### <u>datacolor</u>

## AHIBA IR & IR PRO Industry Proven Lab Dye Machines



### Setting the Standard in IR Dye Machines

- Quality & Durability
- World Class Repeatability
- Temperature & Control Accuracy
- All New Controllers
- Beaker & Substrate Flexibility
- Improved Energy Efficiency
- · Easy to Use

## AHIBA IR

ENERGY EFFICIENT LAB DYER

The Ahiba IR addresses a wide range of dyeing and testing requirements at an affordable price. The unit produces accurate laboratory sample dyeing with the levelness and reproducibility you've come to expect from Ahiba. The Ahiba IR can accommodate many different beaker sizes and quantities maximizing the versatility of the machine.

#### FEATURES

- New Microprocessor Controller New controller interface uses symbols to relay programming information, eliminating the need for language translations.
- Substrate and Beaker Flexibility The design of the unit allows for the widest range of a available beaker sizes that can accommodate many different substrate types. Switching between sizes is very easy. Control algorithms are not affected by the change.
- New Temperature Sensor New design is durable and accurate and gives years of reliable results.
- Low Environmental Impact High efficiency Infrared lamps and high output air cooling system reduce energy consumption.
- Increased productivity in the laboratory Up to 20 dyeing positions available, many beaker sizes available, adaptable as the needs of the dye lab change.
- Low liquor ratio capable Beaker agitation options that offer smooth or aggressive agitation given the specific substrate requirement.
- Increased program storage capability Up to 99 programs of 15 steps available to be stored locally for easy recall.



The Ahiba IR moves the beakers in a circular rotation with advanced infrared heating technology that eliminates glycol contamination and cumbersome beaker cleaning. The specially designed pressure tested beakers offer maximum safety and can be used for atmospheric and high temperature dyeing. Chemical auxiliaries can be easily added through our specially designed beaker lid without removing the lid.





# AHIBA IR PRO

ADVANCED LAB DYER

The Datacolor Ahiba IR Pro gives outstanding performance in any textile exhaust dyeing laboratory. Specific and unique features and attention to accuracy and flexibility make the IR Pro an important tool in everyday laboratory dyeing. For the discerning laboratory that requires their equipment to provide valuable feedback during and about their dyeing process the IR Pro is a great match.

The AHIBA IR Pro has all the features of the Ahiba IR, plus these additional features:

#### FEATURES

• **Consistent Temperature Control** A dye machine must follow the programmed curve as accurately as possible regardless of temperature or beaker load in order to achieve acceptable results. This is a staple in the design of the Ahiba IR Pro as the graph shows.



 Water Cooling for Control in any Environment

High efficiency heat exchanger combined with water cooling deliver optimized control and performance in any lab environment.



#### Proven Repeatability

With Ahiba IR Pro you can dye your samples with the confidence in knowing that years of experience and knowledge have gone into understanding the dyeing process and controlling the variables that can lead to costly re-dyes.

• Touchscreen Color Controller Ease of Use has been a tradition with Ahiba dye machines and the tradition continues with our newest controller. The new touchscreen controller uses icons with text and color schemes laid out in a GPS like color format that makes using the controller very simple and easy to understand.



#### New Controller Algorithms

Ahiba IR Pro contains sophisticated algorithms and control logic to ensure the temperature and time programmed is achieved regardless of beaker size and beaker load. This attention to design excellence sets Ahiba machines above the competition.

• Security

Multi- level user interface gives lab managers the maximum control. Password protected areas ensure your data is protected from editing or deletion.

#### PC Application Software

Adding to the flexibility lab managers can easily create programs and store programs to your local PC, transfer to the controller via a USB flash drive, edit programs from the controller and view log files of the performed process curve.

#### A COMMITMENT TO QUALITY AND SAFETY

### The Ahiba IR and Ahiba IR Pro are certified against the world's toughest standards for safety and compliance including:

- SGS (USTC) mark US approval: UL61010-1 Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use.
- QPS (Canadian approval) Can/CSA C22.2 No. 61010-1 Canadian safety standard
- FCC Part B
- Australian C-Tick
- CE EMC Directive (2004/108/EEC) and Low Voltage Directive (73/23/EEC)
- TUV Rheinland Certification for safety standard compliance

FEATURES COMPARISON	AHIBA IR	AHIBA IR PRO	
Fibers Types	All	All	
Substrate Types	All	All	
Multiple Beaker Size Configuration	<i>v</i>	V	
Wash-Fastness Simulation	<i>v</i>	~	
Minimum Liquor Ratio	1:5 Natural - 1:4 Synthetic	1:5 Natural - 1:4 Synthetic	
Temperature	· · · · ·		
Display Temperature in C° or F°	~	~	
Temperature Range	20° - 140°C	20° - 140°C	
Heating			
nfrared Lamp	ЗКѠ	ЗКѠ	
Heating Gradient	+5.0°C/min	+4.0°C/min controlled	
Beaker-to-Beaker Accuracy	±0.5°C	±0.5℃	
Heating accuracy: isotherm	±2.0°C	±1.0℃	
Cooling	I		
Cooling System	Air	Water/Heat Exchanger	
Movement	I		
Speed	5-50 selectable	5-50 selectable	
Reverse Rotation	Yes-automatic	Yes-selectable	
Dosing	I		
Manual Dosing (injection or membrane)	~	~	
Beakers	I		
	8 x 50 8 x 10	15x 300cc 8 x 500cc 8 x 1000cc 1 x 5000cc	
Controller			
Controller Type	Custom MCU	Custom MCU	
Calibrated Temperature Accuracy	<1°C	<1°C	
Dyeing Temperature Control Accuracy	<±2°C	<±1°C	
Controller Features			
Touchscreen	-	~	
Display Color	Monochrome	Color	
Jisplay Program Graphs		~	
olopiay i rogiani diapno	-	•	
	- 99 programs	99 programs	
Program Storage			
Program Storage External Program Storage	99 programs	99 programs	
Program Storage External Program Storage Record Program Data	99 programs -	99 programs	
Program Storage External Program Storage Record Program Data Controller Multi-Language	99 programs - -	99 programs ✓	
Program Storage External Program Storage Record Program Data Controller Multi-Language Delayed Program Run	99 programs - - -	99 programs ✓ ✓ Yes (7 languages)	
Program Storage External Program Storage Record Program Data Controller Multi-Language Delayed Program Run Manual Mode	99 programs	99 programs Yes (7 languages)	
Display Program Graphs Program Storage External Program Storage Record Program Data Controller Multi-Language Delayed Program Run Manual Mode History File Multi-Level User	99 programs	99 programs	
Program Storage External Program Storage Record Program Data Controller Multi-Language Delayed Program Run Manual Mode History File	99 programs	99 programs	
Program Storage External Program Storage Record Program Data Controller Multi-Language Delayed Program Run Manual Mode History File Multi-Level User	99 programs	99 programs	

#### For more information, please visit www.datacolor.com

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