# HLBAND

Single-channel wireless transmission system.

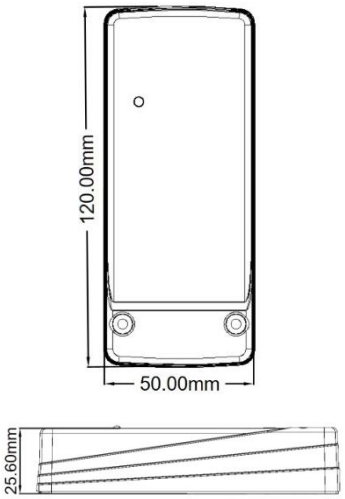
STER-TRONIC



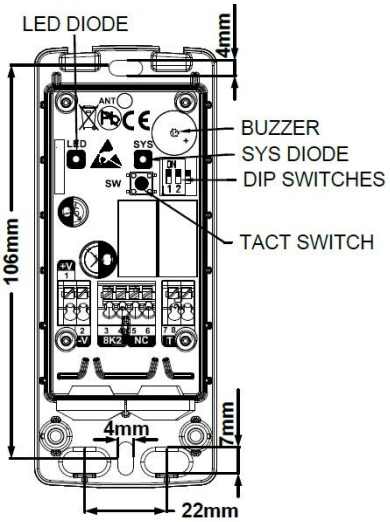
## Installation and operating manual.

**Purpose: Monitoring of 8.2k parametric edge strip or NO/NC switches in door and gate drive systems.**

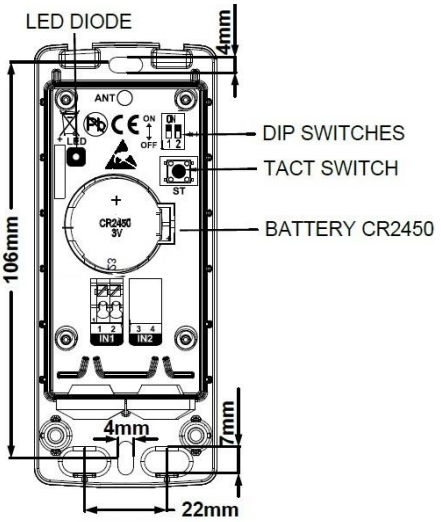
DIMENSIONS



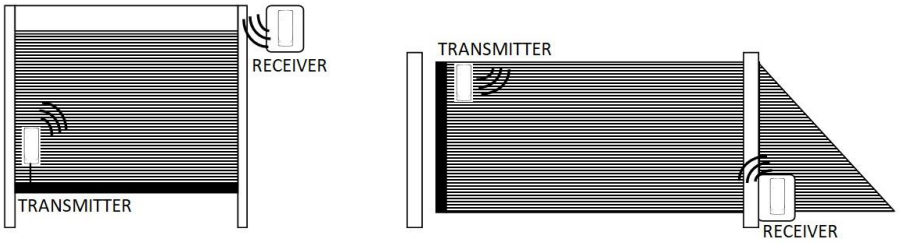

RECEIVER: HLRBAND




TRANSMITTER: HLTBAND



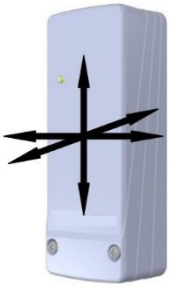

## 1. Basic application.




## 2. Safety notes.

- Read all warnings and safetu rules carefully before installing and using the unit.
- Do not connect the power supply earlier than stated in the instructions.
- Use the product only for its intended purpose.
- Observe all installation instructions. Incorrect installation can lead to serious personal injury.
- Observe and comply withe the health and safety regulations and standards of the relevant countries.
- Assembly, connection and commissioning must only be carried out by qualified person.
- Carry out a risk assessment taking into account all elements of the control system and the local, national and international standards in force (e.g. in accordance with the Machinery Directive 2006/42/EC)
- Protect the cables from mechanical damage and pulling out.
- A category 2 safety device according to EN ISO 134890-1 must be tested at the frequecy specified by the applicable standard.
- Check the correct operation of the unit at least once a month.
- The safety device may only be suppled with very low voltage SELV with electrical separation in accordance with EN 61558.
- Carry out installations with the power supply to the system with which the device will be used switched off.
- Protect the unit from the external environment inclueence.
- If a malfunction is detected, immediately disconnect the unit (with the power off) from the control system.
- The installer is responsible for carrying out final tests to ensure that the applicable safety standards are met.
- Replace the protective covers when the installation is complete.

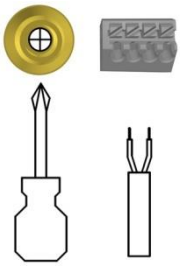
## 3. Installation.



Determine the installation location.

Unscrew the top cover.

Mount the bottom of the case.



Connect the wires (with the power supply off).

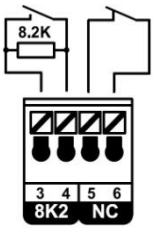
Switch on th power supply. Configure and check fo correct operation.

Screw on the top cover.

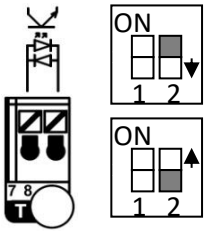
## 4. Connection.

| RECEIVER | TRANSMITTER |
|---|---|


Power supply (12-36VDC, 10-24VAC)



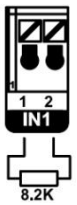

Outputs. Do not connect 3-4 and 5-6 at the same time

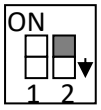



Testing input (category 2)

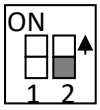
High active

Low active




Parametric input


NO/NC type input (Paragraph programming)

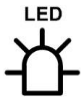
## 5. Configuration/Programming settings.

### 5.1 Deleting transmitter memory.

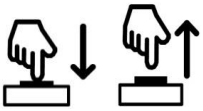
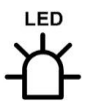
| On the receiver: |  |  |  |  |  | All transmitter removed. |
|---|---|---|---|---|---|---|
| | Hold down the button. | 1 beep | The LED and SYS diodes lught up orange. | 5 beeps | Release th button. | |



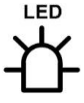
### 5.2 Programming the transmitters.

| 1. On the receiver: |  |  |  |  |
|---|---|---|---|---|
| | Hold down the button. | The LED and SYS diodes lught up orange. | 1 beep | Release th button. |

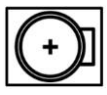
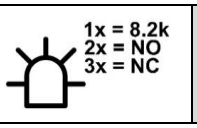
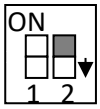
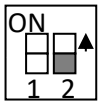


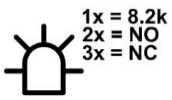
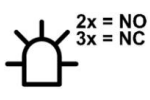
| 2. On the transmitte r |  |  |
|---|---|---|
| | Press and release the button. | the LED diode blinks briefly. |



| 3. On the receiver: |  |  |  |  |  |
|---|---|---|---|---|---|
| | Correct memorisation - 3 beeps. | Full memory- 2 beeps. | Wait 15s or press the button briefly. | 1 beep. | Working state. |

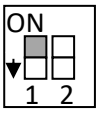
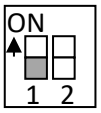
## 5.3 Changing the transmitter input type.

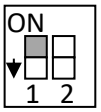
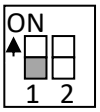
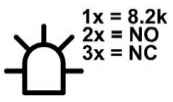
| 1. On the transmitter |  |  | 2. To set the 8.2k type. |  | 2'. To set the NO/NC type. |  |
|---|---|---|---|---|---|---|
| | After battery insertion the current setting of the input flashes on the LED. | | | DIP2 in the OFF position. | | DIP2 in the ON position. |

| 3. Approval of the selection. |  |  |  | 4. To change to the opposite NO/NC type: |  |  |  |
|---|---|---|---|---|---|---|---|
| | Hold down the button (~3s). | The LED flashes the set status. | Release the button. | | Hold down the button (~3s). | The LED flashes the opposite state. | Release the button. |

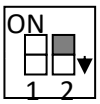
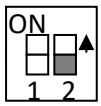
## 5.4 Changing the operational frequency.

CAUTION! The receiver and the transmitter must be set to the same frequency.

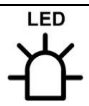
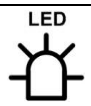
| On the receiver: | 1. To set F1 frequency 869.525MHz. |  | 1'.To set F2 frequency 868.15MHz. |  |
|---|---|---|---|---|
| | | DIP1 in the OFF position. | | DIP1 in the ON position. |

| On the transmitter: | 1. To set F1 frequency 869.525MHz. |  | 1'. To set F2 frequency 868.15MHz. |  |  |  |  |
|---|---|---|---|---|---|---|---|
| | | DIP1 in the OFF position. | | DIP1 in the ON position. | Hold down the button (~3s) | The LED flashes the set state. | Release the button. |

## 5.5 Changing th TEST input type.

| On the receiver: | 1. High state active |  | 1'. Low state active. |  |
|---|---|---|---|---|
| | Factory setting. | DIP2 in the OFF position. | | DIP2 in the ON position. |

## 6. Mandatory performance test (after installation and any configuration change).

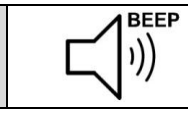
| On the receiver: |  |  |  | Check that the main controller responds to the active state of each strip. |
|---|---|---|---|---|
| | LED and SYS green. | Press each strip in turn. | LED red, SYS orange. | |

## 7. Receiver –status signalling.

| | LED SYS | LED | OUTPUT 1<br>3-4 | OUTPUT 2<br>5-6 |
|---|---|---|---|---|
| No power supply. | - | - | NC | NO |
| Power on, no transmission received or receiver error. | Red | Red | NC | NO |
| No transmitters assigner or test input active. | Green | Red | NC | NO |
| **Normal operating condition - strip inactive (not pressed).** | **Green** | **Green** | **8.2k** | **NC** |
| Strip in active state (depressed). | Orange | Red | NC | NO |
| Configuration. | Orange | Orange | NC | NO |
| Low battery. | 1xBuzzer every 1min. | | | |
| Receiver error. | 2xBuzzer every 1min. | | | |

## 8. Problem solving.

### 8.1 Low battery indicator.

| On the receiver: |  | Checking which transmitter has a low battery. |  |  |  |
|---|---|---|---|---|---|
| | 1 beep every 1min. | | Press the strip. | No acoustic sgnal –battery OK | Signal tone – low battery. |

### 8.2 Receiver error.

| On the receiver: |  | Resetting the error. |  |  |  | If the error persists, contact the service centre. |
|---|---|---|---|---|---|---|
| | 2 beeps every 1min. | | Switch off the power supply. | Wait approx. 5s (until the SYS and LED are off) | Switch the power on. | |

## 9. Technical data.

| | |
|---|---|
| HLRBand power supply | 12-36VDC, 10-24VAC |
| HLTBand power supply | Battery CR2450 3V |
| Power/current consumption | Receiver: <0.8W<br>Transmitter:<br><10uA sleep,<br><15mA transmitting |
| Output | 30VDC, max 1A |
| TEST input | 12-36VDC, 10-24VAC<br><10mA |
| Transmitter memory. | 7 |

| | |
|---|---|
| Operating frequencies | 869.525MHz, 868.15MHz |
| Response time | ~50ms |
| Range | Up to 100m<br>Under optimal conditions. |
| Category<br>EN ISO 138490-1 | PLc for Cat.3<br>Test input Cat. 2 |
| Housing | IP65 |
| Operating temperature | -20°C to +60°C |

## 10. EU Declaration of Conformity.

The manufacturer declares that the equipment HLBand type is in compliance with Directives:
RED 2014/53/UE, ROHS 2011/65/UE, MD 2006/42/UE, WEEE2012/19/UE
The full text of the EU declaration of conformity i s available at the following internet address:
www.ster-tronic.com
In accordance with the provisions of the Machinery Directive 2006/42/EC it is declared that a product cannot be commissioned to use until the final machine into which it is built or which is a component of, obtains the declaration of conformance with the directives and relevant regulations which must be fulfilled by the final machine.

## 11. WEEE.

According to the regulations in place concerning the disposal of used equipment by private users in the European Union, an item with such a symbol MUST NOT be disposed of with other litter. In this case, the user is responsible for appropriate disposal by delivering the device to a specified place or the producer which shall take care of its further disposal. Separate collection and recycling of unwanted devices facilitates the protection of natural environment and ensures that the disposal process is carried out in the way which protects human health and the environment. This remark also applies to used batteries and car batteries.

## 12. Contact.

STER-TRONIC, Okulickiego 24, 33-300 Nowy Sącz, www.ster-tronic.com