

envoy[®]
CHEMISTRY SYSTEM **500**



VITAL[®]
DIAGNOSTICS

Providing Vital Solutions for Your Laboratory™

Why choose the Envoy 500?

Performance matters.

Faster test results

With the Envoy, you receive test results faster than almost any other bench top chemistry system on the market, allowing you to make you treatment decisions sooner.

Cost Savings

The Envoy 500 was designed to deliver the performance of large floor model analyzers but provide the cost efficiency of a benchtop. From reusable glass cuvettes to low maintenance, the Envoy 500 saves your laboratory money.

Room to grow

No other bench top chemistry system on the market provides the throughput and flexibility of the Envoy 500. When your laboratory needs grow, the Envoy 500 will be able to handle the new workload.

Support you can count on.

Vital Diagnostics' commitment to providing the best service and support in the industry continues with the Envoy 500. When you purchase an Envoy 500 you receive a 1 year warranty which provides you unlimited technical support and on-site service calls as needed, as well as one preventive maintenance visit per year.



Highest quality reagents.

The Envoy 500 uses its own line of reagents that are manufactured, validated and optimized by Vital Diagnostics. This ensures quality results, maximum performance, and the best overall value. The Envoy 500 reagents also feature bar coded labels, allowing the Envoy to efficiently identify each reagent.



All the features you need.

Software



Touch Screen

The Envoy 500 has a built-in LCD touch screen and, is driven by the Windows® 2000 operating system. This provides greater ease of use and space savings by eliminating a bulky external monitor and CPU.

Quality Control

Quality Control results are stored in memory and easily displayed on the screen. QC can be evaluated using up to six Westgard rules and displayed with either Levey-Jennings Graphs or Juden Plots.

Pre-Programmed Parameters

The Envoy Reagent application parameters are pre-loaded into the software, saving you time and eliminating the possibility of data entry mistakes.



Reagent Handling

Large Capacity

The Envoy 500 holds up to 40 individual Envoy reagents (mono or dual), providing a longer walk-away operation.

Refrigerated Reagent Tray

Onboard refrigeration and storage assures reagent stability, which increases reliability of results, while lowering laboratory costs.

Continuous Inventory Monitoring

Continuous inventory monitoring enables the operator to know the number of tests remaining for each reagent, minimizing waste.

Positive Reagent Identification

The reagent chamber contains an infrared barcode scanner capable of scanning Envoy bar coded reagents, automatically recognizing reagent position and lot expiration intervals.



Sample Handling

Sample Wheel

The Envoy 500 sample wheel has 52 positions available for patient samples and 26 for calibrators and controls providing your laboratory high throughput capability. Primary tubes or sample cups can be used, providing the testing flexibility you need.

Liquid Sensor Detection

Liquid sensor detection prevents reporting of invalid results from an insufficient sample. This ensures accurate results and proper treatment decisions.

Positive Sample Identification

The sample chamber contains an infrared barcode scanner, capable of scanning your patient barcodes eliminating the need to manually enter patient information and reducing the risk of sample errors that can cost you time and money.



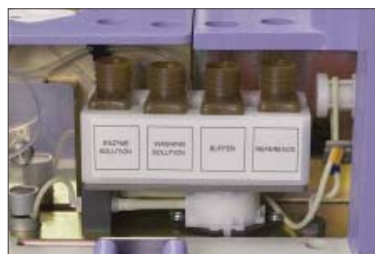
Dry ISE

Dry Electrodes

The Envoy 500 utilizes a proven, dry, solid-state ISE (Ion Selective Electrode) that doesn't need to be kept wet, reducing reagent consumption

Four Parameters

The ISE system has four electrodes, Na^+ , K^+ , Cl^- and CO_2 , providing a complete test panel without adding an enzymatic procedure or using a traditional 'wet' electrode. This significantly reduces costs and maintenance time, while increasing reliability of results.



Reaction Cuvettes

Glass Cuvettes

The Envoy 500 contains 34 reusable glass cuvettes that are automatically washed on board, which eliminates the cost of expensive disposable cuvettes.

Increased Walk-away Time

The reusable glass cuvettes also provide your lab longer walk-away time than a system using disposable cuvettes, which requires you to return to the instrument to reload cuvettes on a regular basis.



Test Menu

General Chemistry Assays

Albumin
Bilirubin, Direct
Bilirubin, Total
Calcium
Creatinine
Glucose
Iron, Total
Magnesium
Phosphorus
Protein, Total
Urea Nitrogen (BUN)
Uric Acid

Enzyme Assays

Alanine AminoTransferase
Alkaline Phosphatase
Amylase
Aspartate Transaminase
Creatine Phosphokinase
Gamma Glutamyl Transferase
Lactate Dehydrogenase

Special Chemistry Assays

Hemoglobin A1c

Lipids Assays

Direct LDL
Triglycerides
Direct HDL
Cholesterol

Electrolyte Assays

Carbon Dioxide
Chloride
Potassium
Sodium

Special Chemistries

Apolipoprotein A1*
Apolipoprotein B*
CRP Wide Range*
CRP High Sensitivity*
Cystatin C*
Digoxin*
Fructosamine*
IgA*
IgG*
IgM*
Phenytoin*
Tegretol*
UIBC*
Valproic Acid*

In Development

Ferritin
Lipase
Microalbumin
Phenobarbital
Theophylline

Technical Specifications

Operative method:

Random access

Kind:

Discrete

Assay Methods:

Clinical chemistry and immunoturbidimetry

ISE Module:

K, Na, Cl, CO₂

Test Modes:

routine, batch, STAT, profiles

Tests on-line:

40 refrigerated reagents (mono or dual)

Programmable tests:

500 single or double reagent

Speed:

330 test/h, ISE module 240 test/hour

Sample rerun and Dilution:

Automatic

Calibration and controls:

Automatic

Reading:

Direct reading in 34 optical glass cuvettes

Sample tray:

78 positions: 52 samples and STATs, 26 STD and controls.

Primary tubes and/or sample cups

Two bar-code readers for samples and reagents

Bar code reader:

From 1 to 100 µl, 1 µl increments

Sample volume:

From 5 µl to 500 µl

Reagent volume:

40 x 27 x 23 inches. Vacuum pump - 8 x 8 x 11 inches (W x H x D)

Dimensions:

110 lbs. Vacuum pump - 10 lbs.

Weight:

Industrial MB Pentium >650MHz IBM compatible

Computer:

> 48x

CD rom:

>10 Gb

Hard disk:

1.44 Mb

Floppy disk:

Color LCD TFT with touch screen

Monitor:

Two serial port RS232C + UBS

Interface:

Inkjet, color, IBM compatible

Printer:

Wireless, IBM compatible

Keyboard and mouse:

For tele-assistance with USB modem

External modem:

Static photometric group (Biotecnica patented)

Optical system:

Halogen lamp 12V - 35W

Light source:

340-380-405-436-480-510-546-578-630-700

Filters:

7 mm ± 1%

Optical path:

From 0 to 2.0 Abs ± 1%; from 2.5 to 3.0 Abs ± 2%

Photometric linearity:

0.001 Abs

Photometric sensitivity:

± 0.0005 at 2.000 Abs

Noise:

Reagent Grade water and surfactant

Kind:

1 liter/500 tests

Use:

From 18 to 35°C

Working temperature:

From 10 to 90%

Humidity:

30 or 37°C ± 0.1°C. Accuracy ± 0.2%

Incubation temperature:

12-15°C (room temperature 25°C)

Refrigeration temperature:

Universal 115-120 VAC with PFC

Voltage:

600 Watt

Power consumption:

*Reagents are available from third party manufacturers. Vital Diagnostics does not manufacture or sell these reagents. All reagents have suggested application parameters only.



**For more information about the Envoy 500, contact your distributor or call
Vital Diagnostics Customer Service at 1-800-345-2822.**

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