Operation Manual

V4.0

Auto-Pure Series Nucleic Acid Purification

System





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Chapter 1 Brief Introduction

Auto-Pure series Nucleic Acid Purification System use the magnetic rod to adsorb, transfer and release magnetic particles to transfer the operating sample and in this way to purify DNA/RNA, protein and cell etc. The Purification system able to handle 1-20,1~24,1~32 or 1-48 samples simultaneously with special reagent kit or 96 well reaction plate, and when using the different reagent, would be able to extract DNA/RNA from animal or plant tissue, blood and body fluid etc.

Features

- Friendly interface with easy operation
- Touch screen with 3 shortcut key or mouse operation
- Heating function in Lysis and elution
- UV steriliza tion
- Quiet operation without vibration
- One stop operation to avoid contamination
- Rapid extraction:10~60 minutes/time
- Premium magnetic particles leads to high yield
- Extendable Ethernet remote control and WiFi
- Extendable APP software for mobile phone and PAD w/android system

Chapter 2 Specification

1. Normal operating conditions

Environmental Temperature: $10^{\circ}C \sim 35^{\circ}C$ Relative Humidity $\leq 70\%$ Input: AC $100 \sim 240V$, 50Hz/60Hz

2. Basic parameter & Performance

Model	Auto-Pure	Auto-Pure	Auto-Pure	Auto-Pure	Auto-Pure	Auto-Pure	
Parameter	32A	48A	20A	20B	24D	24BT	
Principle	Magnetic Particle Method						
Throughput	1~32	1~48	1~20	1~20	1~24	1~24	
Kits	96 Deep-well plate	96 Deep-well plate	2ml Kits	5ml Kits	10ml Kits+ 2ml tubes	5ml Kits+ 2ml tubes	
Sample Volume/µL	50~1000	50~1000	50~3000	50~5000	50~10000	50~5000	
Stability	CV≤5%						
Lysis temp.	Ambient temperature ~120°C						
Elution temp.	Ambient temperature ~120 $^\circ \! \mathbb{C}$						
Heating time	Heating time (Ambient temperature ~120 $^\circ$ C) \leqslant 4 minutes						
Temperature	±1°C						
Accuracy							
interface	7-inch touch screen, 3 shortcut buttons and mouse is available						
Built-in protocol	8 groups of preset protocols, 100 groups of protocols can be stored						
Protocol management	New, Edit, Delete, Save as						
Expansion interface	Standard USB, ethernet port and WIFI are available						
Network	Extensible Ethernet remote control, WiFi, 4G network						
Pollution control	UV light						
Exhaust way	By Fan						
Data storage	Available, with built-in SD card						
Max.input power	450W						

Table 1 Basic parameter & Performance

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Dimension (W×D×H)	400mm×470mm×450mm	400mm×520mm×450mm		
Weight (kg)	28kg	30kg		

3. Overall Dimension





Dimension (W×D×H)

- Auto-Pure 32A: 400mm×470mm×450mm
- Auto-Pure 48A: 400mm×470mm×450mm
- Auto-Pure 20A: 400mm×520mm×450mm
- Auto-Pure 20B: 400mm×520mm×450mm
- Auto-Pure 24D: 400mm×520mm×450mm
- Auto-Pure 24BT: 400mm×520mm×450mm

Chapter 3 Product Introduction

This chapter basically introduce the instrument structure, operation buttons, display panel as well as the preparations before operate. For the first time user, please make sure to read this chapter before start.

1. Structure

1.1. Front



1.2. Back





1.3. Auto-Pure 20A/20B/24D/24BT Inside view

Note: The only difference between the experiment module of above products is the shape of the heating strip.

1.4. Auto-Pure 32A/48A Inside view



Note: The only difference between the experiment module of above products is the shape of the heating strip.

2. Operation panel



Display screen: Operate by touch screen or mouse which connect with USB

port

TAB: Select for the shortcut program

RUN: Run for the shortcut program

STOP: Stop operating

Chapter 4 Operation

1. Preparation

Take out the instrument from packing carton and tear off the tape on the edge of operation window, then open it and take out the foam. First please screw out the fixed screw of position (1) as below .Second please screw out the screw of position (2) then you can take out the baffle and release the moving component.





Note: Be careful in operating or the magnetic rod will be broken.

2. Connect the power

Connect one end of power cord to the instrument socket and the other to power (AC100~240V), then turn on the power switch.

3. Install the reagent kit

3.1 Install the customized reagent kit for Auto-Pure 20A & Auto-Pure 20B.

Open the drawer and mount the customized reagent kit on the heating strip, make sure the sample well marked with 1 should be on the left side, then push back the drawer slowly.



Note: The shape of customized reagent kit of above products is different, while the installation is the same.

3.2 Install the customized reagent kit for Auto-Pure 24D/24BT

Open the drawer and place the kits with sample on the kits tray, then put the kits tray to the drawer and press the kits with hand to make sure the kits fits the heating strip well, then push back the drawer slowly and close the door.



3.3 Install the 96 well reaction plate on Auto-Pure 32A.

Take out the drawer and put the 96 well reaction plate which already filled with samples mounted on the locating slot, make sure the plate with chamfering should be on the left side, then push back the drawer slowly.



4. Install the magnetic rod cover

4.1 Install the magnetic rod cover for 20A/20B/24D/24BT

Insert the magnetic rod cover completely on the mounting groove, and the installation quantity depends on the reagent kit number.



4.2 Install the magnetic rod cover for Auto-Pure 32A/48A

Insert the magnetic rod cover completely on the mounting groove, and the installation quantity depends on the reagent kit number.



Note: Magnetic rod cover for Auto-Pure32A at most is 4pcs, for Auto-Pure at most is 6pcs. The installation method is same.

5. Remove magnetic rod cover

Press the button and take out the magnetic rod cover as per below photo.

