## WEST BOND, INC.



4530E - 4630E - 4730E SERIES (High Frequency)

SEMI-AUTOMATIC WIRE BONDERS

Continuing a Tradition of Quality

## 4530E · 4630E · 4730E Series Semi-Automatic Bonders

454730E - Three-Way Convertibility, 45° Wire Feed, 90° Wire and Ribbon Feed, or Ball Bonder 454630E - Two-Way Convertibility, 45° Wire Feed, or 90° Wire and Ribbon Feed 4730E - Single Ball or Ball-Wedge Bonder



**AUTOMATIC PRECISION** at a fraction of the cost. Microprocessor controlled motor drives for both Y and Z axes bond a succession of parallel, single or multiple arched wires maintaining identical loop and bond shapes. Unlimited deep-reach access to bond targets on IC packages of any X-Y dimension with West•Bond's throatless chassis and micromanipulator designs. Ideal for bonding high power, high frequency devices where identical bond and loop shapes are critical.

**CONVERTIBILITY** for angled and vertical wire feed wedge bonding is easily accomplished with a simple change of clamping mechanisms, both of which are included with Model 454630E. Model 454730E expands convertibility with a tool head and EFO assembly for single ball or ball-wedge bonding. All program variables and bond settings for each configuration are retained in memory between conversions.









**PROGRAMMING** for different types of wire connections are entered into separate buffers, each with individual ultrasonic power, time, force (high or low) and loop control data. Each type may have up to 100 bonds, and may be repeated for any number of wires for up to a maximum of 6,000 individual bonds. Program values, action prompts and fault diagnostics are exhibited on the easy to read 4 line, 40 charater LCD sequentially with machine operation.

**ADDITIONAL FEATURES** include 110 kHz ultrasonics, orthogonal X-Y-Z axes with pure vertical Z, color video and microscope targeting, pneumatic braking of X-Y-Z axes during bonding, and built-in tool heat. Available with the base and work platform for tabletop applications, or without base and work platform for mounting above any work handling system.





## STANDARD SPECIFICATIONS

CONTROL LOGIC: Motorola 68000 microprocessor

DATA ENTRY: Keypad -12 keys DISPLAY: 4 line, 40 character LCD DEVICE STORAGE: Battery Backup RAM

MONITOR: LCD Flat Screen TOOL Z STROKE: 0.5 inch TOOL Y STROKE: 0.5 inch

MOTORIZED Z RESOLUTION: 0.000208 inch per micro-step MOTORIZED Y RESOLUTION: 0.000208 inch per micro-step

FORCE RANGE: Adjustable, 10-250 grams, BOND FORCE: High / Low Programmable TRANSDUCER: Full wave, 110 kHz (nominal) ULTRASONICS: Built-in, 8 bit, 3 watts

ESD PROTECTION: Protection against Electrostatic Discharge

BALL FAULT DETECTION: Ball bonder TAIL AND PULL STROKES: Programmable ANGLED FEED TOOL LENGTH: 0.828 inch VERTICAL FEED TOOL LENGTH: 0.828 inch BALL CAPILLARY LENGTH: 0.750 inch

WIRE RANGE: 0.7 to 2 mils, ½ x10 mil gold ribbon (vertical feed) WIRE SPOOL MOUNT: 0.5 inch with ball bearing roller MICROMANIPULATOR: Counterbalanced, single lever X-Y-Z

RADIANT TOOL HEAT: Built-in

WORK PLATFORM: Fixed height. Adjustable height priced separately

MICROSCOPE: Selection available (ESD types available)
ILLUMINATOR: Selection available (ESD types available)
WORK HOLDERS: Selection available (ESD types available)

DIMENSION: W=24.218" x D=22.297" x H=11.000"

WEIGHT: 75 lbs uncreated, or 110 lbs accessorized and created

## www.westbond.com

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