VACUUM TESTER

User Manual

Please read the instruction carefully before use

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1. Technical Specifications

Power Voltage:

AC 100~240V, 50/60Hz

Power Consumption:

Positive pressure: 40W

Negative pressure: 30W

Lux:

15L/minute

Maximum positive pressure:

80kpa

Maximum negative pressure:

-60kpa

Construction:

Display: LCD display

Accessories: An air pump; Four air pressure valves; Power Cable

Protection Rating: IP65

Control:

Firmware Upgrade: Update via USB link

Features:

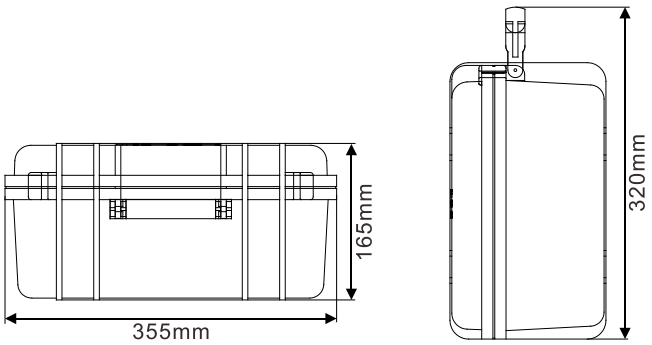
V-BOX is a portable air tightness tester. The test objects are waterproof luminaires.

It is a non-destructive testing instrument based on the principle of pressure drop method and using compressed air (or vacuum) as the medium to test products, The utility model has the advantages of simple structure, complete functions and sensitive precision, which can be used only by connecting the power interface and the luminaire interface, and can be used as an emergency test equipment to test whether the luminaire is waterproof or leaky.

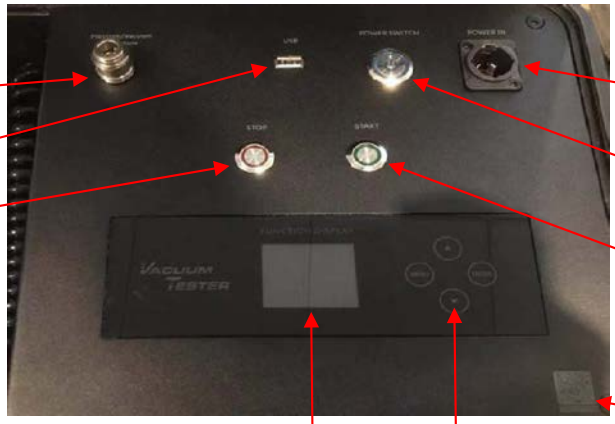
Dimension/Weight:

285x355x165mm, 7kgs

14”x6.5”x12.6”in, 15.4lbs



2. Control Panel



1. Display: To show the various menus and the selected function

2. Button:

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:

Used to upgrade the system or export the test record

6. Stop:

Press to stop testing

7. Power In:

Used to connect to supply power

8. Power Switch:

Turn on/off the power

9. Start:

Press to start testing

3. Connections

1. Connect the power cable to the fixture (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 fixture (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 fixture on (Figure 6).

Figure 2

Figure 3

Figure 4

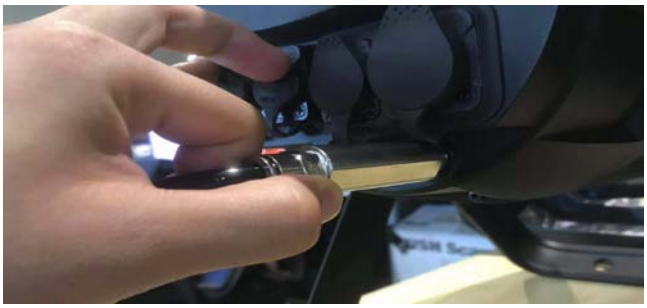


Figure 5

Figure 6

3. To switch the fixture off, press the power switch again or remove the power cable directly.

4. Test Instructions

Attention: The connection between the luminaire and the V-BOX should be kept sealed, otherwise the test will be affected.

4.1 ACME luminaire pressure test

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

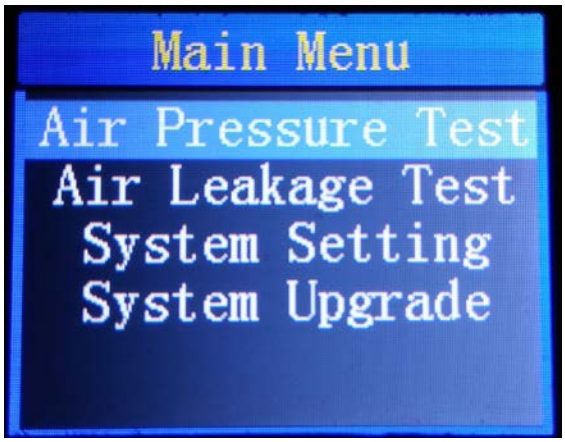


Figure 1

2. Enter the **Test Menu** and use the **UP/DOWN** button to select **Fixture Model**(Figure 2)**,** press the **ENTER** button to confirm, press the **MENU** button to exit.

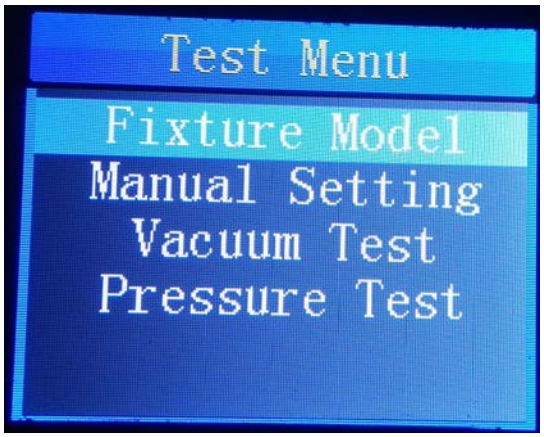


Figure 2

3. Use the **UP/DOWN** button to select the corresponding model on **Select Model** page (Figure 3), press the **ENTER** button to restore, press the **MENU** button to exit.

Figure 3

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

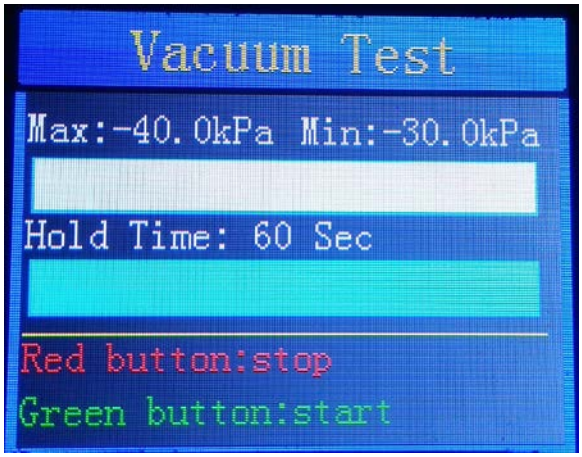


Figure 4

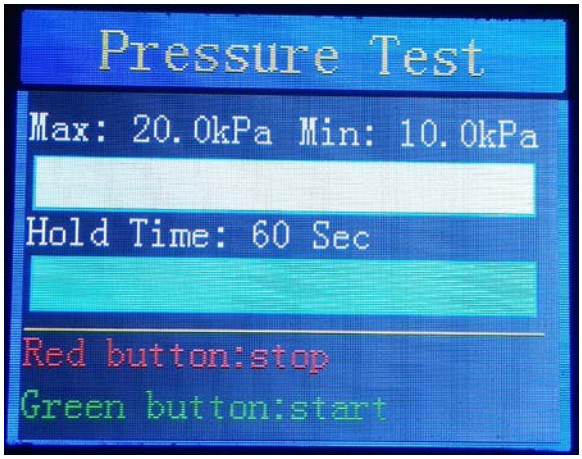


Figure 5

5. If there is any problem during the test, please press the red button to stop 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).

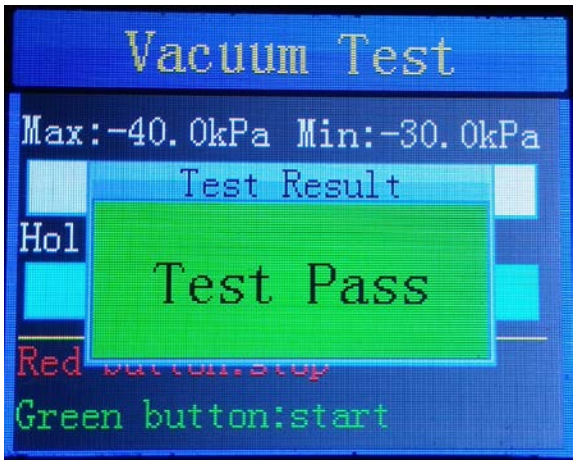


Figure 6

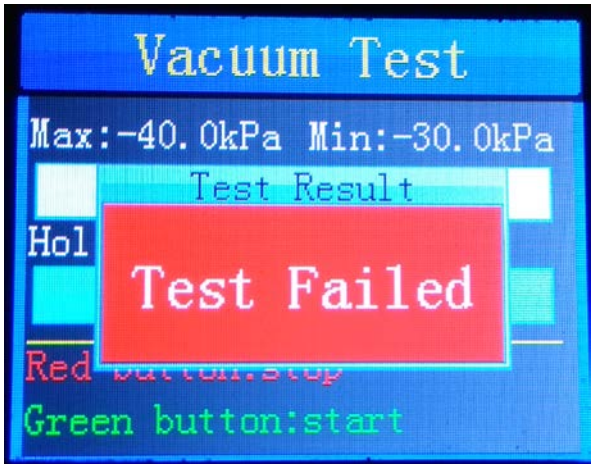


Figure 7

4.2 User-defined pressure test

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

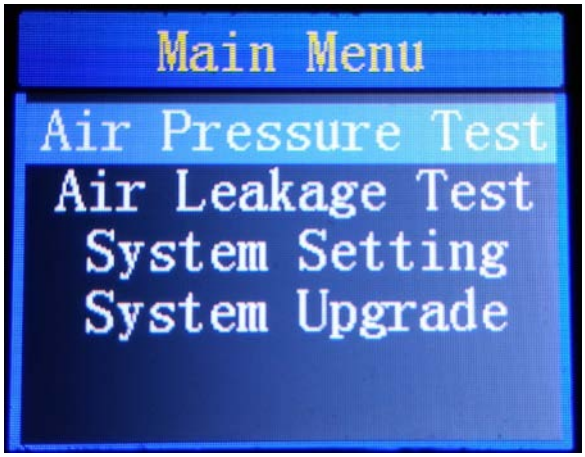


Figure 1

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

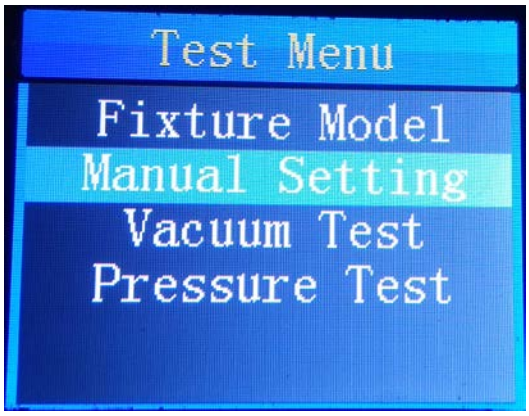


Figure 2

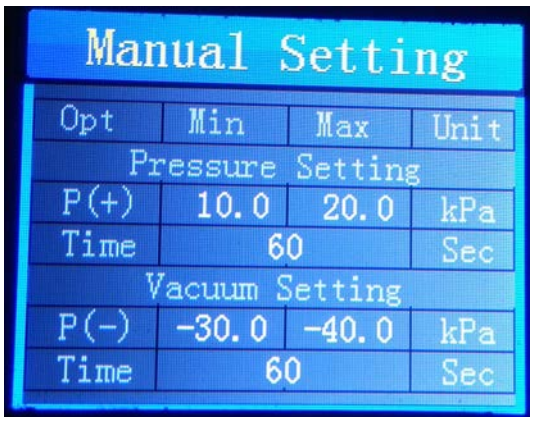


Figure 3

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

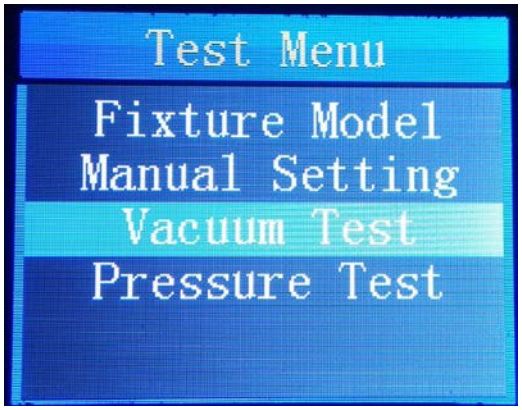


Figure 4

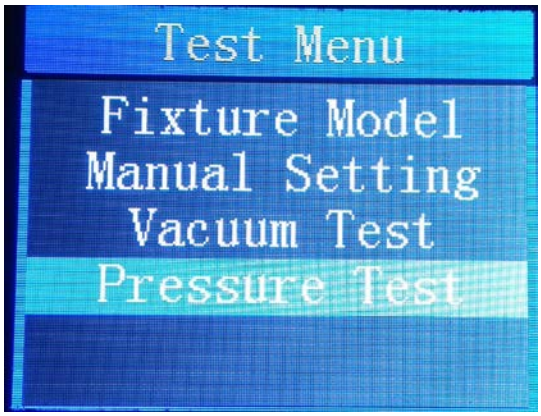


Figure 5

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

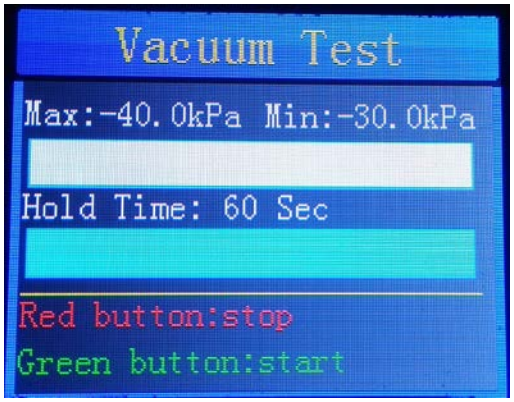


Figure 6

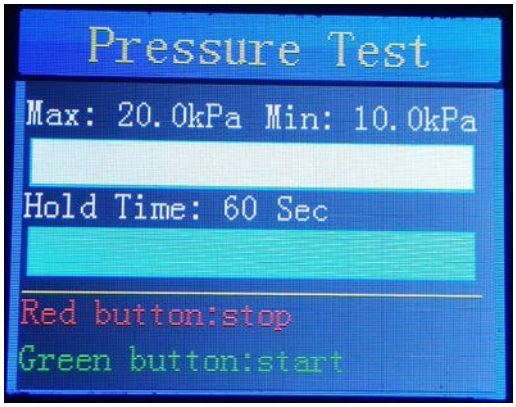


Figure 7

5. If there is any problem during the test, please press the red button to stop 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).

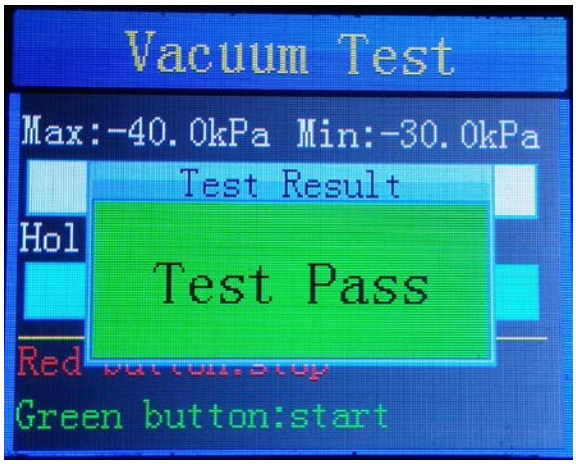


Figure 8

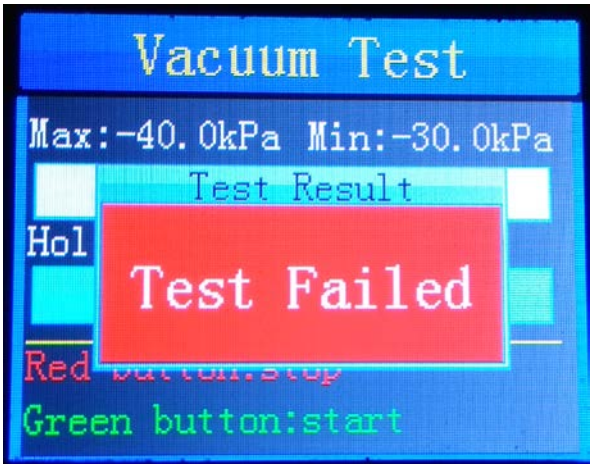


Figure 9

4.3 Air leakage test

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

Figure 1

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

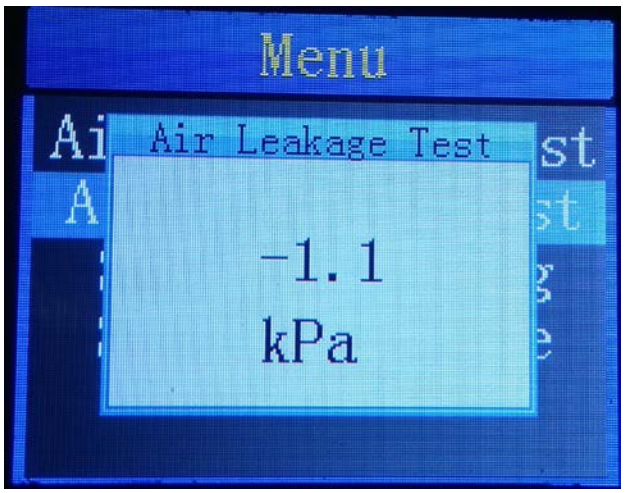


Figure 2

3. Put the luminaire into the water to confirm the location of air leakage by checking where the luminaire bubbles

4. Remove the luminaire from the water and press the red button to stop

5. System Setting

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

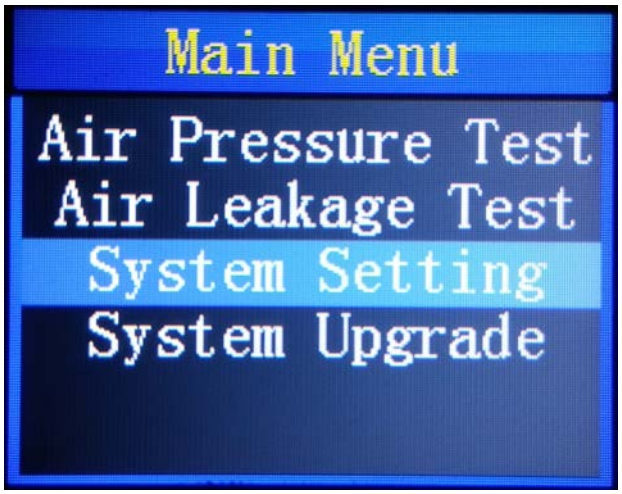


Figure 1

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

Figure 2

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

Figure 3

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

Figure 4

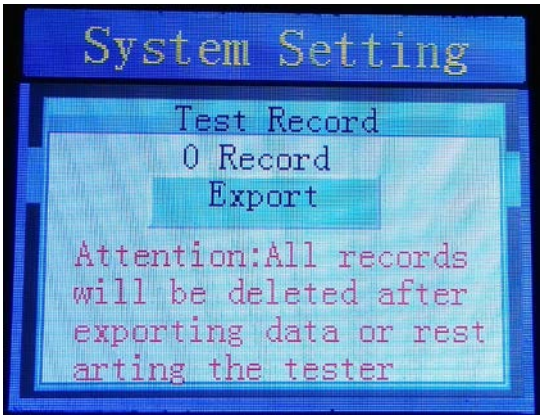


Figure 5

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

Figure 6

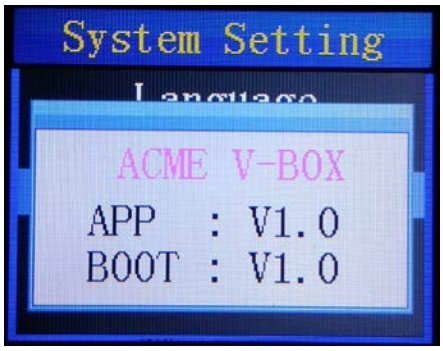


Figure 7

6. System Upgrade

1. Insert the USB drive with the upgrade file into the USB port

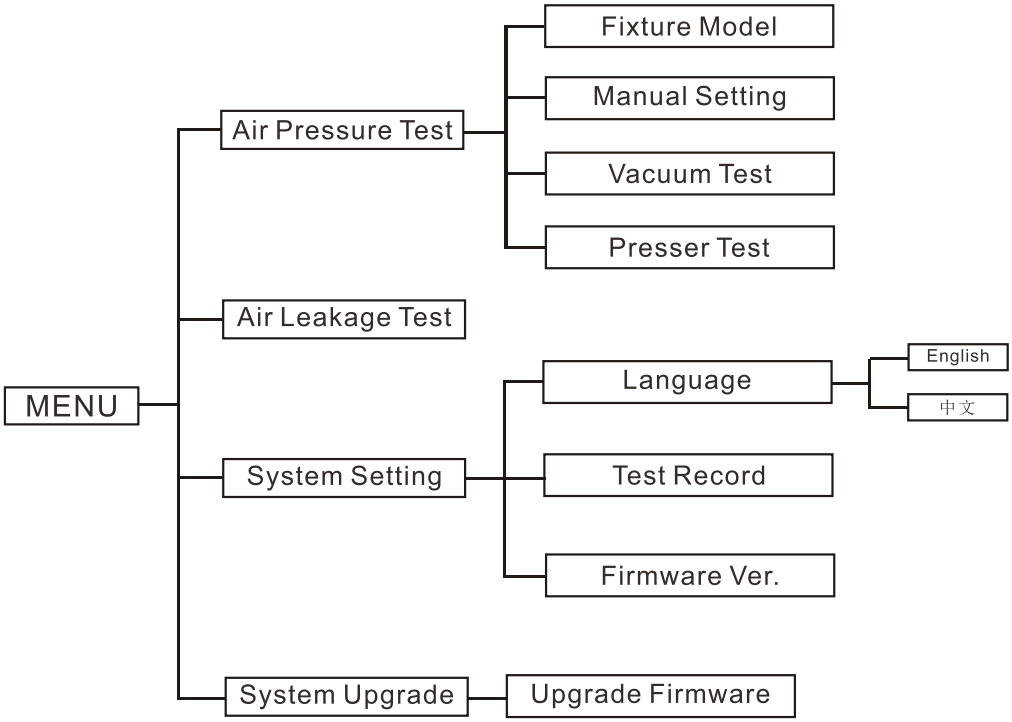
2. Enter the **Main Menu** and use the **UP/DOWN** button to select **System Upgrade** (Figure 1), press the **ENTER** button to confirm, press the **MENU** button to exit.

Figure 1

3. Enter the **System Upgrade** page and use the **UP/DOWN** button to select **Upgrade Firmware** (Figure 2), then press the **ENTER** button to upgrade the file.

Figure 2

Main Menu


MENU
Air Pressure Test
Fixture Model
Manual Setting
Vacuum Test
Presser Test
Air Leakage Test
System Setting
Language
English
中文
Test Record
Firmware Ver.
System Upgrade
Upgrade Firmware

Innovation, Quality, Performance