# HY 01 wireless charging module operating manual

### **Product Overview:**

Thank you for choosing our Wireless Charging Module, an Albemarle Companion product. The HY 01 is a medium-power wireless charging module that utilizes low-frequency magnetic resonance wireless charging technology to increase the charging distance and easily achieve wireless convenience; the maximum charging distance can reach 75 mm. During installation, please mount the transmitter coil of the wireless charging transmitter to the bottom of the charging ramp bracket of the snowplow. The aluminum casing of the transmitter controller should be parallel to the transmitter coil; the wireless charging receiver module should be installed at the center of the bottom of the snowplow, positioned above the base of the snowplow. While wireless charging is in progress, the CAN signal will communicate with the snowplow via wired transmission. By default, the standby state of the transmitter part does not output capability detection. Upon receiving a CAN communication charging command, the receiver will send a charging demand wake-up signal to the transmitter using 2.4G RF communication (used only for wireless transmission, no other smart communication). After the transmitter wakes up, the receiver will detect and complete the 2.4G communication pairing operation. The transmitter coil is driven to produce a varying magnetic field at a certain frequency, and the receiver coil, within a specific range above the transmitter coil, couples this varying magnetic field to generate induced electrical energy for charging the battery. During the operation, the transmitter and receiver coils only transfer power and do not transmit information; any information exchange between the transmitter and receiver relies on the 2.4G RF module.

HYO 1 models and specifications and parameters

nyo i models and specifications and parameters						
A C100-240V 47-63HZ						
8Amax @Full load						
≥0.95						
780W						
42V ±0.2						
15A ±5%						
Constant current-constant voltage (charging curve)						
83%Typ @110V						
49kHz-89kHz						
≤2W						
60-75mm						
X:20mm;Y :30mm;						
2.4G ISM (2.4~2.483GHz)						
CAN (see Annex for the Agreement)						
Emission and reception can be randomly matched						
18A (max)						
not have						
80℃ down current, 85℃ off the charge						



temperature	
RX protection temperature / Receiving protection temperature	75℃ down current, 80℃ off charging
O perating temperature / Operating temperature	-30-55℃ RH<95%
S torage temperature / Storage temperature	-30-55℃ RH<90%
W aterproofing grade / Waterproof grade	TX: IP 65 RX: IP 65
TX controller weight / Launch host weight	3.72KG
TX Coil weight / Launch coil weight	2.84KG
RX controller weight / Receiver weight	2.84KG
TX controller size / Launch host size	49. 4*16. 8*6. 5cm
TX coil size / Launch coil size	29. 2*28. 5*5cm
RX coil size / Receiver size	37*26*5cm

# Packaging content

HY 01 Wireless charging module x 1
Instructions for use, x 1
Warranty card x 1

### operation declaration:

- 1. After unpacking the product, please check whether the equipment is complete, whether the accessories are complete, and whether the appearance is intact.
- 2. Before use, please tear off the coil and the controller protective film to ensure the good heat dissipation performance of the prototype.
- 3. Connect the power plug of the transmitting host to 220V or 110v, enter the power socket, and enter the transmitting host into the standby state, and the indicator light displays the standby state

Machine state

4. Connect the positive and negative output line of the receiving host to the battery (due to the capacitor characteristics, there may be sparks when the battery is connected for the first time,

A normal phenomenon), pay attention to the receiving host output cable: red battery positive electrode, that is, "+", black battery negative

Polar, i. e., "-"

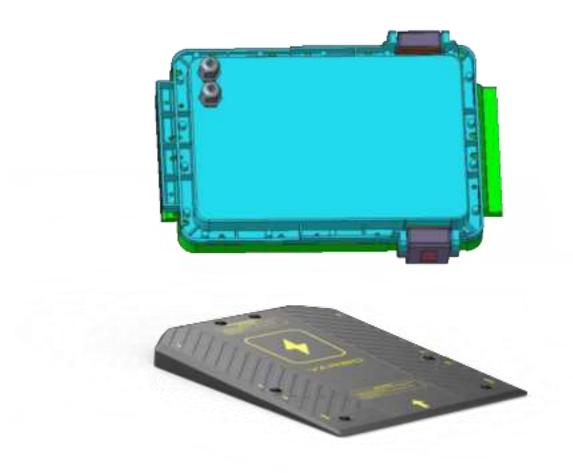
- 5. Charging equipment: place the wireless charging receiver on the charging area of the transmitting terminal. Ensure that the contact surface of the device and the charger is at the required charging distance.
- 4. Start charging: After the device is placed correctly, the device clicks to start charging, and the device will automatically start charging. The transmitter end has an indicator light prompt when charging.

### matters need attention

- 1. Before using the product, please read the product operating instructions first.
- 2. This product is only used for Yarbo car body, and should not be disassembled for other purposes.
- 3. This product is not applicable to children or disabled people.
- 4. This product can only be used under the wireless charging complete module of HY 01 model, and cannot be used in the wireless charging modules of other brands.
- 5. Make sure that the voltage of the charger and power adapter matches the voltage standard in your area.
- 6 Do not use the charger in wet or watery environments.

- 7. Avoid placing metal items on the charger, which may affect the charging efficiency or damage the device.
- 8. Don't expose the charger to high temperatures or to direct sunlight.
- 9. Please regularly check the surface of the charger for foreign matter or damage to ensure safe use.
- 10. Be sure to ensure good ventilation and heat dissipation, and stay away from flammable and explosive products.

# **Schematic diagram of parts**



# debugging

- -If the device cannot be charged, check the car for the the message.
- -Ensure that the vehicle body is aligned with the launch end.
- -Try again, operate the car body and make sure it is in the center of the charging area.
- -Check that the power adapter and power cord are properly connected.

or d er n u m b	Except ion code locatio n	Fault code	Failure judgment	Solution / Solution
1	1	Bit0	Receive and output overpressure	Check whether the voltage of the charging battery meets the requirements, and whether the position of the transmitting and receiving coil is within the standard requirements
2	1	Bit1	Receive output over-stream	Check whether the voltage of the charging battery meets the requirements, and whether the position of the transmitting and receiving coil is within the standard requirements
3	1	Bit2	Receive the temperature	Check whether the ambient temperature of the equipment is too high, and whether the receiving heat dissipation channel is blocked
4	1	Bit3	Receive voltage mutations	Receive power off restart
5	1	Bit4	Reserved position	\
6	1	Bit5	Reserved position	\
7	1	Bit6	The emission power is abnormal	Check whether there are metal foreign bodies around the transmitting and receiving coil, and whether the transmitting and input power supply meets the product specifications
8	1	Bit7	continue to have	\
9	2	Bit0	Emission-resona nt overcurrent (hardware)	Check whether there are metal foreign bodies around the product, whether the launch coil connection cable is loose or broken, and adjust the charging distance between the coils
1	2	Bit1	Emission-resona nt overcurrent	Check whether there are metal foreign bodies around the product, whether the launch coil

			(software)	connection cable is loose or broken, and adjust the		
			(SOILWAIE)			
				charging distance between the coils		
1			The emission of	Check whether the ambient temperature of the		
1	2	Bit2	excessive	equipment is too high, and whether the emission		
1			temperature	heat dissipation channel is blocked		
		Bit3	A 2 4G-channel	Check whether the installation environment has		
1 2	2		/ \	excessive WIFI and Bluetooth devices as		
2			error	communication interference		
1			The 2.4 The G			
1	2	Bit4	module is	Power power the transmitter power supply		
3			abnormal			
1			The 2.4G	Check whether the antenna is loose, the charging		
_	2	Bit5	communication	distance meets the requirements, and the installation		
4			timeout	position of the controller is wrapped with metal		
1			The emission	Charle whather the input payer august walls		
1	2	Bit6	input is	Check whether the input power supply voltage		
5			abnormal	condition and the connection line contact are good		
1						
6	2	Bit7	continue to have	\		

### **FCC WARNING**

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.

Any 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.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body.

IC Warning 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.
- 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 pré sent 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.

## IC RF exposure s tatement:

This equipment complies with IC Radiation exposure limit set forth for uncontrolled environment.

This equipment should be installed and operated with a minimum distance of 20cm between the product and your body.

IC RF Déclaration de exposition:

Este equipo cumple con los limites de exposici6n a radacion por radiofrecuencia de la IC

estipulados para un ambiente no controlado.Este equipo debera instalarse y utilizarse con una

distancia minima de 20 cm entre el radiador y el cuerpo.

# warranty card

Dear users, thank you for buying the products of Zhonghui Chuang Wisdom Co., LTD. In order to better serve you, after buying the product, please read, fill in and properly keep this warranty card.

name of user		contacts	
customer		contact	
address		number	
product name		product	
product name		model	
date of			
purchase			
	date	Fault cause and handling	
tie up	uate	situation	
embellish			
remember			
record			

matters need attention:

- 1. From the date of your purchase of the product, the company will install and use it according to the operation instructions for the product within one year, and after one year, the maintenance fee will be charged for maintenance workers.
- 2. For maintenance not caused by the quality of the company's products, such as improper use, improper storage, unauthorized dismantling, the company shall charge additional fees for maintenance.

Service telephone number: 0755-28993997

Company website: www.zonecharge.net

Service email address: jiangyi@zonecharge.net

The right of final interpretation and modification of the contents of this warranty card belongs to Zhonghui Chuangzhi (Shenzhen) Wireless Power Supply Technology Co., LTD