# INSTALLATION INSTRUCTIONS

PFH-9210 Long Range Proximity Reader

### *Federal Communication Commission Interference Statement*

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 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.

### *FCC Caution* :

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

- ***Introduction :***

PFH-9210 is one of the most secure indoor/outdoor long range RFID reader which is an advanced RFID active reader with smart design. It supplies with the top reliability and performance.

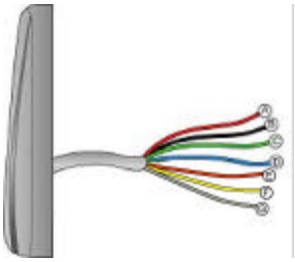
- ***Specifications :***

| | | | | |
|---|---|---|---|---|
| Model No. | PFH-9210 | | | |
| Card / Keytag | PFH-660 | PFH-620 | PFH-320 | EM |
| Dimension | 270 (L) x 270 (W) x 39 (H) mm | | | |
| Mounting | Surface Mount, waterproof | | | |
| Reading Range | 6 meters | 6 meters | 3 meters | 60 cm |
| Operating Temperature | -10°C ~55°C | | | |
| Humidity | 10% ~ 90%RH, non condensing | | | |
| Directivity | Omni-directional | | | |
| Modulation | Transmit coded –ASK, Receiving – Super Heterodyne | | | |
| Operating Frequency | 433.9 MHz / 125KHz | | | 125KHz |
| Output Format | RS485 | | | |
| Indications | 2 color LEDs (Red and Green) | | | |
| Buzzer | No (Built-in driver for external buzzer) | | | Yes (Built-in) |
| Operating Voltage / Current | 15VDC, 300mA | | | 12VDC, 200mA |
| Material | ABS | | | |
| Weight | 2.50 / 1.50 Kgs ±5% (epoxy /no epoxy ) | | | |

- ***Installation guide :***

1. Please select an appropriate place to install the reader and mark the location of mounting holes through the screw holes of the template.
2. When the power is on, the right LED will turn in Red; if the legal card is read, the left LED will turn in Green.
3. Please make sure the linear type (non-switching) power supply is isolated from other devices.
4. Once you use a separate power supply for the reader, a common ground should be connected between the reader and control system.

- ***Wire configurations :***

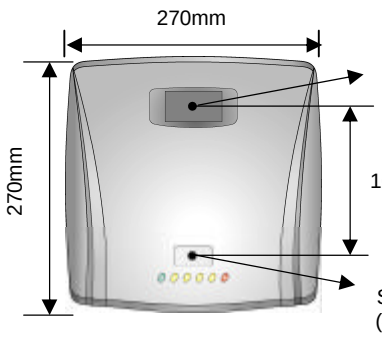


| Pin No. | Wire Color | Signal |
|---|---|---|
| A | Red | DC + output |
| B | Black | DC - ground |
| C | Green | Entry sensor input |
| D | Blue | Exit sensor input |
| E | Orange | Data B |
| F | Yellow | Data A |
| G | Gray | Power for reader |

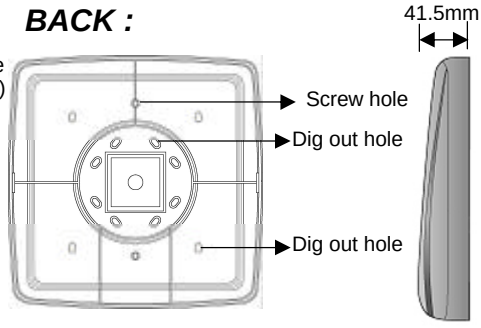
Noted：1. The **PIN C(green)** or **PIN D(blue)** must be shorted to **PIN B(black) DC Ground** to read the card.

2. The reader will only be powered when **PIN G(Gray)** is connected to DC + output of the power supply . The **PIN G(Gray)** can be controlled by relay contacts which is controlled by timer delayed relay. After effective reading, it will be disable for a few seconds during vehicle passes the gate.

- ***FRONT PANEL :***


***BACK :***



**Specifications are subject to change without any notice for further modification.**

## •*PACKAGE CONTENTS*

| **DESCRIPTION** | **Q'TY** |
|---|---|
| Screw | 2pcs |
| Switching Power supply 15VDC | 1pc |
| Sticker | 2pcs |
| Manual | 1pc |

## •*DEFINE OF REVEIVING DATA :*

After connecting PFH-9210/R5 to PC thru RS485/RS232 converter , there should have the following data through HYPER TERMINAL.

00 = unmeaning

0001 = 4 digits of PFH-620 card no.

06 = project code