MK1 Wireless Radar Sensor



PRODUCT SPECIFICATIONS



ODINIDO

Catalogue

| Change History | 2 |
|------------------------------|----|
| 1. Product information | |
| 2. Product Features | 3 |
| 3.Product Specification | 3 |
| 3.Product Specification | 4 |
| 3-3 Installation | 5 |
| 3-4 APP | 6 |
| 3-5 Adjustment | 7 |
| 3-5-1 Write Data | 7 |
| 3-5-2 Read Data | 16 |
| 5. Sensing range information | 17 |
| 6. Range & Limitation | 18 |
| 7. Warranty | 18 |
| 8. Warnings | |
| | |



Change History

| NO. | Edition | Date | Content | Name | Comments |
|-----|---------|------------|-------------------|--------|----------|
| 1 | Rev.1 | 2016.04.26 | First Edition | Winson | |
| 2 | Rev.2 | 2016.08.09 | Add FCC Statement | Winson | |
| 3 | Rev.2 | 2016.11.16 | Remove FCC Logo | Winson | |
| | | | images. | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |



1. Product information

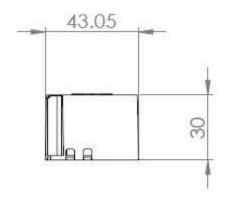
This datasheet will provide all details about MK1 radar sensor.

2. Product Features

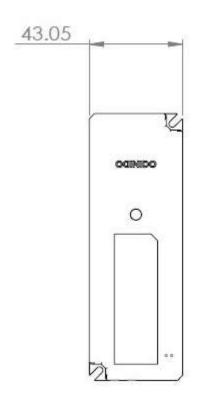
Use BLe to notify D1X Wireless Driver to adjust the light level of brightness when a moving object has been detected.

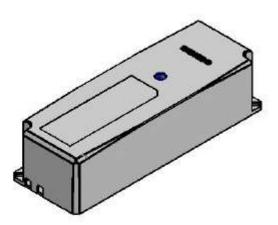
3. Product Specification

3-1 Dimension









ADS0202.3E

3



3-2 Specification

• Input : DC 12V \sim DC48V

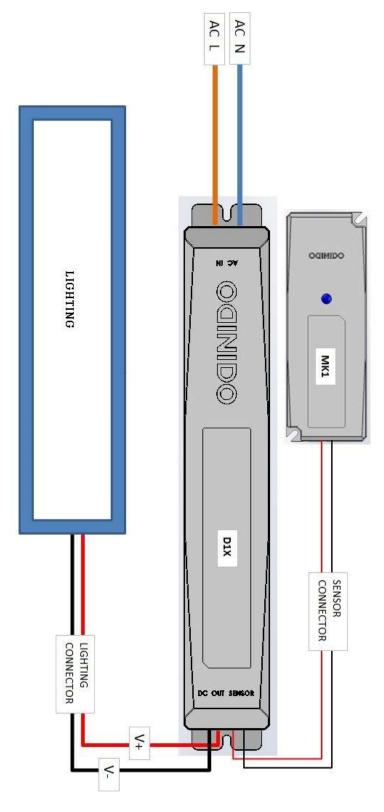
Sensing Distance : 1-15 MSensing Frequency : 10.525G

Communicate : Bluetooth 4.0
Function change : NFC function
Pass CE,FCC safety requirements.



3-3 Installation

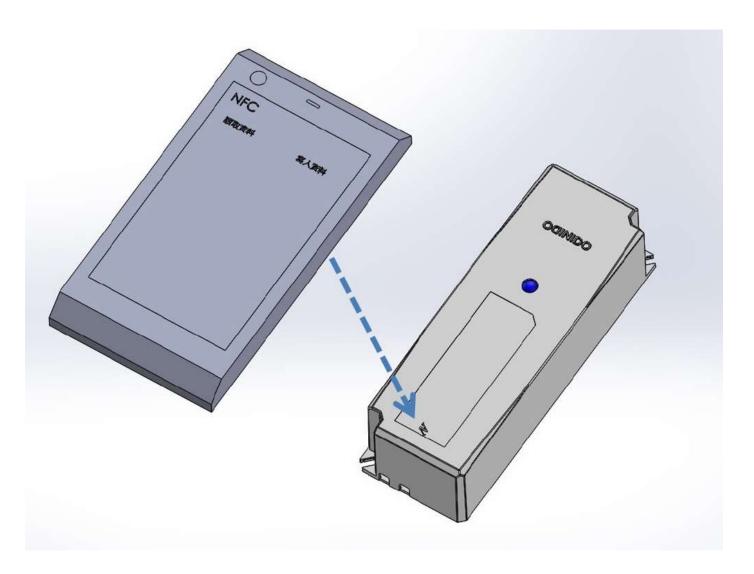
Connect to LED light fixture as below:





3-4 APP

(Since the MK1 APP won't be sold on Google Play, please contact with NIDO to get the MK1 APP) Please make sure the mobile has NFC function, way to sensing as the picture below

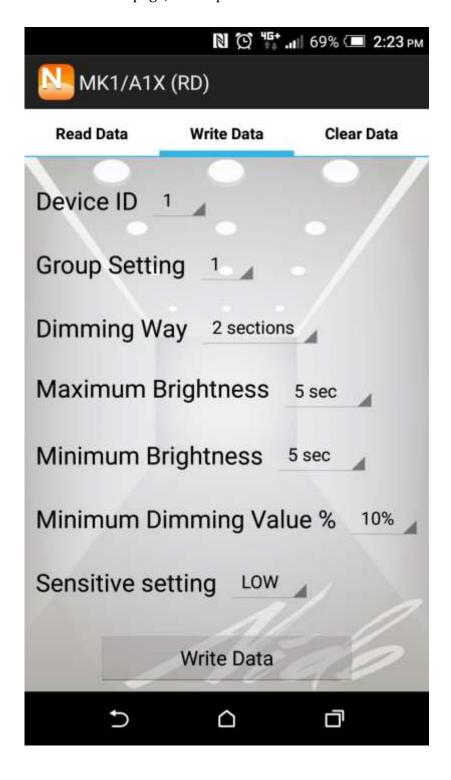




3-5 Adjustment

3-5-1 Write Data

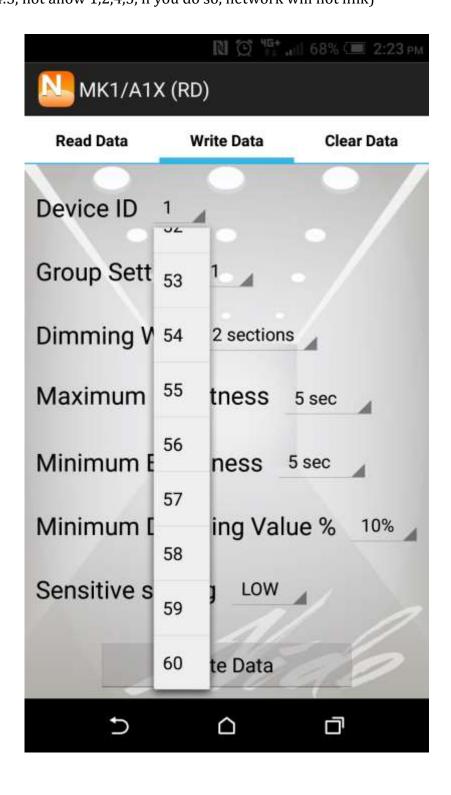
Access "Write Data" page, as the photo below





Set "Device ID":

Pick an area ID from 1-60 to be your product ID number. As the picture below, if you choose"1" to be the ID for this area, (MAX ID number is 60 , MK1 and D1X all share this ID , ID number must link together, ex: 1.2.3.4.5, not allow 1,2,4,5, if you do so, network will not link)





Set "Group":

Pick a number from 1-10 to be the group number.

As the picture below, choose "10" to be the group number, (MAX group ID is 10, MK1 and D1X share these 10 group ID)

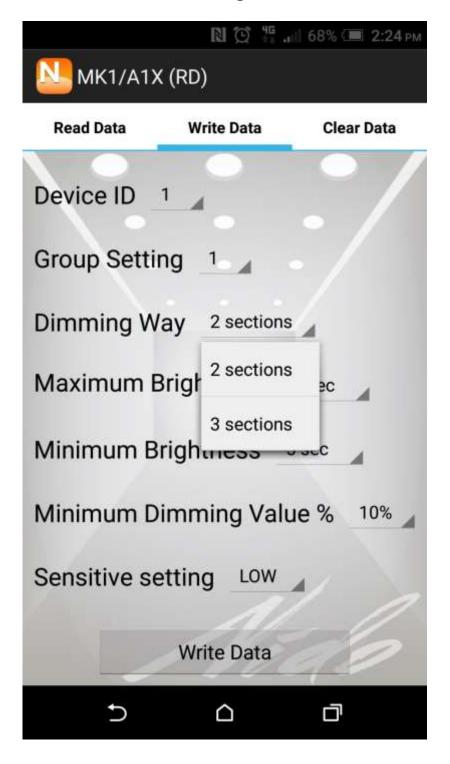




Dimming Way: 2 sections/ 3 sections

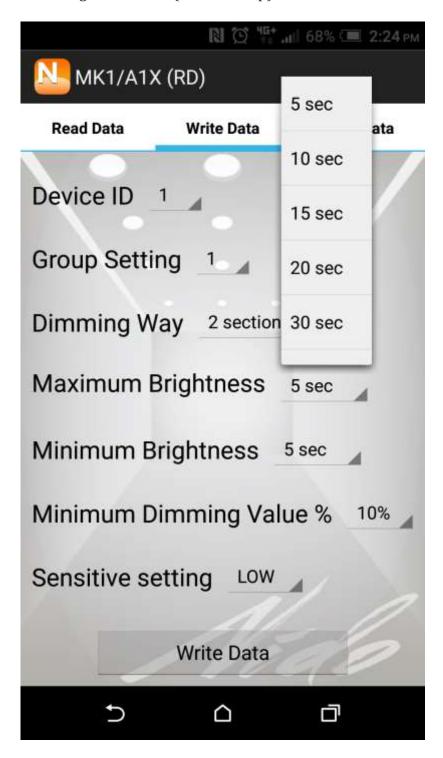
2 sections dimming: when a moving object has been detected by MK1, turn the light up to 100% brightness. If there's no action in few mins, turn into low brightness mode and wait till another object shows up.

3 sections dimming: when a moving object has been detected by MK1, turn the light up to 100% brightness. If there's no action in few mins, turn into low brightness mode. If still no action, turn off the lights.



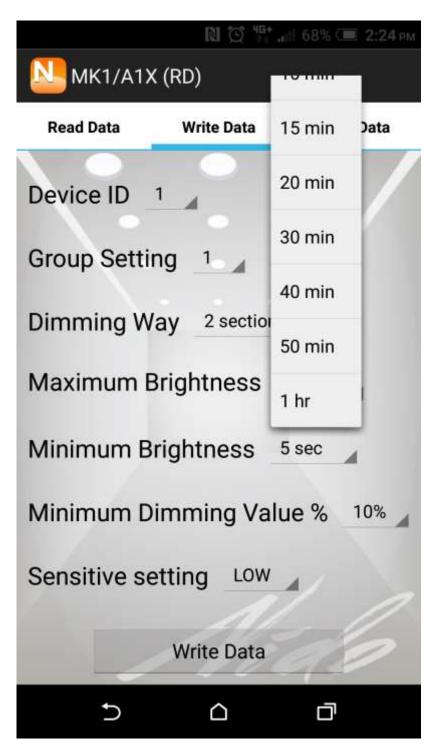


Maximum Brightness: In 2 sections/ 3 sections dimming way, when a moving object has been detected by MK1, turn the lights up to 100% brightness. User can adjust the Maximum brightness time. (one hour top)



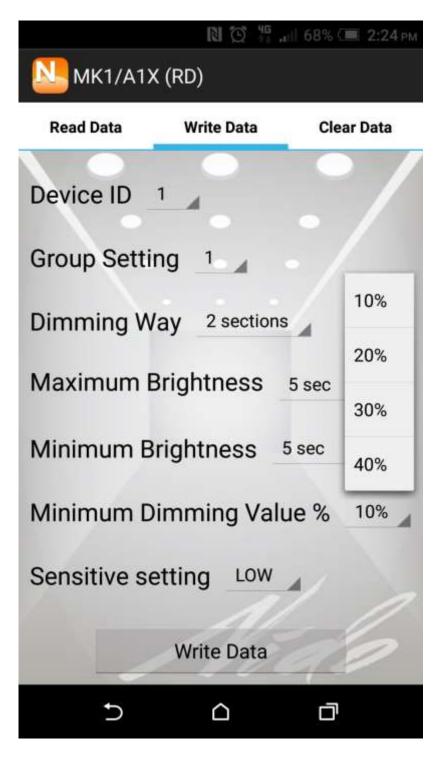


Minimum Brightness: in 3 sections dimming way, when a moving object has been detected by MK1, turn the lights up to 100% brightness. After the Maximum brightness mode, turn into minimum brightness mode, user can adjust the minimum brightness time as well (one hour top). After the time user sets, lights will turn off.



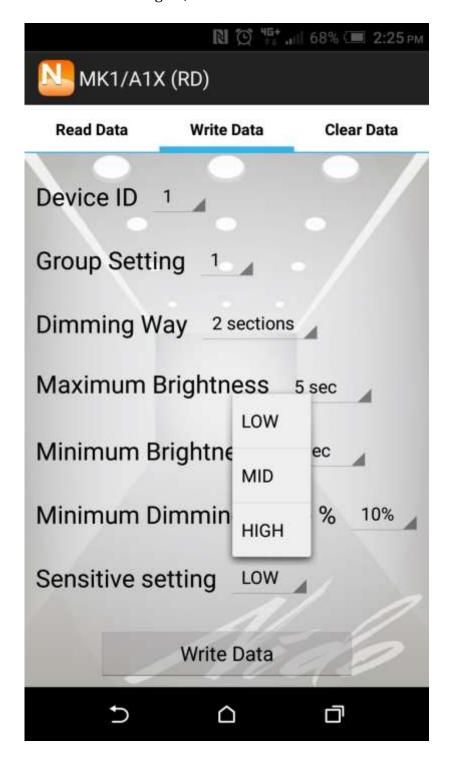


Minimum Dimming Value %: In 2 sections/ 3 sections dimming way, when a moving object has been detected by MK1, turn the lights up to 100% brightness. After the Maximum brightness mode, user can choose the percentage (10%-40%) of minimum brightness. The lower percentage user chooses the more energy-saving efficiency.



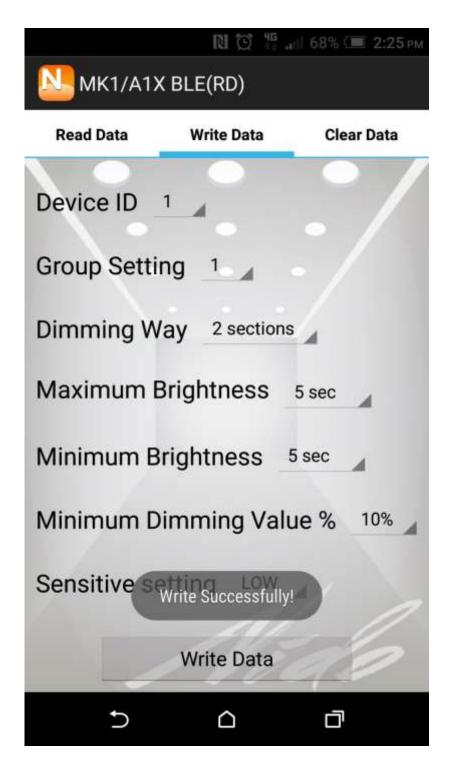


Sensitive setting: Choose how sensitive you want. Now we have LOW, MID and HIGH, 3 different levels. The higher, the sensor is more sensitive.





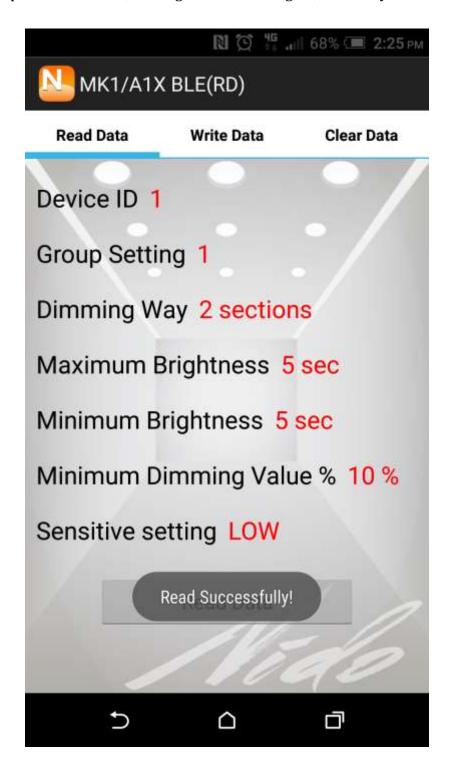
After setting, make sure the mobile gets close to the NFC sensor block on D1X. If the setting is successful, there will pop-out the successfully window and the sound as well.





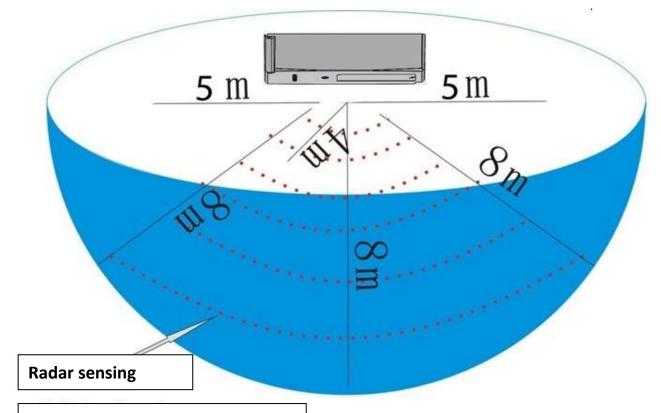
3-5-2 Read Data

Tap the "Read data", and tag the NFC area again, the data you set will show up.



ODINIDO

5. Sensing range information



Sensing range: 180° * 360°

Sensing distance: 8M base on 120°

| Height (M) | Radius (M) | Detect area (πt) |
|------------|------------|------------------|
| 8 | 9.5 | 169 |
| 7 | 8.5 | 144 |
| 6 | 7 | 100 |
| 5 | 6 | 81 |
| 4 | 5 | 49 |
| 3 | 4 | 27 |
| 2 | 2.5 | 16 |



6. Range & Limitation

| Operating Temperature & Humidity (Non-condensing) | -20°C ~ +55°C / 10%RH ~ 90%RH* |
|---|--------------------------------|
| Storage Temperature & Humidity (Non-condensing) | -30°C ~ +70°C / 10%RH ~ 90%RH* |
| Waterproof | No |

7. Warranty

Warranty: 3 years

The warranty doesn't apply to cosmetic damage.

8. Warnings

• After changing the data, please tap the "Load data" to double-check the status.



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: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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.

FCC RF Radiation Exposure Statement:

- 1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- 2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.