



# Catch Cat

## Manual

Read carefully before use

## RM060 CATCH CAT

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### 1, Brief description

Catch Cat is one of the carnival items for indoor use. Players Insert coins then play. Try to hit the claws which come out then get 1 point for each one. Get the tickets according to the total points. Its character: easy to play, player just masters the simple skills. It is so funny that fit for different ages to play.

### 2, Caution

- Check the socket and wires before switching the power on. Check the voltage
- Switch the power off when the personnel are off duty.
- Switch the power off when inspecting and maintenance.
- Only qualified personnel can inspect and maintain it.
- Do not put in the machine in humidity places. Keep the surroundings clean.

### 3, Accessories

Name	Quantity	Remark
Manual	1	
Sensor board	3	
24V lights	2	
12V/3W lights	5	
(6*30)3A fuse	2	
(6*30)5A fuse	2	
Hammer	1	
Key	2	
DIP	1	
Wires	1	

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### 4, Technical parameter

- Dimensions: W890\*D830\*H1460 mm
- Power supply: AC220/110v
- Player: 1

### 5, Principle and Structure

Comprises of coin tower unit, Controller system, payout unit, lights, etc

5-1, The structure of whole machine(picture 1)



PIC1

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### 5-2, Coin tower unit (picture 2)

The coin tower unit comprises coin selector and coin box. Coin box is used to collecting coins.

Its capability is 500-1000 coins.



PIC2

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### 5-3, Controller system(picture3)

The controller system comprises mainboard and periphery control circuit.

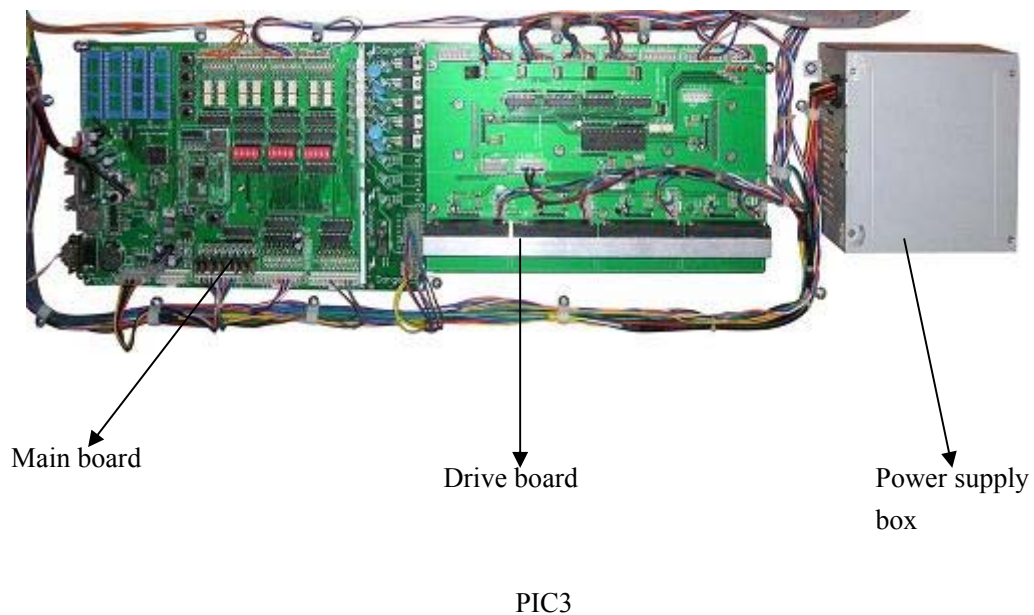
#### 1, Control system (Picture 3)

Mainboard: It is a program control system. It controls the work of all components.

SW1, SW2, SW3: Selection switches are used for adjusting the coins, tickets, the dispenser , the base tickets , the way of counting scores and music, etc. Press the restart button after adjustment. For more detail about the adjustment, refer to Mainboard Selection Switches and Their Functions.

Restart button: Press it to restart the machine.

Volume knob: Use the screwdriver to adjust the volume. It has been adjusted well and needn't adjusting in general instance.



### 5-4, Ticket dispenser (picture 4, picture 5)

Ticket dispenser is controlled by mainboard. It dispenses the tickets corresponding to how many scores you would get.

#### 1, The rear of front door (picture4)

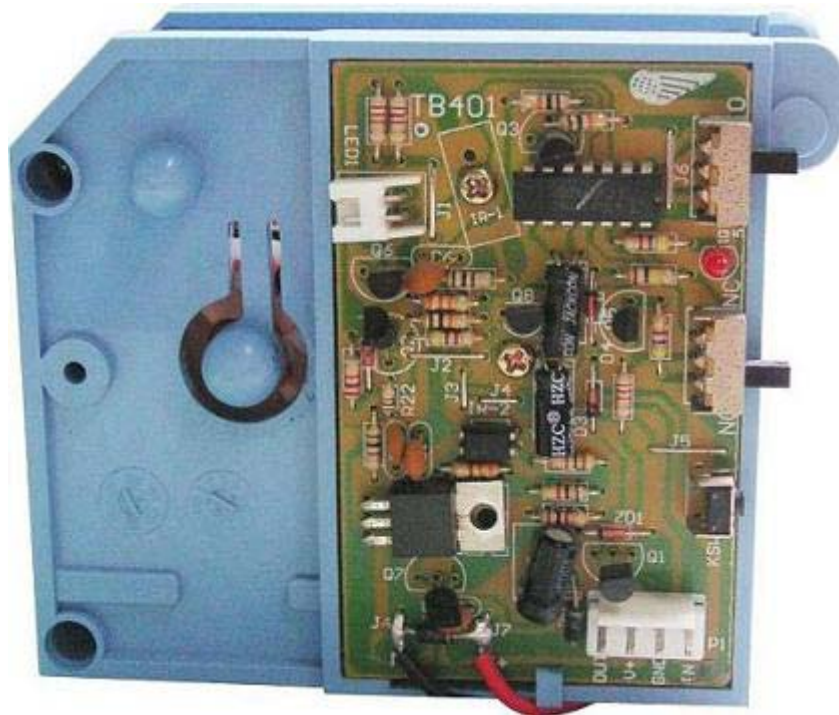
- Using key to open the dispenser then you can see a ticket dispenser (there are two kinds, one is import, another is made in China). The color of blue is made in china, make the driver motor on state of "5",

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choosing state of “NO” from “NO, NC”, then put the tickets in the tickets box, pressing the button “ SW1”let one ticket come out. If it is an import one then does not need to adjust, just let one ticket come out. LED monitor will display error information and alarm no ticket, just repeat then press the button of” Token button” when no tickets.

- Voltage of the dispenser is  $DC12V \pm 20\%$ , width for the ticket is 28mm-30mm, thickness for the ticket is 0.2mm-0.4mm



PIC4

### 2, Selection button(picture 5)

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Record the total number of coin insertion since the machine has been used.

Ticket dispensing record: Record the total number of dispensed ticket since the machine has been used.

Token button: When the game has run out of tickets, replenish tickets and press this button. The game will then payout any owed tickets.

Test button: The test mode is entered from attract mode by pressing the test button during the course of 10 seconds count down of resetting.

Service: press this button for one time then the game start, but Coin insertion record does not work.

Volume: Used to adjust the speaker's sound level.



PIC5

### 6, Display connection

Refer to **Main board Pins and Their Functions** table.

### 7, How to play

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1. Insert coin then play.
2. Hit the claws which come out then get 1 point for each one.
3. Get the tickets according to the total points.

### **8, Operation**

8-1, Check Accessories after buying.

8-2, Check the power if fit for this item.(AC220V OR AC110V)

8-3, Turn on the switch, all the cat claws come out then back for testing, after that the machine waited to play.

8-4, Insert coins then play, cat claws come out. Hit each claw then get 1 point, the tickets will be given according to the total points at the end.

8-5, Press the button for test. Press every button for test of each step until all of them to be tested then the machine waited to play.

8-6, Adjustment and function of Coin tower unit.

8-7, Function of Ticket dispenser.

### **9, Errors & troubleshooting**

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Error description	Cause	Solution
During game process, cat claw is jammed and unable to stretch out	<ol style="list-style-type: none"> <li>1. step motor transmission system jammed or screws fall</li> <li>2. step motor damages</li> <li>3. step motor connectors are so loose to connect with mainboard.</li> <li>4. Driven module of step motor damages</li> </ol>	<ol style="list-style-type: none"> <li>1. check and clean step motor, tighten screws.</li> <li>2. replace with equivalent step motor</li> <li>3. re-connect step motor connectors</li> <li>4. replace driven module</li> </ol>
During game process, cat claw stretch out a little distance and stretch back	<ol style="list-style-type: none"> <li>1. If scored, it might be low output of score opt-sensor</li> <li>2. If scored, it might be damage of front position opt-sensor</li> </ol>	<ol style="list-style-type: none"> <li>1. repair or replace score opt-sensor</li> <li>2. repair or replace position opt-sensor</li> </ol>
during game process, cat claw stretch out and keep vibrating	<ol style="list-style-type: none"> <li>1. possible damages of front position opt-sensor</li> </ol>	<ol style="list-style-type: none"> <li>1. repair or replace position opt-sensor</li> </ol>
during game process, cat claw stretch out and back ,then keep vibrating	<ol style="list-style-type: none"> <li>1. cat claw's rear position opt-sensor damages or malfunctions</li> <li>2. step-back signal cable has bad connections with mainboard</li> </ol>	<ol style="list-style-type: none"> <li>1. replace or repair it</li> <li>2. reconnect signal cable to ensure good connections with mainboard</li> </ol>

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<p>during game process, hit one cat claw but no score recorded.</p>	<p>1. this cat claw score opt-sensor damages. 2. score signal cable has bad connections with main board</p>	<p>1. replace or repair it 2. reconnect signal cable to ensure good connections with main board</p>
<p>when switch on game machine, it functions well expect no LED display</p>	<p>1. LED display cables disconnect with main board 2. Communications ICs on mainboard and LCD displace damages</p>	<p>1. reconnect it and ensure good connections 2. replace IC</p>
<p>During standby mode, insert coin(s),but no response</p>	<p>1. coin acceptor damages 2. coin acceptor signal disconnects with main board 3. coin slots jammed</p>	<p>1. replace coin acceptor switch 2. reconnect it and ensure good connections 3. check and clean coin slot</p>
<p>when game is over, no ticket out and alarms</p>	<p>1. ticket dispense jammed 2. no input of DC12V to ticket dispenser 3. driven signal unable to connect the main board</p>	<p>1. check and clean dispenser. 2. ensure input of DC12V to ticket dispenser 3. reconnect signal cable and ensure good connections</p>
<p>when game is over, LCD board displaces "no ticket out" and keep alarming</p>	<p>1. response signal cable unable to connect with main board 2. ticket dispenser damages 3. mainboard malfunctions</p>	<p>1. reconnect signal cable and ensure good connections 2. replace ticket dispenser 3. check and repair main board</p>

### <CatchCat> DIP

code	bit								function
	8	7	6	5	4	3	2	1	

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SW1	ON								ticket out
	OFF								no ticket
		ON							cancel the parmeter
		OFF							no movement
			ON						game for free
			OFF						insert coin for game
				ON	ON	ON			game time180s
				ON	ON	OFF			game time150s
				ON	OFF	ON			game time120s
				ON	OFF	OFF			game time 90s
				OFF	ON	ON			game time 60s
				OFF	ON	OFF			game time 50s
				OFF	OFF	ON			game time 40s
				OFF	OFF	OFF			game time 30s
	SW2							ON	ON
							ON	OFF	2 coins per time
							OFF	ON	3 coins per time
							OFF	OFF	4 coins per time
							ON	ON	5 points per ticket
							ON	ON	10 points per ticket
							ON	OFF	15 points per ticket
							ON	OFF	20 points per ticket
							OFF	ON	25 points per ticket
							OFF	ON	30 points per ticket
							OFF	OFF	40 points per ticket
							OFF	OFF	50 points per ticket
		ON	ON						5 tickets for hit the jackpot
		ON	OFF						10 tickets for hit the jackpot
		OFF	ON						20 tickets for hit the jackpot
	OFF	OFF						30 tickets for hit the jackpot	
SW3							ON	ON	increase time for 50 points
							ON	OFF	increase time for 100 points
							OFF	ON	increase time for 150 points
							OFF	OFF	increase time for 200 points
					ON	ON			increaseing time is 5 secs
					ON	OFF			increaseing time is 10 secs
					OFF	ON			increaseing time is 15 secs
				OFF	OFF			increaseing time is 20 secs	

error code: E1: alarm for no ticket

### <Catch Cat> Mainboard Pins and Their Functions

PORT	PORT NO.	Programme resource	Direction	Function
IN0	JP1		I	Insert coin
IN1			I	
IN2			I	

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IN3			I		
IN4			I	Feedback for calculation	
IN5			I		
IN6			I		
IN7			I		
IN8	JP2		I	cat's claw #1 mark(connect to stepping motor, drive board JP15-2)	
IN9			I	cat's claw #2 mark(connect to stepping motor, drive board JP15-3)	
IN10			I	cat's claw #3 mark(connect to stepping motor, drive board JP15-4)	
IN11			I	cat's claw #4 mark(connect to stepping motor, drive board JP15-5)	
IN12			I		
IN13			I		
IN14			I		
IN15			I		
IN16	JP3		I		
IN17			I		
IN18			I		
IN19			I		
IN20			I		
IN21			I		
IN22			I		
IN23			I		
IN24	JP4		I		
IN25			I		
IN26			I		
IN27			I		
IN28			I		
IN29			I	Coin Switch(KEY2)	
IN30			I	Hardware switch for testing (KEY3)	
IN31			I	Alarm for no ticket (KEY4)	
DO	JP9		O	display data bit output(DO)	connect to digital LED displayer board: mainboard→ time→ point→ record
CLK			O	clock for displaying data bit output(CLK)	
CTL			O	data lock(CTL)	
GND			P	Power supply	
+5V			P	Power supply(<1A)	
+12V			P	Power supply(<1A)	
+5V	JP13		P	5V power supply for positive side	
GND			P	Power supply for negative side	

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GND			P	Power supply for negative side
+12V			P	12V power supply for positive side

### <Catch Cat> Main board Pins and Their Functions

PORT	PORT NO.	Programme resource	Direction	Function	
1	JP14		O	Left channel	
2-3			P	GND	
4			O	Right channel	
O0	JP5		O	Coin meter drive	
O1			O	Ticket meter drive	
O2			O		
O3			O		
O4			O	Ticket Dispenser drive	
O5			O		
O6			O		
O7			O		
O8		JP6		O	game start/over(connect to stepping motor, drive board JP16-1)
O9				O	selection of claw speed(connect to stepping motor, drive board JP16-2)
O10			O	selection of claw speed(connect to stepping motor, drive board JP16-3)	
O11			O	pause/continue(connect to stepping motor, drive board JP16-4)	
O12			O		
O13			O		
O14			O		
O15			O		
O16	JP7		O	light#1(from left to right)	
O17			O	light#2(from left to right)	
O18			O	light#3(from left to right)	
O19			O	light#4(from left to right)	
O20			O	light#5(from left to right)	
O21			O		
O22			O		
O23			O		
O24	JP15		O	Light#1	
O25			O	Light#2	
O26			O	Light#3	
O27			O		
O28			O		

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O29			O	
O30			O	
O31			O	
L(1-3)	JP13		ACP	AC live wire connect
N(2-4)			ACP	AC neutral wire connect
Pin2	P1		O	connect to data accept port of LED displayer (LED displayer JP5-1)
Pin3			I	connect to data transmit port of LED displayer(LED displayer JP5-2)
Pin5			P	GND
Pin1	JP8			
Pin2				
Pin3				
Pin6				

### <Catch Cat> Mark, Drive board(GL-RE-060222A)

PORT	PORT NO.	Programme resource	Direction	Function
1	JP2			cat's claw #1 stepping motor phase A+
2				cat's claw #1 stepping motor phase A-
3				cat's claw #1 stepping motor phase B+
4				cat's claw #1 stepping motor phase B-
5				cat's claw #1 positive power supply for stepping motor
1	JP3			cat's claw #2 stepping motor phase A+
2				cat's claw #2 stepping motor phase A-
3				cat's claw #2 stepping motor phase B+
4				cat's claw #2 stepping motor phase B-
5				cat's claw #2 positive power supply for stepping motor
1	JP4			cat's claw #3 stepping motor phase A+
2				cat's claw #3 stepping motor phase A-
3				cat's claw #3 stepping motor phase B+
4				cat's claw #3 stepping motor phase B-
5				cat's claw #3 positive power supply for stepping motor
1	JP5			cat's claw #4 stepping motor phase A+
2				cat's claw #4 stepping motor phase A-
3				cat's claw #4 stepping motor phase B+
4				cat's claw #4 stepping motor phase B-

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5				cat's claw #4 positive power supply for stepping motor
1	JP8			Power supply for stepping motor (positive)
2				
3				GND
4				
5				+5V connect
6				
1	JP10			Supply sensor +5V
2				GND
3				Cat's claw #1 front side of limited sensor signal
4				Cat's claw #1 back side of limited sensor signal
5				Cat's claw # mark sensor signal
6				
7				
1	JP11			Supply sensor +5V
2				GND
3				Cat's claw #2 front side of limited sensor signal
4				Cat's claw #2 side of limited sensor signal
5				Cat's claw #2 mark sensor signal
6				
7				

### <Catch Cat> Mark, Drive board(GL-RE-060222A)

PORT	PORT NO.	Programme resource	Direction	Function
1	JP12			Supply sensor +5V
2				GND
3				Cat's claw #3 front side of limited sensor signal
4				Cat's claw #3 back side of limited sensor signal
5				Cat's claw #3 mark sensor signal
6				
7				
1				Supply sensor +5V

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2	<b>JP13</b>			GND	
3				Cat's claw #4 front side of limited sensor signal	
4				Cat's claw #4 back side of limited sensor signal	
5				Cat's claw #4 mark sensor signal	
6					
7				cat's claw #4 magnet lock(one connect to +12V, another one connect to port 7 and connect to IN4007 also)	
1		<b>JP15</b>			
2				cat's claw #1 mark output(connect to mainboard JP2-1)	
3				cat's claw #2 mark output(connect to mainboard JP2-2)	
4				cat's claw #3 mark output(connect to mainboard JP2-3)	
5				cat's claw #4 mark output(connect to mainboard JP2-4)	
6					
7					
8					
1	<b>JP16</b>			game start/over(connect to mainboard JP6-1)	change R38, R39, R40, R41 resistance of drive board to IN4148.
2				selection of claw speed(connect to mainboard JP6-2)	
3				selection of claw speed(connect to mainboard JP6-3)	
4				pause/continue(connect to mainboard JP6-4)	
5					
	<b>JP1</b>				
	<b>JP6</b>				
	<b>JP7</b>				
	<b>JP9</b>				
	<b>JP14</b>				

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### <Catch Cat> 1.9mm LED displayer(GL-RE-060222C)

PORT	PORT NO.	Programme resource	Direction	Function
1	JP5			connect to mainboard(P1_2)
2				connect to mainboard(P1_3)
3				GND
1	JP6			+5V connect
2				+5V connect
3				GND
4				GND

Note: We have the right to improve our products but not notify users!