

AH-490 Series

Automated Programming Equipment

Introduction

AH-490 Series, Customized Automated Programmer, is the leading innovative open-platform product firstly introduced to IC programming industry. Not only does it integrates high-end electromechanical techniques, but it also remains all the advantages of AH-480 including the patented rotary robotic arm with vacuum nozzle at both ends, providing a precise and efficient operating system. With its open platform for different modules and programmers, it enables you to select programmers & modules provided by global makers, maximizing the compatibility and productivity fully according to your needs.

Features

- Open-Platform adopting worldwide programming resources**
 You can choose optional programmers & modules from different IC or programmer makers that meet your requirement the best with a view to fulfilling the needs of customers under any kind of circumstances.
- HDCP Programming Function Supported**
 LEAP Programming Solution not only supports all kinds of file formats but also add functions supporting serial digital encryption.
- All kinds of IC package & packaging**
 Built-in 16 units LEAPER-56 universal programmer to ensure high quality and stability of the programming system.
- Marking machine**
 It supports all kinds of IC packages & packaging methods with various adapters & modules to be chosen. Feeding systems supporting different kinds of packaging with easy replacement are also a main feature of LEAP automated programmers. We believe that only by taking care of the overall process from the very scratch to the ultimate end will we win your full trust on our strong engineering capability.
- Absolute Coordinates & CCD Inspection Systems offering best stability & efficiency**
 Every single coordinate on the platform is thoroughly inspected by absolute precision



Standard Accessories

● AH-490-X:

Not included Tray Transporter

● AH-490B-X:

Included Tray Transporter x 2

※Both of the above include:

- ATM-32 Automatic Taping
- Machine x 1
- Material Recycling Machine x 1
- AH-490 Series Manual x 1
- System Software (USB Disk) x 1
- Custom Programmers 1 set



throughout the whole design & assembly process. CCD inspection system also ensures perfect precision even beyond absolute standards. The highest performance is extracted by all the auxiliary modules and feeding systems integrating and distributing automatic processes including feeding, positioning, classifying, marking, and unloading.

- Smart Software**
 In addition to complete functions for automatic programming, the system control software also provides interface for communication with different measuring equipment and outer handling system, and it saves programming process details & results for data exchanging, all of which are presented in user-friendly display for users to finish configurations and start production within the shortest time.
- Marking**
 Marking accessories can be chosen according to your needs, including dots, numbers and letters.

Optional Accessories

Tape Feeder	ATF-1-XX (XX: Tape Width) Pneumatic Tape Feeder
	ATF-2-XX (XX: Tape Width) Electric Tape Feeder
Taping Machine	ATM-32 (8~32mm Tape Width) Automatic Taping Machine
Tube Feeder	STI-3-XXX (XXX mil: IC Width) Semi-Automatic Tube Feeder
Marking Machine	MK-2 Ink Marker, Replaceable Matrix: Dots, Numbers, Letters
IC Socket	AH-480-XXXXXX (XXXXXX: IC package & Pins, referring to LEAP programmers) IC Socket
Press Bar	AH-480-XXXXXX-XX*XX (IC Package, Pins, Dimensions, Referring to LEAP Programmers)
Precisor	AH-480-XXXXXX-XX*XX (IC Package, Pins, Dimensions, Referring to LEAP Programmers)
Nozzle	

※Please contact Leap representative for correct part numbers of optional accessories.

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For Your Information

You can choose optional programmers & modules from different IC or programmer makers that meet your requirements. By this you will obtain the ultimate solution to automatic programming in the shortest time with best compatibility.



AH-490

Open Platform Series

-B

Platform:

None: Tape in/out

None: Tray in/out

B : Tray in/out

Optional: Tape in/out

-L

Optional Programmers:

B: ELNEC BeeProg

E: ELAN

H: HOLTEK

L: LEAP

P: P&E MICRO

X: XELTEK

Z: ZLG

....continually adding

AH-490P P&E MICRO IC Automatic Programming Equipment



P&E MICRO IC Programming Module

Device Supported

ATMEL

SAM3A,SAM3N,SAM3S,

SAM3U,SAM3X,SAM4E,

SAM4L,SAM4N,SAM4S,

SAMD,SAMG

Freescalo

K0x,K1x,K2x,K3x,K4x,

K5x,K6x,K7x,KEx,KL0x,

KL1x,KL2x,KL3x,KL4x,

KMx,KVx,KWx

NXP

LPC11xx,LPC11xxx,LPC13xx,

LPC15xx,LPC17xx,LPC18xx,

LPC40xx,LPC43xx,LPC8xx

ST

STM32F0,STM32F1,

STM32F2,STM32F3,

STM32F4,STM32L0,

STM32L1,STM32W1

TI

LM3S1,LM3S2,LM3S3,

LM3S5,LM3S6,LM3S8,

LM3S9,LM4F,TM4C123,

TM4C129

Supported Interface

AH-490 Series provides optional automatic input & output methods by Tray, Tape, and Tube.

Marking and surface inspection modules are also supported. Efficiency is assured by easy installation of optional modules.



ATM-32
Automatic Taping Machine
(8~32mm)



STI-3-xxxkit
Semi-Automatic
Tube Loader



STO-3-xxxkit
Semi-Automatic
Tube Unloader



SVS-10
Smart Vision System



ATF-1
Automatic Air Feeder
(8~32mm)



ATT-200
Automatic
Tray Transporter



CCD-1
Coordinate calibration module



CCD-2
Offset correction module

AH-490 Series

Specifications For Operation Platform

Specification

Operating System	U.P.H.	3.0K(Ignoring Programming Time)		
	Positioning Precision	X Axis +/- 0.02mm, R Axis +/- 0.067° Z Axis +/-0.02mm	X Axis +/- 0.02mm, R Axis +/- 0.067° Z Axis +/-0.02mm, Y Axis +/- 0.05mm	
	Operation Area(Max.)	X Axis 350mm, R Axis 330° Z Axis 50mm	X Axis 350mm, R Axis 330° Z Axis 50mm , Y Axis 300mm	X Axis 350mm, R Axis 330° Z Axis 50mm , Y Axis 550mm
	Pick & Place Method	Vacuum Tweezers		
	Device Detection	Vacuum Sensor		
	Dimension(With Alarm)	1160mm (W) x 1500mm (D) x 1800mm (H)		
	Net Weight	~300kg		
Positioning System	Position	Mechanical Positioner		
	Accepted Device Size	30 x 30mm (Max)		
CCD Image	Sensor	CMOS		
Recognition	Dynamic Resolution	5 Mega Pixels		
Feeding System	Tube Input	150mil, 207mil, 300mil, 330mil		
	Tube-Output	150mil, 207mil, 300mil, 330mil		
	Tape Input	12~24mm Tape width Supported		
	Tape Output	12~32mm Tape width Supported (By Pressure-Sealing)		
	Tray In/Out	JEDEC Standard		
Control System	OS	Windows XP		
	Display	17" TFT LCD Monitor		
	Input Device	Keyboard/Mouse		
Requirement	Input	AC 200V~245V, Single-phase, 3 Wires		
	Frequency	50/60Hz		
	Power Consumption	600W		
	Air Pressure	0.6MPa (~6.0kg/cm2)		
	Rated Air Flow	32 Liter/Min.		

Patent Information

Patent certificate No.: M 306360 in Taiwan
 Patent certificate No.: ZL2006-2-0137588.6 in China
 Patent certificate No.: 3129604 in Japan
 Patent certificate No.: US 7830776B2 in America