

# GBR MAX GETECH BOTTOM ROUTER - MAX

## TOTAL SOLUTION FOR ROUTER BUSINESS

As a world leader in PCB Depaneling systems, GETECH presents the latest model GBR Max. An in-line fixtureless machine design for routing of Large PCB panels (400mm x 1200mm).



## FEATURES

**FIXTURE-LESS ROUTER**

**HIGH ACCURACY & QUALITY CUT**

**IN-LINE AUTOMATION READY**

**HIGH-SPEED ROUTING & THROUGHPUT**

**AUTOMATIC CONVEYOR WIDTH ADJUSTMENT**

**AUTOMATIC TOOL CHANGE AND TOOL MEASUREMENT**

**HIGH RELIABILITY PCB GRIPPING SYSTEM**

**HIGH-RESOLUTION CAMERA**

**POWERFUL DUAL VACUUM SYSTEM**

**CE CERTIFICATION**



ISO 9001 : 2015 Cert. No.: 622220

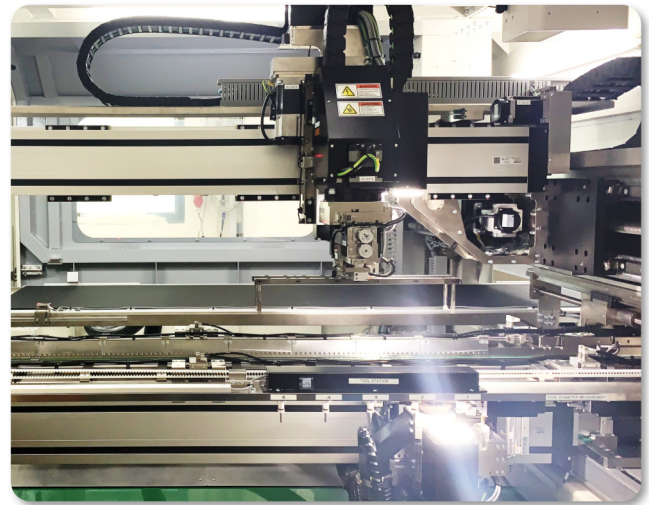
## GBR MAX Getech Bottom Router - Max

The Getech Bottom Router has proven its utility as a PCB Depaneling system and a point of work balance acting as a cutting system, a handling system, a sorting system while keeping the demand for operators to a minimum. As the world of electronics permeates our lives, the demand for miniaturization, smaller and faster is being complimented by larger and longer form factor panels that exceed the norms of manufacture. Many EV and Solar applications have resulted in larger form factor electronics with extreme dimensions. To meet this need Getech launches the GBR Max. The GBR Max can accommodate PCBs unto 1200mm in length.

Unlike many machines designed for large format PCBs, the GBR Max is the only one that uses a multi-stage robotic gripping system to handle the PCB. This means the need for Large, Heavy, and cumbersome fixtures is removed. No Fixtures Required !!! The multi-stage handling means the gripper is positioned at the point closest to the cutting location maintaining PCB stability and minimizing any movement during cutting. An under PCB support mechanism stops the PCB from "Sagging under its own weight" and the output flat belt is stretched to accommodate the total PCB length.

The GBR Max may very well be the largest PCB router in the world – but it is certainly the largest Fixtureless PCB router available today. Another Getech First...

Local Agent:



## SPECIFICATIONS

<b>Routing Capability</b>	Non-Routing Speed	: 800 mm/sec
	Routing Speed	: 100 mm/sec max (depending on material, cutting quality & tool diameter)
	Repeatability	: ±0.1 mm straight lines, curves and interpolated profiles
<b>Manipulators</b>	Configuration	: 9 axis
	Manipulator Motors	: AC brushless servo motors
	Manipulator Repeatability	: ±0.02 mm
	Resolution	: ±0.01 mm
<b>Workstation</b>	Design	: Fixtureless - Bottom Routing
	Panel Positioning	: Conveyor rail clamping (Top and Side) and Board gripping
	Panel Width	: Min. 70mm, Max. 400mm,
	Panel Length	: Max. 1200mm
	Panel Thickness	: 0.8 mm – 4.0 mm
	PCB Max. weight	: 6.0 Kg
<b>Spindle System</b>	Component Height	: Top max. 70 mm, Bottom max. 11 mm
	Spindle Motor	: 0.5 kW spindle with ESD / Ceramic bearings
	Tool Change	: Automatic tool change
	Cooling	: Ambient cooled
<b>Gripper System</b>	Router bit	: Shank size 3.175 mm (1/8")
	Gripper Change	: Manual
<b>Dust Filtration System</b>	Power	: 2 x 2.5 kW rotary vane vacuum blower
	Filtration	: 3 stage filtrations with disposable filter bag (10 microns)
	Vacuum Location	: Bottom vacuum on spindle
	Extraction Hose (x2)	: ID 51 mm (2"), L= 4M
<b>Vision System</b>	Noise Level	: <78 dB
	Video camera	: High resolution CCD video camera : Fiducial Mark Verification/ Confirmation
<b>Programming</b>	System Platform	: Windows ® based Industrial PC (Win 10)
	Product Setup	: Vision assisted point to point manual teaching, vision assisted editing function / test run mode
	Variable Functions	: Tool Diameter Check, Barcode Support (1D or 2D), Auto loading of last product. Other options available.
<b>Operation Monitor</b>	Router Bit	: Tool life tracking, PCB board count, Tool broken sensor
	Vacuum	: Vacuum filter change alarm
	Machine	: Machine error history
<b>Conveyor System</b>	Incoming Conveyor	: Belt Type Edge Conveyor
	Conveyor Width Adjustment	: Automatic (Front Rail – Fixed, Back Rail – Auto Adjust)
	Conveyor Height	: 940mm to 965mm (37" ~ 38")
	Conveyor Direction	: Left to Right
	Outgoing Conveyor	: Flat Belt
<b>Safety Features</b>	Communication	: SMEMA
	"E" Stops, Spindle stop, Spindle motor overheat & Servo overload detection, Enclosed work area with safety doors	
<b>Dimensions &amp; Utilities</b>	Machine Size (W x D x H)	: 1980mm x 1940mm x 1820mm
	Outgoing Conveyor Exposed Length (L)	: Default 1300mm (options available)
	Vacuum Tank Size (Ø x H)	: 2 x 400 mm x 800 mm
	Weight	: Approx. 2010 kg (Main) + Approx. 140 kg (Conveyor, Waste Bin, 2 Tanks)
	Power Supply	: 3-phase, 380~415V, 50 Hz

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