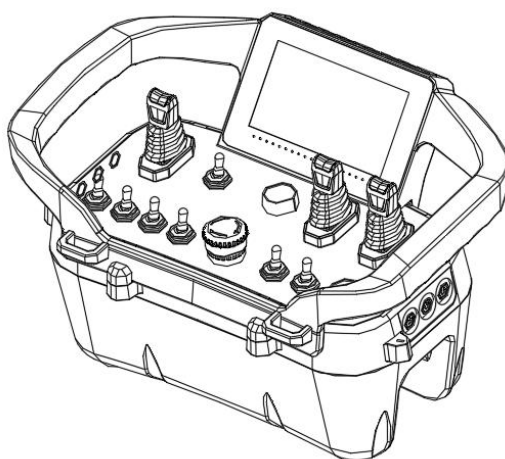


DL-RC01C- MS-GM-RCX0 1

Shoulder Strap Remote Control

product manuals



1. product

Name: Shoulder Strap Remote Control;

Model (specification): DL-RC01C-MS-GM-RCX 01

Main components of the product:

product	Model / specification	unit	quantity
Remote control transmitter	DL-RC01C-M S-GM-RCX0 1 (S)	short for Taizhou	1
receiver of remote-control sytem	DL-RC01C-M S-GM-RCX0 1 (R)	short for Taizhou	1
Bar column antenna	433MHz	individual	1
Cable interface	Lingaceae LP16-5	individual	1
lithium cell	48 00mAh	block	2
braces	And 3. 7CM wide and 1. 4M long	root	1
The 220V power supply adapter	GS-W25A0529	individual	1

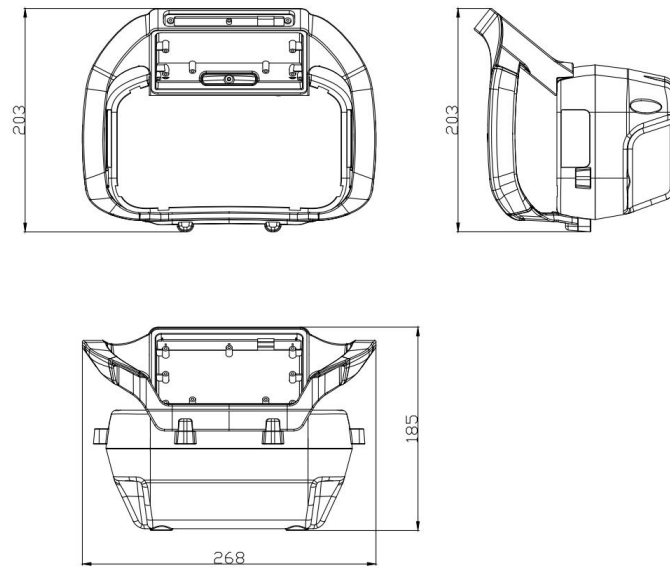
2. Main technical parameters of the remote control device

(一) ejector

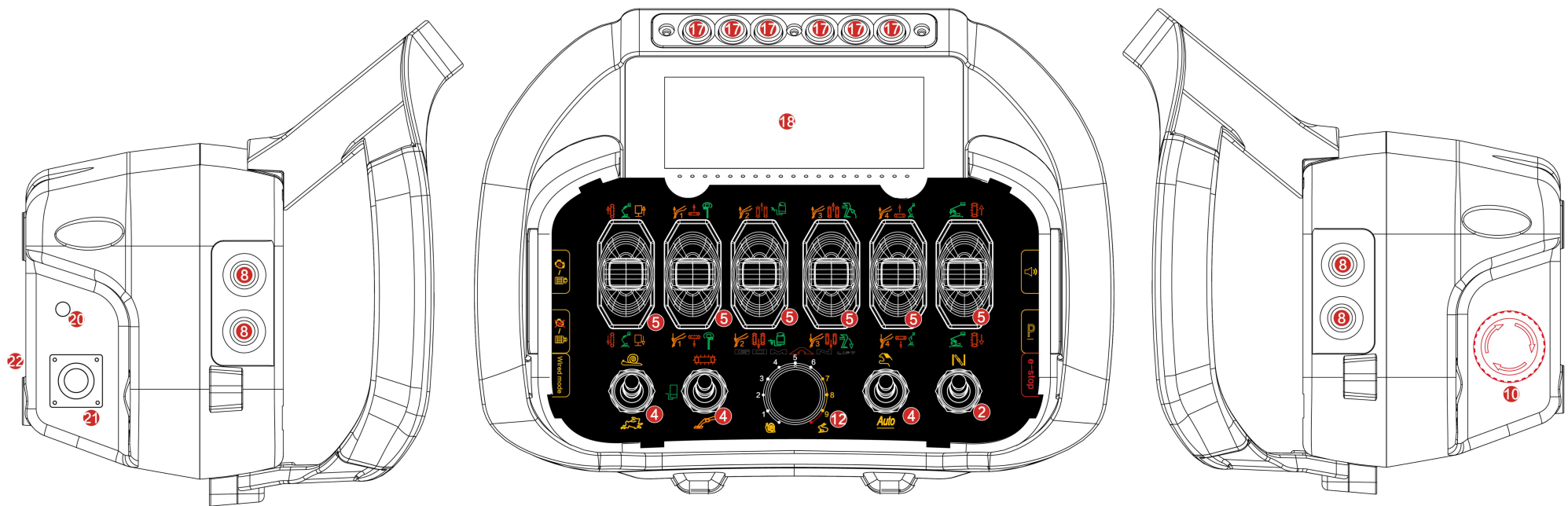
1. Technical parameters of the transmitter

name	Shoulder Strap Remote Control
model	DL-RC01C-MS-GM-RCX0 1(S)
Wired control	9- 36V DC
working temperature	-25℃~70℃
Save the	-25℃~70℃
Working humidity	0~97%, and the
Transmitter size	2 68* 185* 203 mm
levels of	IP65
Benchmark bandwidth	433 MHZ
Data against	Automatic jump frequency

2. Transmitter Size:



3. Transmitter layout

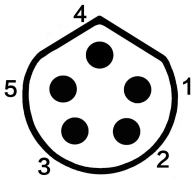


code name	Device description	quantity	code name	Device description	quantity	code name	Device description	quantity	code name	Device description	quantity
1	Two-gear self-reset twist switch	0	7	Double axis cross handle	0	13	Three gear knob switch	0	19	LED indicator lamp (power level / signal)	0
2	Two-gear self-locking twist switch	1	8	Side self-reset button	4	14	Four gear knob switch	0	20	Display screen program download port (M8)	1
3	Three-gear self-reset twist switch	0	9	Side self-lock button	0	15	Five gear knob switch	0	21	Cable Control Interface	1
4	Three-gear self-lock twist switch	3	10	emergency stop switch	1	16	Six gear knob switch	0	22	Battery (4800 mAH)	2
5	Single axis straight	6	11	mains switch	0	17	Physical	6			

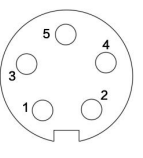
	handle						buttons on the display screen				
6	Double axis universal handle	0	12	Potential knobs	1	18	5 Inch display	1			

4. Transmitter wiring mode:

1) 5-inch display USB connector: 5-core M8 male head

P IN	Signal name	functional	
1	USB_D-	USB signal D-	
2	USB_D+	USB signal D+	
3	GND	USB the earth	
4	VBUS	USB source	
5	USB_ID	USB discriminate ID	

2) Wired control connector: plug-in specification and model: Lingke LP16-5

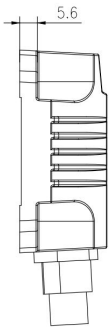
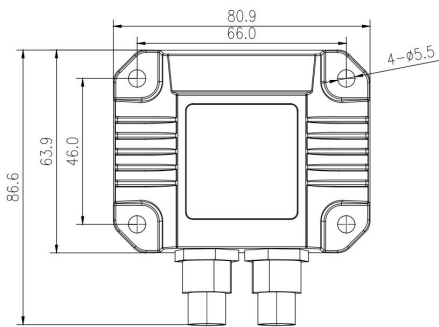
order number	Signal name	Line color	functional description	
1	/	palm	/	
2	Power	white	Power is	
3	GND	blue	Power negative	
4	CAN 1_H	red	CAN highway H	
5	CAN1_ L	yellow	CAN highway L	

(二) acceptor

1. Technical parameters

name	Shoulder Strap Remote Control
model	DL-RC01C-MS-GM-RCX0 1 (R)
working voltage	9~3 6VDC
working temperature	-25℃~70℃
Save the temperature	-25℃~70℃
Working humidity	0~97%, and the anti-condensation
Receiver size	80.9* 63.9* 27.5mm
way to install	foot mounting
installation size	46*66mm 4-Ø5.5
Benchmark bandwidth	433 MHZ
levels of protection	IP67

2. Receiver size

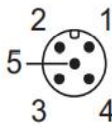


- ☞ Chang Liang: The power supply is normal
- ☞ Flashing (5H z): the communication connection



3. Receiver wiring mode

CAN: M12 header 5-core connector

order	Signal name	functional	
1	empty	empty	
2	9-36V DC	Power is	
3	GND	Power negative	
4	CAN 1_H	CAN highway H	
5	CAN1_ L	CAN highway L	

3. Remote control description

1. Safe and reliable communication distance: 200 meters in open space;
2. If the communication is seriously disturbed or exceeds the normal communication distance, all the bus data within 1s is restored to the zero bit state;
3. After opening the emergency stop 1 S, then press the engine stop side button 3S and enter the code program, the buzzer is often ringing, the receiver is powered off, after the code is successful, the transmitter LED status indicator flash;
4. Wired / wireless mode to open the emergency stop transmitter automatically boot;
5. When the handle switch is not in the initial position, it will enter the boot protection, and it cannot be turned on. It automatically enters the diagnostic field. The buzzer (2H z) rings and cannot be turned on

4. communicating protocol

Heartbeat frame (receiver or transmitter- - - - -> external controller) (sending cycle 100ms)					
CAN_ID	BYTE0	BYTE1	BYTE2	BYTE3	BYTE4
700+Node_ID	CAN heartbea t	Node_ID	Electric quantity indication and signal strength	Channel number	Wireless heartbea t
BYTE0CAN Heart beat frame 0 and 1 jump The BYTE 1 is the Node _ ID The bit0-bit 3 of BYTE 2 indicates that the battery level of 0 xX 0 to 0 xXA is 0 to 10 grids The bit4-bit 7 of BYTE 2 indicates the signal intensity 0 x 0 X to 0 x AX as 0 to 10 lattice signal intensity BYTE 3 is the wireless channel number, ranging from 1-12. BYTE 4 is the wireless transmitter to receiver heartbeat, data from 0 to 0 xff, the receiver receives a packet of transmitter data, the heartbeat adds 1.					

Receiver (or transmitter wired mode) - - - - -> external controller						
	COBID	BYTE	Bit	codom ain	data type	The analog quantity is accompanied by the

						direction instruction / switch quantity instruction
Send PDO1	16 # 180 + Node _ ID (send period of 100ms)	0	0..7	0 0..FF	SINT	On the handle (1 # handle): 01... 7F Median: 00 Under the handle (1 # handle): FF... 81
		1	0..7	0 0..FF	SINT	On the handle (2 # handle): 01... 7F Median: 00 Under the handle (2 # handle): FF... 81
		2	0..7	0 0..FF	SINT	On the handle (3 # handle): 01... 7F Median: 00 Under the handle (3 # handle): FF... 81
		3	0..7	0 0..FF	SINT	On the handle (4 # handle): 01... 7F Median: 00 Under the handle (4 # handle): FF... 81
		4	0..7	0 0..FF	SINT	On the handle (5 # handle): 01... 7F Median: 00 Under the handle (5 # handle): FF... 81
		5	0..7	0 0..FF	SINT	On the handle (6 # handle): 01... 7F Median: 00 Under the handle (6 # handle): FF... 81
		6	0..7	0 0..FF	BYTE	Knob left-knob right: 00-FF
		7				
Send PDO2	16 # 280 + Node _ ID (default 100ms)	0	0	0/1	BOOL	Emergency stop (pull 1)
			1	0/1	BOOL	Ring (1= action, 0= stop)
			2	0/1	BOOL	
			3	0/1	BOOL	Track (1= action, 0= stop)
			4	0/1	BOOL	Arm stand (1= action, 0= stop)
			5	0/1	BOOL	Legs (1= action, 0= stop)
			6	0/1	BOOL	Manual (1= action, 0= stop)
			7	0/1	BOOL	Automatic (1= action, 0=

						stop)
		1	0	0/1	BOOL	Engine start (1= action, 0= stop)
			1	0/1	BOOL	Engine stop (1= action, 0= stop)
			2	0/1	BOOL	P function (1= action, 0= stop)
			3	0/1	BOOL	Winddoor (1= action, 0= stop)
			4	0/1	BOOL	Snail (1= action, 0= stop)
			5	0/1	BOOL	Rabbit (1= action, 0= stop)
			6	0/1		
			7	0/1		
		2	0	0/1	BOOL	1 # Push on the handle
			1	0/1	BOOL	2 # Push on the handle
			2	0/1	BOOL	3 # Push on the handle
			3	0/1	BOOL	4 # Push on the handle
			4	0/1	BOOL	5 # Push on the handle
			5	0/1	BOOL	6 # Push on the handle
			6	0/1		
			7	0/1		
		3	0	0/1	BOOL	1 # The handle is pushed down
			1	0/1	BOOL	2 # The handle is pushed down
			2	0/1	BOOL	3 # The handle is pushed down
			3	0/1	BOOL	4 # The handle is pushed down
			4	0/1	BOOL	5 # The handle is pushed down
			5	0/1	BOOL	6 # The handle is pushed down
			6	0/1		
			7	0/1		
		4				
		5	00/01			Wired function (00= wireless, 01= wired)
		6				
Send a PDO 3	16 # 380 + Node _ ID (send cycle of 100ms)	0	0..7	0 0..FF	SINT	
		1	0..7	0 0..FF	SINT	
		2	0..7	0 0..FF	SINT	
		3	0..7	0 0..FF	SINT	
		4	0..7	0 0..FF	SINT	
		5	0..7	0 0..FF	SINT	

		6	0..7	0 0..FF	SINT	
		7	0..7	0 0..FF	SINT	
Send a PDO 4	16 # 480 + Node _ ID (send cycle of 100ms)	0	0..7	0 0..FF	SINT	
		1	0..7	0 0..FF	SINT	
		2	0..7	0 0..FF	SINT	
		3	0..7	0 0..FF	SINT	
		4	0..7	0 0..FF	SINT	
		5	0..7	0 0..FF	SINT	
		6	0..7	0 0..FF	SINT	
		7	0..7	0 0..FF	SINT	

External controller- - -> receiver- -> transmitter-> display

	COBID	BYTE	Bit	codomain	defined instruction	explanatory note
Receive PDO1	16# 200+nodeID	0	0 .. 7	0..FF		
		1	0 .. 7	0..FF		
		2	0 .. 7	0..FF		
		3	0 .. 7	0..FF		
		4	0 .. 7	0..FF		
		5	0 .. 7	0..FF		
		6	0 .. 7	0..FF		
		7	0 .. 7	0..FF		
Receiving the PDO 2	16# 300+nodeID	0	0 .. 7	0..FF		
		1	0 .. 7	0..FF		
		2	0 .. 7	0..FF		
		3	0 .. 7	0..FF		
		4	0 .. 7	0..FF		
		5	0 .. 7	0..FF		
		6	0 .. 7	0..FF		
		7	0 .. 7	0..FF		
Receiving the	16# 400+nodeID	0	0 .. 7	0..FF		
		1	0 .. 7	0..FF		
		2	0 .. 7	0..FF		
		3	0 .. 7	0..FF		

PDO 3		4	0 .. 7	0..FF		
		5	0 .. 7	0..FF		
		6	0 .. 7	0..FF		
		7	0 .. 7	0..FF		
Rece ivin g the PDO 4	16# 500+nodeID	0	0 .. 7	0..FF		
		1	0 .. 7	0..FF		
		2	0 .. 7	0..FF		
		3	0 .. 7	0..FF		
		4	0 .. 7	0..FF		
		5	0 .. 7	0..FF		
		6	0 .. 7	0..FF		
		7	0 .. 7	0..FF		

Remote control parameters to modify the SDO instruction

1: Modify the PDO cycle (external controller- - - -> receiver or transmitter)

CAN_ID	BYTE0	BYTE1	BYTE2	BYTE3	BYTE4	BYTE5	BYTE6	BYTE7
600+Node_ID	2B	0	18	1	64	0	0	0
580+Node_ID	60	0	18	1	0	0	0	0
BYTE 3 represents the bit PDO number BYTE4, and Byte 5 represents the newly modified period (default is 100ms) low bytes first and high bytes later. BYTE 3- -1 corresponds to PDO 1, BYTE 3- -2 corresponds to PDO 2, BYTE 3-3 corresponds to PDO 3, BYTE 3-4 corresponds to PDO 4, BYTE 3- -0 corresponds to the heartbeat cycle,								
Note: It will not take effect after sending the parameter save command								

2: Modify the port rate (external controller- - - -> receiver or transmitter)

CAN_ID	BYTE0	BYTE1	BYTE2	BYTE3	BYTE4	BYTE5	BYTE6	BYTE7
600+Node_ID	2F	0	20	0	3	0	0	0
580+Node_ID	60	0	20	0	0	0	0	0
BYTE 4 is the corresponding serial number of the newly modified port rate (the default is 3) 2--500kbps 3--250kbps 4--125kbps								
Note: It will not take effect after sending the parameter save command								

3: Modify the node number (external controller- - - -> receiver or transmitter)

CAN_ID	BYTE0	BYTE1	BYTE2	BYTE3	BYTE4	BYTE5	BYTE6	BYTE7
600+Node_ID	2F	1	20	0	64	0	0	0
580+Node_ID	60	1	20	0	0	0	0	0
BYTE3 =0, representing the Node _ ID # 1 change BYTE3 =1, representing the Node _ ID change of # 2								

ote: A transmitter may correspond to multiple receivers. When the receiver Node _ ID is inconsistent, the transmitter needs to have multiple Node _ ID corresponding to the receiver one by one in the wired mode. At this time, the cable needs to be modified to be consistent.

BYTE 4 is the newly modified node Node _ ID (the default is 0x 64)

Note: It will not take effect after sending, until the parameter save command is sent

4: parameter preservation (external controller- - - -> receiver or transmitter)

CAN_ID	BYTE0	BYTE1	BYTE2	BYTE3	BYTE4	BYTE5	BYTE6	BYTE7
600+Node_ID	23	10	10	1	73	6 1	7 6	6 5
580+Node_ID	60	18	5	0	0	0	0	0
Save all of the parameter configurations								

5、 factory data reset;

CAN_ID	BYTE0	BYTE1	BYTE2	BYTE3	BYTE4	BYTE5	BYTE6	BYTE7
600+Node_ID	23	10	10	1	6C	6 F	61	6 4
580+Node_ID	60	18	6	0	0	0	0	0
Send this command to directly restore the factory configuration and save the parameter configuration without the need to send the parameter save command								

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.

NOTE 1: 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.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.