Delta Chem Analyzer-XXV

DC-XXV

Operating instructions

Contents

1. Safety

The following symbols mean:

Caution! Read these operating instructions fully before use and pay particular attention to sections containing this symbol.

GENERAL SAFETY
- Operation of the unit must be carried out according to the given operating instructions.
- The unit should be saved from shocks and falling.
- After transport or storage in humid conditions dry out the unit (2-3 hrs) before connecting it to the mains.
- Do not make modifications in design of the unit.

ELECTRICAL SAFETY
- Connect only to a power supply with a voltage corresponding to that on the serial number label.
- Ensure that the mains connector is easily accessible during use.
- Before moving the unit, disconnect the mains supply from the mains.
- If liquid is spilt inside the unit, disconnect it from the mains power supply and have it checked by a competent person.

DURING OPERATION
- Do not check the temperature by touch. Use a calibrated thermometer.
- Do not operate the unit in premises with aggressive or explosive chemical mixtures.
- Do not operate the unit outside the laboratory premises.
- Do not operate the unit which have not been correctly installed or repaired.
- Do not leave the operating unit unattended.

BIOLOGICAL SAFETY
- It is the user's responsibility to carry out appropriate decontamination if hazardous material is spilt on or inside the equipment.

2. General Information

Delta Chem Analyzer DC-XXV is an interferential filter photometer analyzer for clinical chemistry. It performs photometric measurements and computes the results according to programs whose parameters are selected by the operator.
Reckonings are made using the following modes:

-ABSORBANCE
-CONCENTRATION
-KINETIC
-FIXED TIME

25 different programs may be stored.
All programmed tests may be permanently stored in the analyzer.

Disposable micro cells (Cuvette) may be used. The instrument also carries a 12 place cylindrical cell temperature regulated oven. The oven's temperature is equal to the cell compartments and is controlled at 37°C, only with main power supply.

The analyzer is keyboard programmed with the parameters that are prompted by the 32 character alpha-numeric display. Status and error/fault messages are shown on the display.

Analytical results of the tests are directly displayed in the measuring units selected by the current program.

3. Getting started

UNPACKING:
Remove packing materials carefully and retain for future shipment or storage of the unit.

THE UNIT SET INCLUDES:
Delta Chem Analyzer DC-XXV   ……………………………………………………………. 1 unit
Operating Instructions…………………………………………………………………… 1 unit

SET UP:
- Place the unit upon even horizontal non-flammable surface away from any flammable materials (not less than 30 cm);
- Plug the mains power cord into the socket and position the unit so that there is ease access to the instrument.

4. Operation

5. Specifications

The unit is designed for operation in cold rooms and closed laboratory rooms at ambient temperature from +10°C to +40°C.

5.1   Technical specifications

Photometric Unit:
- Light source   2 Watt long life lamp.
- Spectral range   320 to 700 nm.
- Optical filters   340, 405, 505, 546, 578, 630 nm.
- Sensor   Solid state sensor.

Temperature:
- Elements   Dry heating / resistor.
- Temperature value   37°C.
- Temperature stability   ±0.2°C.
- Stability time   10 min.
- Cell compartment   12 cylindrical cells

Measuring system:
- Zero setting   Automatic
- Range   -0.500 to +2.500 OD units.
- Photometric linearity   1%
- Photometric accuracy   ±2% within 0 to 2000 OD range.
- Repeatability   ±1 digit.
- Zero drift   less than 0.005 OD per hour.
- Minimum reagent volume   1ml (0.5ml with micro cuvette)

5.2   General specifications

- Keyboard   16 key.
- Display   16 X 2 line LCD display.
- Power ratings   220V AC 50Hz
- Dimensions
- Weight

5.3　Frequently used terms

- CHECK
  At power ON it means the processor is checking the storage memories and photometer unit

- INSERT PG. CODE < >
  Test code number request for test execution for pressing LIST forces a printout of all stored test programs.