

HYBOND

Soft Touch™

MODEL 616B-001 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 wire, ribbon or gold-plated copper leads



STANDARD FEATURES:

- HYBOND *Soft Touch™* bond force system.
- Servo-motor vertical (Z axis) control.
- 1.0in (25mm) vertical bonding window.
- Variable height bonding within 1.0in (25mm).
- Search height adjustable in 0.001in (25um) 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 @ 10A max.
- Dual bond counters record number of bonds performed by bonding tool and total bonds.
- Dual footswitch control for bond head vertical (Z - up and down) movement.
- Bond head vertical (Z) 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 tool.

HYBOND's Model 616B-001 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 a HYBOND motorized programmable X-Y work platform, the 616B-001 becomes a semiautomatic bonder for medium to high volume production.

Partial List of Available Options:

- **OP-06S7E:** Leica S7E Zoom Stereo Microscope.
- **OP-06B:** Nikon SMZ745 Microscope.
- **OP-08A-LED:** Dual Fiber Optic Illuminator.
- **OP-08R1-LED:** White LED Ring Illuminator.
- **OP-12:** Provisions for 240VAC 50/60 Hz operation.
- **OP-46:** 4in Work Height for Taller Parts.
- **OP-47:** Beam Lead Diode Bonding option.
- **OP-54:** Motorized programmable X-Y work platform. Connects to bonder for automatic bond sequencing, joystick control and user interface.
- **WP-CF:** Work platform with custom fixture.
- **Work Stages:** Heated & Unheated available.
- **PT-X.X:** Peg Tool as ordered per application.

Specifications for Model 616B-001:

- Ultrasonic (U/S) System: PLL self tuning 62.5KHz (nominal) system (± 2.5 KHz).
- U/S Power Range: 0-0.2 Watt on low range and 0-4 watts on high range.
- Bond Time Range: 0msec. to 900msec.
- Bond Force Range: 12gr. to 300gr.
- Bondable Wire Diameter: 0.7 to 3.0mil (18 to 76 μ m).
- Bond Head Movement: True linear vertical (Z) 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/overtravel.
- X-Y Work Platform Motion: Manual, 4:1 ratio between manipulator and X-Y table.
- Input Power Requirements: 120VAC 50/60Hz @ 10A (max.) is standard, order OP-12 for 240VAC 50/60Hz.
- Minimum Bench Space Required: Width: 20 in., Depth: 20 in. (50,8cm x 50,8cm).
- Unit Weight: 45 lbs. (20Kg).
- Shipping Weight: 135 lbs. (61,2Kg), shipping weight varies with options ordered.
- Industry Standards: CE.

For more information contact us:



330 State Place, Escondido, CA. 92029, USA

Tel. 760-746-7105 Fax. 760-746-1408

e-mail: mailus@hybond.com or visit us online at: www.hybond.com