

# HBT / LBT Wireless Safety Switch

## User Manual

### Product Description

The HBT/LBT Wireless Safety Switch is a two electronic module system using a low energy wireless signal to create a safety interlock switch between two pieces of equipment. The HBT module is the key-side of the system and the LBT module is the lock-side of the system. When the HBT is within range and properly activated it sends a secure wireless signal to the LBT that effectively 'unlocks' the piece of equipment for safe use. If, at any time, the HBT signal is interrupted or stopped the LBT module returns to its locked state.

### LBT Module Installation

The LBT module connects to the equipment (machine-side) so that the equipment cannot be powered or operated without the LBT module being activated by the HBT module.

### LBT Connections

1. Positive (red) and negative (black) wire leads from LBT connect to a regulated 5 volt DC power source. The 5 volt DC source can be switched or constant depending on user requirement. Note that to operate the LBT module must have power at all times.
2. Switch (blue) leads from LBT connect to equipment controls or equipment power depending on voltage and current ratings of the equipment's switched circuit. The LBT module is designed to only switch low voltage and low current circuits directly (e.g. control circuits, etc.).

### HBT Module Installation

The HBT module is battery powered and uses 3 switches (magnetic reed switches) to activate itself and start transmitting its signal. The 3 switches may be used in any number of safety devices or procedures that are required before the safe operation of the equipment (e.g. the proper connection of a safety harness before operation of a lift is allowed).

### HBT/LBT Operation

1. Engage HBT's 3 switches.
2. LBT LED indicator will illuminate and LBT electromechanical relay will actuate.
3. If HBT power supply is interrupted or any of the HBT's 3 switches are disengaged the HBT will cease transmitting and the LBT will release its relay connection.

## **FCC STATEMENT**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

**Warning:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## **RF warning statement:**

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

### **Module Warning Statement:**

This Bluetooth module is designed to comply with the FCC statement, FCC ID is: WRY-HBT.

The host system using this module, should have label in a visible area indicated the following texts:

"Contains FCC ID: WRY-HBT".

This radio module must not be installed to co-locate and operated simultaneously with other radios in host system, additional testing and equipment authorization may be required to operating simultaneously with other radio.

This Bluetooth module has a PCB antenna. While this module has no shielding, and therefore the host equipment shall add a shielding function, and any host with module installed, has to be retested, then additional equipment authorization shall be achieved on the host equipment that has the module installed.