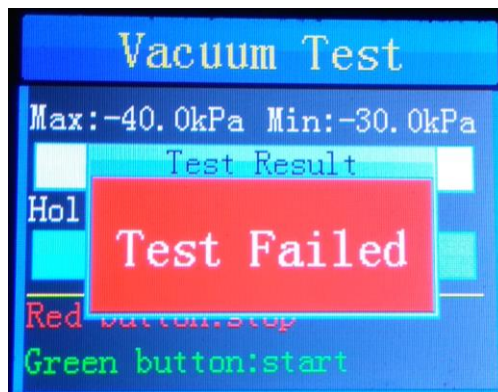


Figure 7

5.2 User-defined pressure test

- ▶ To access the control menus, press the [MENU] button.
- ▶ Navigate the menu structure, using the [ENTER], [▲ UP] and [▼ DOWN] buttons.
- ▶ To select a menu option or to confirm a selection, press the [ENTER] button.
- ▶ To return to a higher level in the menu structure without making a change, press the [MENU] button, or wait 30 seconds.

1. Enter the **Main Menu** and use the UP/DOWN button to select **Air Pressure Test** (Figure 1), confirm your selection with ENTER.



Figure 1

2. Enter the **Test Menu** and use the UP/DOWN button to select **Manual Setting** (Figure 2), confirm your selection with ENTER. Adjust the parameters of the time and pressure on the **Manual Setting** page (Figure 3), press the ENTER button to restore and it will automatically return to the **Test Menu**.

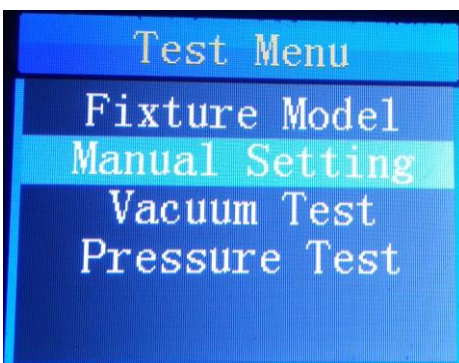
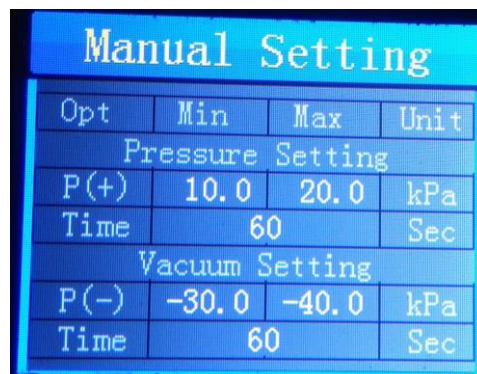


Figure 2



The image shows a monochrome LCD screen with a blue background. At the top, the text 'Manual Setting' is displayed in yellow. Below it, there are two sections: 'Pressure Setting' and 'Vacuum Setting'. Each section has a table of parameters.

Opt	Min	Max	Unit
Pressure Setting			
P(+)	10.0	20.0	kPa
Time	60		Sec
Vacuum Setting			
P(-)	-30.0	-40.0	kPa
Time	60		Sec

Figure 3

3. Enter the **Test Menu** and use the UP/DOWN button to select **Vacuum Test** (Figure 4) or **Pressure Test** (Figure 5) as needed, confirm your selection with ENTER.

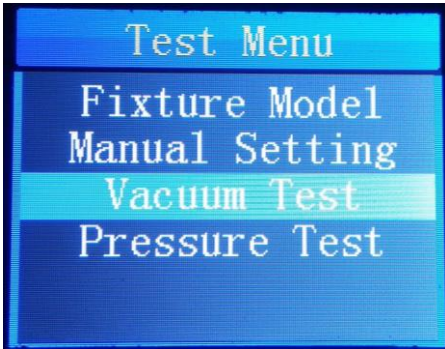


Figure 4

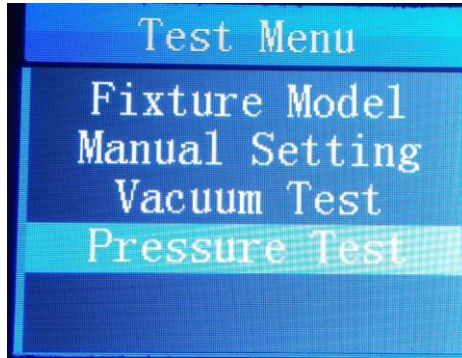


Figure 5

4. Enter into the test page (Figure 6, Figure 7) and press the green button to start testing.

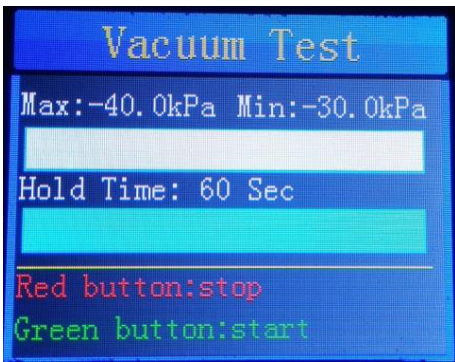


Figure 6

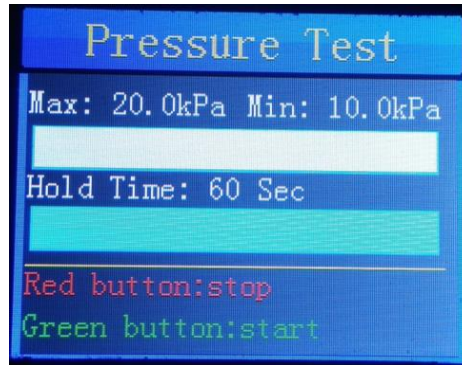
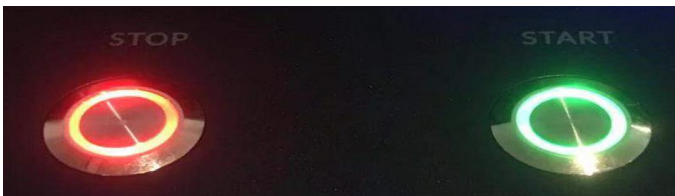


Figure 7

5. Press the red button to stop testing if there is any problem during the test.



6. "Test Pass" will be displayed when the test passes (Figure 8) and "Test Failed" will be displayed when the test fails (Figure 9).

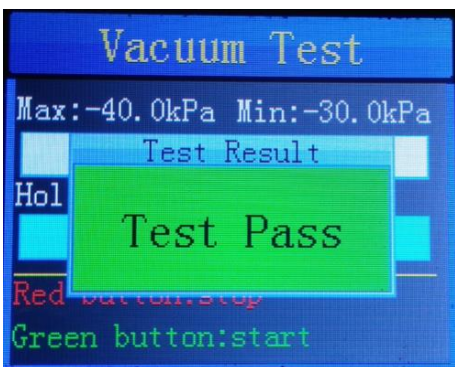


Figure 8

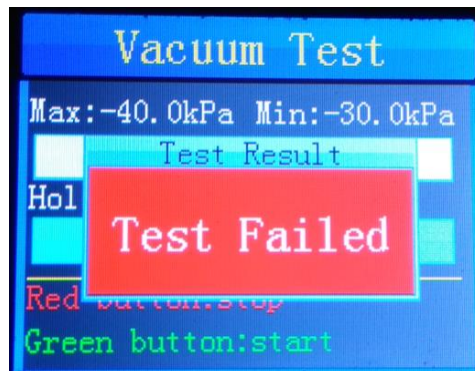


Figure 9

5.3 Air leakage test

- ▶ To access the control menus, press the [MENU] button.
- ▶ Navigate the menu structure, using the [ENTER], [▲ UP] and [▼ DOWN] buttons.
- ▶ To select a menu option or to confirm a selection, press the [ENTER] button.
- ▶ To return to a higher level in the menu structure without making a change, press the [MENU] button, or wait 30 seconds.

1. Enter into the **Main Menu** and use the UP/DOWN button to select **Air Leakage Test** (Figure 1), confirm your selection with ENTER.

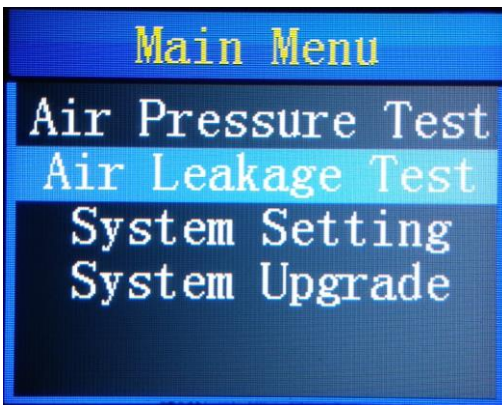


Figure 1

2. Enter into the test page (Figure 2), press the green button to start, then the Vacuum Tester will continuously fill the luminaire with air.

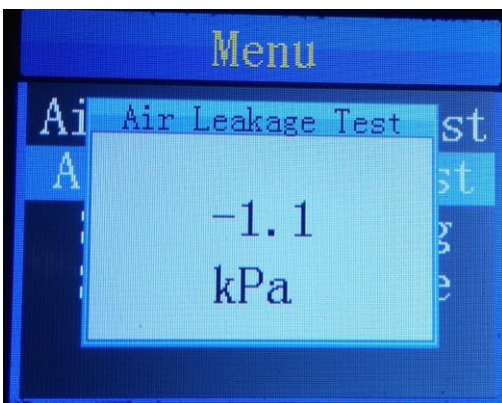


Figure 2

3. Put the luminaire into the water to confirm the location of air leakage by checking where the luminaire bubbles.
4. Take the luminaire out of the water and press the red button to stop testing.

06/ System Setting

- ▶ To access the control menus, press the [MENU] button.
- ▶ Navigate the menu structure, using the [ENTER], [▲ UP] and [▼ DOWN] buttons.
- ▶ To select a menu option or to confirm a selection, press the [ENTER] button.
- ▶ To return to a higher level in the menu structure without making a change, press the [MENU] button, or wait 30 seconds.

1. Enter into the **Main Menu** and use the UP/DOWN button to select **System Setting** (Figure 1), confirm your selection with ENTER.

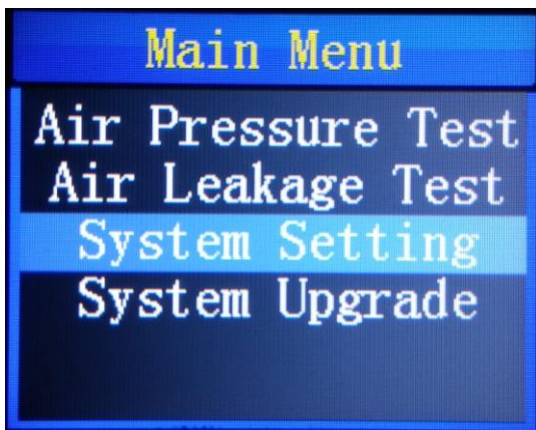


Figure 1

2. Enter into the **System Setting** page and use the UP/DOWN button to select **Language** (Figure 2), confirm your selection with ENTER.



Figure 2

3. Enter into the **Language** page and use the UP/DOWN button to select **English** or **中文** (Figure 3), confirm your selection with ENTER.



Figure 3

4. Enter into the **System Setting** page and use the UP/DOWN button to select **Test Record** (Figure 4), confirm your selection with ENTER. Enter into the **Test Record** page to view or export the test record, press the MENU button to exit.



Figure 4

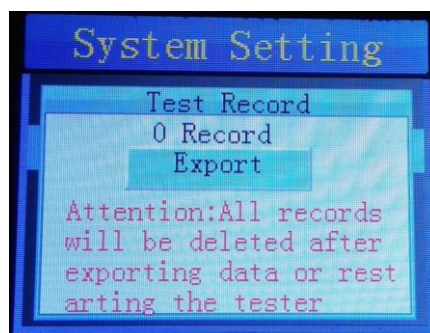


Figure 5

5. Enter into the **System Setting** page and use the UP/DOWN button to select **Firmware Ver.** (Figure 6), confirm your selection with ENTER. Enter into the **ACME V-BOX** page to view the firmware version of the Vacuum Tester (Figure 7), press the MENU button to exit.

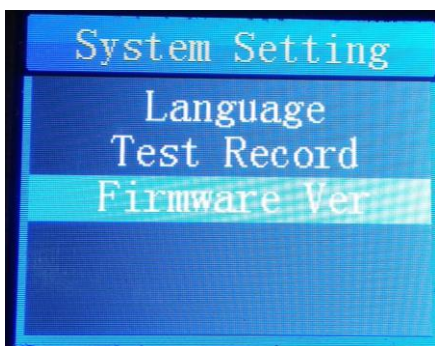


Figure 6

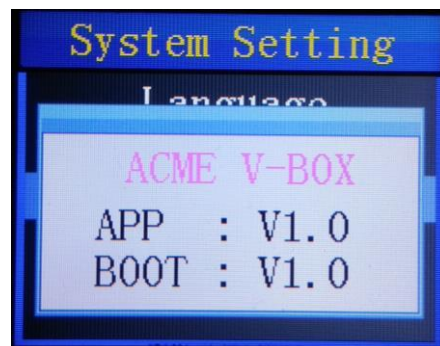


Figure 7

07/ System Upgrade

- ▶ To access the control menus, press the [MENU] button.
- ▶ Navigate the menu structure, using the [ENTER], [▲ UP] and [▼ DOWN] buttons.
- ▶ To select a menu option or to confirm a selection, press the [ENTER] button.
- ▶ To return to a higher level in the menu structure without making a change, press the [MENU] button, or wait 30 seconds.

1. Insert the USB drive with the upgrade file into the USB port.
2. Enter the **Main Menu** and use the UP/DOWN button to select **System Upgrade** (Figure 1), confirm your selection with ENTER.



Figure 1

3. Enter the **System Upgrade** page and use the UP/DOWN button to select **Upgrade Firmware** (Figure 2), confirm your selection with ENTER to upgrade fixture's firmware.

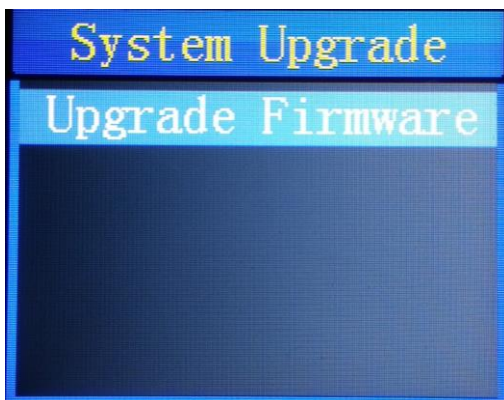


Figure 2

08/ Main Functions

- ▶ To access the control menus, press the [MENU] button.
- ▶ Navigate the menu structure, using the [ENTER], [▲ UP] and [▼ DOWN] buttons.
- ▶ To select a menu option or to confirm a selection, press the [ENTER] button.
- ▶ To return to a higher level in the menu structure without making a change, press the [MENU] button, or wait 30 seconds.

The main functions are shown below:

MENU	SUBMENU	OPTION
Air Pressure Test	Fixture Type	Moving Lights
		Arc. Lights
		Static Lights
	Manual Setting	
	Vacuum Test	
	Pressure Test	
Air Leakage Test		
System Setting	Language	English
		中文
	Test Record	
Firmware Ver.		
System Upgrade	Upgrade Firmware	

ACMETEC HOLDING LIMITED

Office Website: <https://www.acme.com.cn>

Technical Service: support@acme.com.cn

Technical Service Hotline: 0757-63289616



www.acme.com.cn