

Instruction Manual



FY-4CM

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



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1. Precaution

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-4CM
Input Voltage	220V / 1-phase / 50-60Hz
Input Power	4 × 1000W
Curing Area	1200 × 1000mm
Temperature	35°C - 80°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.

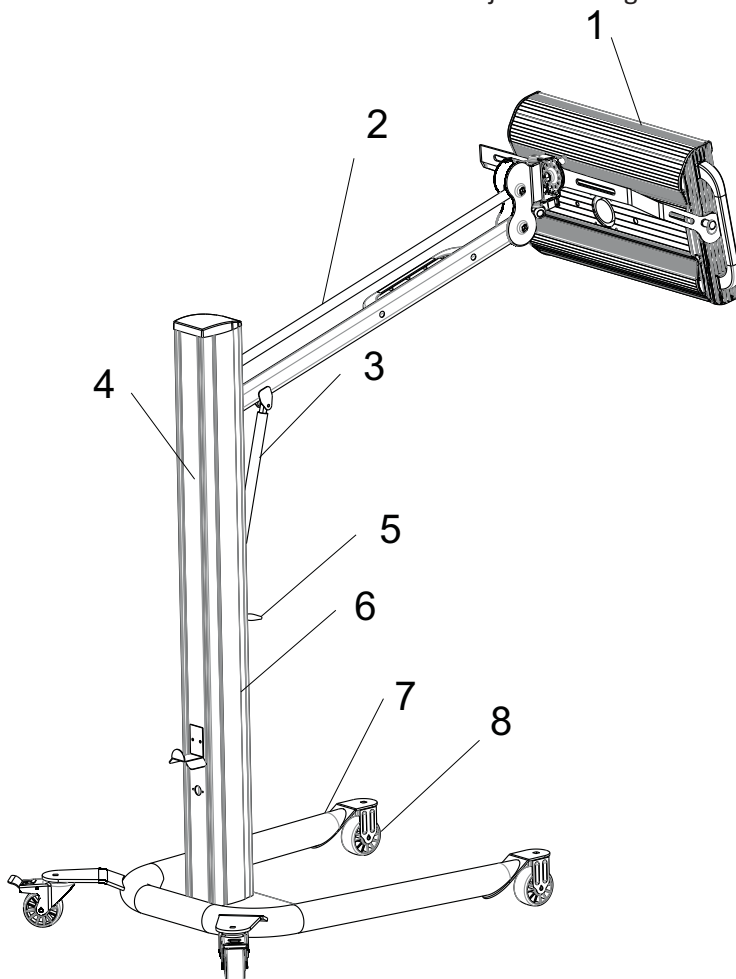
- a. Open the packing of the base.
- b. Install the four wheels on the base respectively and tighten up the screws. Usually, the wheels with brakes should be mounted on the rear of the base.

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.

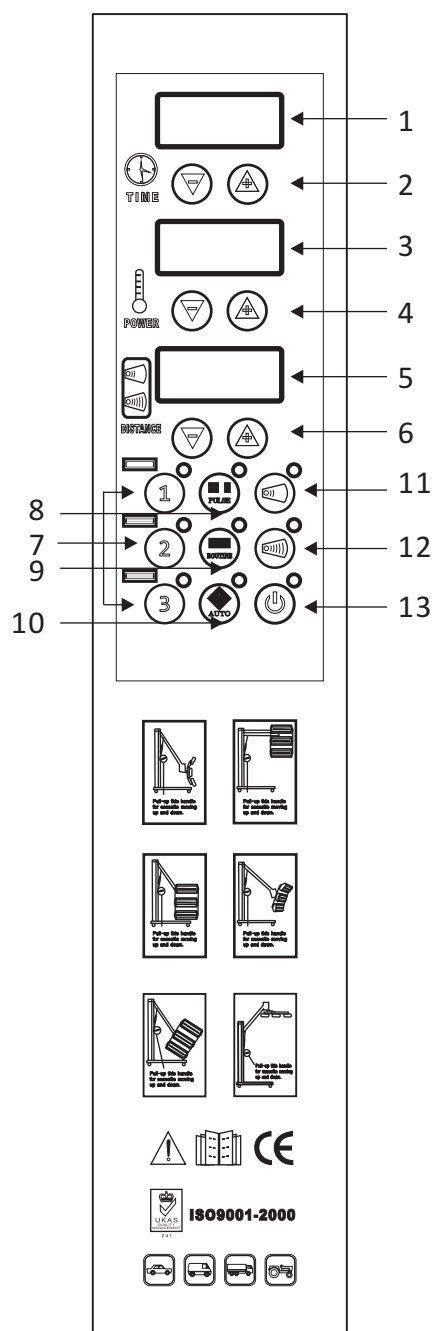
- a. Open the packing of the cassette with care.
- b. Connect cassette with support arm and tighten up with the screws.
- c. Connect control wires and adjust the angle of cassette.



1. Cassette
2. Connecting rod
3. Lifter
4. Control box
5. Lifter handle
6. Column
7. Base
8. Wheel

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

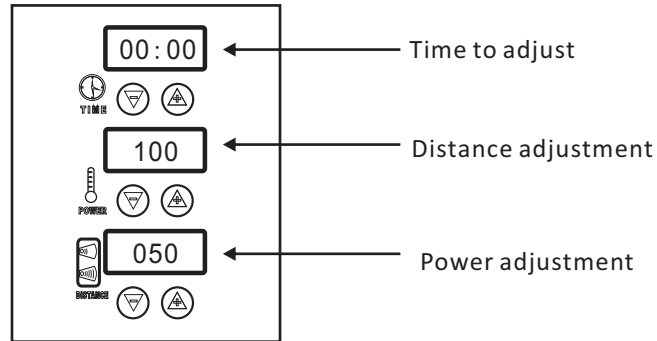


Press "Auto" (Button 10) after switching on the power to set parameters such as time, power, distance, routine and pulse according to different paint requirements. The lamp is in routine mode when "Routine" (Button 9) is on and it is in pulse mode when "Pulse" (Button 8) is on. Press "Start" (Button 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 the cassette forward or backward from the paint surface to adjust to the best distance for curing. The distance data will be detected and shown on the display screen automatically. The curing distance between the cassette and paint surface should be set according to the paint material and weather conditions (air humidity). Usually, keeping a distance of about 35-45cm from the paint surface is recommended.



- 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	Routine Time (15min) Power (70%)
step2	Pulse Time (15min) Power (60%)
step3	Routine Time (5min) Power (60%)
step4	Pulse Time (15min) Power (60%)

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.

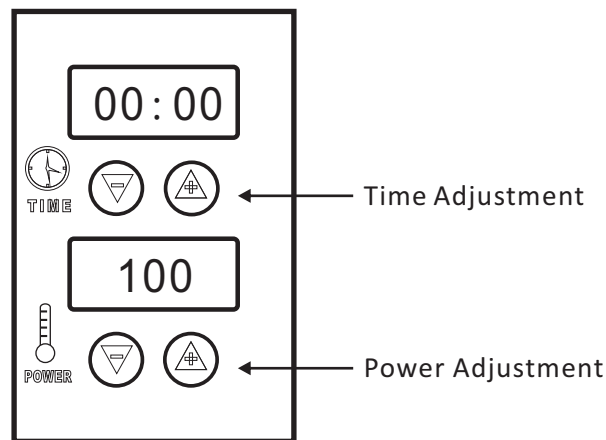
5. Operation

2. Manual Mode

- Press the button "Auto" to shut down the automatic mode.
- Press the button to select "Routine" or "Pulse".
- Press the button "Start".
- 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.
- 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.
- Press the button "Start/Stop".
- Turn off the equipment when the work is completed.

3. Pulse Mode

- Press the button "Auto" when the lamp is ready to use to shut down the automatic mode. Set power and time. Press the button "Pulse".
- Press the button "Start/Stop".
- The curing distance between the emitters and paint surface should be set according to the material of paint and weather (air humidity). Usually, keeping a distance of about 35-45cm from the paint surface is recommended.



- 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.

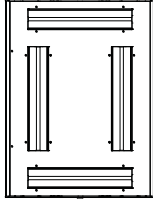
6. Troubleshooting

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

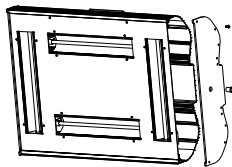
6. Troubleshooting

2. Lamp Tube Replacement



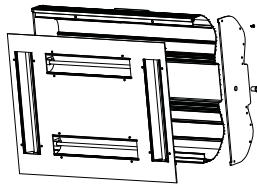
(1)

1. Prepare cassette for replacement



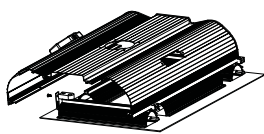
(2)

2. Remove the screws on the side panel of cassette.



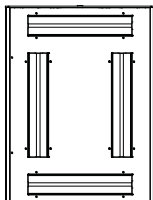
(3)

3. Remove the screws on the front panel to open it.



(4)

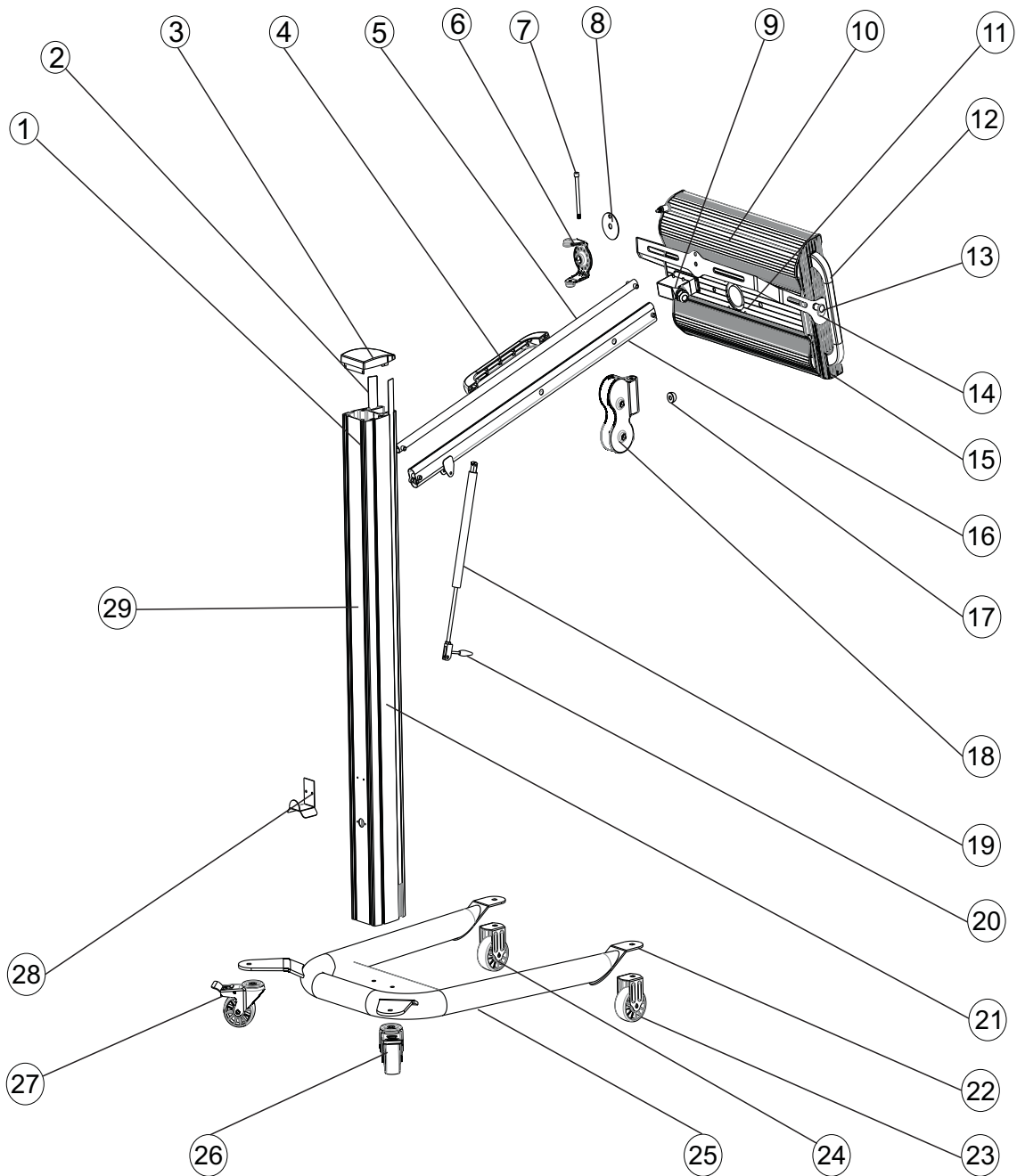
4. Remove the screws on both ends of the lamp tube so it can be replaced.



(5)

5. Reverse the steps above after replacement to re-install the cassette.

7. Exploded View



NO	NAME	NO	NAME	NO	NAME	NO	NAME
1	Column	9	Junction box	17	Rubber washer	25	U-pipe
2	Plastic band	10	Cassette	18	Connector	26	Back wheel
3	Top cover	11	Fan cover	19	Lifter	27	Back wheel
4	Aluminium handle	12	Cassette handle	20	Lifter handle	28	Cable holder
5	Upper connecting rod	13	Spring Lock	21	Column	29	Control box
6	Adjustable hand wheel	14	Square head screw	22	U-type base		
7	Long bolt	15	Side panel	23	Front wheel		
8	Cassette washer	16	Lower connecting rod	24	Front wheel		

8. Circuit Diagram

