



LBX ELFP - Power supply for electrophoresis

Please read the User Manual carefully before use, and follow all operating and safety instructions!



english

User Manual



Power Output

LBX ELFP - 300 - 001 LBX ELFP - 600 - 001

Preface

Thank you for purchasing our product. Users should read this manual carefully, follow the instructions and procedures, and beware of all the preventive measures when using this instrument.

Service

If help is needed, you can always contact your dealer or Labbox via www.labbox.com

Please, provide the customer service representative with the following information:

- Serial number
- Description of the problem
- Your contact information

Warranty

This instrument is guaranteed to be free from defects in materials and workmanship under normal use and service, for a period of 12 months from the date of invoice. The warranty is extended only to the original purchaser. It shall not apply to any product or parts that have been damaged due to improper installation, improper connections, misuse, accident or abnormal conditions of operation.

For claim under the warranty, please contact your supplier.



SAFETY PRECAUTION



THESE UNITS USE HIGH OUTPUT VOLTAGES. FOLLOW THE GUIDLEINES CAREFULLY TO PREVENT ANY HARM TO YOU AND THE EQUIPMENT.

ANYONE INTENDING TO USE THIS EQUIPMENT SHOULD READ THE COMPLETE MANUAL THOROUGHLY.

THIS PRODUCT IS INTENDED FOR LABORATORY USE ONLY.

- Leave at least 6cm clearance around the power supply and do not block the fan vents at the rear of the unit.
- Always connect the power supply to a three-prong earthed AC outlet, using the cord provided with the power supply.
- Never connect a high voltage output cable to earth ground. This defeats the electrical isolation of the power supply and exposes the user to potentially lethal high voltages.
- Do not operate the power supply in relative humidity >95% or where condensation can damage the electrical circuits or in temperatures below 0°C or above 40°C. Doing so will void the warranty.

<u>Important</u>: this product conforms to the class A standards for Electromagnetic Emissions, intended for laboratory equipment applications. Emissions from this product could interfere with some sensitive appliances when placed nearby or on the same circuit. The user should be aware of this and take appropriate measures to avoid interference.

Introduction

TECHNICAL SPECIFICATIONS

- Type of output: Constant voltage, current or power
- Output range: 1~300 W
- Increment:
 - → 1V
 - → 1mA
 - $\rightarrow 1W$
- Timer range: 1 min ~ 99h 59min
- Display: LCD with backlight
- Output jacks: 4 sets

CHARACTERISTIC FEATURES

- Touch keys
- Dual core microprocessor intelligent control
- Stores up to 10 electrophoresis methods
- Automatic memory function
- Automatic detection of:
 - \rightarrow no-load/over-load
 - \rightarrow short circuit
 - \rightarrow rapid resistance change
 - → electrical leakage
 - \rightarrow system overheating.
- Standard timing operation function
- Fault intelligent prompt functions



Error Alarms

- OVER-LOAD: When the power supply runs with over-load, it will stop automatically and display **ERROR 1!.** Turn the device off immediately.
- NO-LOAD: When the power supply runs with no load, it will stop automatically and display **ERROR 2!**. Turn the device off immediately.

Operation instructions

OPERATING STATE

- This is the regular operating state. The output will be working while in this state.
- Press **Run/Stop** to stop output and go into the Setting State.

SETTING STATE

When the device is turned on, the monitor goes directly into this state.

This state has three parameters:

- 1. VOLTAGE → U = --- V
- 2. CURRENT → I = --- mA
- 3. POWER → P = --- W

The cursor will flash at the parameter being edited.

- Use $\blacktriangle \mathbf{\nabla}$ to adjust the value.
- Press **Enter** to confirm the value and jump to the next parameter.
- Press Run/Stop to leave the Setting State and go to the Operating State.
- Press Edit to go into the Editing State.

EDITING STATE

This state has four parameters:

- 1. SAVE choose the memory program (1-9)
- 2. LOAD choose form 1-9
- 3. TIME T = --:--
- 4. QUIT option to leave the Editing State
- Use ▲ ▼ to adjust the value.
- Press Enter to confirm a value and jump to the next parameter.
- Press Edit to jump to the next parameter (without editing).
- To leave, press Enter when in the QUIT parameter.



Nota importante para los aparatos electrónicos vendidos en España

Instrucciones sobre la protección del medio ambiente y la eliminación de aparatos electrónicos



Los aparatos eléctricos y electrónicos marcados con este símbolo no pueden ser eliminados en forma de residuos urbanos.

De conformidad con la Directiva 2012/19/UE, los usuarios de la Unión Europea de aparatos eléctricos y electrónicos, tienen la posibilidad de devolver sus RAEE para su eliminación al distribuidor o fabricante del equipo después de la compra de uno nuevo. La eliminación ilegal de aparatos eléctricos y electrónicos es castigada con multa administrativa.

Remarque importante pour les appareils électroniques vendus en France

Informations sur la protection du milieu environnemental et élimination des déchets électroniques :



Les appareils électriques et électroniques portant ce symbole ne peuvent pas être jetés dans les décharges.

En réponse à la règlementation, Labbox remplit ses obligations relatives à la fin de vie des équipements électriques de laboratoire qu'il met sur le marché en finançant la filière de recyclage de ecosystem dédiée aux DEEE Pro qui les reprend gratuitement (plus d'informations sur www.ecosystem.eco).

L'élimination illégale d'appareils électriques et électroniques est punie d'amende administrative.

Nota importante per le apparecchiature elettroniche vendute in Italia

Istruzioni sulla protezione ambientale e sullo smaltimento dei dispositivi elettronici:



Le apparecchiature elettriche ed elettroniche contrassegnate con questo simbolo non possono essere smaltite come rifiuti urbani.

In conformità con la Direttiva 2012/19 / UE, gli utenti dell'Unione Europea di apparecchiature elettriche ed elettroniche hanno la possibilità di restituire i propri RAEE per lo smaltimento al distributore o al produttore di apparecchiature dopo averne acquistato uno nuovo. La rimozione illegale di apparecchiature elettriche ed elettroniche è punibile con una sanzione amministrativa.



