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Car wireless charging product manual

Model 1: CHG-WIRELESS 4.0

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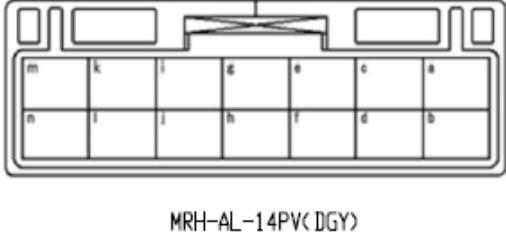
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Part 1: Function Block Diagram

1.1 Function Block Diagram

Definition of Radio Block
Connector Pin-out Detail

| Kinds of Connector | Pin # | Signal Name | Wiring Detail (SW/TWP/STWP ¹) | Rated Current ² |
|---|-------|--------------|---|----------------------------|
|  | a | +B | SW | 15A |
| | b | ACC | SW | 7.5A |
| | c | N.C | --- | --- |
| | d | PBLC MS-CAN- | TWP | 10mA |
| | e | N.C | --- | --- |
| | f | PBLC MS-CAN+ | TWP | 10mA |
| | g | LF State | --- | 10mA |
| | h | N.C | --- | --- |
| | i | N.C | --- | --- |
| | j | N.C | --- | --- |
| | k | N.C | --- | --- |
| | l | GND_CFGSR | --- | --- |
| | m | GND | SW | --- |
| | n | GND_CFG | --- | --- |

1.2 Basic product information

| | |
|----------------------|---|
| Product Name | Car Wireless Charger |
| Technology | Wireless Charger、NFC |
| Manufacturer | Huizhou Desay SV Automotive Co., Ltd. |
| Manufacturer Address | 103, Hechang 5th Road West, Zhongkai National Hi-tech Industrial Development Zone, Huizhou, Guangdong, P.R. China |
| Brand | DESAY SV |
| Model | CHG-WIRELESS 4.0 |
| RF output power | Wireless charger 3m: 40.67 dBuA/m 10m: 9.27 dBuA/m NFC 3m: -9.6 dBuA/m 10m: -38.6 dBuA/m |
| Modulation | ASK |
| Weight | 0.4 kg |

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| | |
|--------------------|----------------|
| Product size | 270.9*93.7 |
| Antenna type | Coil Antenna |
| Antenna Gain | 1.5dBi |
| Connector | JAE MX58014UF1 |
| Antenna Brand Name | ST |
| Antenna Model Name | ST25R3920 |
| Assembly Position | Armrest-Box |
| Hardware Version | 001 |
| Software version | KMDC-11-006 |

Part 2: Statement & Notice

2.1 Voltage and Current Requirement

| Type | Voltage/Current Value |
|-------------------------|-----------------------|
| Rated voltage/ Current | 12V,3A |
| Maximum product power | 25W |
| Operating voltage range | 9~16V |
| Operation Frequency | 127.7KHz、125.95KHz |
| NFC Frequency | 13.56MHz |

2.2 Temperature Requirement

| Type | Temperature Value |
|--|--|
| Performance guaranteed temperature range | 0°C~+40°C |
| Operation guaranteed temperature range | -30°C~+85°C Over-temperature protect of wireless charging can be accept while surface temperature higher than 50°C. |
| Storage temperature range | -40°C~+85°C |

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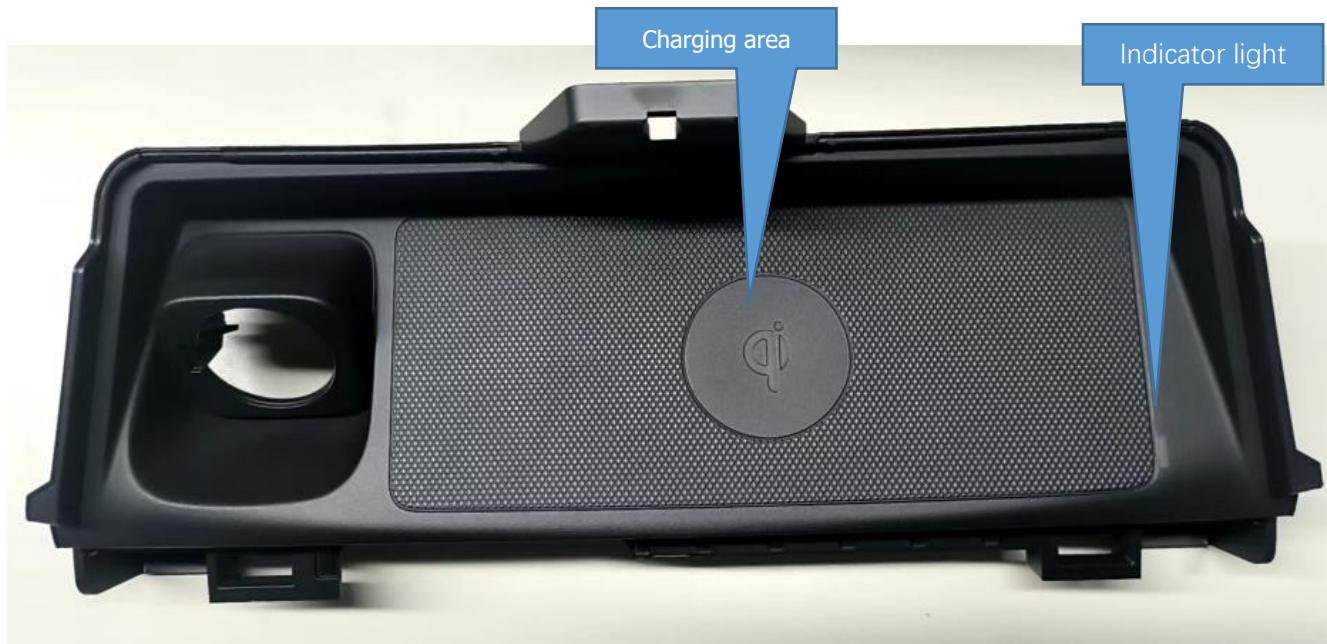
| | | |
|------------------|---------------------|------|
| Test temperature | Nominal temperature | 20°C |
|------------------|---------------------|------|

2.3 Parameter Tolerances

If not otherwise specified, the following tolerances shall apply:

- frequency and time: $\pm 5\%$
- voltages: $\pm 0.5V$
- current: $\pm 10\%$
- resistance: $\pm 5\%$
- temperature: $\pm 5^{\circ}C$
- Operation Frequency: $\pm 500HZ$

Part 3: User's Interface Overview



MODEL 1: KMDC-66CHX

1 Indicator light _ Charge indicator

| The Pattern | Qi State | Color | Lighting / Blinking | Frequency |
|-------------|---------------------------------|--------|---------------------|-----------|
| A | Power OFF | -- | -- | - |
| B | Power on (Non-charging) | White | Flashing | 0.5Hz |
| C | Power on (Charging) | White | Light up | - |
| D | Charging (rapid) | Green | Light up | - |
| E | Charging (Rapid & misalignment) | Green | Flashing | 0.5Hz |
| F | Charging (Normal) | Orange | Light up | - |

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| | | | | |
|---|--|--------|----------|-------|
| G | Charging (Normal misalignment) & | Orange | Flashing | 0.5Hz |
| H | high temperature / Foreign object detection | Red | Flashing | 1Hz |
| I | Malfunction | Red | Light up | - |

2area_Charging area

Functional Requirements:

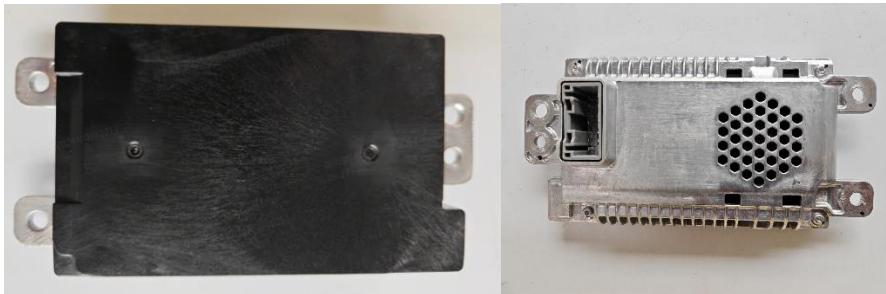
| Wireless Charging | |
|--------------------------------------|--|
| Power transmitter | BATT: 9~10.5V, Guaranteed 5W charging. |
| | BATT: 10.5~16V, Guaranteed 15W charging. |
| Foreign object detection | Yes |
| Temperature detection | Yes |
| Charging working frequency switching | Yes (AM frequency hopping, PEPS frequency hopping) |

| NFC | |
|---------------------------------|-----|
| Contactless card identification | Yes |

Part 4: Product Appearance

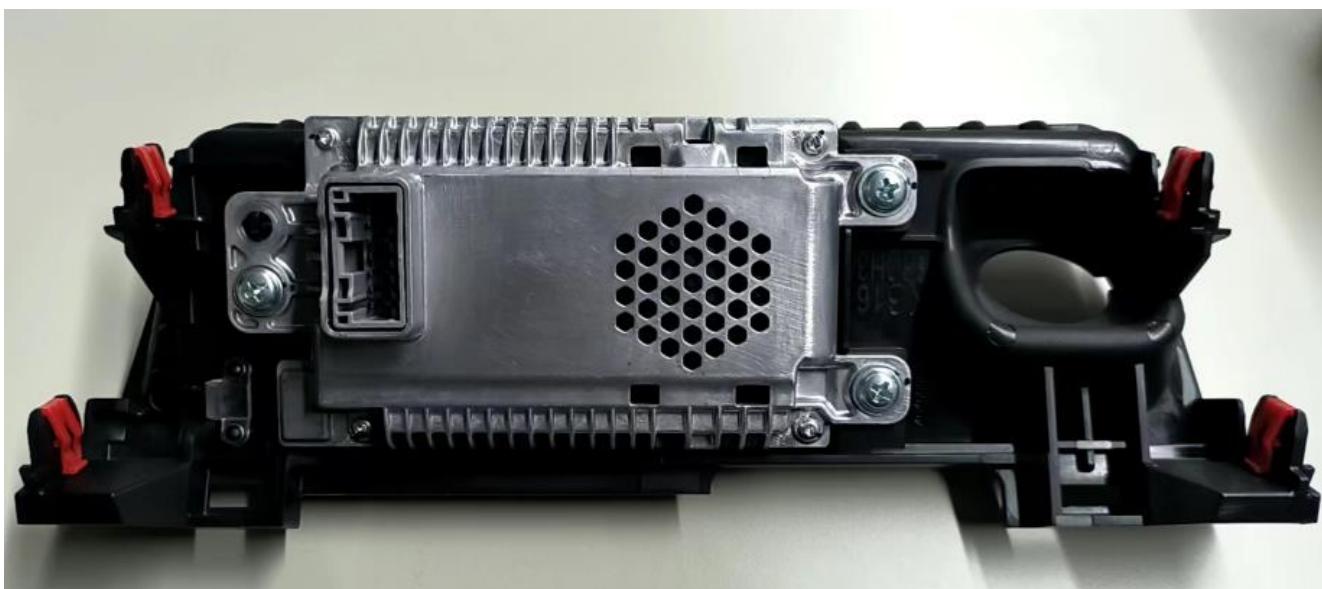
型号 1: CHG-WIRELESS 4.0

Wireless Charging Module:



Wireless Charging Module+ panel:

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Part 5: Declaration of Conformity

5.1 Simplified EU Declaration of Conformity

The simplified EU declaration of conformity referred to in Article 10(9) shall be provided as follows: Hereby, *[Huizhou Desay SV Automotive Co., Ltd.]* declares that the radio equipment type [designation of type of radio equipment] is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:<http://www.desaysv.com/index.php?id=oumeng>

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5.2 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.

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 important announcement

Important Note:

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

5.3 IC Statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: (1) This device may not cause interference. (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique 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; 2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This equipment complies with Industry Canada radiation exposure limits set forth for an uncontrolled environment.

Cet équipement est conforme à l'exposition aux rayonnements Industry Canada limites établies pour un environnement non contrôlé.

5.4

FCC Supplier's Declaration of Conformity

Product Name: Car Wireless Charger

Model number: CHG-WIRELESS 4.0

Suppliers Name: DESAY SV AUTOMOTIVE USA

Suppliers Address (USA) : 840 W LONG LAKE RD STE 150, TROY MI 48098-6356

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Suppliers internet contact :Da.Xu@desaysv.com