# DRAGON PUNCH SERVICE MANUAL





Please read the manual carefully and keep it in mind before using this machine.

Put this manual within touch of your reference in anytime.





#### 1. Precaution

- a. Check after recieving your stuff.
- b. Installation
- c. Shipping the unit.

## 2. Specification

#### 3. Table of contents

- a. the front
- b. the inside
- c. mechanism
- d. PCB wiring diagram

## 4. Operation

- 5. Contents list
- 6. Troubleshooting
- 7. Assembling



## precaution

### 1. Check point

- Check immediately after receiving.
- Check your power requirements.

#### 2. Installaton Reguirements.

- Installing, must be done by an "experiauced engineer"
- Follow the introduction of this maunal.
- Use the proper wire, or it can cause a fire or electric shock.
- Be sure to locate the machine in proper place, Make the place to install the unit level, and install safely using appointed parts.
- Install the Machin in level groud

### 3. Shipping the unit

- If the machine is damaged drug transportation, do not install, accident or problem.



## **SPAC**

a. Power requirement : private use 110V or 220V

b. Power consumption : (approx) 80Wc. Dimensions : W830 D1115 H2200

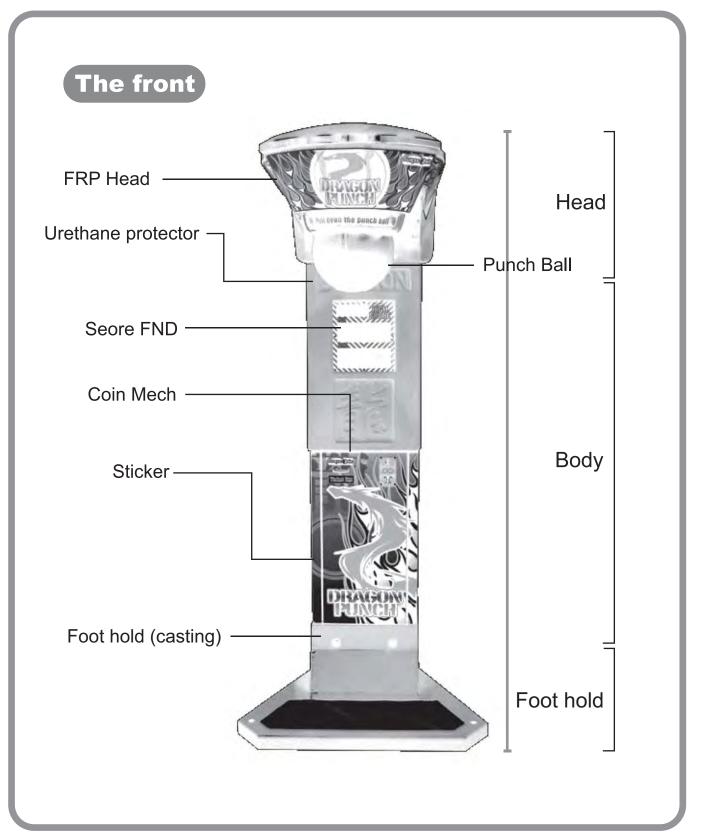
d. Mass: (approx) 120Kg



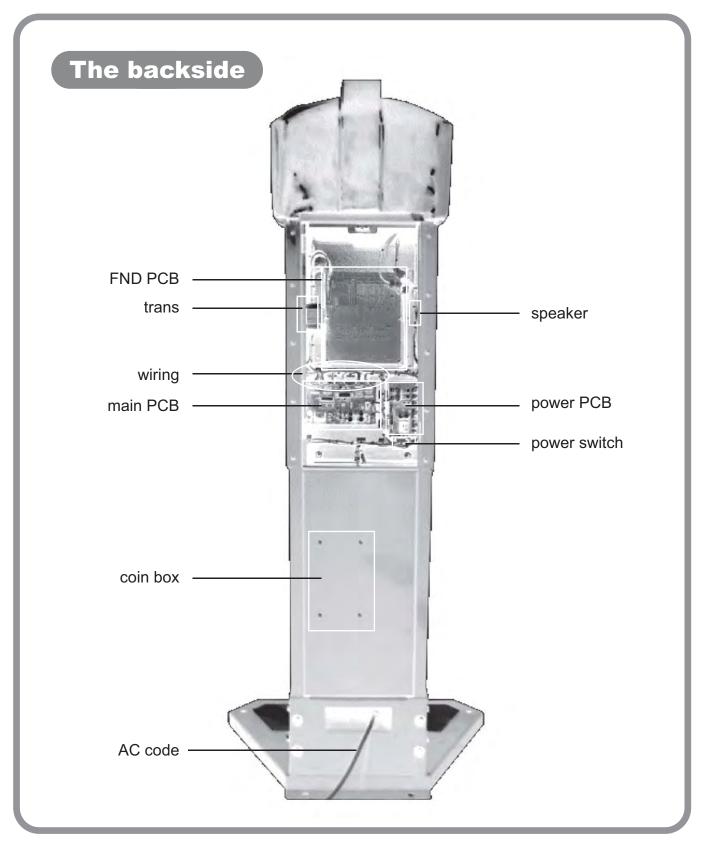
2200

830



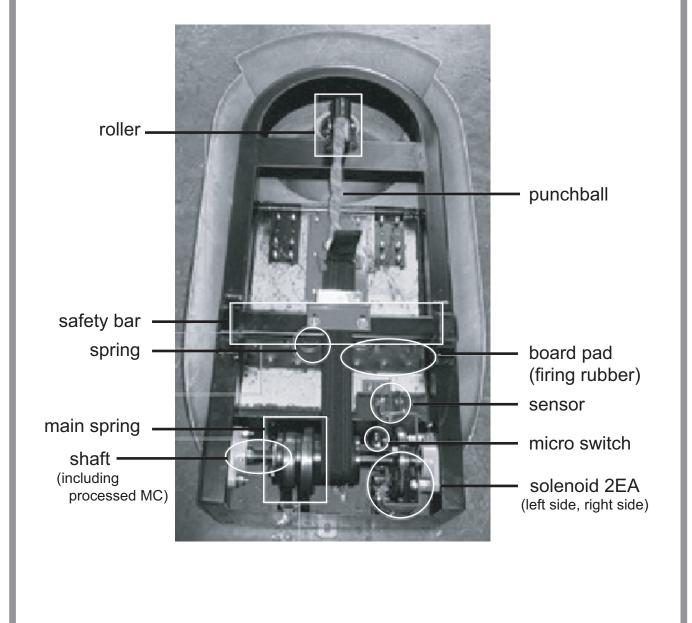








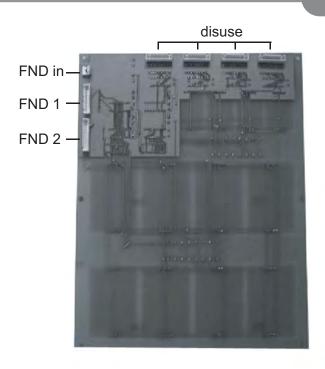
## **Upper mecanism**





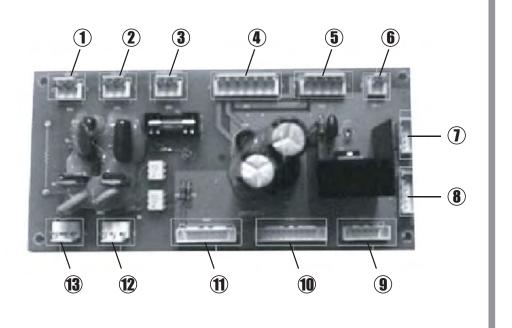
# **Main of parts**

#### **FND PCB**



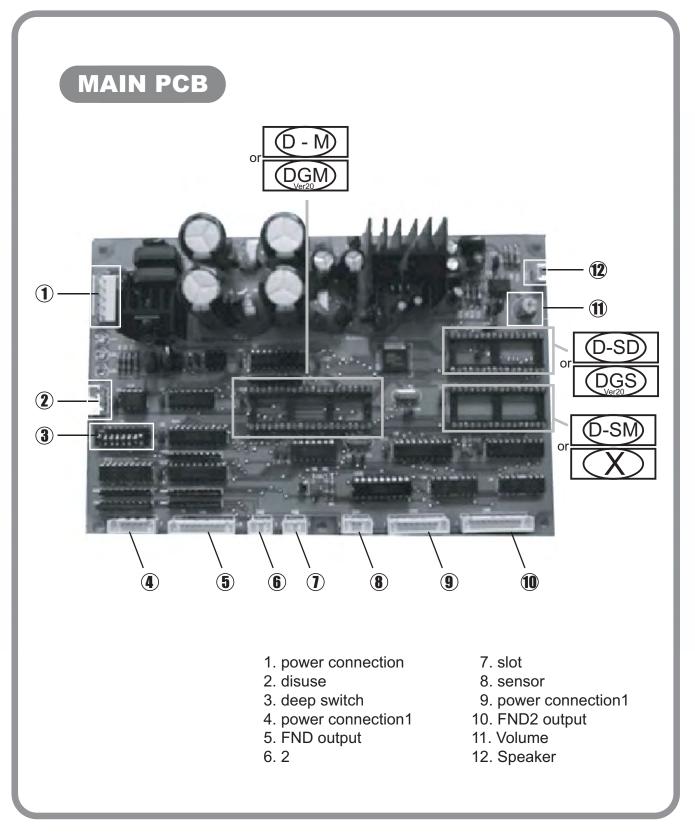
#### **POWER PCB**

- 1. Power in
- 2. Power
- 3. Trans in
- 4. Trans out
- 5. Main PBC in
- 6. FND in
- 7. Counter machine & test button
- 8. Micro switch
- 9. Main PCB connection1
- 10. Disuse
- 11. Main PCB connection 2
- 12. Solenoid 1
- 13. Solenoid 2





# **Main of parts**



<b>Table of contents</b> Version: 4T									
COIN	PLAY	1	2	3	4	5	6	7	8
1	1	off	off	off					
1	2	on	off	off					
2	2	off	on	off					
2	3	off	off	on					
3	2	on	on	off					
3	3	on	off	on					
4	2	off	on	on					
4	3	on	on	on					
Demo	Demo Sound				on				
	Game over, in 15sec, if you don't pull the rope Game over, if you don't hit the ball in 30sec					off			
Game over, in 30sec, if you don't pull the rope Game over, if you don't hit the ball in 60sec						on			
Use Ticket							on		
AVE. TICKET	AVE. TICKET OUT 12,335							off	
AVE. TICKET	AVE. TICKET OUT 10,335							on	
Back up	Back up function								on

- 8time Back up function on = always auto back up / off = always do not back up
- A right score will become 1 point down ateach game

#### [9] ANDAMIRO\*

	Dip 7 on			Dip 7 OFF		
BONUS TYPE	FND	TICKET		FND	TICKET OUT	
1. STANDARD TICKET OUT	XXX1 XXX2 XXX3 XXX4 XXX5 XXX6 XXX7 XXX8 XXX9 XXX9	1 2 3 4 5 6 7 8 9	1. STANDARD TICKET OUT	XXX1 XXX2 XXX3 XXX4 XXX5 XXX6 XXX7 XXX8 XXX9 XXX0	1 2 3 4 5 6 7 8 9	
	AVE. TICI			4.5 AVE. TICKET OUT		
2. SMALL JACKPOT	XX11 XX22 XX33 XX44 XX55 XX66 XX77 XX88 XX99 XX00	30	2. SMALL JACKPOT	XX11 XX22 XX33 XX44 XX55 XX66 XX77 XX88 XX99 XX00	30	
		2.7 AVE. TICKET OUT		2.7 AVE. TICKET OUT		
3. MIDDLE JACKPOT	X111 X222 X333 X444 X555 X666 X777 X888 X999 X000	80	3. MIDDLE JACKPOT	X111 X222 X333 X444 X555 X666 X777 X888 X999 X000	80	
	0.7 AVE. TICK			0.7 AVE. TICK		
4. BIG JACKPOT	7777 8888	100	4. BIG JACKPOT	6666 7777 8888	100	
	3 AVE. TICKET OUT			AVE. TIC		
TOTAL TICKET OUT OPTION 1.+2.+3.+4. X n/n.	10.3 TOTAL AVE.		TOTAL TICKET OUT OPTION 1.+2.+3.+4. X n/n	12.3 TOTAL AVE.		

## Table of contents(3T)

COIN	PLAY	1	2	3	4	5	6	7	8
1	2	off	off	off					
1	3	on	off	off					
2	2	off	on	off					
2	3	off	off	on					
3	2	on	on	off					
3	3	on	off	on					
4	2	off	on	on					
4	3	on	on	on					
Demo Sonund					on				
Game over, in 15sec, if you don't pull the rope Game over, if you don't hit the ball in 30sec						off			
Game over, in 30sec, if you don't pull the rope Game over, if you don't hit the ball in 60sec						on			
Use Ticket							on		
Normal-1 Ticket beat the high score -5 ticket								off	
Normal-1 Ticket beat the high score -10 ticket								on	
Back up function									on

- 8time Back up function on = always auto back up / off = always do not back up
- A high score will become 1 point down at each game



## **Contents list**

## **Contents list**

NAME	QUANTITY	SPECIFIC
case(including Iron parts)	1	Iron
FRP	2	FRP
Urethane protector	1	Urethane
Foothold	1	Casting
PCB(Main,power,FND)	1	
PC	1	Bulletproof PC
Punchball	1	Leather, Tube
Sticker	10	adhesive sheet
Trans	1	
Slot	1	
Wiring	1set	
Speaker	1	

Upper Mechanism Name	QUANTITY	SPECIFIC		
Solenoid 1.5k	1	Solenoid 1.5k		
Proccessed Iron parts	Shaft1, Shape parts1, Stain pin1	Proccessed Iron parts		
Spring	Big 2, Middle2, Small2	Heat treatment		
Bearing	2			
Punchball pad	1	15T board, 20T firing rubber		
roller, safety rope	Each 1			
Porter sensor, Micro switch	Each 1			
Processed MC	1	MC		
Safety bar	1			



# **Trobleshooting**

#### **Trobleshooting**

SYMPTOM	CHECK (CAUSE)	CORRECTION	
1. NO power	The power code is disconnected. The power switch is off. The power code is disonnected	Plug out. Switch on. Replace the fuse by new one (proper size)	
The power is on, but FND viewer doesn't work	Check the FND connector. Plug in the FND connector.	The slot doesn't work. Check the power switch.	
3. The slot is doesn't work	Check the power switch. Something is wrong with slot.	Switch on. Repair the slot.	
4. No sound	Something is wrong with speaker. Check the speaker connector	Repair the speaker. Connect propenly.	
5. Unable to pull the punchball	Check the power. Make mistakes in connecting solenoid. The couse of solenoid trouble	Switch on. Connect the solenoid properly. Repiace the solenoid.	
Punchball is pulled of itsell During the game.	Not gather in upon shape & I shape parts because the tension of spring is warn away.	Make the tension of spring strong or exchange it.	
7. Not counted a score in spite of hilting the punchball	Microswitch trouble, or disconncetion	Replace the miaro switch with new one.	
Replace the punchball by another one		Open the cover, release M10bolt, exchange them in reverse order.	



# **Assembling**

#### The method of assembling 3pieces



a. The lower foothold:

Release M12 bolts (10EA),
separate the body.

To put together, do that in
reverse order.



b. The upper mechanism:
Release M12 bolts (10EA), take
the head apart. (check the solenoid,
micro switch, sensor wiring, and the
connector) To put together, do thaat
in reverse order.

#### The method of controling the tension or spring



Loosen the bolt and fix the spring by adjusting the bottom side of it

#### The method of exchange the punchball



You should release M10 bolt.

#### The method of exchange the micro switch



Replace it after releasing M3 bolts (2EA)

#### The method of fixing the FRP cover

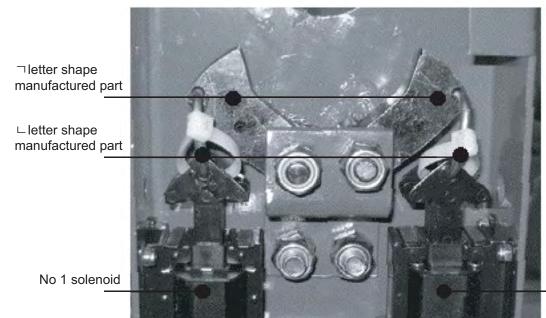


Assemble the front part first, fix the cover with a tool



# component inside of the head part

#### A component inside of the head part



No 1 solenoid

#### No 1 solenoid function

It pulls over a punching ball, after inseerting a coin to start a game. More details: a ¬-shaped part and No 1 solenoid are connected to a ⊏-shaped part and when No 1 solenoid is pulled over, the punching ball can be pulled on, separate from a shaft. In ⊏-shaped part breakdown connected to No 1 solenoid, the punching ball cant't be pulled.

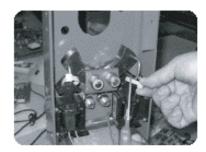
#### No 2 solenoid function

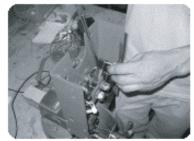
After the pinching ball is hit, FND scores up and No 2 solenoid works to make the punching ball go up. More details : a ¬-shaped part and No 1 solenoid are connected to a ⊏-shaped part and when No 2 solenoid is pulled over, the punching ball can go up, separate from a shaft. In ⊏-shaped part breakdown connected to No 2 solenoid, the punching ball can't go up.



# shaped part in a breakage

#### How to exchange the $\Box$ -shaped part in a breakage



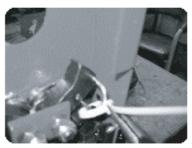






4.See pictute ④ ·······

Put a cable tie right to left under the □- shaped part, tight it up appropriately and finish at a forty-five angle.



★ To tighten up only with a cable tie can prevent the □-shaped part from sliding off without fastening an E-ring. Another cable tie tightening will make it easier to prevent the part from sliding off.



# **How to assemble three parts**



The lower bottom



Body



The top head

#### **Assembly order**



1. fix a body to the lower bottom and screw 12mm bolts (10ea) front, back, right and left.



2. Connect a power line (AC code)



3. Loose with a screwdriver the direct connection pieces(4mm) fastening the top head cover.



4. Open the head cover.



## **How to assemble three parts**

#### **Assembly order**



- 5. Fasten the top head onto the body with 12mm bolts(10EA) front, back, right and left.
  - Note: Back 4EA bolts should be fasten only with spring washer.



- 6. Stand behind the machine holding the cover and put on the cover to attach completely to the top head from the front.
  - Note: Use an I-head driver.



7. Loose direct connection pieces (4mm) right and left, and fix the pieces again



- 8. Connect wirings from the top head and wirings from the body. Connection order.
  - Solenoid 2EAe → Sensor
     → Micro switch.