# **Instruction Manual**

# **PCR Plate Centrifuge**





#### 1. Introduction

PCR Plate Centrifuge II is designed for quick spins of samples in PCR plates. Primarily designed for use with 96 or 384 well plates and small volumes, it will accommodate skirted, non-skirted, and semi-skirted styles.

## 2. Normal Operating Conditions

Ambient temperature:  $0^{\circ}C \sim 35^{\circ}C$ 

Relative humidity: ≤70%

Power supply: AC110~220V/50-60Hz

#### 3. Specifications

Rotating speed	2200~2800rpm
Timing range	15sec ~1min59sec
Max (RCF)	550g
Acceleration time	≤10sec (0 to 2800rpm)
Brake time	≤4Sec (2800rpm to 0)
Lid Open Auto Stop	YES
Short Run	YES
Capacity	2 PCR plates
Power	45W
Voltage	AC110~220V/50-60Hz
Fuse	250V/3A Φ5 × 20
Dimension	260 x 240 x 226mm
Weight	3.3kg

#### 4. Installation

- 1. Ensure that the instrument is placed on a level worktable, press the lid button (OPEN), to open the lid.
- 2. Load 2 microplates vertically into chamber (Figure 1).
- 3. Check the Microplates installed in the correct direction (Figure 2).
- 4. Close the lid.

To ensure safe operation and long life of the instrument, samples must always be loaded into the rotor in a balanced fashion.

Plates must always be loaded in the center of the carrier. Starting the centrifuge with the plates not properly centered/balanced will result in an unbalanced load and increased vibration.

## **Operation Guide**

#### 1. Power on



Turn on the power switch, after the sound the system automatically enters the setting mode and displays the last setting parameters.

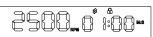
### 2. Speed and Time setup

In setting mode, press the Speed  $\blacktriangle \nabla$  to increase or decrease the speed value.

Speed range: 2200~2800rpm (100rpm increments).

In setting mode, press Timer ▲ ▼ to increase or decrease the timing value. Set value adjustment range: 15sec~1min 59sec. (5sec increments).

#### 3. Run



When parameter setup is completed, close the lid, the lid lock icon will light up. Then press the Start/Stop key to start operation of the device. If the lid is not locked, the device will not run.

A short run can be performed by pressing the "Short" button. The centrifuges will run for as long as the button is pressed.

#### 4. Stop Run

Press the Start/Stop key for more than 2 seconds during running, the device will automatically come to a stop, and enter the parameter setting mode.

If the lid is opened during running, the device will automatically stop and enter the parameter setting mode.

# 3. Icon Description



- Indicating device in the parameter setting mode.
- Indicating device is running.
- □ Indicating device lid is locked.
- Andicating device failure.

## 5. Safety

**NEVER** use the centrifuge in any manner not specified in these instructions.

**NEVER** put hands in the rotor area unless the rotor is completely stopped.

**NEVER** move the centrifuge while the rotor is spinning.

**NEVER** use solvents or flammables near this or other electrical equipment.

**NEVER** centrifuge flammable, explosive, or corrosive materials.

**NEVER** centrifuge hazardous materials outside of a hood or proper containment facility.

**NEVER** continue to operate a centrifuge that is vibrating excessively.

**ALWAYS** load the rotor symmetrically. Each plate should be counterbalanced by another plate of the same brand type, and volume.

**ALWAYS** use plates that have been sealed in some manner to avoid spillage.

**ALWAYS** load plates so that the sealed side faces the center of the rotor slot and the bottom of the plate faces out.

**ALWAYS** be sure the plates are pushed all the way to the button of the rotor slot before operating the centrifuge. **ALWAYS** locate the centrifuge within easy access to an electrical outlet.

Fault	Causes/Solution
After power on, no response	Power supply is not connected.
	Check the power cable connection, ensure that the external
	power supply to meet the requirements.
	Fuse is blown.
	Restart after replacing fuses. If the problem is still resolved,
	please contact your vendor or manufacturer.
	Switch failure
	Restart the device, if the problem still exists, please contact the
	vendor or manufacturer.
Abnormal vibrations	Rotor load imbalance
	Check if the load weight of the rotor is in balance.
Unable to speed up or slow down	Circuit fault
	Restart the device, if the problem still exists, please contact the
	vendor or manufacturer.
	Lid does not close.
	Check that the lid is closed properly.
Press no effect	Key is damaged.
	Restart the device, if the problem still exists, please contact the
	vendor or manufacturer.

# V. <u>Service and Contact</u>

Appleton Woods distributes these products in the UK; for customer service or technical support, please contact **info@appletonwoods.co.uk** or call on **0121 4587740.** 



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