

DNF-01

USER'S GUIDE



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Revision History

Revision	Issue Date	Author	Scope
1.0	2018/11/16	J.H.Lim	Initial Release

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3.4.1	6 pin Connector <NFC_MX4406NF1>	오류! 책갈피가 정의되어 있지 않습니다.
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1 Warnings for safety operation

This is to protect your safety and property. Please read this manual carefully before using.

■ Operational Environment

- The operating voltage of this products is between 9Vdc and 34Vdc. Please use the specified operating volgage.
- Use within the specified temperature range.
- This product is specialized for industrial vehicles.

■ Insallation Precautions

- Insallation and wiring require professional skills. Be sure to install it with the help of a propessional. Incorrect insallation and wiring can cuase the fire or malfuncation.
- When installing the product, install it so that it does not interfere with the operation of safety devices such as airbags and brake levers...etc.
- Insall in a location free from moisture. It may cuase damage or accidents if it is installed in places where water or rain is splashed or dusty.
- When wiring, be sure to check the position of pipes, tanks, electric wiring, etc., and pay special attention to avoid interference or contact.
- Use specified cables and components.
- Be careful not to fall down when installing in a place where the ceiling and vibration of the vehicle are severe.
- Do not block the vent or heat sink. It may cause the fire.
- Protect the wire tube by winding the insulation tape around the area where the wire is in contact with the metal part. It can cause the fire or electric shock.

■ Important Safety Precautions

- Do not operate the device by manually during the vehicle operation. It can cuase the accidents.
- Any modification of this product is prohibited and will void your warranty. Any use of the product or its components for purposes not expressly authorized by this document is prohibited and will void your warranty.

Allow only authorized personnel to service the unit. Unauthorized service can invalidate the warranty.

2 Hardware

2.1 Picture



3 Specifications

3.1 General

Item	Specification	Descriptions
Size	59.8(W) x 83.3(H) x 24.6(D)	Unit : mm
Weight	78 grams	
Operating Temperature	-30℃ ~ +70℃	
Storage Temperature	-40℃ ~ +85℃	
Vibration	Random 5~20Hz 0.05g2/Hz, 20~150Hz: -3dB/oct.(1.7g rms), 3-axis, 30minutes for each axis.	
Thermal Shock	-40℃(1H)/+85℃(1H), 1cycle- Total24 cycle, 48H, non-operating	
Humidity	+70℃/95%/48 Hours, Operating	
Input rating	12 Vdc - 24 Vd.c, 1 A	

3.2 Communication

Item	Specification	Descriptions
Communication	- UART(RS-232)	
I/O	- 6 Pin	Waterproof
LED	- 3 LEDs	Power, OK, FAIL
Buzzer	- Level: Min. 90.0dB	

3.3 Accessories

Item	Specification	Descriptions
NFC Card	NFC - A (ISO/IEC14443A)	NFC – B/F type

3.4 LED

3.4.1 LED Status

	Mode	Status	RED	GREEN	YELLOW	BEEP
1		Power ON	ON			
2	Normal	Slave Card Recognition Ok	ON	Turns on after 5 seconds and then turns off		Beep
3		Slave Card Recognition Fail	ON		Turns on after 5 seconds and then turns off	Beep,Beep
4	Master Card Registration	Master Card Registration Ready	Blinking	Blinking	Blinking	Beep
5		Master Card Registration Completed	ON	Blinking	Blinking	Beep
6	Slave Card Registration	After contact Master Card , Slave Card Registration Ready	Blinking			Beep
7		After contact Slave Card, UID Read Ok	Blinking	Turns on after 1 seconds and then turns off		Beep
8		After contact Slave Card, UID Read Fail	Blinking		Turns on after 1 seconds and then turns off	Beep, Beep
9		After contact Master Card, Slave Card Registration completed		Turns on after 3 seconds and then Re-booting	Turns on after 3 seconds and then Re-booting	Beep

WARNING & SAFETY INFORMATION

Safety Symbols



Warning

- When encountering this symbol in the manual, you must follow these recommendations to avoid irreparable damage to your car, system or connected devices or to avoid accidents with injuries or death.

IC Information

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

FCC Information

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 notification to users

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 when the equipment is operated in a commercial environment. 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, the user is encouraged to try to correct the interference by consulting with a dealer or an experienced technician for technical assistance.

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