

# **Electric Router**

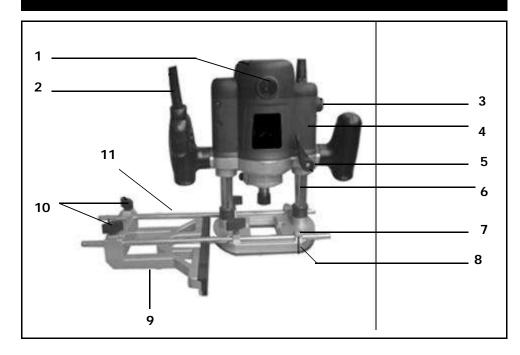


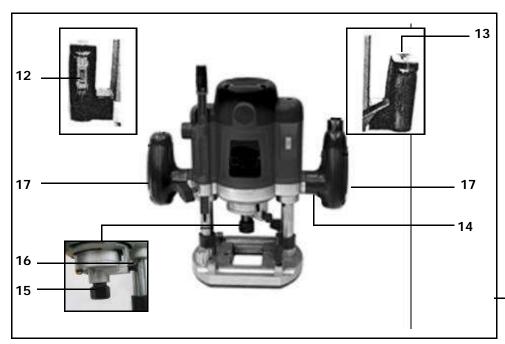
Please read and fully understand the instructions in this manual before operation and keep this manual safe for future reference

FOR HELP OR ADVISE ON THIS PRODUCT PLEASE CALL OUR CUSTOMER SERVICE HELP LINE: 01509 500400

THE MANUFACTURER RESERVES THE RIGHT TO ALTER THE DESIGN OR SPECIFICATION TO THIS PRODUCT WITHOUT NOTICE. PICTURES AND DIAGRAMS ARE FOR ILLUSTRATION PURPOSES ONLY

## GETTING TO KNOW YOUR MACHINE





# **DECLARATIONS**

#### **DECLARATION OF CONFORMITY**

WE

SIP LTD

GELDERS HALL ROAD SHEPSHED LOUGHBOROUGH LEICSTERSHIRE LE12 9NH

Declare that the

Electric Router PT2512 SIP Pt No: 01478

Complies with the following EEC Directives their supporting Statutory Instruments and the relevant standard where applicable:

98/37/EEC Machinery Directive 73/23/EEC Low Voltage Directive

EN 50144-1 EN 50144-2-3

89/336/EEC EMC Directive

EN 55014-1 EN 61000-3-2 EN 61000-3-3 EN 55014-2

Signed:

Joint Managing Director

Date: 5th February, 2004

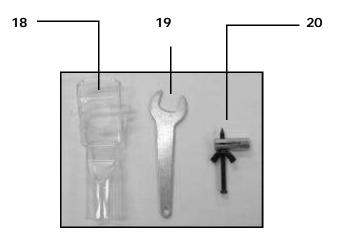


## **PARTS LIST**

1	Dymamic adjusting knob	35	Housing case baffle	68	Steel ball
2	Adjusting pole	36	Circuit board	59	Spring
3	Spring	37	Housing case	70	Rise and drop guilde pole
4	Static adjusting knob	38	Stator	71	Sping of guilde pole
5	Knob rule	39	Wind guard	72	Standing pole A
5	Knob rule scale	40	Self-tapping screw	73	Locating nut
7	Gear knob	41	Bearing	74	Dust ejector
8	Hole stopple of gear knob	42	Rotor	75	Standing pole B
9	Brush holder	43	Plain-head screw	76	Nut
10	Carbon brush	14	Bearing pressboard	77	Knob
11	Brush holder	45	Bearing	78	Spring
12	Label	46	Gear box	79	Base
13	Screw	17	Rotor fixed nut	80	Screw
14	Spring washer	48	Spring	81	Sample compasses
15	Plain washer	19	Radial self-locking pin	82	Base board
16	Height-wcating knob	50	Self-locking block	83	Screw
17	Twist spring	51	Spring washer	84	Spring
18	Copper screw	52	Screw	85	Collet
19	Inner bush of pole	53	Cable	86	Collet nut
20	Guilding bush of standing pole	54	Cable sheath	87	Plain washer
21	Spring	55	Cable pressboard	88	Spring washer
22	Knob	56	Self-tapping screw	89	Screw
23	Handle A	57	Switch side handle A	90	Screw
24	Plain washer	58	Plain washer	91	Plain washer
25	Spring washer	59	Spring washer	92	Leaning board
26	Screw	50	Screw	93	Knob
27	Handle B	51	Switch	94	Spring
28	Self-tapping screw	62	Capacitor	95	Linear moving rack
29	Self-tapping screw	63	Switch side handle B	96	Guilde pole
30	Self-tapping screw	64	Self-tapping screw	97	Screw
31	Back cover	65	Screw	98	Butterfly nut
32	Self-tapping screw	56	Height-setting block	99	Collet bush
33	Self-tapping screw	67	Bush of Height-setting block	100	Level rule
34	Self-tapping screw				

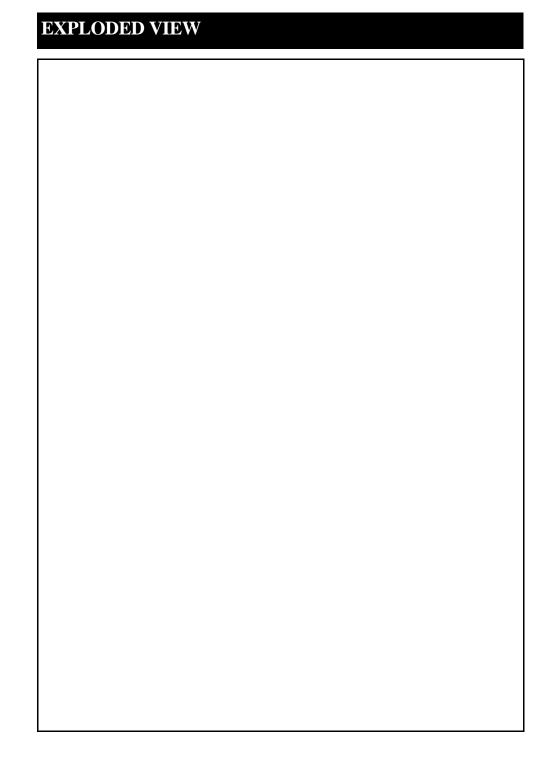
# GETTING TO KNOW YOUR MACHINE

- 1. Motor brush housing
- 2. Mains cable
- 3. Depth adjusting knob
- 4. Depth calibration guide
- 5. Depth limiting screw
- 6. Depth limiting guide rod
- 7. Depth limiting turret
- 8. Base plate
- 9. Parallel fence guide
- 10. Parallel fence guide securing screws
- 11. Parallel guide calibration
- 12. Safety power ON/OFF switch
- 13. Variable speed selector
- 14. Depth locking lever
- 15. Spindle nut
- 16. Arbor lock button
- 17. Handle
- 18. Vacuum adaptor
- 19. Wrench
- 20. Trammel attachment



### **GENERAL SAFETY INSTRUCTIONS**

- 1. **KNOW YOUR POWER TOOL**. Read the owner's manual carefully. Learn the tool's applications and limitations, as well as the specific potential hazards peculiar to it.
- 2. **KEEP GUARDS IN PLACE** and working order.
- 3. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- 4. **KEEP WORK AREA CLEAN**, Cluttered areas and benches invite accidents.
- 5. **DON'T USE IN DANGEROUS ENVIRONMENT**, Don't use power tools in damp or wet locations, or expose them to rain. Keep word area well lighted. Don't use tool in presence of flammable liquids or gases.
- 6. KEEP CHILDREN AWAY. All visitors should be kept safe distance from word area.
- MAKE WORKSHOP CHILD PROOF with padlocks, master switches or by removing starter keys.
- 8. **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was designed.
- 9. **USE RIGHT TOOL.** Don't force tool or attachment to do a job for which it was not designed; for example, don't use circular saw for cutting tree limbs or logs.
- 10. **WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
- 11. **ALWAYS USE SAFETY GLASSES.** Also use face or dust mask if cutting operation is dusty everyday, eyeglasses only have impact resistant lenses, they are NOT safety glasses.
- 12. **SECURE WORK.** Use clamps or a vise to hold word when practical. It's safer than using your hand and it frees both hands to operate tool.
- 13. **DON'T OVERREACH.** Keep proper footing and balance at all times.
- 14. **MAINTAIN TOOLS WITH CARE**. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- 15. **DISCONNECT BATTERY FROM TOOL** before servicing; when changing accessories such as blades, bits, cutters, and the like.
- 16. **REDUCE THE RISK OF UNINTENTIONAL STARTING**. Make sure switch is in off position before the tool is plugged in.
- 17. **USE RECOMMENDED ACCESSORIES.** Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
- 18. **NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.
- 19. CHECK DAMAGED PARTS Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function check for alignment of moving parts binding of moving parts, its operation. A guard or other part that is damaged should be properly repaired or replaced.
- 20. **DIRECTION OF FEED.** Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
- 21. **NEVER LEAVE TOOL RUNNING UNATTENDED**. TURN POWER OFF. Don't leave tool until it comes to a complete stop.



## CLEANING AND MAINTENANCE

#### **CAUTION:**

Ensure that the router is switched off and disconnected from the mains supply before starting any cleaning, or maintenance procedures.

After use, remove the router cutter, the parallel guide and the vacuum adaptor. Thoroughly clean all excess wood chippings and dust from the router, taking special care to clean the cooling vents on top of the motor housing. Clean the spindle and the collet. The two plunge columns should be lightly oiled from time to time. There are no user servicable parts inside this tool. Any worn, or damaged parts should be replaced by qualified personnel.

## TECHNICAL DATA

Model Number	01478
Voltage and Frequency	230V ~ 50 Hz
Power	1500 W
Variable Speed—no load	6000 — 26000 rpm
Max. Plunge Depth	70 mm
Max. Cutting Diameter	32 mm
Sound Pressure Level	91 dB(A)
Sound Power Level	103 dB(A)
Vibration	2.38 m/s <sup>2</sup>

### Accessories

Description	Quantity (pc)	
12 mm Collet (fitted)	1	
8 mm Collet	1	
Dust extraction attachments	1	
Parallel fence guide	1	
Parallel fence fixing rods	1	
Trammel attachment	1	
Follower guide	1	
Wrench	1	

### **ASSEMBLY**

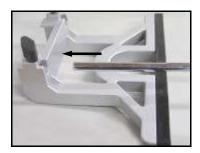
#### **CAUTION:**

Ensure that the router is unplugged from the mains supply before assembling or removing any of its fittings or accessories.

#### 1, Assembly of the Parallel Fence Guide

To assemble the parallel fence guide, proceed as follows:

- 1) Fit the fixing rods to the parallel guide by sliding them through the holes provided on each side of the fence.
- 2) Tighten the fence guide securing screws.

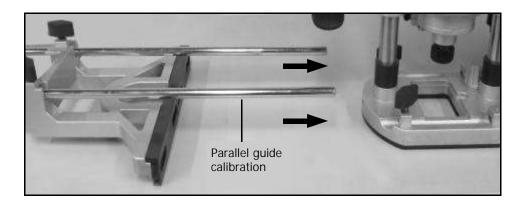




#### 2, Fitting the Parallel Fence Guide to the Router

The parallel fence guide may be fitted to either side of the router. To fit the parallel fence guide proceed as follows:

- 1) Insert the fixing rods through the guide holes in the base plate.
- 2) Using the parallel guide calibration, set the guide to the required setting.
- 3) Tighten the parallel guide securing screws.



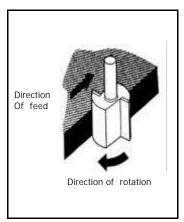
### **INITIAL OPERATION continued...**

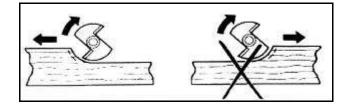
#### 6, Using the Router

To begin cutting proceed as follows:

- 1) Make sure that the depth locking lever is locked.
- 2) Securely fit the appropriate router cutter.
- 3) Select the speed, using the variable speed control.
- 4) Set the depth of cut.
- 5) Fit the vacuum adaptor and if required the trammel attachment, or the follower guide.
- 6) Connect the vacuum adaptor to a vacuum cleaner if required.
- 7) Place the router on the workpiece.
- 8) Switch the router ON and release the depth locking lever.
- 9) Plunge the router to the selected depth and lock the depth locking lever.
- 10) Make the required cut. Cut against the direction of rotation. Feed the cutter into the workpiece at an even pace. If you cut too fast the cut will not be clean. If you cut too slow the workpiece and the cutter will overheat and could be damaged.
- 11) When the cut is complete, release the depth locking lever and allow the router body to rise to the upper position.
- 12) Switch OFF by releasing the switch lever and then remove the router from the workpiece.

When routing along an edge, the direction of the router should be opposite to the direction of rotation of the cutter. This will give the most efficient cutting action and prevent the cutter from snatching. It will also pull the router into the workpiece. The parallel fence guide, or the follower guide will be less likely to move away from the edge of the workpiece. If a deep cut is to be made, work in stages, adjusting the depth of cut with each pass until the required depth is reached. If the material to be cut is thin, clamp a piece of scrap material to the underside for support. When cutting is finished, unlock the depth locking lever and allow the router to return to the upper before switching Off.





### **INITIAL OPERATION continued...**

#### 4, Fitting the Dust Extraction Attachment

To fit the dust extraction attachment, proceed as follows:

- Turn the router over and position the dust extraction attachment over the two fixing holes in the base plate
- 2) Hold the attachment in place with one hand and secure is using the two nuts and bolts provided. The dust extraction attachment may be fitted to either side of the router. The attachment will accept standard vacuum cleaner tube sizes.

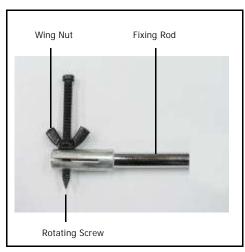


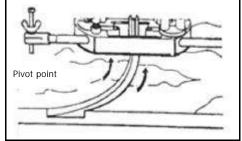
#### 5, Fitting the Trammel Attachment

The router is supplied with a trammel attachment to allow you to cut arcs and circles around a given pivot point.

To fit the trammel attachment, proceed as follows:

- 1) Push the trammel attachment on to the one of the parallel guide fixing rods.
- 2) Adjust the height of the attachment by loosening, or tightening the rotating screw.
- 3) Tighten the wing nut.
- 4) Fix the end of the rotating screw in the pivot point.
- 5) The trammel attachment is now ready for use.





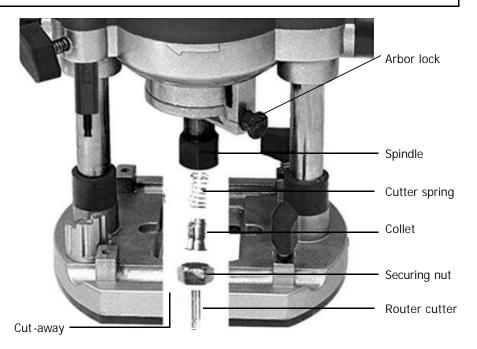
## ASSEMBLY continued...

#### 3, Fitting the Cutter

The router is supplied with one 8 mm and 12 mm collet. The latter being fitted into the motor spindle in production with the cutter spring and the securing nut. In order to fit the cutter, proceed as follows:

- Press and hold in the arbor lock button to lock the motor spindle. The motor spindle may have to be turned in order for the arbor lock button to engage.
- 2) Place the wrench over the securing nut and loosen it. Do not remove the securing nut.
- 3) Make sure the cutter spring, the collet and the securing nut are correctly fitted.
- 4) Insert the cutter through the securing nut and the collet. Do not force or push the cutter too far into the motor spindle. The shaft should enter the collet approx 20 mm long.
- 5) Whilst pressing and holding the arbor lock button, tighten the securing nut with the wrench provided. Ensure the cutter is secure before starting work.

NOTE: If the cutter spring or collet needs to be changed, they must be fitted in the right order and the correct way round.



### **INITIAL OPERATION**

#### 1, To Switch the Router On

The router is fitted with a safety locked off button as an integral part of the switch mechanism.

To switch the router ON, proceed as follows:

- 1) Hold the router handles with both hands. The On/Off switch is located in the center of the right hand handle.
- 2) Press the locked off button downwards.
- 3) At the same time, squeeze the trigger.
- 4) The router will now start.
- 5) To switch Off, release the trigger and the switch will return automatically to the Off position.



#### 2, Adjusting the Variable Speed Control

Adjust the variable speed control wheel to suit the different types of working material. When cutting make sure the cutter is suitable for the type of material, or workpiece being used.

When the MIN setting is selected on the control wheel, the spindle will rotate at 6,000 rpm. When the MAX setting is selected, the spindle will rotate at 22,000 rpm. Different types of materials will require different speeds for the cutter. The required speed also depends on the size of cutter and on how fast the material is being cut. The optimum speed can be determined by testing on a scrap piece of material. Speed selection is a matter of experience, but the table below can be used as a guide. To select the spindle speed, Proceed as follows:

- 1) Hold the router with both hands. The speed control wheel is located on the top of the left hand handle.
- 2) With your left thumb, select the required speed setting.

Material	Cutter size	Speed setting
Hardwood	4-10 mm 12-20 mm 22-30 mm	4-MAX 2-3 MIN-1
Softwood	4-10 mm 12-20 mm 22-30 mm	4-MAX 2-5 MIN-2
Chipboard	4-10 mm 12-20 mm 22-30 mm	2-MAX 1-3 MIN-2

### **INITIAL OPERATION continued...**

#### 3, Adjust the Depth of Cut

To adjust the depth of cut, proceed as follows:

- Make sure that the router is disconnected from the mains supply.
- 2) Release the depth locking lever.
- 3) Loosen the depth limiting screw.
- 4) Rotate the depth limiting turret until the appropriate limiting stop is positioned beneath the depth guide rod. There are 8 positions on the turret.
- 5) Select the required depth of cut by using the depth calibration guide.
- 6) Rotate the depth adjusting knob until the depth guide rod is in the required position. The gap between the bottom of the depth guide rod and the stop on the depth limiting turret will determine the plunge depth.
- 7) When the plunge depth has been selected, tighten the depth limiting screw to secure the guide rod.
- The router cutter will now plunge to the depth selected by the guide rod.
- 9) To lock the cutting depth for continuous operation, push the depth locking lever to the locked position.

