

LANGRY®

HT225-NB/RH225-B

Digital Concrete Test Hammer

Operating Instructions



PREFACE

Your choice of the products made by Jinan Langrui Detection Technology Co., Ltd. (LANGRY) is greatly appreciated. We are committed to deliver you excellent products and satisfied sales services. Please carefully read the instructions prior to use.

1. The instructions are prepared to provide the correct and complete descriptions of related products and data. However, we do not guarantee that there are no errors or omissions. Therefore, we will not bear responsibilities for any resulting consequences.

2. LANGRY keeps the right of updating the instructions without prior notice.

3. LANGRY bears no responsibilities for possible losses from data deviation or incorrect testing conclusion arising from instrument failure and other errors.

4. When the instrument is put into operation, it means that you have carefully read and had full picture of all terms in the instructions, and you have fully agreed to all the terms in the instructions.

5. LANGRY will not bear responsibilities for all the signed agreements violating the statement during the sales and services process not involving LANGRY.

Testing data processing basis: synchronous built-in "Technical specification for inspecting of concrete compressive strength by rebound method" (JGJ/T23-2011)、EN 12504-2 and ASTM C 805.

Technical Parameters

Memory quantity: 240 components

Impact energy: 2.207J

Spring stiffness: 785 ± 30.0 N/m

Pointer length: 20.0 ± 0.2 mm

Friction of pointer: 0.65 ± 0.15 N

Spherical radius at the top of bouncing rod: 25 ± 1.0 mm

Operating length of spring: 61.5 ± 0.3 mm

Stretch length of spring: 75.0 ± 0.3 mm

Take off position of Bounce hammer: scale "0~1"

Rebound value on anvil: 80 ± 2

Indication consistency: $\leq \pm 1$

Working temperature: $-4^{\circ}\text{C} \sim +40^{\circ}\text{C}$

Display: 3.12" OLED 256*64 (Dot matrix)







Communication rate: 115200 bps

Battery power supply: 2300 mAh 4.2V lithium ion battery

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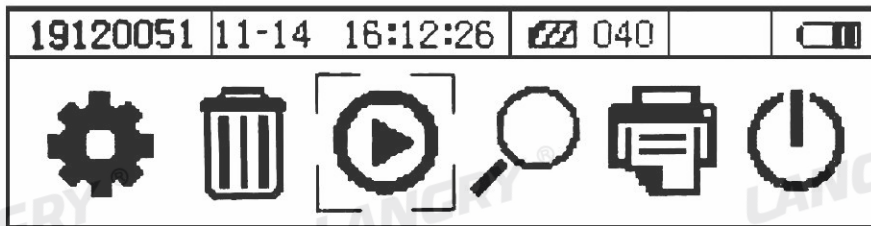
1 Keys

-  KEY:Performed the confirmation or cancel selected command
-  KEY:Generally used for direct return or exit operations
-     KEY: In general, it is used to move the cursor in the screen and adjust the value of the selected position item.


KEY:For on / off operation, long press 2s to start

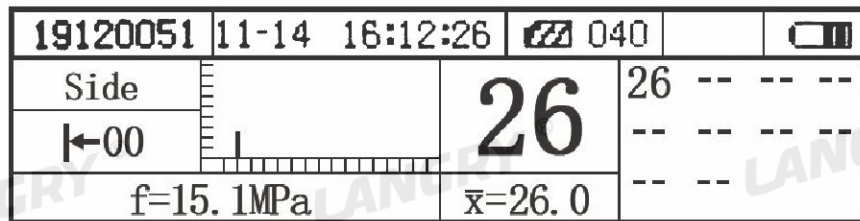
2 Interface Design



All functions of the instrument are started from the main menu interface. The main menu contains six sub modules: setting, deleting, sampling, viewing and shutting down.



2.1 Sampling Interface

In the main menu interface, select the sampling icon, Press the  key to enter the sampling interface.



In the sampling interface, select  key to pop-up Menu as show in the figure, The first item is to delete the last rebound value; the second item is to set parameters; the third item is to exit sampling, At this time, press the  key to return to the sampling interface to continue sampling.





| | | | | | | | | | | | |
|-----------|--|-------|--|-----------------|-------|-----|----|--|----------------------------|--|--|
| 19120051 | | 11-14 | | 16:12:26 | | 040 | | | | | |
| Side | | | | | -- -- | | -- | | Delete SetParam Exit | | |
| ←00 | | | | | | | -- | | | | |
| f=--.-MPa | | | | \bar{x} =--.- | | -- | | | | | |

Press the key to select the second item, Press the key to enter the sampling parameter setting interface.


| | | | | | | | | | | | |
|----------|----|-------|-------|----------|-----|-----|--|--|--|--|--|
| 19120051 | | 11-14 | | 16:12:26 | | 040 | | | | | |
| | | | | | | | | | | | |
| Cont | 10 | 0.0 | Angle | Side | Min | Max | | | | | |

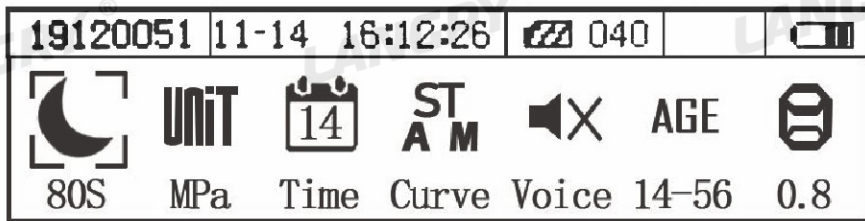
The sampling parameter setting menu includes: continue sampling, number of measuring points (American Standard and European standard are not allowed to be modified), carbonization value, Impact Angle, detection surface, Allowable minimum and maximum.

Press the  key on the sampling parameter setting interface to return to the sampling interface.

After the completion of sampling, the system prompts and automatically jumps to the sampling completion interface. The component data is saved. Press the  key to switch to the sampling selection interface. Select continue sampling or modify parameter sampling by   key. At this time, press the  key to return to the main menu interface.

2.2 System Setup Interface

Select the Settings icon in the main menu interface, press the  key to enter the system setting interface. There are 7 options. They are backlight delay, unit, system time, curve, voice switch, age, Correction factor of test block size.



Backlight delay can be adjusted by key, and the range is 20s-80s.

Compressive strength units: MPa, psi and kgf / cm².

Select the time icon, press the key to enter the system time adjustment interface. When adjusting the time, press the key to select the part to be adjusted. Press the key to adjust the value. After adjustment, press the key to return to the system setting interface.


Curve Settings can be selected as JGJ23-2011, ASTM C 805, EN 12504-2, and custom curves. If set as a custom curve, the maximum number of sampling points can be set to 400 during sampling.

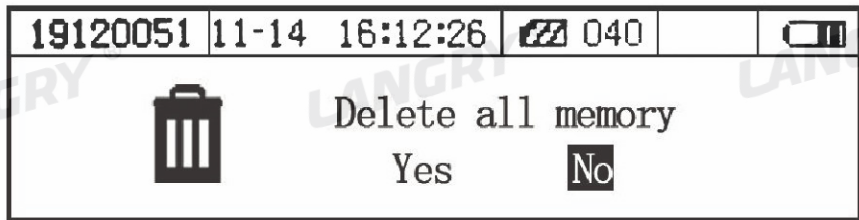
Need to slow down the Recoiling speed when the voice is turned on.

There are two options for age: 7 days and 14-56 days.

There are three correction factors of test block size according to different sizes:1.0, 0.95 and 0.8.After the calculation, the strength value is corrected.


2.3 Deleting Data

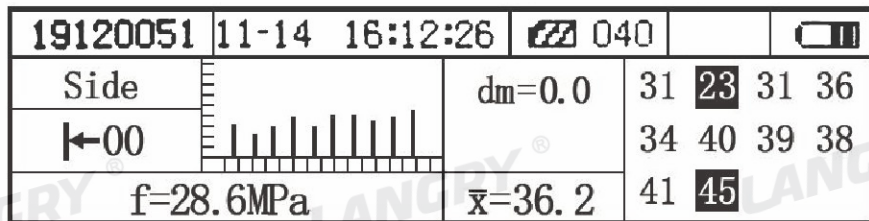
After the delete icon is selected in the main menu interface,Press the  key to enter the deletion confirmation interface.



Once this command is executed, all component data in memory will be deleted and cannot be recovered.For the sake of insurance, The instrument will be confirmed by a confirmation screen, so be careful!

2.4 Viewing Interface



After the view icon is selected in the main menu interface, Press the  key to enter the viewing interface.



The viewing interface is the same as the sampling completion interface. The third item in the in the status bar of the interface is the number of current components.


Press the   key to increase or decrease the number of current components, in order to view all component data.

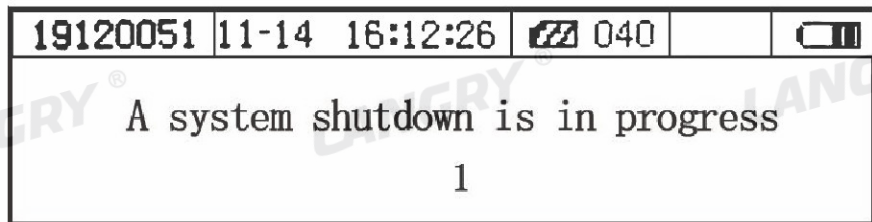
Press the  key in the viewing interface to select the carbonization depth value.

Press the   key to change the carbonization depth value.

Press the  key in the viewing interface to return to the main menu interface.

2.5 Shutting Down

After the shutdown icon is selected in the main menu interface. Press the  key and the system will prompt to shut down. If you forget to shut down, the system will shut down automatically after the shutdown delay, and give system prompt. Press any key at this time to cancel the shutdown.



Manufacturer warranty

LANGRY guarantees that the tool is free from defects in materials and manufacturing processes when it leaves the factory, and the warranty is valid only if the user correctly installs, operates, maintains and cleans the tool in accordance with Langry's operating instructions.

The warranty covers the free replacement or repair of damaged parts during the whole service life of this tool. If the parts need to be repaired or protected due to normal wear and tear, they are not covered by the warranty.

Other claims are not covered by the warranty unless there is a different provision under the specific law of the customer's country. In particular, langry shall not be liable for any direct, indirect, incidental or inevitable damage, financial loss or additional expenses caused by or related to the improper use or abuse of this tool. Expressly exclude implied warranties of merchantability and fitness for a particular purpose.

In case of repair or replacement, the tool or relevant parts shall be sent to Langry's market organization immediately after the failure is determined.

V1.2

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