Before installation and application of the product, please read the Instruction Manual for Installation and Application

Instruction Manual for Installation and Application of TCSG5266 Addressable Sounder Strobe

Ver. 1.1

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I General

TCSG5266 Addressable Sounder Strobe adopts four wires, connecting to the fire alarm control panel, mainly installed in public places. It generates a kind of optical and visual alarm used to warn people in field when fire occurs. The built-in microprocessor has independent measuring and processing functions. As for the collected information, transmit a variety of measuring data to the fire alarm control panel by fuzzy logic processing, and then the control panel judges the status in order to send alarm information quickly and accurately.

With plug-in structure, reliable performance, simple and easy installation, attractive appearance, it has high reliability and good anti-interference functions.

II Features

- 1. Four wires: non-polarized signal two-wire, and non-polarized DC24V power two-wire.
- 2. Built-in microprocessor processes fuzzy logic intelligently.
- 3. Electronic programming of address code that can be modified in field, no dial switch.
- 4. Self-diagnostic function.
- 5. Provide state signal value.
- 6. Multilevel filter can effectively suppress the interference signal.
- After activated, it will generate strong audible and visual alarm signal.
- 8. Attractive appearance, convenient and reliable installation.

III Technical Specifications

1. Operating voltage

Signal bus voltage: bus 24V Range allowed: DC18.5V~DC26V

Range allowed: DC19V~DC28V Power bus voltage: DC24V

2. Operating current

Bus standby current≤0.2mA

Bus action current≤1.5mA

Power standby current≤0.5mA

Power action current≤50mA

3. Operating temperature: $-10^{\circ}\text{C} \sim +55^{\circ}\text{C}$

4. Relative humidity: $\leq 95 \% (40\pm2^{\circ}C)$

Main sound frequency: 1.67KHZ~5.9KHZ

6. Frequency range: 1.67KHZ~5.9KHZ

7. Rating: Continuous

8. Voice pattern: Alarm sound

9. Tone type: 1

10. Sound pressure level: dB @1m

| Angle | Horizontal | | Vertical | |
|-------|------------|---------|----------|---------|
| | Max 28V | Min 19V | Max 28V | Min 19V |
| 15° | 101 | 99 | 102 | 100 |
| 45° | 102 | 102 | 102 | 98 |
| 75° | 104 | 101 | 100 | 98 |
| 105° | 104 | 101 | 103 | 98 |
| 135° | 103 | 99 | 100 | 98 |
| 165° | 103 | 102 | 101 | 99 |

11. Cycle of changing tone: 3.5S~4.5S

12. Basic flashing frequency: 1Hz~2Hz

13. Applicable place: Indoor (Non-residential)

14. Dimensions: 140mm×115mm×55mm (L×W×H)

15. Standard: EN 54-3:2001

16. Indoor application: Type A

17. Ingress protection Rating: IP21C

18. Weight: 200g

IV Structure and Operation Principle

1. Appearance and size of the sounder strobe is shown in Fig. 1.

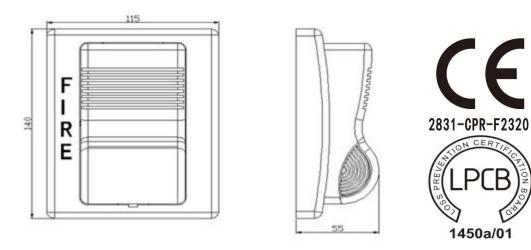


Fig. 1

2. Operation principle

The sounder strobe is built in with microprocessor, which execute communication with fire alarm control panel, checking power cut of the power bus and startup of audio and visual signals. The sounder strobe can start audio and visual signal after receiving startup command from fire alarm controller or directly by outer controlling contact. And it uses sound effect chip amplified by dynatron and transformer to vocalize the speaker; 5 LEDs are controlled by timing circuit giving flashing light signal.

V Mounting and Cabling

1. Mounting steps

- (1) Unplug the base.
- (2) Fix the base. Thread cable through entrance hole from the back of base; according to the words and directions of arrow around the entrance hole, fix the base.
- (3) The sounder strobe is mounted inside the wall. The base box and cover of the sounder strobe are plugged together, surfaced mounted on 86H50 embedded box. The mounting hole distance is 60mm (Fig. 3), and the installation of the sounder strobe is shown in Fig. 2.

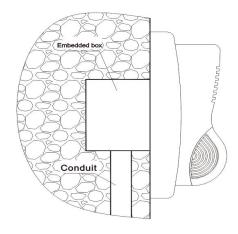


Fig. 2

- (4) Connect. Unplug the sounder strobe; connect cables with corresponding terminals correctly. The contact must be reliable and fixed.
 - (5) Plug the cover of sounder strobe. Plug and twist the sounder strobe onto the base firmly.
- 2. Terminals are shown in Fig.3.

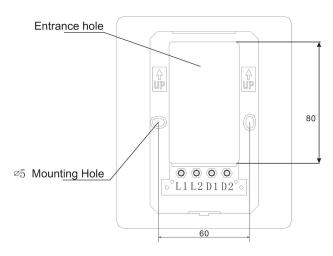


Fig.3

Specifications:

- L1, L2: Non-polarized signal 2-wire input terminal
- D1, D2: Non-polarized DC24V power input terminal
- 3. Recommended Wiring
 - L1, L2: 1.0mm² or above fire cable, subject to local codes.
 - D1, D2: 1.5mm² or above fire cable, subject to local codes.

VI Testing

- 1. Warning: Power up only after all devices are well connected.
- 2. Test should be made to the sounder strobe at least once a year after installation and put into operation.
- 3. Before testing, notify the proper authorities that the system is undergoing maintenance and will temporarily be out of service. Disable the zone or system undergoing maintenance to avoid unwanted alarms.
- 4. Testing:
 - Give start command to the sounder strobe from the controller, so the sounder strobe is activated, and it gives audio and visual alarm, the sounder strobe is in normal operation.
- 5. After testing, the sounder strobe can be reset by power cut. Notify the proper authorities the system is back on line.

6. If a sounder strobe fails in testing, check its connection and test again. If it still fails, return for repair.

VII Use and Operation

Use TCBM5023 Handheld Encoder to program the address of addressable sounder strobe in field. When programming addresses, connect the encoder to the bus terminals of sounder strobe(polarity-free), and

then write and read the address.

Firstly, press key 2 to choose "(2) mode setup" on the main menu, and then enter the sub menu to press

"(1) TC5000", or press "(5), (6), (7)" to choose "increase code, normal code, decrease code", which is easy

to use (note: the default is TC5000, normal code). And then press Clear key/Page key to directly enter the

interface of programming address, or press Exit key back to the main menu. Press key 1 to choose "(1) read

and write address", then then connect the encoder to the bus terminals L1 and L2 of sounder strobe. In

standby mode, input the address code of sounder strobe (1-255). If it shows "Success" on the menu, it means

that programming is successful; if it shows "Failure" on the menu, it means that programming is not

successful.

VIII Application

Connect signal bus to the loop bus of fire alarm control panel and connect power bus to DC24V. Start

the sounder strobe by using fire alarm control panel or linkage relations.

IX Random Documents

1. Packing document: 1 packing list

Maintenance location: Yingkou city, Liaoning province



WEEE Information

2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted

municipal waste in the European Union. For proper recycling, return this product to your local supplier

upon the purchase of equivalent new equipment, or dispose of it at designated collection points

X Limited Warranty

Tiancheng warrants that the product will be free of charge for repairing or replacing from defects in design,materials and workmanship during the warranty period. This warranty shall not apply to any product that is found to have been improperly installed or used in any way not in accordance with the instructions supplied with the product. Anybody, including the agents, distributors or employees, is not in the position to amend the contents of this warranty. Please contact your local distributor for products not covered by this warranty.

