

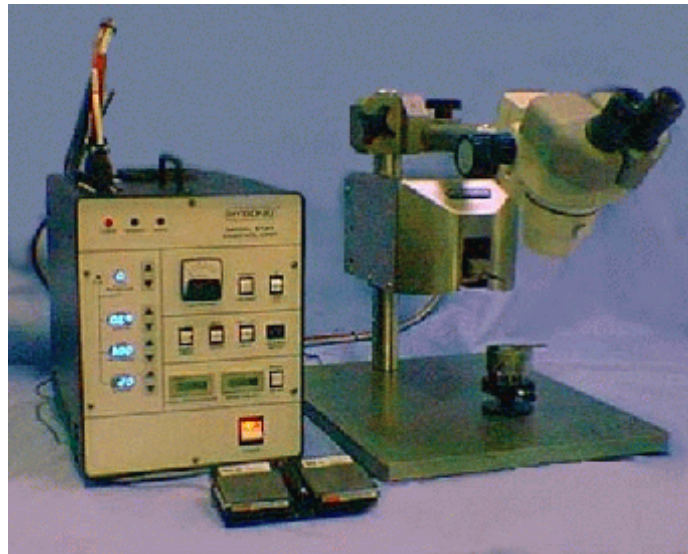
# HYBOND

*Soft Touch*<sup>TM</sup>

## Model 616A-003

### DIGITAL ULTRASONIC PEG BONDER

For 0.5 - 2.0 mil (12.5 - 50 micron) dia. insulated wire, 0.5 - 3.0 mil (12.5 - 75 micron) dia. bare wire and up to 1 x 20 mil (25 x 500 micron) gold or aluminum ribbon/gold plated copper leads



#### STANDARD FEATURES:

- ! HYBOND *Soft Touch*<sup>TM</sup> bond force system.
- ! Servo-motor vertical (Z axis) control.
- ! 0.75 inch vertical bonding window.
- ! Variable height bonding within 0.75 inch.
- ! Search height adjustable in 0.001in. increments.
- ! Hi/Lo U/S power selector (PLL generator).
- ! Digital parameter adjustment in actual units (watts, milliseconds and grams).
- ! Storage for up to ten bond schedules in non-volatile memory.
- ! Wiring for 120VAC 50/60 Hz @ 10 A max.
- ! Dual bond counters record number of bonds performed by bonding tool and total bonds.
- ! Dual footswitch control for bond head vertical (up and down) movement.
- ! Bond head vertical movement can be controlled in fast or slow speeds on manual mode.
- ! Bond level sensor system stops Z axis movement upon contact with bond surface and activates bond cycle.
- ! Deep access when using 0.750in. wedge.

HYBOND's Model 616A-003 ultrasonic single channel peg bonder is designed for ultrasonic bonding of interconnects in applications that do not require the bonder to feed wire. Applications include "tacking" tuning ribbons, insulated wire bonding, flex on flex bonding, pin tab bonding, mesh bonding and ball coining. When fitted with WP-280 and OP-75, the 616A-003 becomes a semiautomatic machine for medium to high volume production.

### Partial List of Available Options:

- ! OP-06S6 Leica Stereo Zoom Microscope.
- ! OP-06A Nikon SMZ660 Microscope.
- ! OP-08B Dual Fiber Optic Illuminator.
- ! OP-12 240VAC 50/60Hz input wiring.
- ! Motorized X-Y tables for automation available.
- ! OP-100 Base Plate and Post (as shown in photograph) for mounting the bond head when not used as a retrofit for a pre-existing table.

- ! OP-101 Microscope Boom Arm and Clamping Block for mounting the microscope to the post (as shown in photograph).
- ! WST-15A Heated Workstage, 2.125 in. Top.
- ! WST-19B Heated Workstage, 4 x 4 in. Top.
- ! WP-102A Manual X-Y table.
- ! PT-X.X Peg Tool (size varies, match to application).

### Specifications for Model 616A-003:

Ultrasonics (U/S):	PLL self tuning 62.5 KHz (nominal) system ( $\pm 2.5$ KHz).
U/S Power:	0-2 Watt on low setting and 0-4Watts on high setting.
Bond Time:	0-900mS.
Bond Force:	25gr-300gr.
Bond Head Movement:	True vertical motorized movement with fast and slow speeds in manual mode or search height pause in auto mode.
Bond Actuation:	Bond height sensor activates bond cycle upon contact with bond surface.
Microscope:	Zoom Stereo-microscope with maximum magnification of at least 60X.
Illumination System:	Illuminator with dual fiber optic "goose necks."
Workstage:	Unheated standard stages or custom stage to match application.
Work Platform:	None (WP-102A or motorized X-Y tables Optional).
Input Power:	120 VAC 50-60 Hz @ 10 A (max.) Standard.
Dimensions:	Bond Head: 13.4 x 6.75 x 6.75 in. (34 x 17.2 x 17.2 cm).
Control Unit:	14 x 9.5 x 11.5 in. (35.6 x 24.1 x 29.2 cm).
Unit Weight:	Approximately 37 lbs. (16.8 Kg.).
Shipping Weight:	Approximately 135 lbs. (61.2 Kg.) depending on accessories.



For more information, contact:

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