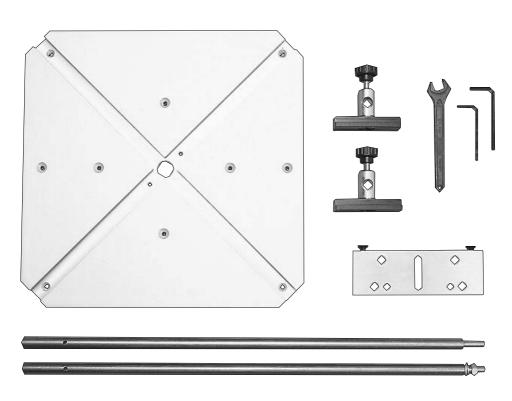




# **ELLIPSE JIG**

**EN** Original Instructions



# **ELLIPSEJ/A**



Thank you for purchasing this Trend product, we hope you enjoy many years of creative and productive use.

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#### **TECHNICAL DATA**

Ellipse size:	max min.	1800mm x 1400mm 700mm x 580mm
Circle size	max min.	1800mm 580mm
Weight		3.2kg

The following symbols are used throughout this manual:



Denotes risk of personal injury, loss of life or damage to the tool in case of non-observance of the instructions in this manual.



Refer to the instruction manual of your power tool.

This unit must not be put into service until it has been established that the power tool to be connected to this unit is in compliance with 2006/42/EC (identified by the CE marking on the power tool) or UK Statutory Instruments 2008 No. 1597 – The Supply of Machinery (Safety) Regulation (identified by UKCA marking on the power tool).

#### **INTENDED USE**

This jig is intended for use with a router fitted with a suitable router cutter to rout ellipses and circles in timber and manmade boards.

# **ELLIPSEJ/A**













#### SAFETY

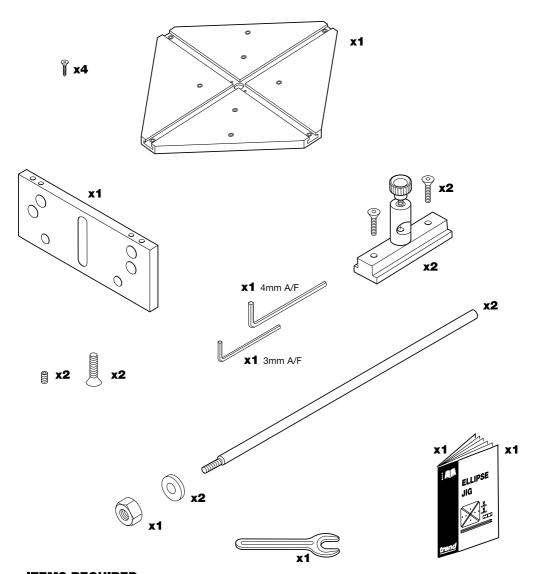
- 1. Disconnect power tool attachment from power supply when not in use, before servicing, when making adjustments and when changing accessories such as cutters. Ensure switch is in "off" position and cutter has stopped rotating.
- 2. Read and understand instructions supplied with power tool, attachment and cutter.
- 3. Current Personal Protective Equipment (PPE) for eve, ear and respiratory protection must be worn. Keep hands, hair and clothes clear of the cutter.
- 4. Before each use check cutter is sharp and free from damage. Do not use if cutter is dull, broken or cracked or if any damage is noticeable or suspected. Only use tools for woodworking to EN847 safety standard. Ensure cutting tool is suitable for application.
- 5. The maximum speed (nmax) marked on tool or in instructions or on packaging shall not be exceeded. Where stated, the speed range should be adhered to.
- 6. Insert the shank into the router collet at least all the way to the marked line indicated on the shank. This ensures at least 3/4 of the shank length is held in collet. Ensure clamping surfaces are clean.
- 7. Check all fixing and fastening nuts, bolts and screws on power tool, attachment and cutting tools are correctly assembled, tight and to correct torque setting before use.
- 8. Ensure all visors, guards and dust extraction is fitted.
- 9. The direction of routing must always be opposite to the cutter's direction of rotation.
- 10. Do not switch power tool on with the cutter touching the workpiece.
- 11. Trial cuts should be made in waste material before starting any project.
- 12. Repair of tools is only allowed according to tool manufacturers instructions.
- 13. Do not take deep cuts in one pass, take shallow passes to reduce the side load applied to the cutter.
- 14. User must be competent in using woodworking equipment before using our

- products. Dress properly, no loose clothing/ jewellery, wear protective hair covering for long hair.
- 15. Consider working environment before using tools. Ensure working position is comfortable and component is clamped securely. Keep proper footing and balance at all times. Check work area for obstructions. Keep control of power tool at all times.
- 16. Please keep children and visitors away from tools and work area.
- 17. All tools have a residual risk so must therefore be handled with caution.
- 18. Only use Trend original spare parts and accessories.

If you require further safety advice, technical information, or spare parts, please call Trend Technical Support or visit www.trend-uk.com



# **ITEMS ENCLOSED**



# **ITEMS REQUIRED**

- Router
- Hand Tools
- Suitable Router Cutter

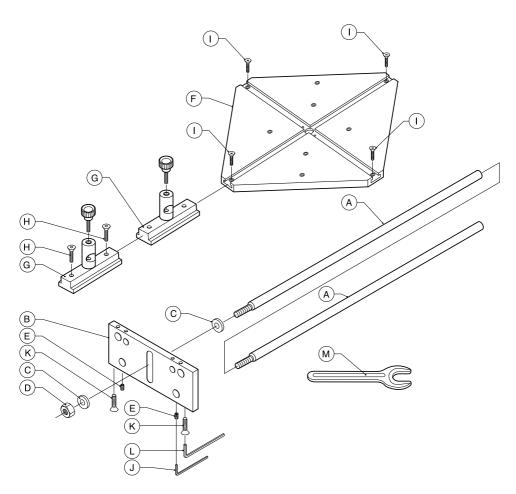


# **DESCRIPTION OF PARTS & ASSEMBLY**

Use the diagram below as a guide to assembling the jig.

- 0 0 10
- A Trammel barB Connector plate
- (C) Washer
- D Nut M8
- (E) Grub screw M6 x 5mm
- F T-slotted main plate
- G Slider

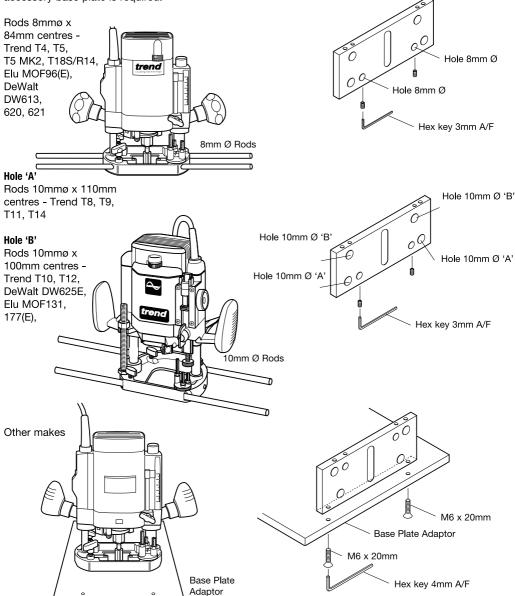
- (H) Circle cutting fixing screws M5 x 20mm
- (I) Mounting screws
- (J) Hex key 3mm A/F
- (K) False base plate fixing screws M6 x 20mm
- (L) Hex key 4mm A/F
- (M) Spanner 13m A/F





# Mounting Router

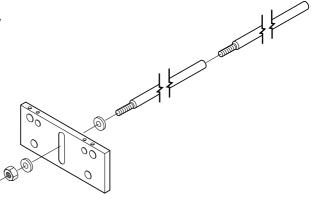
The Ellipse Jig will fit Trend, Elu and DeWalt routers directly. For other makes of router an accessory base plate is required.





# Trammel Bar Assembly /!

- Fit the two trammel bars together by threading the male thread into the female hole.
- Put the washer onto the threaded section of the joined trammel bars and pass the threaded section through the slot in the connector plate.
- Fit the second washer and nut onto the thread and hand tighten.

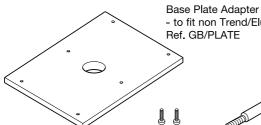


## **Ellipse & Circle Sizes**

Ellipse Major Axis	Ellipse Minor Axis		
	Max.	Min.	
1800mm	1650mm	1400mm	
1500mm	1350mm	1100mm	
1200mm	1050mm	800mm	
900mm	760mm	580mm	
800mm	650mm	580mm	
700mm	580mm	580mm	
Circle Dia. Min.	580mm		
Circle Dia. Max.	1800mm		

#### **ACCESSORIES**

Please use only Trend original accessories.



- to fit non Trend/Elu/DeWalt routers

Extension Bar 500mm - for extra large ellipses and circles.

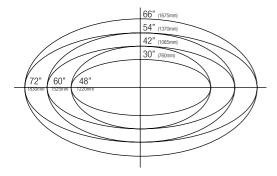
Ref. ELLIPSE/J1



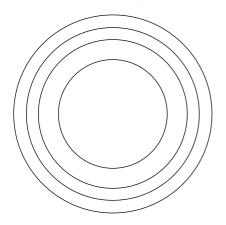
# Ellipse & Circle Look-up Chart

This shows three major lengths of ellipses with the maximum and minimum widths.

Any variation between these sizes can also be produced with this jig.



With circle cutting attachments, diameters of 1850mm or more can be cute, routed or moulded



Minor Axis		Major
Min	Max	Axis
2700	2940	3090
1700	1930	2100
1620	1850	2000
1570	1800	1950
1500	1750	1900
1450	1700	1850
1400	1650	1800
1350	1600	1750
1300	1550	1700
1250	1500	1650
1200	1450	1600
1150	1400	1550
1100	1350	1500
1050	1300	1450
950	1250	1400
950	1200	1350
900	1150	1300
850	1100	1250
800	1050	1200
750	1000	1150
710	950	1100
660	900	1050
610	850	1000
580	800	900
580	760	900
580	700	850
580	650	800
580	610	750
580	580	690

Maximum possible with the addition of one extension bar

Maximum possible with standard 100mm trammel bar





# **OPERATION**







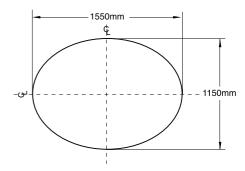




### **Basic Setting Up Procedure**

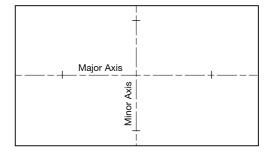
for an Ellipse 1550mm x 1150mm.

Illustrations are symbolic and not to scale.



# **Marking Out**

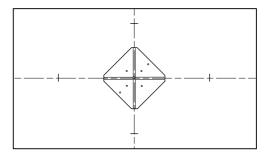
- Determine size of workpiece required.
- Ensure chosen workpiece is sufficiently larger to accommodate the ellipse and support the jig.
- On the underside of the workpiece mark the centre lines for the major and minor axis.
- Mark overall dimensions of ellipse onto centre lines.





#### **Fixing Main Plate**

- Position main plate using the four sighting holes on the perimeter of the main plate.
- Drill four 3.2mm (1/8") diameter holes through the holes of the main plate into the workpiece.
- Using the four mounting screws, fix the main plate to the workpiece.





**Ensure working position is comfortable** and work bench is at a suitable height.



#### **Setting Major Axis**

- Slide the two sliders into each slot on the main plate at 90° to each other.
- Loosen both knobs, A and B.
- Slide the trammel bar assembly with router fitted through the holes in the sliders. Level adjuster plate so that router base is flat on the material. Tighten nut on trammel bar, using the spanner.
- Position the router over major axis mark.
  Slide trammel bar assembly until cutter is positioned over mark, then lock knob 'A'.

#### **Setting Minor Axis**

- Position router cutter over minor axis mark, slide trammel bar assembly until cutter is positioned over mark, then lock knob 'B'.
- Setting up of the Ellipse Jig is now complete.

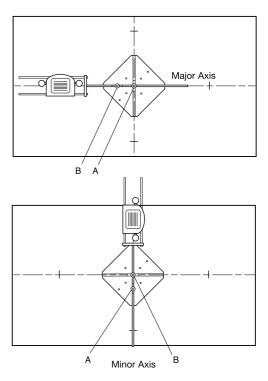


#### **Fixing Methods**

The workpiece should be fixed onto a false or waste piece to stop you damaging your work bench.

There are many methods depending on the application as follows:

- **1.** 'G' clamps should be positioned outside the swing area of the jig.
- Cam clamps are ideal as they will not obstruct the jig. An adjustable camclamp jig can be made for various sizes of ellipses.
- **3.** Double-sided tape (Ref. DS/TAPE) can be used and rolled off easily after operation.
- **4.** Spot gluing with a hot melt glue gun will allow the workpiece to be prized off with minimal surface damage.
- **5.** Panel pins are a quick and easy method providing the small holes are acceptable.





Trial runs should be made on scrap material when first using this Jig.



# **Routing Operation**



- Fit cutter, switch router on, plunge in and make repeat sweeps with the router at 3-6mm steps.
- When routing ensure power cable does not get twisted.



Note that when cutting or central panelling, one can reverse direction of feed to stop the electric cable becoming twisted. However, when edge moulding and cutting, feed direction must be opposite to that of the cutter.



Care should be taken on the last cut prior to break through, as the resultant ellipse or circular plaque or ring can possibly move. Double sided tape can be used to eliminate any danger of this occurring.

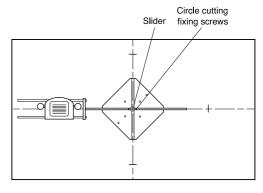
 After cut is complete, release router plunge and switch off router.

# Circle Cutting



- Fit only one slider in the centre of the main plate using the two M5 x 20 countersink machine screws supplied.
- Fit main plate to workpiece. The screws are fitted from the underside and can be tightened using the 3mm hex key.
- · Fit trammel bar assembly.
- Adjust length of trammel bar as required for cutting circles from 550mm to 1800mm in diameter.
- Fit cutter and rout out the circle.
- After cut is complete, release router plunge and switch off router.

After use remove router from jig, remove trammel bars from slider sets and disassemble bars, store jig carefully.



#### **MAINTENANCE**

Please only use Trend original spares and accessories.

This jig has been designed to operate over a long period of time with a minimum of maintenance. Continual satisfactory operation depends upon proper tool care and regular cleaning.

#### Cleaning

- Keep the grooves on the main board clear of sawdust.
- Regularly clean the jig with a soft cloth.

#### Lubrication

· Your jig requires no additional lubrication.

#### Storage

 After use store jig in its packaging or place in a cupboard.

# **ENVIRONMENTAL PROTECTION**



Recycle raw materials instead of disposing as waste.

Packaging should be sorted for environmental-friendly recycling.

The product and its accessories at the end of its life should be sorted for environmentally friendly recycling.

#### WARRANTY

The jig carries a manufacturers warranty in accordance with the conditions on our website

www.trend-uk.com

















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