Introduction to remote debugging

WD 666 motherboard:

The system implements the automatic saving mechanism. After entering the debugging interface, the parameters are debugged by the \triangle and ∇ buttons. After pressing CON, the system automatically saves all the debugged parameters. If you want to give up the function being debugged during the debugging process, you can pass the PSW. Press the button to cancel the current debug item, or press the Escape key (EX).

Clear the number of alarms: Press PSW and then decrease to 099 and press CON to complete the operation.

Restart the system: Press PSW and then decrease to 098 and press CON to complete the operation.

View the software version number: press PSW and then decrease to 097, press CON to display the current software version number, press EX to exit.

0101 interface function keys:

After pressing PSW, add 0101 and press CON to display (-) to enter the 0101 interface.

PSW: Enter the system key and enter the system to abandon the function item being debugged.

∇ key: minus (long press continuous reduction)

 \triangle key: Add (long press continuous plus)

EX key: Exit

SA button: Adjust the door mode (short press): $P \times (long press)$ sweep mode FC

MIN key: dynamic threshold adjustment; H xx

GN button: Hardware gear adjustment (long press) AU x; Software gain (short press) A x;

SYN key: synchronization delay; b xx

RE button: Receive window delay; C xx

MOD button:

E 0 : empty

E 1 : Restore factory settings

E 2: Identify static label settings

E 3 : Alarm length adjustment

E 4: Alarm type selection

E 5 : Transmission mode switching

E 6: Anti-interference mode switching

NSE button (short press):

- d 0: empty
- d 1: Signal value received by CH1 (environmental noise value when no tag enters)
- d 2: The signal value received by CH2 (the ambient noise value when no tag is entered)
- d 3: The signal value received by CH3 (the ambient noise value when no tag is entered)
- d 4: Noise value received by CH1 (environmental noise value)
- d 5: noise value received by CH2 (environmental noise value)
- d 6: noise value received by CH3 (environmental noise value)

NSE button (long press):

- n 0: empty
- n 1: Cumulative number of strong interferences received by CH1 (used to assess current environmental conditions)
- n 2: Cumulative number of strong interference received by CH2 (used to assess current environmental conditions)
- n 3: Cumulative number of strong interference received by CH3 (used to assess current environmental conditions)

CON button: Confirm button (the parameters set after pressing this button are automatically saved)

0101 interface function details:

First, the door mode adjustment: press the SA button (SA button is no longer used as a save button) to enter the display (P x), change the value of x by the \triangle and ∇ buttons, the following is a function introduction.

- 0 : CH1, CH2, CH3 transceiver
- 1 : CH1 reception, CH2, CH3 transmission (pure pair mode)
- 2 : CH2, CH3 reception, CH1 transmission (pure gate mode)
- 3 : (CH2 outside is closed) CH2 is only transmitted, CH1, CH3 transceiver is integrated (the door and the transceiver are coexisting)
- 4: (CH3 outside is closed) CH3 is only transmitted, CH1, CH2 transceiver unit (the door and transceiver unit coexist)
- 5 : Only CH1 transceiver, CH2, CH3 is off (single transceiver unit)

Second, the transmission mode switch (synchronized with other devices): Press MOD to enter (E 5), press CON once to display (LF x), and change the value of x with the \triangle and ∇ buttons. The following is a description of the function.

- LF 0 : Standard mode transmission (standard transmission interval 6.6ms (milliseconds) / 50Hz; 5.5ms/60Hz)
- LF 1: Non-standard mode transmission (interval between transmissions 3.5ms (milliseconds) / 50Hz; 3.5ms/60Hz)
- LF 2 : Non-standard mode transmission (interval between transmissions 2.5ms (milliseconds) / 50Hz; 2.5ms/60Hz)

Third, GN key:

1. Hardware gear debugging: Press and hold the GN button to enter the display (A 第 2 页

- U x). Use the \triangle and ∇ buttons to change the value of x. The following is the function introduction.
- A U O: Low gear, the detection distance is the weakest and the noise is the lowest.
- A U 1: Mid-range, medium detection distance, low noise, (factory default).
- A U 2: High-grade, the detection distance is strong, the noise is easy to become high, and the environment is not good.
- 2. Software gain: short press GN key to enter (CH 1) (channel 1 software gain value adjustment), change CH 1 value (switch channel) by \triangle and ∇ keys, press CON key to enter channel debugging software gain The default value is (A 8)
- C HO: A x All software gain value operation (CH1, CH2, CH3)
- C H1: A x Channel 1 software gain value.
- C H2: A x Channel 2 software gain value.
- C H3: A x channel 3 software gain value.

Fourth, look at the noise of each channel:

After pressing NSE to enter (d 0), change the value of 0 by pressing the \triangle button. The following is the function introduction.

- d 0: empty
- d 1: signal value received by CH1
- d 2: signal value received by CH2
- d 3: signal value received by CH3
- d 4: noise value received by CH1
- d 5: noise value received by CH2
- d 6: noise value received by CH3

Fifth, the receiving window delay:

The RE button is used as the window delay adjustment button. The default value is (C 4). For each additional 1 reception delay 40us, if there is a large metal object near the system, the delay value can be appropriately increased. The delay value is not recommended to be too low or too high. In particular, the maximum value should not exceed (C 7) in non-standard emission mode. Recommended value: between 4 and 5.

Sixth, dynamic threshold adjustment:

Press the MIN button to enter and display CH 1 (channel 1 MIN value adjustment). Use the \triangle and ∇ buttons to change the channel value to be adjusted. Press the CON button to enter the selected channel MIN value (default value H 40), and then pass \triangle and The maximum value of the button change 40 is 200. The higher the value, the lower the false alarm rate, but the detection distance will also decrease.

Recommended value: between 10-60. Here's a brief operation:

After pressing MIN: add or subtract CHx

CHO: Hxxx All MIN value operations (CH1, CH2, CH3)

CH1: Hxxx channel 1MIN value. CH2: Hxxx channel 2MIN value. CH3: Hxxx channel 3MIN value.

Seven, synchronization delay:

Press the SYN value to enter the display (default value b 0), change the setting 第 3 页

value by the \triangle and ∇ keys. For each additional 1 synchronous delay 40us, the same device synchronization delay value must be set to the same value. Improper setting of the synchronization delay value will cause co-channel interference, false alarms, etc.

?Eight, restore the default settings: ??????????????Press MOD to enter (E 0), press \triangle to add to E 1 and press CON to complete the factory reset. The parameters set by the system are all restored to the factory settings.

Nine, the alarm length adjustment (adjust the length of a single alarm): Press MOD to enter and display (E 0), press \triangle key to add to E 3 and press CON key to display (default value bb 8), change the value of bb x by \triangle and ∇ keys and press CON key to complete the setting.

X. Alarm type selection:

Press MOD to enter and display (E 0), press \triangle key to add to E 4 and press CON key to display (default value bE 1), change the value of bE x by \triangle and ∇ keys and press CON key to complete setting.

bE 0: intermittent alarm bE 1: continuous alarm

XI. Anti-interference mode switching:

Press MOD to enter (E 6), press CON once to display (EF x), and use the \triangle and ∇ buttons to change the value of x. The following is a description of the function.

EF 0: The probability of false positives in this mode is relatively low, but the detection effect is a little poor due to interference from other unsynchronized devices.

EF 1: In this mode, there is a possibility of false alarm under strong interference, but it has a good detection effect under the interference of other unsynchronized devices.

- 12. Static tag identification: Press MOD to enter (E 0), press \triangle key to add E 2 and press CON key to display (default value CE 0). The following is the function introduction.
- CE 0: Turn off the identification of static tags.
- CE 1: Turn on the identification of static tags. The static label will be recognized when the power is turned on. If the label is close to the detection door, it will be undetectable. After removing the label and entering the detection area again, the label can be identified and the alarm can be made. After the function is turned on, if the current alarm is automatically recognized after 12 consecutive alarms,

When the tag is no longer moving, the detection door will not alarm, and the detection distance will be automatically restored after the tag is removed. The function realized by this function is that when there is a tag nearby, it will not keep alarming. If the identified tag is not very close (39tags 1.5 meters away), another tag can be alarmed.

- 13. Sweep mode: Display FC 0 (default value) after long press SA key, change parameters by \triangle and \triangledown keys
- FC 0: narrow frequency detection.

FC 1: Broadband detection.

0111 interface function keys:

After pressing PSW and adding to 0111, press CON to display (-) to enter the 0111 interface.

PSW: Enter system key

▽ key: minus (long press continuous reduction)

△ key: Add (long press continuous plus)

EX key: Exit

SA button: Transmit frequency setting, default value 5809 (58.09KHz)

MIN key: the lowest frequency of the identification signal, the default value is F576 (57.6KHz) F

GN button: The highest frequency of the identification signal, the default value is F586 (58.6KHz) F

SYN key: Filter mode L

RE key: Fixed threshold, default value n100, if you are prone to false positives, you can increase this value. n

MOD button:

E 0 : empty

E 1 : Display the current AC frequency E 2 : Back to 0101 debugging interface

E 3 : Clear alarms

E 4: empty

E 5 : Channel alarm times display switching; AHO = all alarm times display, AH1 = channel 1 alarm times display, AH2 = channel 2 alarm times display, AH3 = channel 3 alarm times display.

NSE key:

d 0: empty

d 1: frequency received by CH1 d 2: frequency received by CH2 d 3: frequency received by CH3

CON button: Confirm button (the parameters set after pressing this button are automatically saved)

If the function is changed, it will continue to follow up.