



CE

MPure-32 aNAP System

MPure-32™ aNAP System is a fully automatic platform for magnetic reagent assays. It can process up to 32 samples simultaneously within a short period of time (around 40 to 60 minutes).

Cat. No. 117032200

Tech Support: techsup@mpbio.com

Customer Service: custserv.eu@mpbio.com

IMPORTANT - PLEASE READ CAREFULLY BEFORE USING THE MPURE-32 ANAP SYSTEM

COPYRIGHT INFORMATION

The contents of this document are the property of MP Biomedicals Germany GmbH. The contents may not be copied, reproduced, and transmitted to third parties without the written consent of MP Biomedicals. Copyright © MP Biomedicals. All rights reserved.

DISCLAIMER

Information in this document is subject to change without notice. MP Biomedicals Germany GmbH makes no warranty of any kind with regards to this material, including, but not limited to, the implied warranties or merchantability and fitness for a particular purpose. MP Biomedicals shall not be liable for errors contained herein or for incidental or consequential damage in connection with the furnishing, performance, or use of this material.

WARRANTY

The MPure-32 is warranted against defects in material and workmanship for one (1) year after the date of delivery to the original purchaser.

MP Biomedicals will repair or replace with reconditioned comparable unit at MP Biomedicals option when the product is returned to MP Biomedical. This warranty includes one-year parts and labor at MP Biomedicals' facilities or approved distributors. Warranty work is subject to the inspection of the unit. No instruments, equipment, or accessories will be accepted without a Return Material Authorization (RMA) number issued by MP Biomedicals, Costs of shipping the unit are not covered in this warranty.

An instrument that may contain hazardous and / or infectious materials must be packed and labeled according to the U.S. Department of Transportation (DOT) and / or European Community (EC) regulations applying to the transportation of hazardous and / or infectious materials. All shipping documents must meet DOT and / or EC regulations. All returned units must be fully decontaminated of any chemical, biological or infectious agents. Acceptance of the return of an instrument in our workshops is appreciated by MP Biomedicals with regard to the safety declaration filled and signed by the end user.

WARRANTY LIMITATIONS

The warranty does not cover any adjustments, damages, or deterioration to or malfunction of the Products resulting from: abuse, accident, or negligence; use of abrasive or harsh cleaning agents; excessive exposure to heat or moisture; normal wear and tear; repair or modifications performed or attempted by personnel other than MP Biomedicals representative; failure to provide reasonable and necessary maintenance; misuse for purposes other than those originally intended. The warranty only covers the original customer, and is not transferable. The warranty only applies if the customer has paid for the products in full. All claims under this warranty must be submitted to MP Biomedicals in writing.



MP Biomedicals Asia Pacific Pte Ltd

2 Pioneer Place
Singapore 627885
Tel: +65-6775 0008
Fax: +65-6774 6146
Email: enquiry_ap@mpbio.com



MP Biomedicals Germany GmbH

Thüringer Straße 15
37269 Eschwege Germany
Tel. (49) 5651 921 0
Fax No. : (49) 5651 921 181
Email : techsup.eu@mpbio.com

Revision Date: 2021-10

Ref. No. 117032200

SAFETY INFORMATION

Follow the safety instructions below to avoid electric shock or fire accident.

- 1 Do not touch any plugs and electric switches with wet hands.
- 2 Turn off and unplug the machine before moving it.
- 3 Fasten the moving parts before moving and delivering the machine.
- 4 Put the machine in a room with good ventilation. Allow an empty space of more than five centimeters around the machine.
- 5 When you disconnect the plug from the outlet, be sure to hold the power plug itself. Do not pull the power cable.
- 6 Do not place electric wires on any object with high temperature.
- 7 Do not look directly at the ultraviolet lamp while it is on.
- 8 Disconnect the plug from the power source when the machine is not used.
- 9 Do not repair the machine by yourself. Contact our service center or authorized agencies.

WARNING

Please remove the two fixing screws inside the internal compartment before turning on the machine. The two screws are used to hold the magnetic rod frame during shipping, and it has to be **REMOVED** before turning on the power. This is a very important step. Failure to do this step may cause instrument malfunction.




TABLE OF CONTENTS

SAFETY INFORMATION.....	4
ABOUT THIS MANUAL	7
INTRODUCTION	8
OPERATION INTERFACE	8
HEATING SYSTEM	8
OPERATION ENVIRONMENT.....	9
OPERATION PRINCIPLE.....	9
INSTALLATION OF MPURE-32.....	9
1. Unpacking.....	9
2. Components & Accessories.....	9
3. Installation	11
INTENDED USE	12
SPECIFICATIONS	12
SAFETY & EMC INFORMATION.....	13
1. Safety Requirements	13
2. EMC requirements.....	13
APPEARANCE OF THE MACHINE.....	14
1. Front View.....	14
2. Back View	14
3. Internal View.....	15
THE CONTROL PANEL	16
THE TOUCH SCREEN	17
1. Run Screen	18
2. Program Screen	19
3. Clock Screen.....	20
4. USB Screen: Import Procedure from USB to Instrument.....	21
5. USB Screen: Export Procedure.....	22
6. TEMP Screen.....	23

7. UV LAMP Screen	24
RUN SCREEN	25
EXECUTE A PROGRAM.....	27
1. How to START.....	27
2. How to PAUSE	28
3. How to STOP	28
CLEANING OF MPURE-32	29
1. Cleaning of the case	29
2. Cleaning of inner surface of the instrument.....	29
MAINTENANCE OF MPURE-32	30
STORAGE & TRANSPORT	31
1. Storage.....	31
2. Transport.....	31
REPLACING THE FUSE	31
DISPOSAL.....	31
TROUBLESHOOTING GUIDE	32
IMPORTING / EXPORTING THE PROGRAM	33
1. Accessory.....	33
2. Install AutoMag Software.....	33
3. Transmission of AutoMag program	33
AUTOMAG SOFTWARE.....	34
1. Log In	34
2. File Menu.....	34
3. Usage Instructions and fonction of icons.....	36
4. Introduction of program parameters.....	37
IMPORTANT NOTES	41
CONSUMABLES	42
CONTACTS.....	43

ABOUT THIS MANUAL

SYMBOLS ▶ The label on the back of the instrument, the User Manual, and other packaging material may contain the following symbols.

	Catalog number
	Serial number
	Specification of fuse
	Manufacturer
	The date of manufacture
	This product fulfills the requirements of the European Directive
	In Vitro Diagnostic Medical Device
	Consult Instructions for Use
	Authorized Representative in the European Community
	Caution, consult accompanying documents

INTRODUCTION

MPure-32 aNAP System is an instrument designed to handle magnetic reagent assays. It is used for extraction of nucleic acids. With appropriate reagents, this instrument can also be used for protein extraction or cell separation.

Users may put the samples and reagents into 96 well Autoplate or 6 well format Autotubes. By combining a 96 well Autoplate or 6 well Autotubes a specially designed strip, the MPure-32 aNAP System can automatically process 1 to 32 samples simultaneously within 40 to 60 minutes.

The extraction process of the magnetic system is simpler than that of the spin column system. Yet, it is still able to achieve research and diagnostic requirements with relatively quick, easy, and safe operating procedures.

OPERATION INTERFACE

The operation interface consists of nine parts: **RUN, PROGRAM, CLOCK, USB, TEMP, UV LAMP, USER, SETTING** and **CONTROL PANEL**. The control panel has 5 buttons (indicated by icons and LED light).

HEATING SYSTEM

The heating system may provide reagents with the best working temperature.

The temperatures can be programmed. When setting the temperatures, "PRESET" is the programmed temperature and "PRESENT" is the real temperature on stainless steel board.

The heating system is connected to the main power system. Switch off both the main power and heating switch when you turn off the machine.

There is a light on the heating switch, and it will be lit up as the heating is functioning. As the temperature of stainless steel board is raising, please stay clear from the heating element.

OPERATION ENVIRONMENT

Place of Operation	Indoor Use Only
Altitude	2,000 m
Pollution Degree	2
Transient overvoltage at Main Supply	2,500 V

OPERATION PRINCIPLE

The robot of MPure-32 aNAP System uses magnetic rods to transfer magnetic beads from one well to another. It also uses the strip to mix the solution; by moving the strip up and down to mix the solution, users can get high yield and quality of purified nucleic acids.

INSTALLATION OF MPURE-32

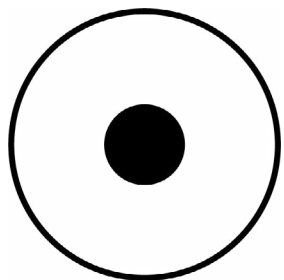
1. Unpacking

Open the packing box and take out the instrument and related accessories.

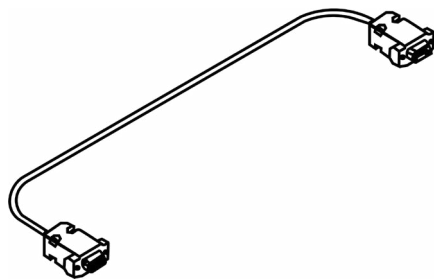
Important: Keep the shipping box and all packing materials. They will be needed again when transporting the MPure-32.

2. Components & Accessories

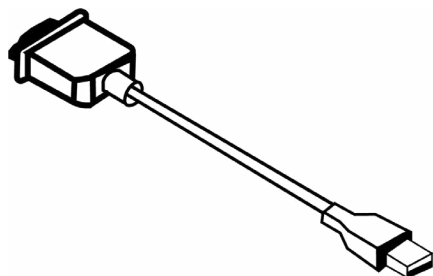
Check that the following are included in the package. Contact your local representative if any parts are missing.



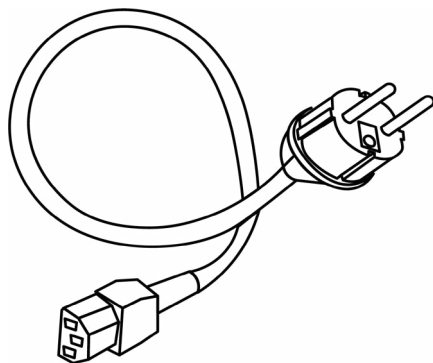
Disk - AutoMag Software



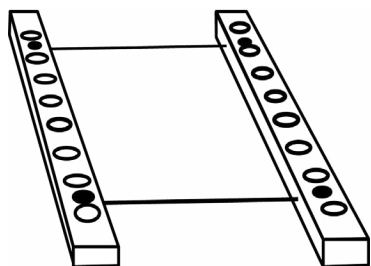
RS232 Cable (Cat 117032124)



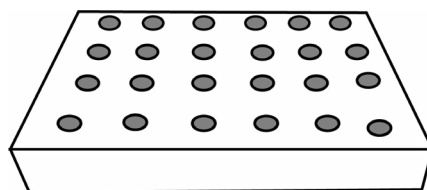
RS232 - USB Cable



Power Cord



Thermal Block (optional)



Magnetic Base

3. Installation

- ▶ Install the MPure-32 system on a clean, dry, sturdy surface within 1.2 M of an electrical outlet, and in a location that allows a minimum 5-10 cm clearance around the instrument base at all times to ensure proper ventilation.
- ▶ A location that is flat and stable, with no vibration
- ▶ A location away from direct sunlight (Block the sunlight by closing curtains or blinds as necessary.)
- ▶ A location where the temperature and humidity are kept within the specified range (far from water faucets, water heaters, humidifiers, air-conditioners and heaters)
- ▶ Before plugging the power cable into the power point, use the screwdriver to remove the fixing plate.
- ▶ Install the instrument in a well-ventilated space.
- ▶ Remove the foam packing material inside the instrument.
- ▶ Plug in the power cord to the instrument and connect to electric outlet
- ▶ Turn the main power switch on.
- ▶ Turn heating switch on.

INTENDED USE

- ▶ MPure-32 aNAP System can be used in combination with MP Biomedicals DNA/RNA Extraction Kits to extract the DNA/RNA from clinical/non-clinical specimen.
- ▶ Suitable for in-vitro diagnostic testing.
- ▶ When dealing with potentially infectious specimens, strips and reagent plates should be disposed as biohazardous waste.
- ▶ After the extraction procedure, the internal parts of the machine may be disinfected. Use 75% alcohol to wipe the stainless-steel plate. Turn on the UV lamp for 10 minutes or more to sterilize any residual nucleic acids from the specimen/bacteria/viruses.

SPECIFICATIONS

Model	MPure-32
Width	38 cm
Height	37 cm
Length	35 cm
Weight	21 kg
Voltage	100 - 240 V
Current	3.2 A
Operation Temperature Range	5-50°C
Operation Humidity Range	< 80%
Temperature Range	RT-70°C
Sample Number	1-32
Processing Volume	50µL - 1000µL
Transmit Interface	USB / RS232

SAFETY & EMC INFORMATION

1. Safety Requirements

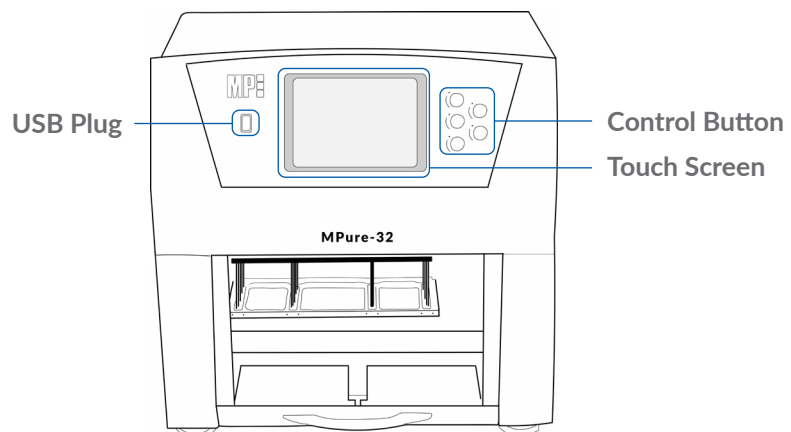
- ▶ This device has passed the tests and conformed to the standards of IEC 61010-1:2001 & EN61236-1:2006, "Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use, Part 1: General Requirements".
- ▶ This device has passed the tests and conformed to the standards of IEC 61010-2-101:2001 & EN61236-1:2006, "Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use, Part 2-101: Particular Requirements for In Vitro Diagnostic (IVD) Medical Equipment"

2. EMC requirements

- ▶ This device has passed the tests and conformed to the standards of IEC 61326-1:2005 & EN61236-1:2006 (First Edition), "Electrical Equipment for Measurement, Control and Laboratory Use - EMC Requirements, Part 2-6: Particular Requirements - In Vitro Diagnostic (IVD) Medical Equipment".
- ▶ This device has passed the tests and conformed to other standards:
 - EN 61326-1:2006
 - EN 55011:2009/A1:2010
 - EN 61000-3-2:2006/A2:2009
 - EN 61000-3-3:2008
 - EN 61000-4-2:2009
 - EN 61000-4-3:2006/A2:2010
 - EN 61000-4-4:2004/A1:2010
 - EN 61000-4-5:2006
 - EN 61000-4-6:2009
 - EN 61000-4-11:2004

APPEARANCE OF THE MACHINE

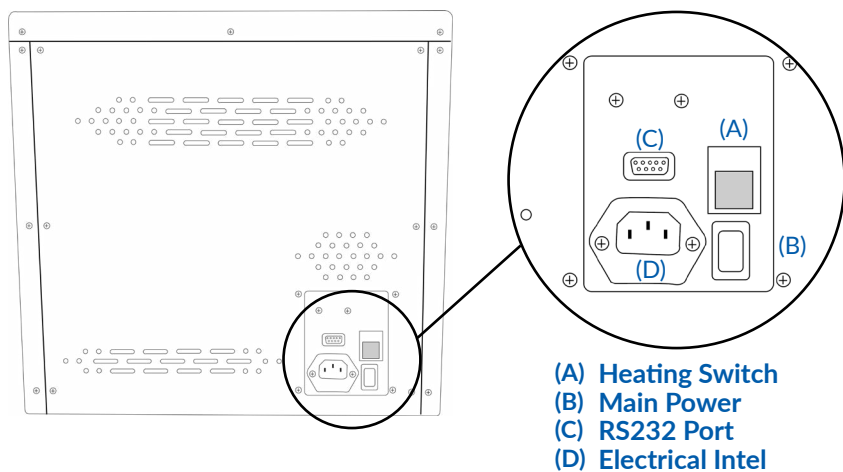
1. Front View



WARNING

Control button has LED light. It will light up to guide the user.

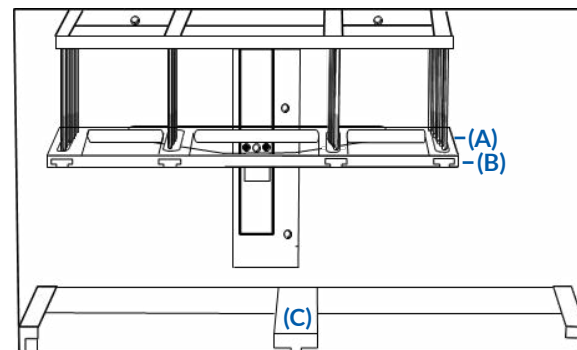
2. Back View



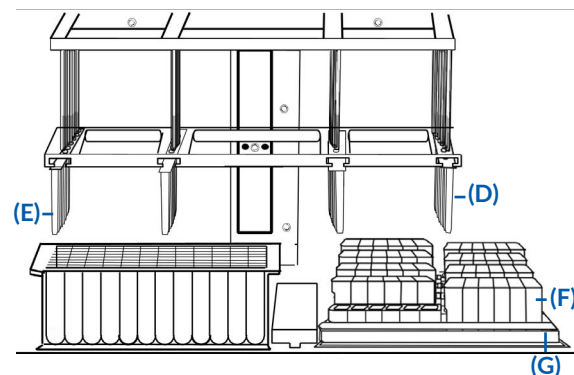
- (A) Heating Switch
- (B) Main Power
- (C) RS232 Port
- (D) Electrical Inlet

Switches and Electrical Inlet. (voltage: 100-240V, fuse: 5A/250V)

3. Internal View



- (A) Magnetic Rod Frame
- (B) Strip Rack Frame
- (C) Reagent Plate Rack



- (D) 8-Channel Strip
- (E) Reagent Plate
- (F) Reagent Autotube
- (G) Base for Autotube

THE CONTROL PANEL

WARNING

LED Light up to guide the users to press the start button with green LED light, other buttons are in red.



Start

Start: to initiate the program.

The buzzer will sound when the instrument is turned on.



Stop

Stop: to terminate the program.

The screen will show "STOP?" (at status row) the first time you press the button. Press the Stop button again to confirm, then the robot will move back to home position.



Buzzer

Buzzer: Press the button to turn the buzzer off.



Pause

Pause: Press the button to stop temporarily.

Press the button again to continue program, and the End time will be recalculated.



Light

Light: Turn On/Off the LED light.

THE TOUCH SCREEN



RUN

Run an extraction of nucleic acids.



PROGRAM

Select a saved program



CLOCK

Setting up the hour



USB

Import or Export Program



TEMP

Select Temperature



UV LAMP

Switch on/off UV lamp



BARCODE

Setting up Barcode reader



SETTING

Additional settings of the instrument

1. Run Screen

1 Touch "RUN"



2 The last executed program is shown.

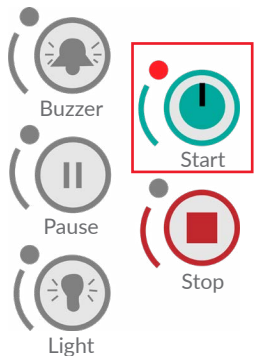


Touch the program icon to change (if required)

Programmable Temperature:

- ▶ The temperature setting is editable.
- ▶ User may refer to the reagent kit protocol for the optimal working temperature.

3 Press "Start"



4 The selected program is executed



Temperature Setting:

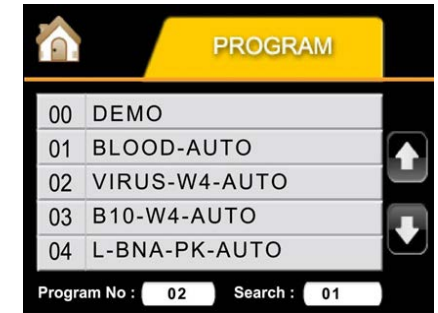
- ▶ The current temperature set by the user. It is fixed and constant.

2. Program Screen

1 Touch "PROGRAM"



2 Select your program



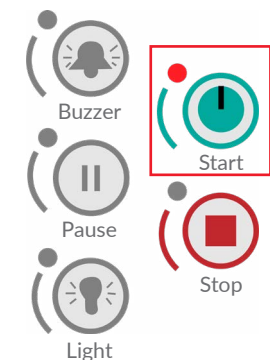
Scroll with the arrows to find your program and touch the program name to select.

- ▶ **Program Name:** The name should not be more than 15 characters.
- ▶ **Program No.:** It display the last program number used. You can preload 100 programs, program number from 00 to 99.
- ▶ **Search:** Enter the number to search the program directly

3 View the Selected Program



4 Executed the program: Press Start



3. Clock Screen

1 Touch "CLOCK"



2 Touch setting icon to change time



When the time turns yellow, touch input block to enter value.

3 Enter Value



4 Save the updated time

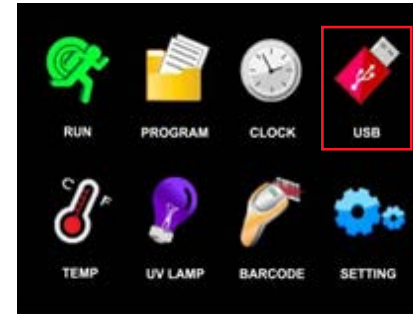


After entering, touch setting icon to complete setting. Touch home to go back to home screen

- ▶ Year (YYYY): Starting to 0000 to 9999
- ▶ Month (MM): Starting from 01 to 12
- ▶ Day (DD): Starting from 01 to 31
- ▶ Hours (hh): Starting from 00 to 23
- ▶ Minutes (mm): Starting from 00 to 59
- ▶ Seconds (ss): Starting from 00 to 59

4. USB Screen: Import Procedure from USB to Instrument (more info page 52)

1 Touch "USB"



2 Plug in USB, touch import icon

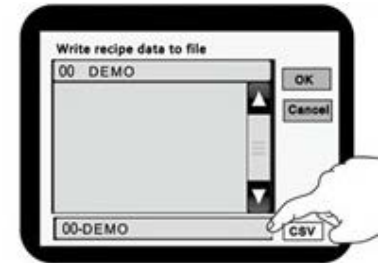


3 Program Selection



Navigate thanks to arrows to select the program or enter the program number to search. Touch ok to confirm.

4 Import Program



Touch the input block to enter file name. (Must be Program No., program name).

5 Touch OK to import



6 Data Transfer



5. USB Screen: Export Procedure

(more info page 52)

1 Touch "USB"



2 Plug in USB, touch Export icon

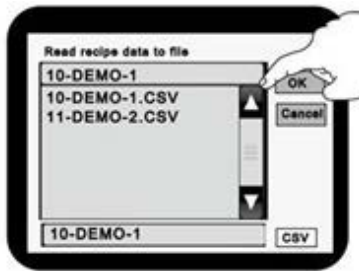


3 Read the USB



Touch export icon to read the program in the USB key.

4 Program Selection



Navigate thanks to arrows to select the program

5 Touch OK to Export



6 Export Processing



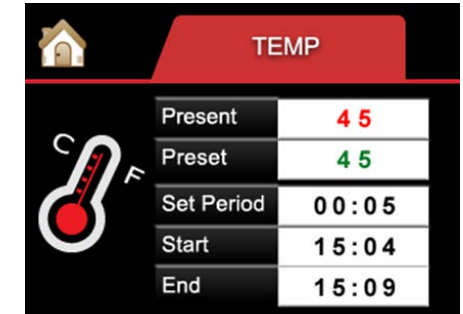
You will hear a beep after successful transmission.

6. TEMP Screen

1 Touch "TEMP"



2 Setup Temperature & Time

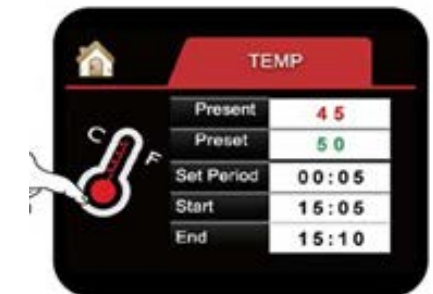


Touch input block to setup the temperature and time.

3 Enter Value



4 Touch "TEMP" to execute



- ▶ **Present:** Current working temperature (°C)
- ▶ **Preset:** Temperature setting for the stainless steel plate. Ranging from RT to 70°C
- ▶ **Set Period:** Set-up the working time (hh:mm)
- ▶ **Start:** Start time (hh:mm)
- ▶ **End:** Estimated end time (hh:mm)

7. UV LAMP Screen

1 Touch "UV LAMP"



2 Setup UV LAMP



Touch input block to setup.

3 Enter Value



4 Touch the LAMP to execute



Touch the LAMP icon, it turns purple

- ▶ **Set Period:** Set working time for the UV Lamp (hh:mm)
- ▶ **Start:** Start time (hh:mm)
- ▶ **End:** Estimated end time (hh:mm)

Current time is displayed in the lower right corner. Time is in 24-hour format.

RUN SCREEN

Current Time
(24-hour format)

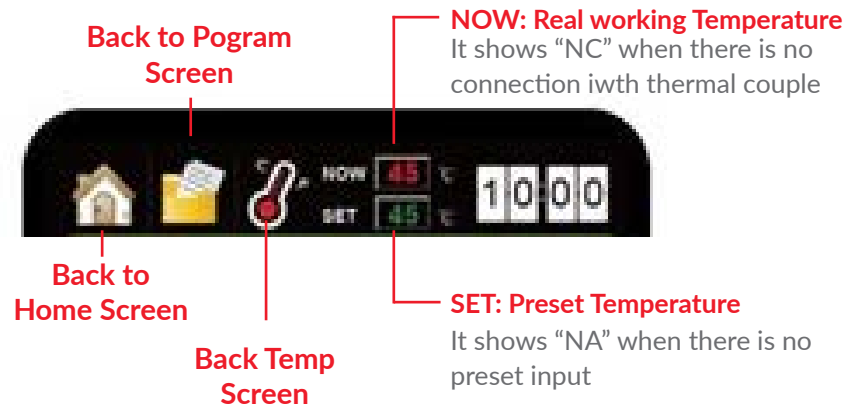


Working Step

- ▶ **MIXING:** Working time of the strip (minute)
- ▶ **COLLECT:** Working time of the magnetic rod (second)
- ▶ **VAPOR:** Waiting time for the reaction or alcohol vaporization (mm:ss)

Machine Status

- ▶ **RUNNING:** Program is in progress
- ▶ **WAITING:** Executing vaporization
- ▶ **PAUSE:** Making a short stop
- ▶ **END:** The program is ended
- ▶ **HOME:** Back to Home Screen
- ▶ **STOP?:** Do you want to stop program?
- ▶ **JOG:** To move the robot slowly
- ▶ **LIMIT:** Robot is out of the limited range
- ▶ **SENSOR:** Fault is detected
- ▶ **TEMP MAX:** Real Temperature is >79 °C
- ▶ **TEMP ALARM:** Preset Temperature cannot be reached in a reasonable period
- ▶ **VOLUME:** Volume of the buffer in the well (µL)
- ▶ **START:** Start time of the program (hh:mm:ss)
- ▶ **PAUSE:** Pause time (hh:mm:ss)
- ▶ **END:** End time of the program (hh:mm:ss)



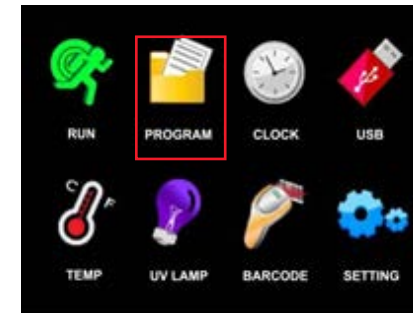
WARNING

- 1 If it shows **LIMIT** or **SENSOR**, the machine is out of order. The buzzer will keep on ringing. Press on the buzzer button to stop it. Turn the power system off and notify our service center.
- 2 If it shows **TEMPMAX** or **TEMPALARM**, heating system is out of order. The buzzer will keep on ringing. Press on the buzzer button to stop it. Turn off the heating switch and notify our service center.

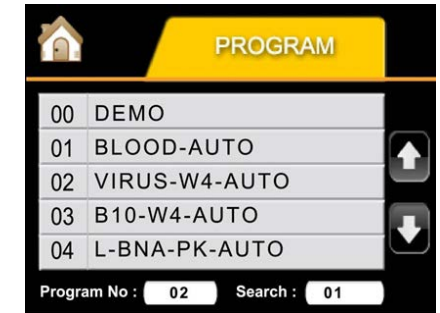
EXECUTE A PROGRAM

1. How to START

- 1 Touch "PROGRAM"



- 2 Select your Program



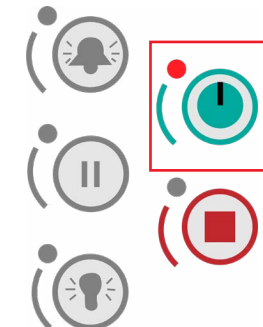
Navigate thanks to arrows to select the program

- 3 Review Program Settings



The program name will show up in the green block

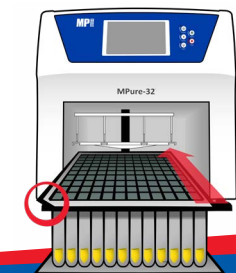
- 4 Start the Program



Press on the start button

BEFORE STARTING THE PROGRAM

- 1 Ensure you to put the 96 Deep-well Autoplate toward outside (by the missing corner) and push it to the bottom of plate rack.



- 2 Ensure you to put the 8-channel strip are in place at the bottom of strip rack.

2. How to PAUSE



If you press the **pause button** during the process of program execution, the execution will be paused immediately. The robot will stop working and move back to the top. Meanwhile, other buttons will not be functioning.

3. How to STOP



Pressing the **stop button** during the process of program execution will stop the program immediately. The robot will stop working immediately and it will show **"STOP?"** at status row.

YES — Press the stop button again to confirm terminating the program and the robot will go back to the home position.

STOP?

NO — If you do not want to terminate the program, press the start button to continue the program execution.

WARNING

During the **COLLECT STEP**, the robot cannot be stopped immediately. It will pause after finishing the step. Afterwards, the magnetic rod and strip will move back to the top together.



Press the **pause button** again to continue running the program.

- ▶ Stop is the same as emergency button. It moves the robot back to the home position.

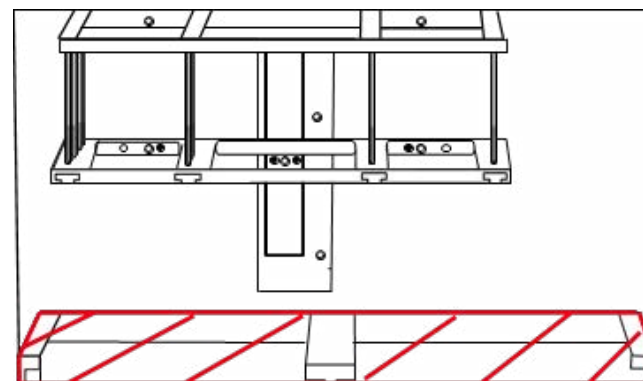
CLEANING OF MPURE-32

1. Cleaning of the case

- ▶ Wipe with 75% ethanol solution.

2. Cleaning of inner surface of the instrument

- ▶ Wipe with 75% ethanol solution.



- ▶ The magnetic rod and aluminum rod are connected with adhesive. Please do not wipe them with ethanol solution. Use a soft, lint-free cloth (soaked with RO water) to wipe these parts.
- ▶ Most reagents may contain salts; if the magnetic rod is accidentally in contact with the reagents, please use a soft, lint-free cloth (soaked with RO water) to wipe it, so as to avoid any potential corrosion.

MAINTENANCE OF MPURE-32

- ▶ Daily Maintenance (to be performed by user)
 - ▶ Clean & wipe operation area, strip frame (with 75% ethanol)
 - ▶ Turn on UV light for 30 to 60 minutes.
- ▶ Annual Maintenance (to be performed by trained engineer)
 - ▶ Check all buttons and touch screen function.
 - ▶ Check USB port function.
 - ▶ Check all default parameters and X, Y, Z axes movement.
 - ▶ Check heating function.
 - ▶ Check magnetic rod (perform cleaning, if required).
 - ▶ Check LED light/UV light.
 - ▶ Check door sensor/door alarm.
 - ▶ Check all connecting cables.
 - ▶ Check X, Y axes timing belt & X, Y axes rail (lubricate the rail, if needed).
 - ▶ Check screw rods (Z axis, lubricate if needed).
 - ▶ Check and clean the inner surface & strip frame.
 - ▶ Turn on and initialize the instrument, check all axes position.
 - ▶ Execute the commonly used program, check the robotic movement and function.

STORAGE & TRANSPORT

1. Storage

- ▶ Storage & Operation Conditions:
 - ▶ Temperature Range: 5-50 °C
 - ▶ Humidity Range: <80%

2. Transport

- ▶ To avoid damaging the linear side during transportation, please use the fixing plate or fixing screws to fix the position before transporting.

REPLACING THE FUSE

Use a flathead screwdriver to remove the fuse base from the power outlet.

- ▶ Fuse specification: 250V/5A (cat#116002517)

DISPOSAL

- ▶ The strips, reagent plates, and reagent tubes (which are in contact with the specimen) are potentially infectious. Please follow the biohazard waste treatment.
- ▶ The inner surface of the instrument may be contaminated with infectious specimens, wipe the surface with 75% ethanol solution. Turn on the instrument for 10 minutes or more to sterilize the surface area.
- ▶ Dispose the UV lamp, fluorescent tubes, and Nd-Fe-B magnets separately following the local waste management regulation.

TROUBLESHOOTING GUIDE

- The screen is blank.**
- ▶ Did you turn on the power system already?
 - ▶ Did you connect the plug to the power system?
 - ▶ Measure the voltage of the outlet.

-
- Noise from the machine**
- ▶ Check the strip to see if it has been pushed to the bottom of strip rack.
 - ▶ Check the plate to see if it has been pushed to the bottom of plate rack.

-
- The magnetic rod frame does not move normally. It does not move down or move up.**
- ▶ Press the “Stop” button to terminate the program. Then, press the “Stop” button again to let the robot to move back to home position.
 - ▶ Run **DEMO** program without reagent tube. Check the magnetic rod frame to see if it is still abnormal.

-
- The heating function is abnormal. The temperature does not increase**
- ▶ Check the heating switch to see if it has been turned on.

-
- Stain on the magnetic rod.**
- ▶ Be sure to put a clean strip on the strip rack whenever you operate it.
 - ▶ Use clean and moistened cotton cloth or wet tissues to wipe it out carefully. Do not use any solvent or cleanser to clean it.

-
- The magnetic rod comes off the magnetic rod frame.**
- ▶ Contact our service center (techsup.eur@mpbio.com)

IMPORTING / EXPORTING THE PROGRAM

1. Accessory

- ▶ AutoMag.rar file (AutoMag 4.1)
- ▶ USB to serial converter driver disc
- ▶ RS-232 transmission cable
- ▶ RS232 - USB cable

2. Install AutoMag Software

- 1 Copy AutoMag.rar to your computer and extract it.
- 2 If you do not have any decompression software, please contact your dealer to obtain the AutoMag Installation files.
- 3 You can run AutoMag software by executing the AutoMag file.
- 4 Key in password to start the software. The default password is “0”. You can set a new password (with no more than 6 numerical digits).

3. Transmission of AutoMag program

- 1 RS-232 transmission cable can be connected to the RS232 port of the PC. The present port is COM1.
- 2 For portable computers without RS-232 port, you can connect the USB cable to USB port. Please install USB to serial converter driver.
- 3 If your computer is using the latest operating system, you can download new USB to Serial converter driver at www.prolific.com.tw.

WARNING

Before using the AutoMag software, change the communication port first. The used USB port can be checked though control/system/device manage/port.

AUTOMAG SOFTWARE

1. Log In

1 Key in Username and Password



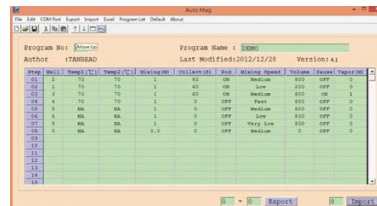
2 Change your Password



3 Confirm your Password

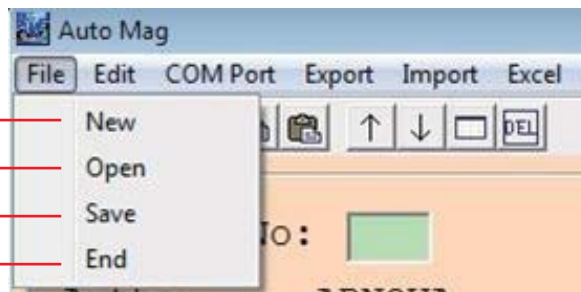


4 Protocol Edit Window



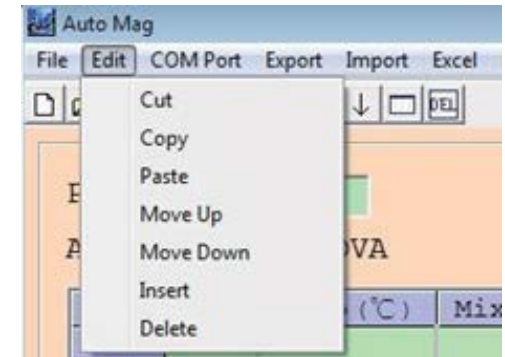
2. File Menu

- Open a new file
- Open an old file
- Save a file
- Close the file



Edit:

- ▶ Cut
- ▶ Copy
- ▶ Paste
- ▶ Move Up
- ▶ Move Down
- ▶ Insert
- ▶ Delete

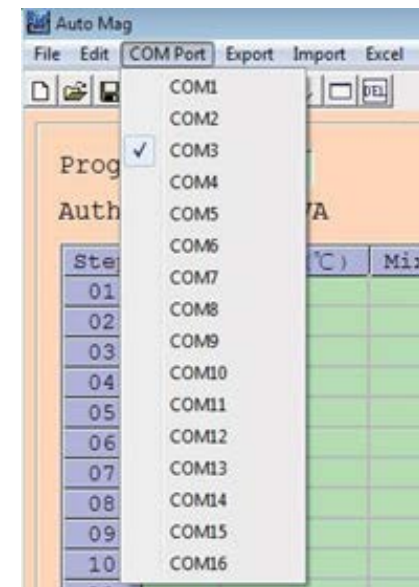


COM Port:

- ▶ Choose a COM port
- ▶ There are 16 COM ports.

COM1 is a preset port.

- ▶ When setting a new COM port, the program can record it, so you do not have to set it again in the next use.



WARNING

The used USB port can be checked in control/system/device manage/ port.





- ▶ **Export:** Export the program from a computer to a machine.
- ▶ **Import:** Import the program from a machine to a computer.

- ▶ **Excel:** Transfer the program data or program list to Excel. Use Excel software to print the program data or program list in machine.



Step	Well	Temp1(°C)	Temp2(°C)	Mixing (M)	Collect (S)	Rod	Mixing Speed	Volume	Pause	Vapor (M)
1	2	70	70	1	60	ON	Medium	800	OFF	0
2	1	70	70	0.1	0	OFF	Medium	100	ON	0
3	3	70	70	0.1	0	OFF	Medium	100	ON	0
4	4	70	70	0.1	0	OFF	Medium	100	ON	0
5	5	70	70	0.1	0	OFF	Medium	100	ON	0
6	6	70	70	0.1	0	OFF	Medium	100	ON	0
7	1	70	70	1	0	OFF	Medium	800	OFF	0
8	2	70	70	1	0	OFF	Low	800	OFF	0
9	3	70	70	1	0	OFF	Very Low	800	OFF	0
10	4	70	70	1	60	ON	Medium	150	OFF	0
11	5	NA	NA	0.1	0	OFF	Medium	800	OFF	0
12	0	NA	NA	0	0	OFF	Medium	0	OFF	0

- ▶ Default: You can build a default parameters table in AutoMag.
- ▶ About: Description of AutoMag version.


3. Usage Instructions and function of icons

- ▶ **Open a new file** 
- ▶ **Open an old file** 
- ▶ **Save a file** 
- ▶ **Cut** 

When you select a certain row, you could cut off a whole row of data. However, if you highlight a certain cell, all you could cut is the data in the field length that you highlight.

- ▶ **Copy** 
- Select a certain row, click  to copy a whole row. However, if you highlight a certain row, you could copy all the data in the field length.

- ▶ **Paste** 

After the actions mentioned above, move to the position that you are going to paste. Click  to paste a whole row of data on the right position.

- ▶ **Move up** 

Move up a whole row of data.

- ▶ **Move down** 

Move down a whole row of data.

- ▶ **Insert** 

Insert a row of blank space

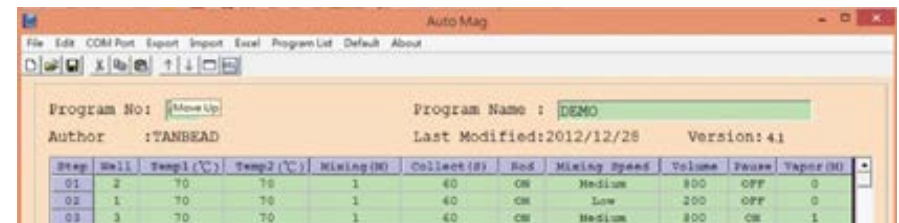
- ▶ **Open a new file**

- ▶ **Open an old file**

- ▶ **Delete** 

You may delete a whole row of data when you select a certain row. However, if you highlight a certain cell, all you will delete is the data in the field length

4. Introduction of program parameters



Program No:

- ▶ You could set 100 programs at most; from 00-99.
- ▶ Use serial numbers as the file names when saving the files.

Program Name:

- ▶ 15 characters at most.
- ▶ Only alphabet letters and numerical digits.

Step:

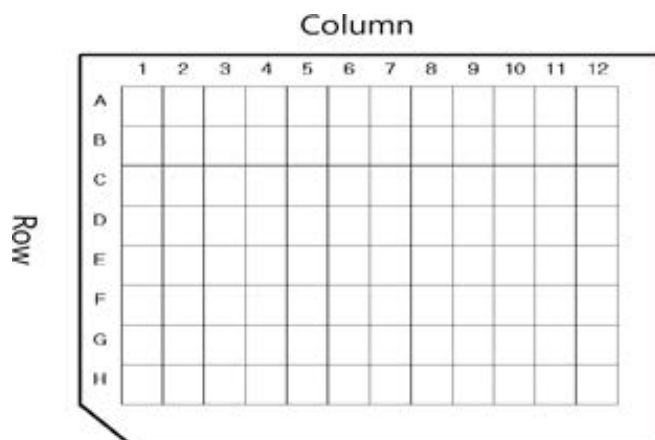
- ▶ You could set 40 steps at most for a program: from 01-40.

WARNING

It indicates the end of program if you input "0" or none in Well parameter.

Well:

- ▶ The maximum number of well for each program is 6 wells. Please refer to the picture of reagent plate below.
- ▶ First group is from column #1 to #6.
- ▶ Second group is from column #7 to #12.



Temp (°C): working temperature of the bottom stainless steel plate.

- ▶ Input numeral from RT to 70 (unit is °C)
- ▶ If you input "999", it will show "NA", and heating system will be turned off.

Mixing (M): working time of the strip.

- ▶ The time you use the strip to mix the solution (minutes).
- ▶ 999 minutes is the maximum.

Collect (S): working time of the magnetic rod.

- ▶ The time you use the magnetic rod to collect the magnetic beads (seconds).
- ▶ 999 seconds is the maximum.

WARNING

It takes 30 seconds for the magnetic rod to reach the lowest position. Therefore, do not set collect time less than 30 seconds.

Rod: Whether to use the magnetic rod or not.

Drop-down list will show "ON" or "OFF".

- ▶ OFF: Magnetic rods stay.
- ▶ ON: Magnetic rods move down to collect magnetic beads.

Mixing Speed: mixing speed of the strip.

- ▶ There are four types of speed in the program.
- ▶ Drop-down list will show highest, medium, slow, or slowest speed.

Volume: Volume of the solution in the well.

- ▶ Ranges from 0 to 1200 (unit is μL)

WARNING

It is recommended to use solution volume of no more than 1000 μL . It may potentially cause cross contaminations with the volume of >1000 μL .

Pause: short stop after finishing the current step.

Drop-down list will show "ON" or "OFF".

- ▶ ON: It will stop after finishing current step.
- ▶ OFF: It will not stop after finishing current step.

WARNING

When you pause, the robot will move to the top and the buzzer will be sounding at the same time.



Stop buzzer: Press the **buzzer button** to stop the buzz.



Stop pause: Press the **pause button** to continue the program.

Vapor (M): Waiting time for the reaction or alcohol vaporization.

- ▶ At this step, it will stop to wait for the reaction or alcohol vaporization to occur.
- ▶ Ranges from 0 to 999 (minute).
- ▶ 999 minutes are the maximum

WARNING

It is recommended to set the time more than 5 minutes for the alcohol to evaporate.

IMPORTANT NOTES

You can use the mouse or keyboard to move the cursor.

- ▶ When using the mouse, you can move the cursor to the place you want to edit, then click left. OFF: It will not stop after finishing current step.
- ▶ When using the keyboard, you can move the cursor to the place you want to edit, then press "Enter".

Step	Well	Temp (L)	Temp (R)	Mixing (M)	Dilution	...				
01	2	TD	TD	1	60	ON	Medium	800	OFF	0
02	1	TD	TD	1	60	ON	Low	800	OFF	0
03	3	TD	TD	1	60	ON	Medium	800	ON	1
04	4	TD	TD	1	0	OFF	Peak	800	OFF	0
05	5	NA	NA	1	0	OFF	Medium	800	OFF	0
06	6	NA	NA	1	0	OFF	Low	800	OFF	0
07	5	NA	NA	1	0	OFF	Very Low	800	OFF	0
08	5	NA	NA	0.5	0	OFF	Medium	0	OFF	0
09										
10										
11										
12										
13										
14										
15										

- ▶ Key in the "Well Number" first, then you can key in other parameters for the setting.
- ▶ Key in every "STEP" in a serial order, you cannot skip any of them.
- ▶ If the number in the blue field exceed the maximum value, press the key "Backspace" to delete the numerical digits.
- ▶ When program setting is done, press "Enter" to confirm. If you want to cancel it, press "Esc". After pressing "Enter", the blue field will disappear, and a dotted-line check will appear. You can move the dotted-line check to the next field that you want to edit and press "Enter" to edit again.
- ▶ When using the mouse, you can move the cursor to the place you want to edit, then click left. OFF: It will not stop after finishing current step.
- ▶ When using the keyboard, you can move the cursor to the place you want to edit, then press "Enter".

Transmitting the program

- ▶ If you want to transmit the program from a computer to a machine, please save the program first, then key in the program number that you are going to transmit.
- ▶ After that, click “Export”. If it is transmitted successfully, a message “Success” will appear in the lower left corner.
- ▶ If it is transmitted incorrectly, a message “Fault” will appear.
- ▶ If you see “File:#.xgp Not Find.”, it means the program has not been saved.
- ▶ Before you transmit a program, please switch on the power system of the machine.
- ▶ You can transmit more than one program at a time.

CONSUMABLES



Name 8-strip A (Cover for Magnetic Rod)
Cat# 117032148
Pack Size 500/box



Name 6-tube format Autotube
Cat# 117032149
Pack Size 96x6/box



Name 16-base (for Autotube)
Cat# 117032150
Pack Size 2 per bag



Name 96 Deep-well Plate (Autoplate)
Cat# 117032151
Pack Size 2 per bag



Need more information for your MPure-32?

Visit our MPure-32 webpage

OR

Watch our instructional video



CONTACTS



Customer Support

Product ordering, order status, invoices and quotes

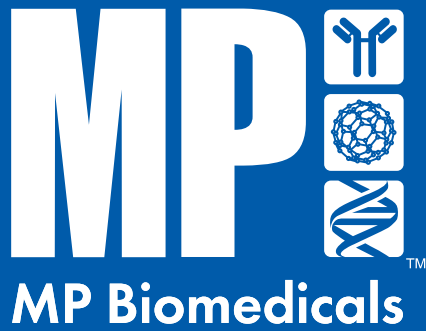
custserv.eur@mpbio.com



Technical Support

Technical questions, product selection, and troubleshooting

techsup.eur@mpbio.com



MP BIOMEDICALS

AMERICAS: 800.854.0530 | custserv.na@mpbio.com

EUROPE: 00800.7777.9999 | custserv.eur@mpbio.com

APAC: +65 6775.0008 | custserv.ap@mpbio.com

www.mpbio.com

