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SAFTY PRECAUTIONS AND WARNINGS

To prevent personal injury or device damage, users should carefully observe the instructions provided by this operation manual and adopt the following safety precautions:

- Always operate the tool under the safe condition
- Do not place the tool in any wet, oily, dusty area
- Do not place any tool or container on the tool
- Please use this tool with local legal permission

PRODUCT PACKAGING CHECKLIST

The whole package covers the following items, if missing, please contact your dealer.

<table>
<thead>
<tr>
<th>Name</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VVDI KEY TOOL</td>
<td>1</td>
<td>device</td>
</tr>
<tr>
<td>BS Remote</td>
<td>5</td>
<td>Xhorse wire universal type</td>
</tr>
<tr>
<td>Remote programming cable</td>
<td>2</td>
<td>programming Xhorse wire remote</td>
</tr>
<tr>
<td>Remote renew cable</td>
<td>1</td>
<td>renew smart key</td>
</tr>
<tr>
<td>Transponder collection box</td>
<td>2</td>
<td>place for chip</td>
</tr>
<tr>
<td>User Manual</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
OVERVIEW

TOOL SCHEMATIC

1. Transponder detection area
2. Ignition data acquisition & Signal testing
3. Frequency & Power testing
4. LCD Screen
5. Power on/off
6. Cancel
7. IR Tester
8. Direction
9. OK
10. USB Power charge port
11. Remote Programming port
CHARACTERISTICS

- Built-in more than 1200 types of vehicle remote database
  (More vehicle types will be supported continuously)
- Support varieties of offline transponder cloning
- Built-in hundreds of key renew database
- Support most HCS rolling code and fixed code remote cloning
- Support partial Non-HCS rolling code remote cloning
- Perfect testing function of frequency, power, IR and Ignition coil signal
- Large capacity lithium battery ensures super long working time
- Bounes points reward system

SPECIFICATIONS

<table>
<thead>
<tr>
<th>LCD Size</th>
<th>2.4''</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display</td>
<td>240X320</td>
</tr>
<tr>
<td>Battery Voltage</td>
<td>3.6~4.2V</td>
</tr>
<tr>
<td>Battery Capacity</td>
<td>&gt;2500mAh</td>
</tr>
<tr>
<td>Charge Voltage</td>
<td>4.5~6.5V</td>
</tr>
<tr>
<td>Charge Current</td>
<td>&lt;1000mA</td>
</tr>
<tr>
<td>Working Time</td>
<td>≥10 hour</td>
</tr>
</tbody>
</table>
GENERAL INFORMATION

1. The descriptions, Illustrations and specifications given in the pamphlet are subject to alteration without notice.

2. Under the usage of instruction sheet, The warranty time is three years.

3. Even if within the warranty period, If the following occurs, Certain maintenance costs will not be free:
   - The product malfunction caused by not in accordance with the user manual operation
   - The malfunction and damage caused by unauthorized repairs and alteration
   - The product malfunction caused by the fall, crash and the improperly voltage
   - Damage due to force majeure

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OPERATING INSTRUCTIONS

The operation instructions describe the basic operating procedures and precautions of each function, at the same time listed some common problems encountered during using this function.

Please read operating instructions section carefully before your work.

1、MAIN INTERFACE
2. TRANSPONDER CLONING

Support identification all immobile Transponder in current market, clone & edit partial common Transponder.

- **Support editing transponder types**
  - 36/46(Hitag2), 47(Hitag3), 48, 4D(40/80), 7935

- **Support cloning transponder types**
  - Support 36/46 original or aftermarket transponder offline cloning
  - Support 4D-40 bit 60 63 83 67 69, etc offline cloning
  - Support 11/12/13/4c/30/33/42 offline cloning
  - Support Toyota 72-G transponder online cloning
  - Support Hyundai/KIA 70(4D-80) bit online cloning
  - Support Ford 83-80 bit online cloning
  - Support all 48 online cloning

- **Support unlocking transponder type**
  - Support unlocking Xhorse special 4D, 46 transponder
  - Support unlocking all 7935 locked transponder
After entering the transponder cloning function,
please put the transponder on ① transponder detection area and press [OK] to identification.
The identification result will be showed as picture 2.2.

**Picture 2.1**
Transponder identification diagram

**Picture 2.2**
Identification result
Press 📲 for transponder editing

- Use direction buttons to move cursor or revise editing content. Click on [OK] to confirm.

![Transponder editing diagram](image)

Press 🗣️ for transponder cloning

- Partial transponder cloning need to Ignition data acquisition first, other types no need to sniffer data, press [OK] to start sniffer data.

![Ignition data acquisition](image)
If data acquisition success will auto show the data, at the same time the buzzer will beep.

Picture 2.5
Data acquisition success diagram

Transponder Clone

Sniff: 63DE9FE8AD6498
Insert the original key into the left coil and press [OK] to start the calculation. In calculate progress, don't move the key!

Picture 2.5
Transponder cloning success.

Transponder password, or partial vehicle matching password

After cloning success, please press direction buttons ➔ to view data details (used for no need password matching vehicle types like BYD, or view Hyundai and KIA smart key matching password, etc. special functions.)
After get the transponder password success, different original transponder types should use different correct types transponder for cloning. Please refer to the following list:

<table>
<thead>
<tr>
<th>Original transponder type</th>
<th>Cloning transponder type</th>
<th>Reusable or not</th>
</tr>
</thead>
<tbody>
<tr>
<td>36/46</td>
<td>YS21 ,Xhorse SN2 key</td>
<td>Yes</td>
</tr>
<tr>
<td>4D</td>
<td>LKP02</td>
<td>Yes</td>
</tr>
<tr>
<td>4C</td>
<td>LKP02</td>
<td>Yes</td>
</tr>
<tr>
<td>11/12/13</td>
<td>T5 Glass or ceramic chip</td>
<td>Yes</td>
</tr>
<tr>
<td>30/33/42</td>
<td>PCF7935</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Note: Please enter transponder editing option then select [unlock] for unlock function.

* Please refer to [FAQ] section to solve the common problems encountered during operating.

3. TRANSPONDER GENERATING

- Support generating hundreds of vehicle immobilize transponder. ID36/ID46 special transponder can be generated by Xhorse SN2 universal (wireless remote) support reuse again.

- Transponder generating function: brand → vehicle model → year/configuration. Please select [more vehicle model] to get the transponder type for next process if can't find the proper vehicle model.

* Attention: Partial special transponder maybe locked permanent after generated, please pay attention to the tool prompts.
4. REMOTE CLONING

Remote cloning includes HCS/fixed code cloning, non-HCS rolling code cloning and remote editing function.

- **HCS/fixed code cloning:**
  Support common fixed code cloning PT22XX, LX918, HT6P20, etc.
  Support hundreds of vehicle and garage HCS rolling code remote cloning and generating. Generated remote should be re-programmed to receiver box.
  Support all Xhorse Universal remote series.

- **Non-HCS rolling code cloning:**
  Support all fixed code remote cloning.
  Support partial special vehicle model (such as Hornor) remote cloning without repeated code.
  Support partial vehicle non-repeated code HCS type remote direct cloning.
  * This type only support cloning by Xhorse universal wire remote series

- **Remote editing:**
  Support editing PT22XX, LX918, HT6P20, VD5026, AX5326, HT12X etc. Common fixed code format data, and use Xhorse universal remote to emulate.
  Support all Xhorse universal remote series.
- For remote cloning, in order to ensure the accuracy of frequency testing, please place the remote front surface close to the remote testing area, and short press the relevant buttons on remote as the device show you. Once receive data, device will auto beep. During cloning process, transponder type, baud, frequency and bits information are shown on the screen.

- Attention: When the data cannot be received, please check the remote battery and make sure the original remote is ASK code.

- When testing frequency maybe not accuracy, Please use direction buttons to modify the frequency value manually when generating remote.
• The HCS rolling code remote types may signal interface with original remote when cloning. Users can prepare new remote adapt to the car. When cloning remotes by SN series (wireless) remote should be assembled with battery and placed in transponder detection area. N series (wire) remote should remove battery and connected to Remote programming port with programming cable.

5. REMOTE GENERATING

VVDI Key tool built-in more than 1200 vehicle models remote data (increased continuously), remote pictures and matching information, users can select the relevant data file according to actual vehicle model, use Xhorse universal remote and match to the vehicle control unit by programming.

• The remote generating brand support personalized rank, users can press [OK] till the brand name becoming green and transparent, then use direction buttons to adjust the brand display position, press [OK] to confirm, press [C] to cancel and exit personalized rank mode.

* Attention: Some chip on board remotes only support Xhorse SN series remote.
• When generating, SN series remote should be assembled with battery and placed in transponder detection area. N series remote should remove battery and connected to Remote programming port with programming cable.

6. GARAGE GENERATING

This function is not available for current version; please use the remote cloning function to clone the garage remote.

7. RENEW REMOTE

• VVDI Key tool built-in dozens of vehicle models for renew remotes (adding continuously), users can use renew adapter or soldering wires, connect PCB to renew.

* For renew remote function please contact your dealer get connection diagram.
8. **FREQUENCY TESTING**

VVDI Key tool supports 300-500MHz frequency, relative power, signal modulation and IR testing.

When testing frequency, users press remote button to transmit signal as shown in picture 8.1, the "green wave" moving at the left top of screen indicates that the frequency value and the modulation result are valid. When testing IR, please place the IR emitter head aimed at the IR testing area, distance depends on signal strength, generally 15-80cm. A small red light will light on at the bottom of screen if the IR signal is detected.

*Attention: If some FSK modulation remote cannot be tested, please short press remote button continuously for testing.*
9、SPECIAL FUNCTIONS

- All key lost testing
  Place ② Ignition data acquisition & Signal testing close to vehicle ignition coil, if coil has transmitted signal the tool will beep means vehicle coil is working, at the same time according to the transmitted signal tool prompts the transponder type used in this vehicle, support 36,47 and 4D, other types can not supported yet.

- Toyota smart key unlock
  Support 40/80 bit original Toyota smart key unlocking: insert original smart key with battery and place on ① transponder detection area, press unlock button to start. LED light on key PCB flashing intermittently indicates unlock success. if failed, please retry until unlock success.

- VVDI special transponder
  Used to initialize Xhorse SN series universal remote keys for different types transponder, support 11/12/13/46/47, after initialization success can be used for generating special immobilize transponder and match to the car.

10、SYSTEM SETTING

- Back light setting
  Please use up/down button to adjust back light, press [OK] to confirm, press [C] to cancel
• **Buzzer:**
  Select whether to open the button tone, but cannot turn off the prompts tone of tool normal using. Press [OK] to switch status.

• **Language:**
  According to the regional differences, this tool supports multiple languages available for users to select. Please restart tool after change language.
  Change language still keep the same database inside.

• **Bluetooth:**
  This function is not available for current version, will update soon.

• **System upgrade:**
  Display the hardware and software version & how to update firmware.