

IDTECK RF245

2.45GHz Long Range Reader



※ RF10, 20 Quick Installation Guide

1. Important Safety Instructions

The description below is to keep user's safety and prevent any product damage. Please fully read these instructions and use the product properly.



Danger: This symbol indicates that incorrect handling of the product may result in serious injury or death.



Warning: This symbol indicates that incorrect handling of the product may result in injury or property damage.



CAUTIONS ABOUT POWER

- Only use the standard voltage (DC +12V / 350mA).
- If the product emits smoke or smells, stop using the product. Unplug the product from DC power source and contact nearest service center.



CAUTIONS ABOUT INSTALLATION

- Do not install the product in a place subject to humidity, dust (metallic dust) or splashing water (raindrops).
- Do not install the product in a place not meeting the operating humidity and temperature specified in the specification.
- Do not install the product with tools such as driver in hand when power is being supplied.



CAUTIONS ABOUT USAGE

- Do not drop liquid onto the product such as water and give the product a severe shock.
- Do not place magnetic objects near the product.
- Do not replace the wiring cables installed by experts.
- Do not use the product under direct sunlight or in a heat-producing place such as a place near a heating apparatuses.
- If you want to relocate the installed product, turn power off and then move and reinstall it.
- Do not use flammable sprays or objects near the product.
- Do not let anyone but the manager touch the product except using it for normal purpose.
- If liquid has been spilled on the product, unplug it first.



CAUTIONS ABOUT CLEANING

- Do not clean the product with water. Clean gently with dry cloth or towel.
- Do not use chemicals such as benzene, thinner or acetone for cleaning.

※ RF10, 20 Quick Installation Guide

2. WHAT'S INCLUDED

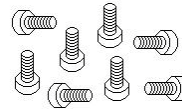
Please unpack and check the contents of the box. If any of these parts are missing, please contact a nearby distributor or IDTECK



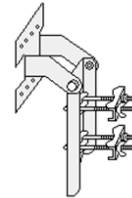
RF245



User's Manual



Mounting Bolts (8 pcs)



Mounting Bracket

3. COLOR CODED & WIRING TABLE

Power

Power (DC +12V)

DC(+)

Red wire

Power (DC Ground)

GND

Black wire

26bit Wiegand Output

Wiegand Data-0

Data-0

Green wire

Wiegand Data-1

Data-1

White wire

RS232 Output

RS232 Output

RS232

Violet wire

BARGATE Output

BARGATE Output¹⁾

BARGATE

Gray wire

Control Input

HOLD²⁾ Control Input

HOLD

Blue wire

OTR³⁾ Control Input

OTR

Yellow wire

¹⁾ BARGATE Output is an open collector output. (TR output)

Max. 100mA current drain, 1 second low active pulse.

²⁾ HOLD Input is low active input, NC contacts required. Put GND for HOLD.

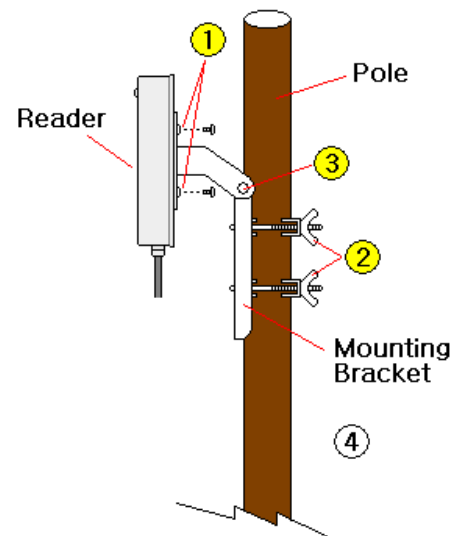
³⁾ OTR is One Time Reading.

※ RF10, 20 Quick Installation Guide

4. INSTALLATION

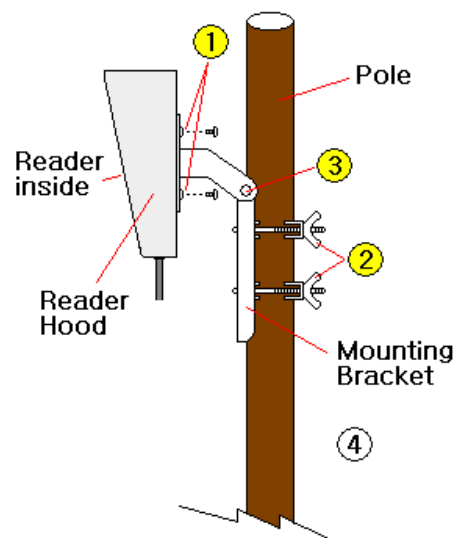
Installation with Mounting Bracket

- 1 Tighten 8 x mounting bolts to the reader
- 2 Insert Mounting Bracket to the pole and tighten the V-bolts
- 3 Setting the reading angle and tighten bolts/nuts

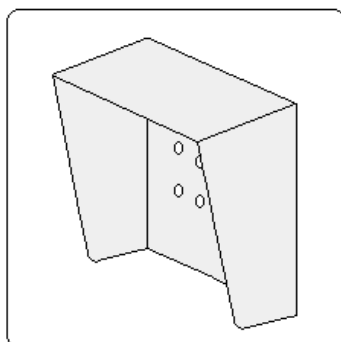


Installation with Mounting Bracket and Reader Hood

- 1 Insert Reader Hood in between the reader and the Mounting Bracket and tighten 8 x mounting bolts to the reader
- 2 Insert Mounting Bracket to the pole and tighten the V-bolts
- 3 Setting the reading angle and tighten bolts/nuts



Extra Purchase



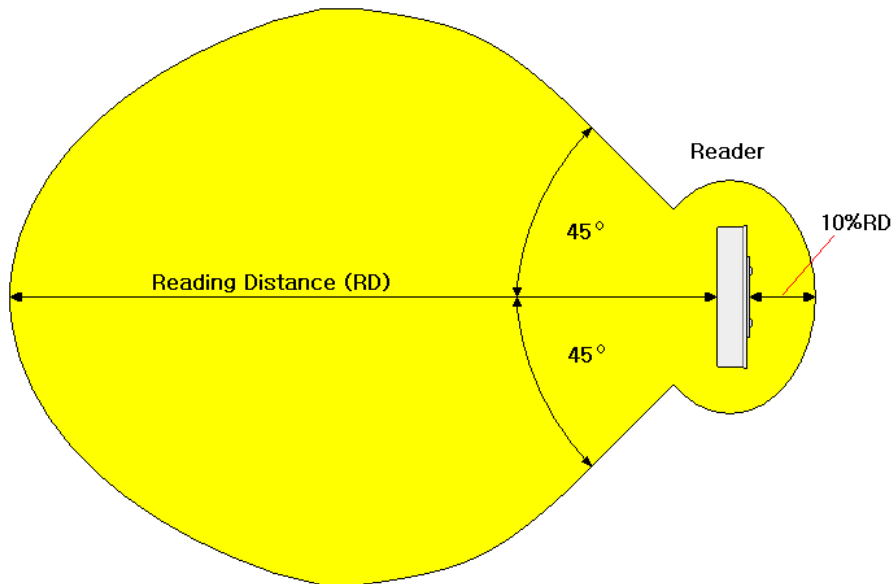
Reader Hood

Readerhood , bargate, loop coil and speed bump are extra purchase.(IDTECK doesn't offer these contents)

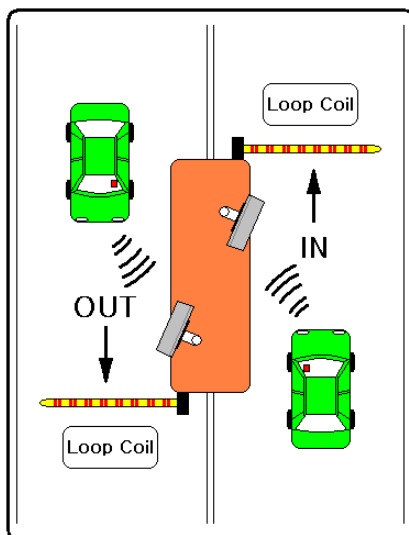
※ RF10, 20 Quick Installation Guide

Reading Angle of RF245

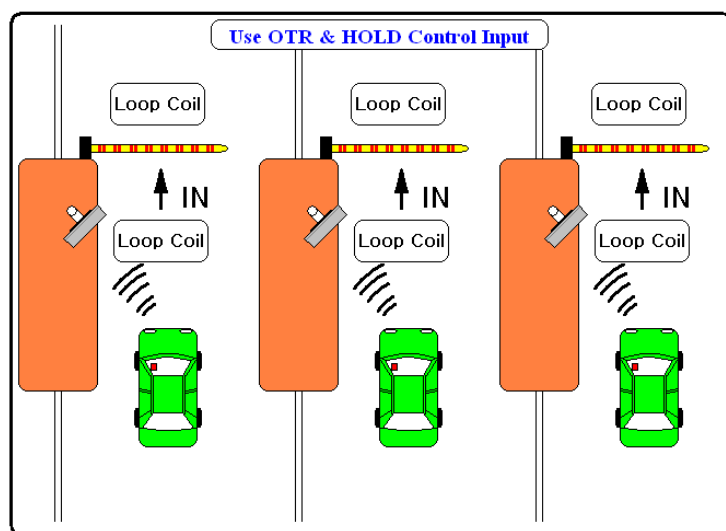
The reading angle of RF245 is approximately 90 degree at the front side of the reader. However the reader has about 10% of the maximum reading distance at the rear side of the reader.



Applications



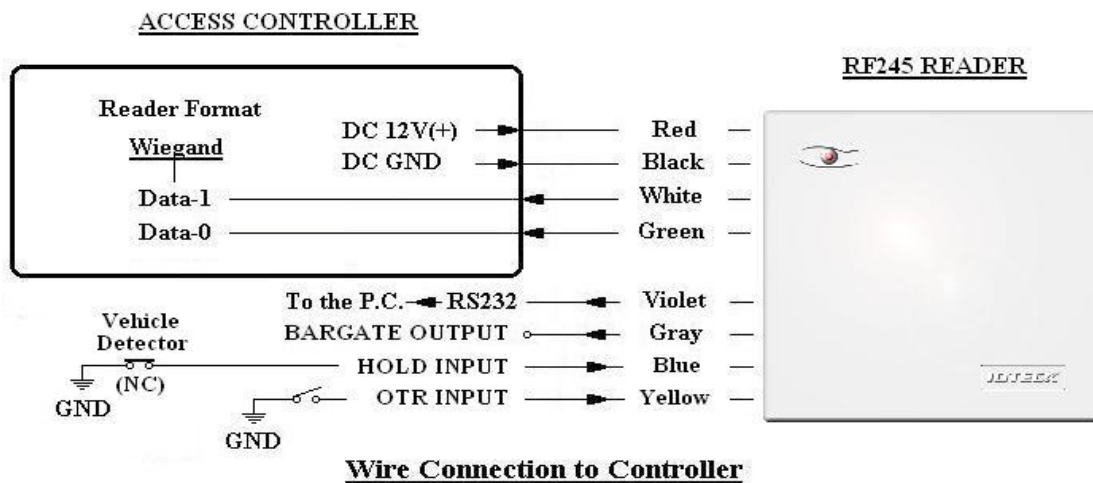
Parking Control (Island)



Multiple Gates with OTR & HOLD Control

※ RF10, 20 Quick Installation Guide

5. Connection



6. How to operate

1. Apply the power to the reader. The RF245 reader will setup receiving frequency and Site Code automatically. Then the Reader will get into standby mode and turn red LED on after a successful initialization and diagnostics.
2. If a tag approaches the reader, the reader makes a beep sound and the red LED blinks off and on. The reader will send the 26bit Wiegand output, RS232 output and BARGATE output to the controller on the same time.
3. **BARGATE Output:**
When the reader detects the tag, the reader also generates 1s BARGATE control output through the Gray wire. The BARGATE output is a Transistor (open collector) output, maximum current drain 100mA.
4. **One Time Reading (OTR) Control Input:**
When you setup the reader to One Time Reading Mode (Put OTR Control Input, Yellow wire to GND), the reader only generates output when the tag is detected first time. The output for same tag is only generated when the tag is away from the read range of the reader for 5 seconds and approach to the reader again.
(Up to 12 tags are able to OTR operation at the same time then cards from the 13rd are become 'Continuous Reading', because number of OTR operation memories are 12.)
5. **HOLD Control Input: (NC contacts required)**
When the HOLD Control Input (Blue wire) puts to GND, the Reader will not read the tag. The Reader will read the tag while this wire opens. Use this input to vehicle detector such as Loop Coil Sensor. When you use Hold Input with OTR function (Put Yellow wire to GND), only one tag ID will be detected during the HOLD Input is open circuit. Please refer to the following figure for HOLD & OTR function.

※ RF10, 20 Quick Installation Guide

