

# Instruction Manual



**FY-3C**

Our equipment is approved by the following car manufacturers(China)



# Contents

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1. Precautions .....	1
2. Specifications .....	2
3. Installation .....	3
4. Controls .....	4
5. Operation .....	5
6. Troubleshooting	
1) Troubleshooting .....	7
2) Light Tube Replacement .....	8
7. Exploded View .....	9
8. Circuit Diagram .....	10

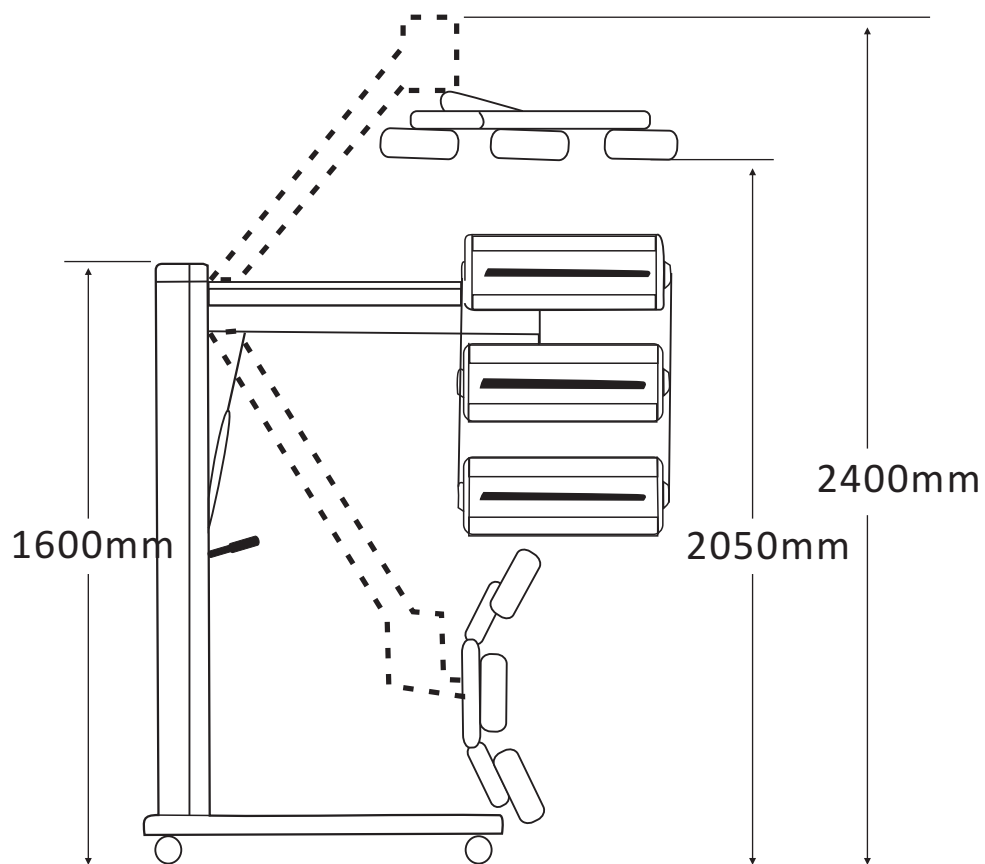
# 1. Precaution

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1. Read this manual carefully before installing or using this equipment.
2. This equipment is designed for paint drying applications. Adjust to the correct temperature and check minimum safe distance from the heat source when using. Improper use may cause paint surface damage.
3. Installation and servicing must be performed by a qualified installer or service agency.
4. The system has been designed for easy installation, low operating costs and minimal maintenance. The warranty does not cover lamp tube defects resulting from misuse or improper operation.
5. Disconnect power source when the equipment is not in use for a long time.
6. The light tube should not be perpendicular to the ground when the equipment is in operation. Otherwise, it will shorten the useful life of the light tube.
7. Make sure the cassette plug is tightly connected before using to prevent it from burning.

## 2. Specifications

Model	FY-3C
Input Voltage	220V / 1-phase / 50-60Hz
Input Power	3 × 1000W
Curing Area	1200 × 1000mm
Temperature	35°C - 100°C adjustable
Time Setting	0min - 99min adjustable
Light Intensity	10% - 100%



### 3. Installation

The shortwave infrared curing lamp is divided into 3 parts (a base, a column and a cassette).

1) Installation of the base.

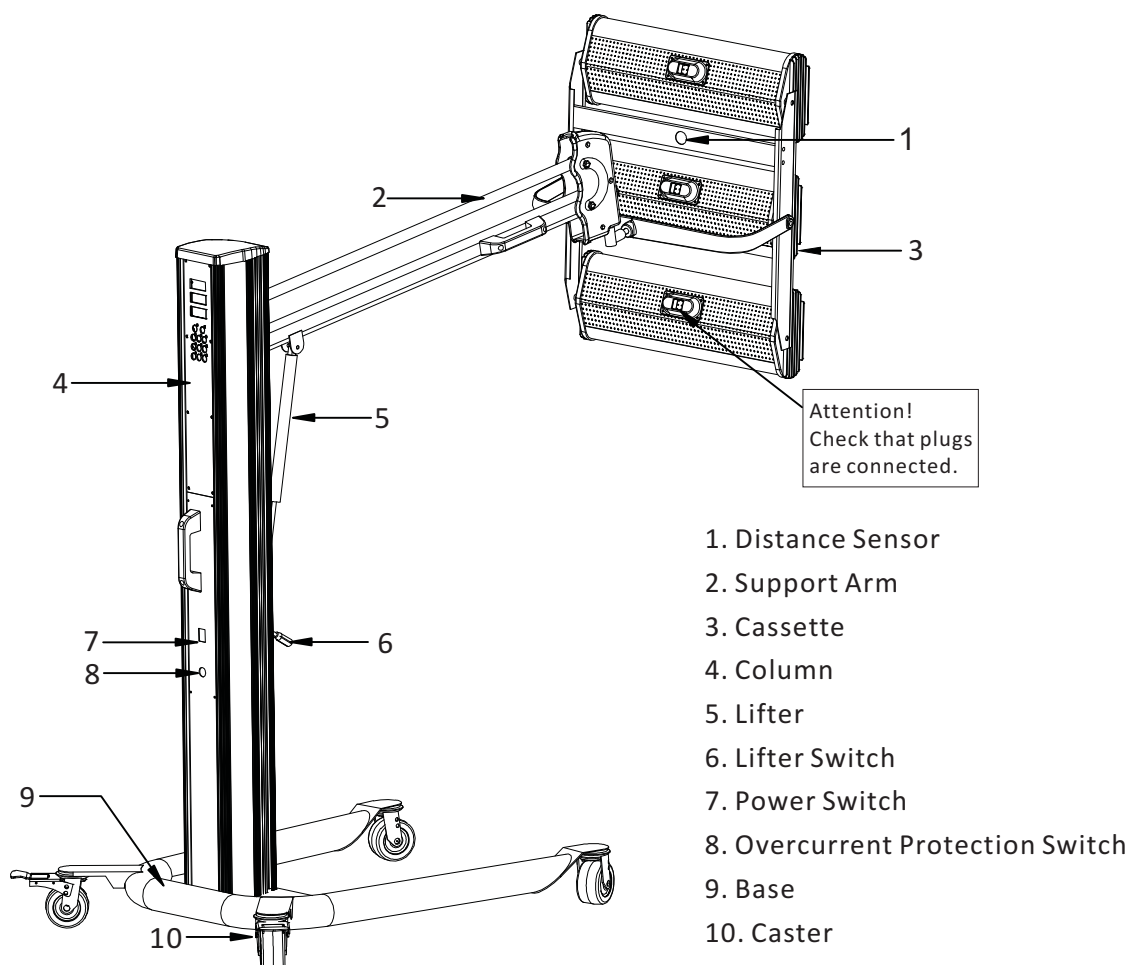
- a. Open the packing of the base.
- b. Install the four wheels on the base respectively and tighten up the screws. Usually, the wheels with brakes should be mounted on the rear of the base.

2) Installation of the column.

- a. Open the packing of the column.
- b. Put the column vertically on the top of the base, directly engage the screw holes and tighten up using the screws.
- c. Connect the support arm with the column for supporting the cassette.
- d. Connect the lifter with the column to control the up and down movement of the cassette.

3) Installation of the cassette.

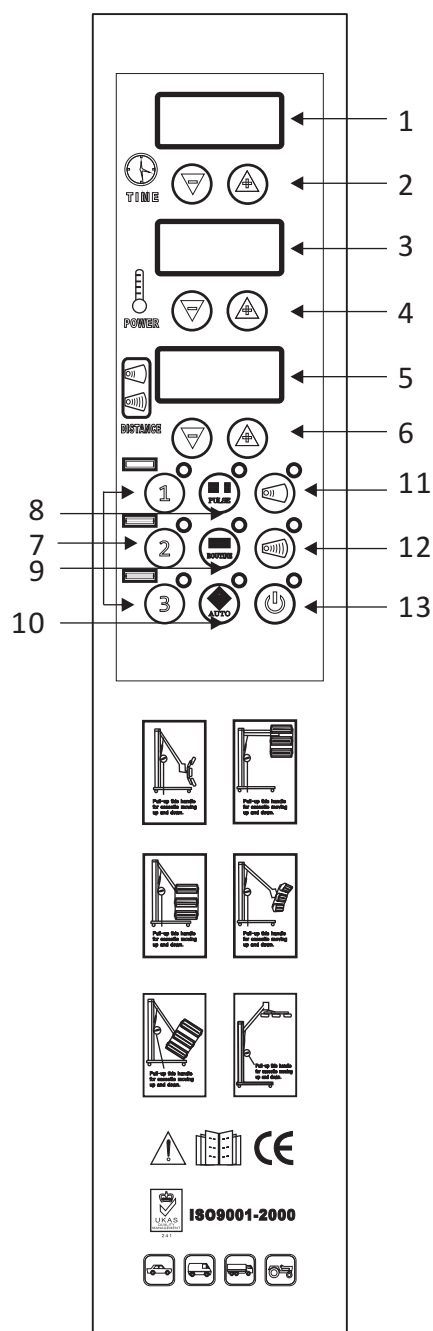
- a. Open the packing of the cassette with care.
- b. Connect cassette with support arm and tighten up with the screws.
- c. Connect control wires and adjust the angle of cassette.



## 4. Controls

1. Time display
2. Time adjustment
3. Power display
4. Power adjustment
5. Distance display
6. Distance adjustment
7. Lamp selector (each lamp can be controlled separately)
8. Pulse
9. Routine
10. Auto
11. Nearest distance adjustment (press this button first then press Button 6 to adjust the nearest distance)
12. Farthest distance adjustment (press this button first then press Button 6 to adjust the farthest distance)
13. Start/Stop

Circuit breaker must be installed

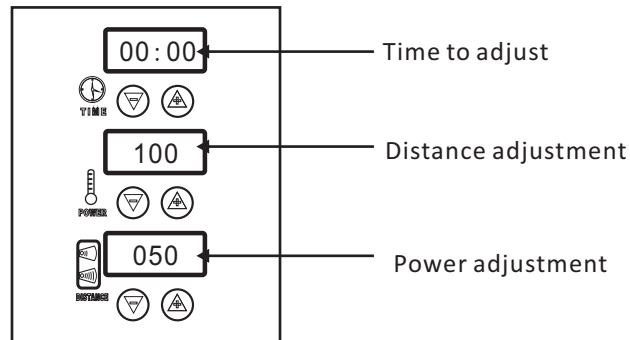


Press "Auto" (Button 10) after switching on the power to set parameters such as time, power, distance, routine and pulse according to different paint requirements. The lamp is in routine mode when "Routine" (Button 9) is on and it is in pulse mode when "Pulse" (Button 8) is on. Press "Start" (Button 13) after setting up parameters, the lamp will enter into automatic working procedure.

## 5. Operation

### 1. Automatic Mode

- Properly assemble the curing system according to the instruction (see page 3).
- Switch on the power supply. The display will go through the start-up procedure and automatically default to Automatic Mode. The system is ready to use when the parameters appears on the display screen as follows:



- Move forward or backward heat lamp to adjust to the best distance.  
Distance data will be detected and displayed on the screen.  
Roast lamp lamp holder and paint surface distance according to the paint material and weather conditions to adjust the humidity of the (air humidity).  
Under normal circumstances, Advised to keep distance from 35 to 45 cm.



- Press the button "Start/Stop" to start automatic curing mode. Once the automatic mode is selected, Four related cure programs become available to the user – Program 1-4(Fig. A).

The time and power of each step can be adjusted during execution, but it won't change the default data.

Fig. A

step1	Pulse Time (3min) Power (70% )
step2	Routine Time 5(min ) Power 66% )
step3	Pulse Time (3min) Power (60% )
step4	Routine Time 5(min ) Power 56% )

If you want to change the default data of automatic mode, adjust the parameters as follows before pressing "Start":

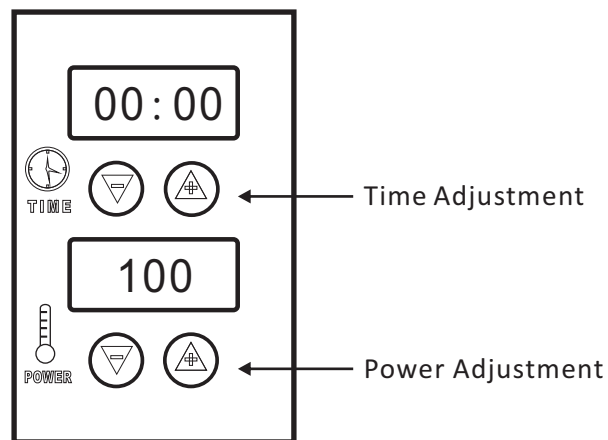
- Once switching on the power supply, the display automatically defaults to Step 1 of the automatic mode.
- Press "Routine" once, switches to Step 2; press again, switches to Step 3; keep pressing, switches recurrently.
- When switch to each step, adjust the time and power by Button 2 and 4, stay unchanged for 3 seconds then the data will be automatically saved as default setting for this step.
- To initialize all data, press and hold the distance adjustment buttons + and - at the same time.

- Protect the lamp against shocks and vibrations when the lamp is in use.
- After this program is completed, the system is able to carry out other programs. Make sure to turn off the system when the equipment is not in use and keep the equipment securely in place.

## 5. Operation

### 2. Manual Mode

- a. Press the button "Auto" to shut down the automatic mode.
- b. Press the button to select "Routine" or "Pulse".
- c. Press the button "Start".
- d. The curing distance between the cassette and paint surface should be set according to the paint material and weather(air humidity). Usually, keeping a distance of about 35-45cm from the paint surface is recommended.
- e. The curing time and power should be set according to the requirements of the paint material. Usually, "Pulse" is set to 5 mins and "Routine" to 10 mins.
- f. Press the button "Start/Stop".
- g. Turn off the equipment when the work is completed.



- h. After this program is completed, the system is able to carry out other programs. Make sure to turn off the system when the equipment is not in use.



## 6. Troubleshooting

### 1. Troubleshooting

PROBLEM	CAUSE	SOLUTION
Light tube does not work	a. Light tube damaged b. Lamp is not plugged in c. Control silicon damaged	a. Check light tube b. Check the connections c. Check control silicon
Light tube does not turn off	a. Control silicon damaged	a. Check control silicon
Digital display is blank or is incomplete	a. Unplugged flat wire in circuit board b. Digital display damaged	a. Check flat wire b. Check digital display
Temperature and time cannot be adjusted	a. Switch imbalance b. Key board has exclusion	a. Check the installation of switch b. Check keyboard exclusion

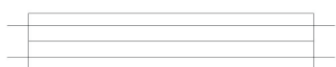
## 6. Troubleshooting

### 2. Light Tube Replacement



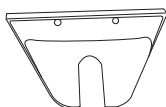
(a)

a. Prepare the cassette which needs replacement.



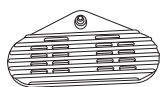
(b)

b. Remove the grille of cassette.



(c)

c. Remove the plates from both ends of the cassette.



(d)

d. Remove the fixed plates from both ends of the cassette.



(e)

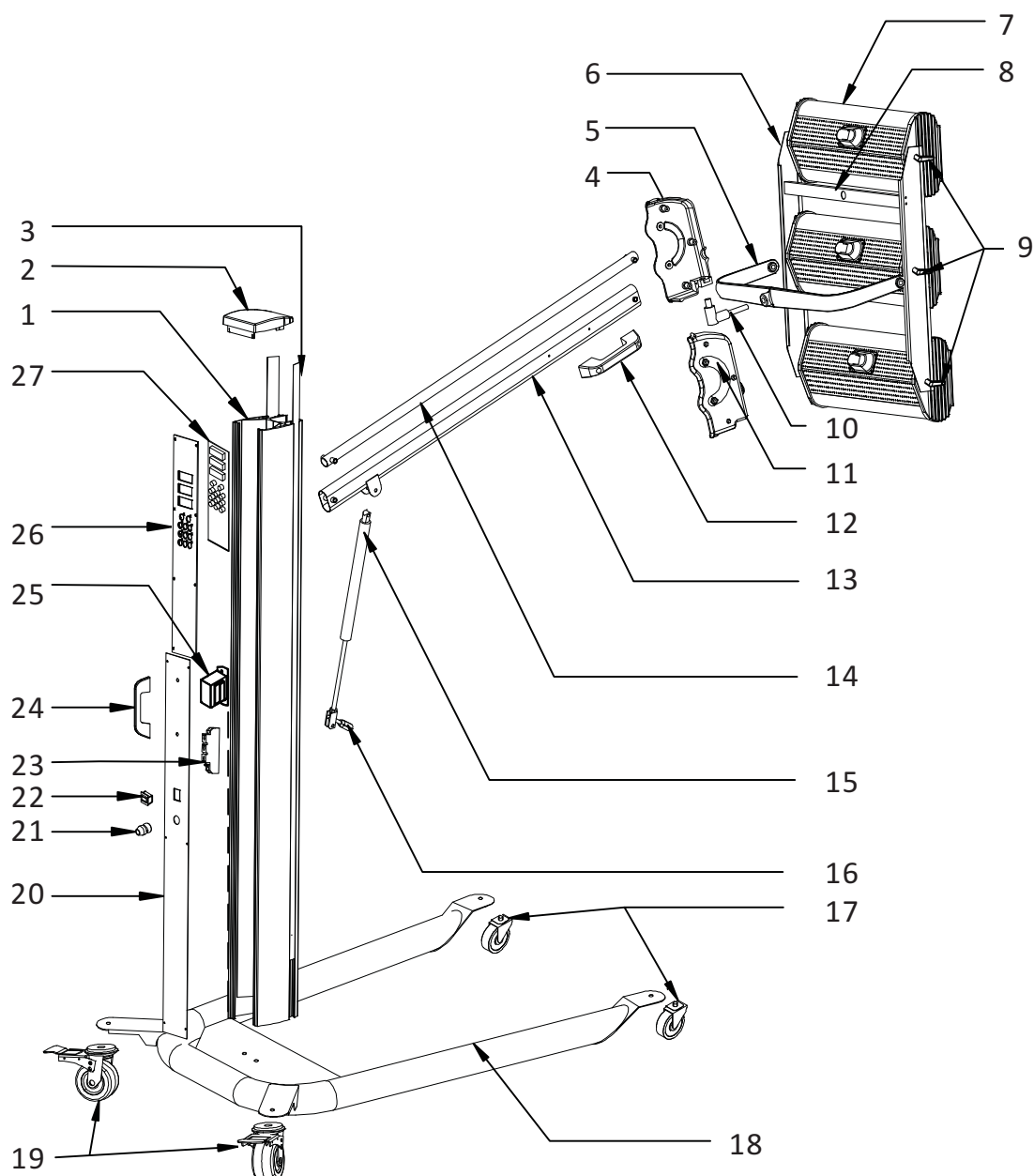
e. Loosen fixed screws and cut off connections, the light tube can be replaced.



(f)

f. Repeat the steps above in reverse order to replace the light tube.

## 7. Exploded View



NO	NAME	NO	NAME	NO	NAME	NO	NAME
1	Upright post	9	Plastic nut	17	Front caster	25	Transformer
2	Top cover	10	Connecting axle	18	U-type base	26	Cover plate (upper)
3	Plastic band	11	Connector (right)	19	Back wheel	27	Circuit board
4	Connector (left)	12	Handle	20	Cover plate (lower)		
5	Bracket	13	Lower support arm	21	Flange		
6	Clamping bar	14	Upper support arm	22	Power switch		
7	Cassette	15	Lifter	23	Control Silicon		
8	Distance sensor	16	Lifter handle	24	Handle		

## 8. Circuit Diagram

