

GRID HOUSE



User Guide

Remark: Photos are for your reference only,
please regard the actual product as the truth.

Warning

- Please read this user guide carefully before operation to ensure the safe operation of this machine.
- Please keep this user guide in order to check when you need in the future.

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CHAPTER 1 OPERATION

SECTION 1 HOW TO PLAY

1. Insert coins into coin slot, the music will be changed from demo music to game play music.
2. Use joystick to move claws above your selected object. When you move the joystick, the game time is countdown, and the light of [DESCEND] button is flashing.
3. Once you press [DESCEND] button or time's up (game play time is adjustable), the crane drives motor to lower down claws and then catch object.
4. If 'Catch in air' function is available, press [DESCEND] button again and the claws can catch item in the air.
5. After movement of catching, the claws rise up till it touches stop uping, then the claws move to exit area and release.

SECTION 2 GAME RULES

ITEM 1 DEMO STANDBY

Demo music is keeping playing for 2 minutes every 3 minutes when the machine is standby.

ITEM 2 COINS IN

1. Coins v.s. plays by DIP SW setting.
2. If COIN pulse speed was lower than 10mms, the machine can't recognize the signal.
3. If the speed of inserting coin was over 150mms, the machine shows error code.
4. The machine will have sound effect of receiving coins when you insert coin. The counter of coin acceptor will add up. The cumulative unit is based on number of PLUSE which coin acceptor sends to the mainboard.
5. Display of inserting coins:
If the setting is 1 coin 1 point, the displayer on control plate will accumulate 1.
If the setting is 2 coins 1 point, the displayer will accumulate 1 after inserting 2 coins.
When you insert the first coin, the game machine can only have sound effect, the counter of coin acceptor will accumulate it, but the displayer on control plate will not accumulate it till then the player inserts the second coin.
6. Insert coins cumulative function: The 2 pcs coin acceptors in the machine is the same currency value, when setting from 'multiple coins play multiple times' to 'multiple coins play 1 time', the coins will be inserted to different coin acceptor, then the coins will accumulate each other. For example: If the currency value is 10RMB for 2 coin acceptors, and the program has been set to '2 coins play 1 time', if the player only have 2pcs 10RMB coins, he inserts to different coin acceptor, these 2pcs coin acceptor value will be accumulated each other to be 2 coins, so only play 1 time.

ITEM 3 SHAKING MACHINE TEST

1. When a tilt is installed in machine, it plays 'Don't shake the machine' when players shake the machine.
2. When the claw arms are closing, the arms will open and move back to the home position when players shake the machine.

CHAPTER 1 OPERATION

ITEM 4 SERVICE button

1. When standby, press[SERVICE] button to play free game, the number at " Score " display flashes and if player catch item, the prize meter will display the record of working.
2. Player can insert coin at free game status, the normal game can play till free game is over.
3. When press [SERVICE] button to play free game, only play 1 time, player should press[SERVICE] again to play free game after game is over.

SECTION 3 MACHINE FUNCTION ADJUSTMENT SETTING(DIP SW Setting)

DIP SW1		1	2	3	4	5	6	7	8
Standby	Fixed adjustment	OFF	OFF						
Random super power one time	ON			ON					
	OFF			OFF					
Standby	Fixed adjustment	OFF							
On/off CREDIT save	Yes					ON			
	No					OFF			
Standby	Fixed adjustment						OFF		
Air catching object	Yes							ON	
	No							OFF	
Standby	Fixed adjustment								OFF
Default setting		OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

DIP SW2		1	2	3	4	5	6	7	8
Standby	Fixed adjustment	OFF							
Game mode	Mode 3		OFF	ON					
	Mode 2		ON	OFF					
	Mode 1		OFF	OFF					
Claw descend delay	Random(0.4,0.8,1.2,1.6 sec)				ON				
	No				OFF				
Claw touch delay	0.6 sec					ON	ON		
	0.4 sec					OFF	ON		
	0.2 sec					ON	OFF		
	No					OFF	OFF		
Standby	Fixed adjustment							OFF	OFF
Default setting		OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

Game Modes:

Mode 1 (Normal)

1. The super power can be preset. When the number reaches to the preset value, there will be a super power, and no matter whether the toy is caught or not, it will start a new round again.
2. If the value of coin is not equal to the actual price of toy, the winning proportion will be recalculated.

Mode 2 (Give super power when no winning and renew.)

1. When the number reaches to the certain value of super power, if you keep inserting the coins, the machine will keep the powerful claw till you get the prize. After winning the prize, it will start a new round again.
2. If the machine is in the standby mode, the number will be kept and accumulated when new players participate in this game.
3. The number will be clear once the machine is restarted.
4. If the value of coin is not equal to the actual price of toy, the winning proportion will be recalculated.

Mode 3 (Free mode)

1. When the number reaches to the certain value of super power, there is no need to insert the coin anymore, and the machine will keep the powerful claw till you get the prize. After winning the prize, it will start a new round again.
2. You can insert enough coins at one time till you get the prize.
3. The number will be clear once the machine is restarted.
4. If the value of coin is not equal to the actual price of toy, the winning proportion will be recalculated.

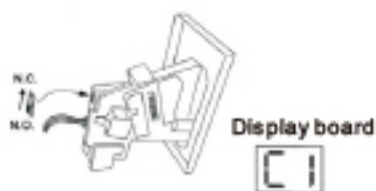
CHAPTER 1 OPERATION

SECTION 4 Claw Power Adjustment

Entry way: Adjust COIN 1 to N.C then power on the game, The display board will show [C1], This means ready to proceed with setting ups.

Mode 1:

■ Start Mode 1: Set (COIN1) to N.C. then power on, it enters to claw power adjustment status, and display board will show [C1].



Remarks: (When still not enter to adjustment, display board will keep showing C1-C4, move joystick to right can test C1, C2, C3 power level automatic. Move joystick to left can test C4 power level automatic.)

Mode 2:

■ Start Mode 2: Hold Pressing Test button and power on, display board will show [PP], release the button then the display board shows [00] and keep flashing, select 1st item, enter to claw power test, and the display board will show [C1] after entering.



Remarks: (After setting claw power, just press the Service button, you can go back, and continue to set other function.)

Move joystick front or back can select C1-C4, press Catch button and enter to adjustment, move joystick can adjust voltage value.

1. Select to C1, press Catch button and enter to adjustment, clasp claws now, display board (Flashing) show voltage value 20V, move joystick front and back can adjust the value, range is 0-25V. (C1 is value of before clasp claws and the wire take-up)

2. Select to C2, press Catch button and enter to adjustment, clasp claws now, display board (Flashing) show voltage value 8V, move joystick front and back can adjust the value, range is 0-25V. (C2 is the value of claw touch upper stopping.)

3. Select to C3, press Catch button and enter to adjustment, clasp claws now, display board (Flashing) show voltage value 9V, move joystick front and back can adjust the value, range is 0-25V. (C3 is the value of claw touch upper stopping and back to exit.)

4. Select to C4, press Catch button and enter to adjustment, clasp claws now, display board (Flashing) show voltage value 25V, move joystick front and back can adjust the value, range is 0-25V. (C4 is the value of claw output super power.)

5. Select to A5, press Catch button and the display board (flashing) show AU, move the joystick, enter to simulation game status, press control button, gantry will start to simulation game, display board (Flashing) show 20V voltage value, 8V, 9V, (20V=C1, 8V=C2, 9V=C3)

CHAPTER 2 SETTING METHOD AND ATTENTION

SECTION 1 MACHINE FUNCTION SETTING

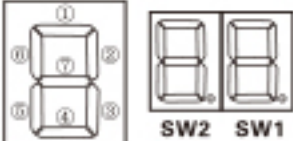
Enter in the TEST mode:

Hold [SERVER] SW while powering on the machine. The DISPLAY will show [PP] .

Release from the [SERVER] SW, the DISPLAY will show [00] flashing meaning you are now in the TEST mode. Move the joystick to select the test item. Press [DROP] button for enter. The test items are shown as the following table. You must switch off the machine to quit test mode. Press [SERVER] SW to quit the items.



Test items

Item	Description	Introductions
00	Quit	Press [DROP] button to quit test mode.
01	Claw power test	Same as previous section 'CLAW POWER ADJUSTMENT'
02	Crane test	After entering in, display panel shows [a0] *Joystick operate [Front] display panel shows [aF] ,crane moves to forward. *Joystick operate [Back] display panel shows [ab] ,crane moves to back. *Joystick operate [Right] display panel shows [ar] ,crane moves to right. *Joystick operate [Left] display panel shows [aL] ,crane moves to left. *Press [DROP] Joystick operate [Front], display panel shows [bU] ,Claw rises up. *Press [DROP] Joystick operate [Back], display panel shows [bd] ,Claw lower down.
03	Display panel	Displayer test
04	DIP SW	1). Adjust PCB DIP SW as (A.), set to ON, light on, when PIN8 is ON, 7 sections displayer blinks. 2). Units digit matches DIP SW1, tens digit matches DIP SW2, as (B.)  (A.) (B.)
05	Music, Effects	Test number of sentences 01-12
06	Crane auto test	Crane automatic test, reboot to quit.
07	Coin insert setting	Display panel units digit shows [1] is number of coin, tens digit shows [1] is times of play. Joystick move to left is insert coin or play, joystick move to forward is digit plus 1. (Default Values is 11 when return to zero, adjustment range of insert coin and play is 1-9)

CHAPTER 2 SETTING METHOD AND ATTENTION

Item	Description	Introductions
09	Adjusting times of super power	Joystick-forward and joystick-back can be adjusted value, units digit, tens digit and hundred's digit is available to choose by joystick-left, descend button is confirm to quit. (Default values is 10 after returning to zero, adjustment arrange is 1-999) Example: Adjusting times of super power is 25. 1. Pressing [SERVER] to test SW and reboot. 2. Move joystick to forward, choose testing item to 9. 3. Press descend button, and confirm to enter, 00 shows units digit (blinking). 4. Move joystick to forward, plus units digit to 5, 05 shows units digit (blinking). 5. Move joystick to left, shift 05 shows tens digit (blinking). 6. Move joystick to forward, plus tens digit to 2, 25 shows tens digit (blinking). 7. Move joystick to left, shift 00 shows hundred's digit (blinking). 8. Press descend, confirm to quit, setting is finish.
10	Game time(sec)	Move joystick to forward which is can plus numbers, move joystick to back which is can reduce numbers, descend button is confirm to quit. (Default values is 60 sec after returning to zero, arrange is 10-90sec.)
11	Adjusting speed of motor for front & back, left & right, up & down	After entering, display panel shows L0, total 0-4 level speed, 0 is fastest, 4 is slowest. L0 is left&right motor speed, F0 is front&back motor speed, U0 is up&down motor speed. (Default values is 0 after returning to zero, which is fastest, arrange is 0-4.) Example: Adjust up&down motor speed to U4. 1. Pressing [SERVER] to test SW and reboot. 2. Move joystick to forward, choose testing item to 11. 3. Press descend, confirm to enter, showing 00 4. Move joystick to forward, showing 00 5. Move joystick to forward, showing 00 6. Press descend, shows 00 units digit (blinking). 7. Move joystick to forward by 4 times, shows 04 units digit (blinking). 8. Press descend, showing 04 and setting is finish. 9. If you need auto DEMO, move joystick to right 1 time can auto test for 1 time.
14	Choosing gift and selling interval time adjustment (sec)	Move joystick to forward which is can plus numbers, move joystick to back which is can reduce numbers, descend button is confirm to quit. (Default values is 90 sec after returning to zero, arrange is 10-90sec.)
18	Claw despoiling length adjustment	The claw despoiling length, joystick-forward and back can adjust value, press descend button when you finish adjusting, can test length, stop after the length is enough, and press descend button for winding up. (Default values is 18 after returning to zero, arrange is 1-99.)
21	RAM return to zero(93C66)	After press descend button, display panel shows cc, and then reboot, and sweep away all information, all setting return to default value.

CHAPTER 2 SETTING METHOD AND ATTENTION

SECTION2 ERROR CODE INTRODUCTIONS

Error Code	Description	Checking time	Trouble shooting
Er01	CPU Error	When machine start	1.Change U1 CPU 2.PCB error
Er02	Take-Up Error	1.When machine start 2.When playing 3.Auto demo	1.Check when take-up,the stop-up SW if is loose? 2.Check stop-up SW if is error? 3.Check if the air-plug of crane set is connect well? 4.Main board error.
Er03	Paying out Error	When auto demo	1.Check when take-up,the stop-up SW if is loose? 2.Check stop-up SW if is error? 3.Check if the air-plug of crane set is connect well? 4.Main board error.
Er04	SERSON Error	Detect during adjusting DIP SW2 J5 to 'ON'	1.Please check whether the sensitivity of electric drainage is too high or not?Please adjust VR and LED to be 'dim' status. 2.Please check whether J5 fall down or not? 3.Electric eye is error. 4.Main board is error.
Er05	Stop-Forward SW or Stop-Back SW error	1.When machine start 2.When playing 3.Auto demo	1.Check if stop-forward SW or stop-back SW is error? 2.Check if the air-plug of crane set is connect well? 3.Main board error.
Er06	Stop-Left SW error	1.When machine start 2.When playing 3.Auto demo	1.Check if stop-left SW is error? 2.Check if the air-plug of crane set is connect well? 3.Main board error.
Er07	Coin1 Meter disconnected	Check anytime	1.Check if the J5 PIN connect well? 2.Check if the meter is error?Check if the PIN connect well? 3.Main board error.
Er09	Prize Meter disconnected		
Er11	Coin1 insert coin signal over 150mms	Check when coin insert	1.Coin acceptor error. 2.Player is phishing. (COIN1,COIN2 signal is less than 10mms, will not be confirmed to be a coin insert signal.)
Er12	Coin2 insert coin signal over 150mms		
Er14	93C66 Error	When machine start	93C66 detect error.

CHAPTER 2 SETTING METHOD AND ATTENTION

SECTION 3 TROUBLE-SHOOTING

Items	Description	Check and Solving
Coin in	When the insert coin in the coin acceptor, machine make a sound to reminder, and displayer shows the point, but can not play.	1. Please check the coin in mode whether is Coins v.s. Plays, set values is changed, please modify your required set values. 2. If can not modify, it's possible the main board is error, please send the main board back to our company for fixing.
	Coin/token can not insert	Comparison expression coins acceptor: 1. Please check the sample coin from coin acceptor. 2. Adjust the sensitivity and loose it. 3. Check the PIN, whether DC 12V is input correctly. 4. Coin acceptor error. Multi-coin coin acceptor: 1. Sampling memory is error, please reset it follow the manual. 2. Please Check the PIN, whether DC 12V is input correctly.
Claw power	Claw return to exit after closing, but cannot closing after open.	1. Claw power voltage of C3 is too low, please adjust to higher base on the goods' size and weight.
	Claw is closing once machine start	1. The coil maybe short out, please change it. 2. Main board is broken.
	Claw can not close	1. Please check the coiling of claw whether is fall off. 2. Main board is broken.
Crane	Claw can not return to home position	1. Power off and reboot the machine, if the trouble is still, please check stop-back SW or stop-left SW, it's possible SW is stuck, hear whether is click, and check line whether is fall off. 2. Check if the air-plug of crane set is connect well? 3. Main board is broken.
	Can not move to forward or back by joystick operation	1. Front SW and Back SW of joystick whether is error or line whether is fall out. 2. Check J5 of P.C.B whether is connect well. 3. Stop-forward SW or stop-back SW of crane whether is broken or stuck. 4. Front and back motor is broken or line fall out, the gear is not mesh. 5. Check J9 of P.C.B whether is connect well. 6. The connector between crane and the machine whether is normal.
	Can not move to left or right by joystick operation	1. Front SW and Back SW of joystick whether is error or line whether is fall out. 2. Check J5 of P.C.B whether is connect well. 3. Stop-forward SW or stop-back SW of crane whether is broken or stuck. 4. Front and back motor is broken or line fall out, the gear is not mesh. 5. Check J9 of P.C.B whether is connect well. 6. The connector between crane and the machine whether is normal.

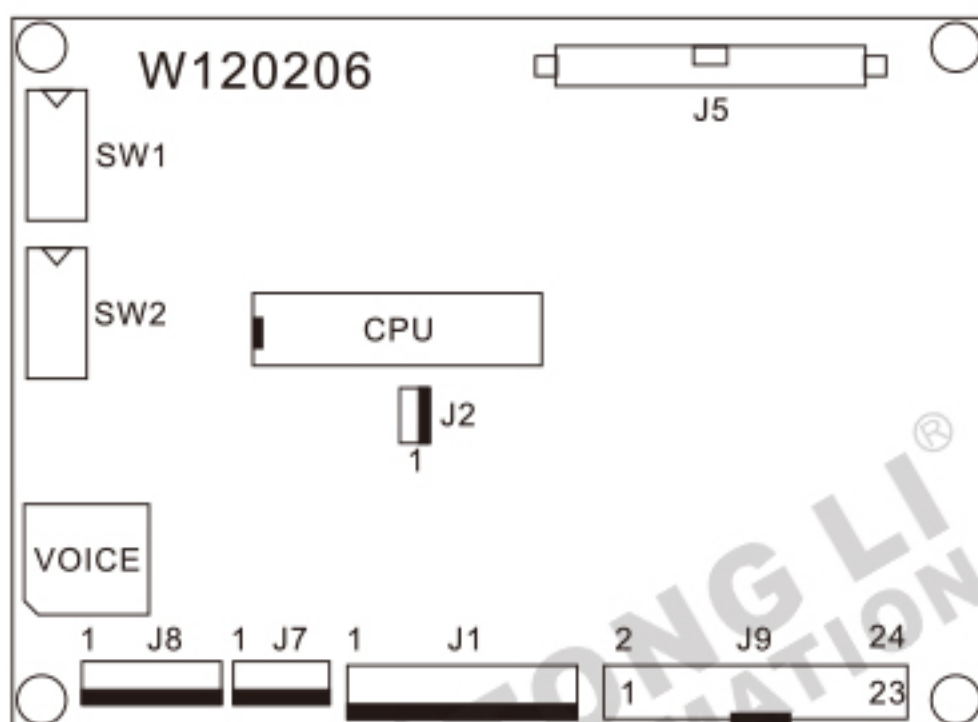
CHAPTER 2 SETTING METHOD AND ATTENTION

Items	Description	Check and Solving
Claw descending	Can not descend after pressing button,it will auto to descend after the game time is over.	1.Check [Descend] is normal or not. 2.[Descend] button wire is connect well or not. 3.Check the J5 of P.C.B whether is connect well.
	[Descend] button is in normal status,but can not lower down.	1.Check the motor of up and down whether is fall out. 2.Check the motor of up and down whether is broken or the gear meshing whether is normal. 3.Check the coiling is normal or not. 4.Check the J9 PIN of P.C.B is connect crane well or not. 5.Main board is broken.
	After pressing [Descend],claw can not lower down or only lower down a bit,also the claw close and return to home position.	1.Check the reel is entangled or not. 2.Stop-down SW whether is easy to affect or broken.
	Press [Descend],claw return to home position without reaching to the gifts.	1.Check coiling whether is too short. 2.Check reel is entangled or not. 3.Stop-down SW whether is easy to affect or broken.
Claw fetching	When return to exit,can not open claw after fetching	1.Check stop-back and stop-left whether is broken or the line is fall off or not.
	After fetching,the crane return to home position while claw can not rise up.	1.Check stop-up SW whether is affect or not. 2.Stop-up SW whether is broken or fall out. 3.Main board is broken.
	After fetching,the crane stops moving while claw can not rise up.	1.Check the motor of up and down whether is broken or line is fall out. 2. Stop-up SW whether is broken or fall out. 3. Main board is broken.

CHAPTER 3 WIRING DIAGRAM

SECTION 1 MAIN BOARD W120206

Host machine board CONNECTOR location plan



W120206 J5 34PIN			
1	W120206 J5 34PIN	2	W991907 JP1 PIN3
3	W991907 J1 PIN1	4	W991907 JP1 PIN4
5	W991907 J1 PIN5	6	W991907 JP1 PIN6
7	W991907 J1 PIN7	8	W991907 JP1 PIN10
9	W991907 J1 PIN9	10	GND
11	HP 11 COIN1 Meter	12	HP
13	COIN2 Meter	14	HPSW
15	Display Meter	16	+12V
17	Tickets Test Meter	18	+12V
19	+12	20	COIN1
21	+12	22	COIN2
23	Descend lighting	24	GND
25	Shaking machine	26	SENSOR
27	Test	28	+12V
29	Joystick Forward	30	GND
31	Joystick Left	32	Joystick Back
33	Joystick Down	34	Joystick Right

CHAPTER 3 WIRING DIAGRAM

W120206 J1		
1	GND	
2	GND	
3	GND	
4	+5V	
5	+5V	
6	+12V	
7	+12V	
8	+24V	
9	+24V	
10	+48V	

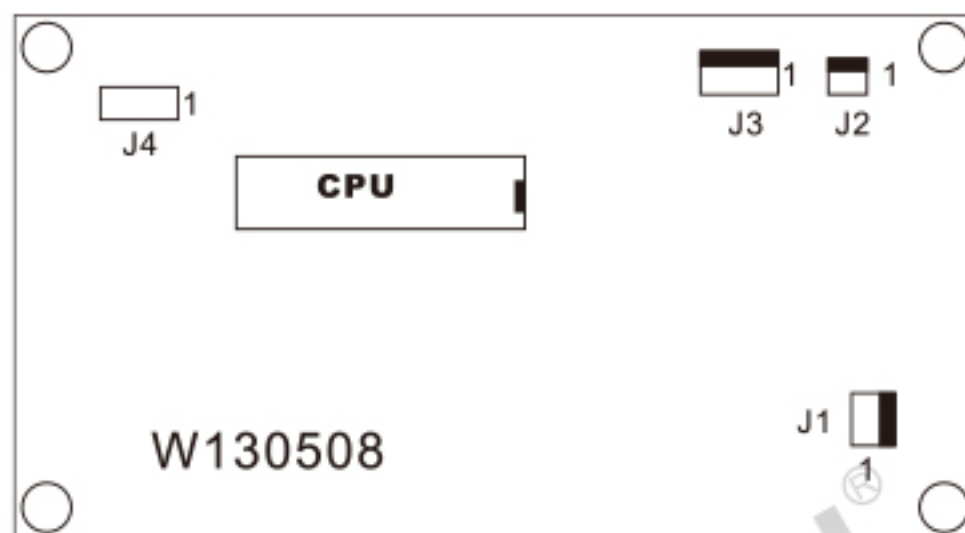
W120206 J8			
1	VR11	1KVR	VR1
2	VR12	1KVR	
3	VR13	1KVR	
4	VR21	1KVR	VR2
5	VR22	1KVR	
6	VR23	1KVR	
7	Voltmeter+		
8	Voltmeter-		

W120206 J9			
1	Claw+	2	X
3	Claw-	4	X
5	X	6	Stop-down SW NO
7	X	8	Stop-up SW NC
9	X	10	Stop-left NO
11	X	12	Stop-forward, stop-back NO
13	GND	14	GND
15	GND	16	GND
17	X	18	Left and right motor-
19	X	20	Left and right motor+
21	Forward and back motor+	22	Up and down motor-
23	Forward and back motor-	24	Up and down motor+

W120206 J7		
1	Sound VR1	1K VR
2	Sound VR2	
3	Sound VR3	
4	SP-	
5	SP+	

CHAPTER 3 WIRING DIAGRAM

SECTION 2 PAYMENT DISPLAY BOARD W130508(BACK)



W130508 J1		
1	+12V	Reserved
2	GND	

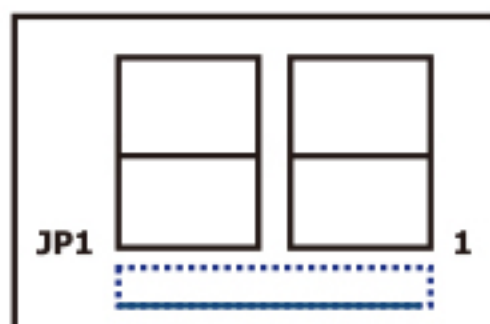
W130508 J2		
1	+12V	Power supply 12v
2	GND	

W130508 J3	
1	connect with main board W120206 J2
2	
3	
4	

W130508 J4	
1	Burn-in PIN
2	
3	
4	

CHAPTER 3 WIRING DIAGRAM

SECTION 3 DISPLAY BOARD W991907(FRONT)



J1	Color	2.54PIN-connect to Main board W120206	
1	Brown	A	Connect to main board J11 Pin1
2	Red	B	Connect to main board J11 Pin2
3	Orange	C	Connect to main board J11 Pin3
4	Yellow	D	Connect to main board J11 Pin4
5	Green	E	Connect to main board J11 Pin5
6	Blue	F	Connect to main board J11 Pin6
7	Purple	G	Connect to main board J11 Pin7
8		DP	
9	White	COM4	Connect to main board J11 Pin9
10	Pink	COM3	Connect to main board J11 Pin8
11		COM2	
12		COM1	

MAINTENANCE

Dear Customers:

Thanks for your purchasing from Tong Li! We will constantly improve our quality and service, and provide you better quality, high-efficiency, professional products and after-sales service. For protect your legitimate rights and interests, please read this manual detail, and knowing our service content, if the products and accessories were broken without according to this manual, we will not responsible for warranty, and only provide products and accessories for value.

1. Guarantee term.

Guarantee period of crane machines electronic components is 12 months from the purchasing. (Base on the PI date.).

2. The situation without guarantee.

After you purchase this product, if the machines were broken by below reasons, we can not provide guarantee according to this term, and will provide you service for value.

- (1) The whole machine or the parts is over the guarantee period.
- (2) LCD monitor surface is scuffing, weeping, fracture by human error.
- (3) User breached this manual, install, keeping and use wrongly causes to broken.
- (4) Fixing by person without our company authentication, user fixed (Wrong operation, scuffing, knock mark by human error, water-dampness, supply improper voltage.) causing to broken.
- (5) No purchase and guarantee voucher.
- (6) Guarantee and purchase voucher are modified by human.
- (7) The model and number are not match with matter.
- (8) The machine broken due to using the accessories without our authentication
- (9) The machine broken due to natural disaster (earthquake, fire).

3. Service type.

- (1) Once the products are broken down, please notice to us at once.
- (2) Products breakdown maintenance, please must send the unserviceable component to us, and provide the related purchasing voucher.

4. Reminder

- (1) The accessories during the fixing are belong to our company.
- (2) The service for value is containing cost of labor and fixing material.

5. Service and support.

- (1) Please review our website www.tongliananimation.com to get the latest information.
- (2) Technical support and after-service tel: 86-20-39960806/23885090

Memo

TLS TONG LI[®]
ANIMATION

Memo

TLS TONG LI[®]
ANIMATION



Product name: GRID HOUSE

Company name: Guangzhou Tong Li Animation Technology co., Ltd.

Address: H19 Startoon City, No. 143 Yingxing East Road, Donghuan Street, Panyu, Guangzhou, China

Version: Ver1.0

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