M POWER™

N.COMPASS™

INSTRUCTION MANUAL

ALL ROUND PRECISION FOR ROUTERS

N·COMPASS™

Component Descriptions (Figs 1 & 2)

Baseplate- The 4mm Baseplate provides a durable low frction surface.

Guide Rods- The Router guide rods lie parallel to the baseplate, and slot through your router base securing the router to the N-Compass.

Bridge- The aluminium bridge supports the two guide rods. The vernier guide rod passes through an 8mm circular hole. The fixed guide rod passes through an 8 x 19mm slotted hole, this allows setting to the guide rod separation of different makes of router.

Bridge Shim pieces- Not normally required, but to cater for different makes of router, the separation between the guide rods and the baseplate may be increased by inserting the spacers provided (fig 1). If these become lost, or for different thicknesses , plywood , thick card or similar sheet material may be used for this purpose.

Micro Adjuster- The aluminium micro adjuster can be rotated for precise positioning of the cutter. This aluminium adjuster is knurled for easy operation. One full rotation of this adjuster will move the cutter by 1.25mm.

Countersunk Pin Holes A & B- Hole A is the standard pivot point for the N-compass (FIG 2), this is positioned close under the Router base enabling circles to be cut from approximately 200mm to as small as 20mm in radius (Fig 3). Hole B is an alternative pin position for larger circles and when using Mod.Rod™ extensions.

Fitting Instructions ⚠

Always ensure that the pivot pin is secured tightly.

Loosen the locknut (Fig 2) with an M8 or 1/2” AF spanner. This allows adjustment for an individual router base and, once set, remains fixed.

Slide your router base onto the guide rods butting your router base up against the bridge.

Lock the router thumb screw onto both guide rods then tighten the fixed guide rod locknut onto the bridge.

Your N.Compass™ should now be ready for use

Note: If the guide rod holes on your router base are higher than the bridge holes your guide rods may be forced out of parallel with the baseplate and the router may jam. If this is the case use the enclosed bridge shim spacers to increase the baseplate to guide rod separation.

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Fig 1 End

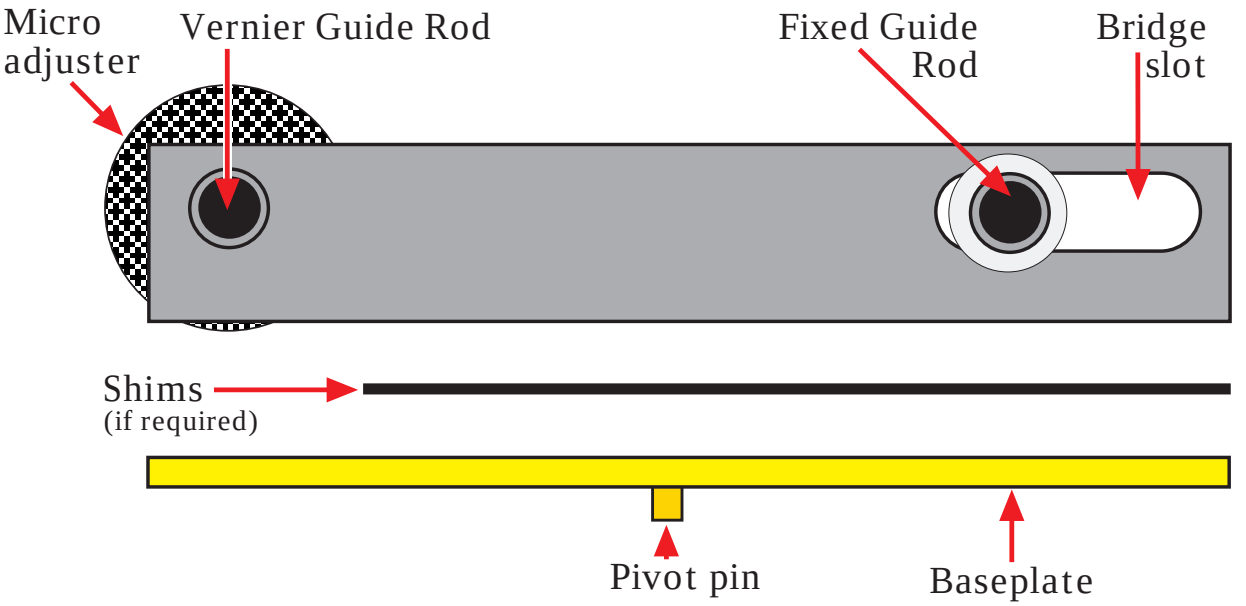
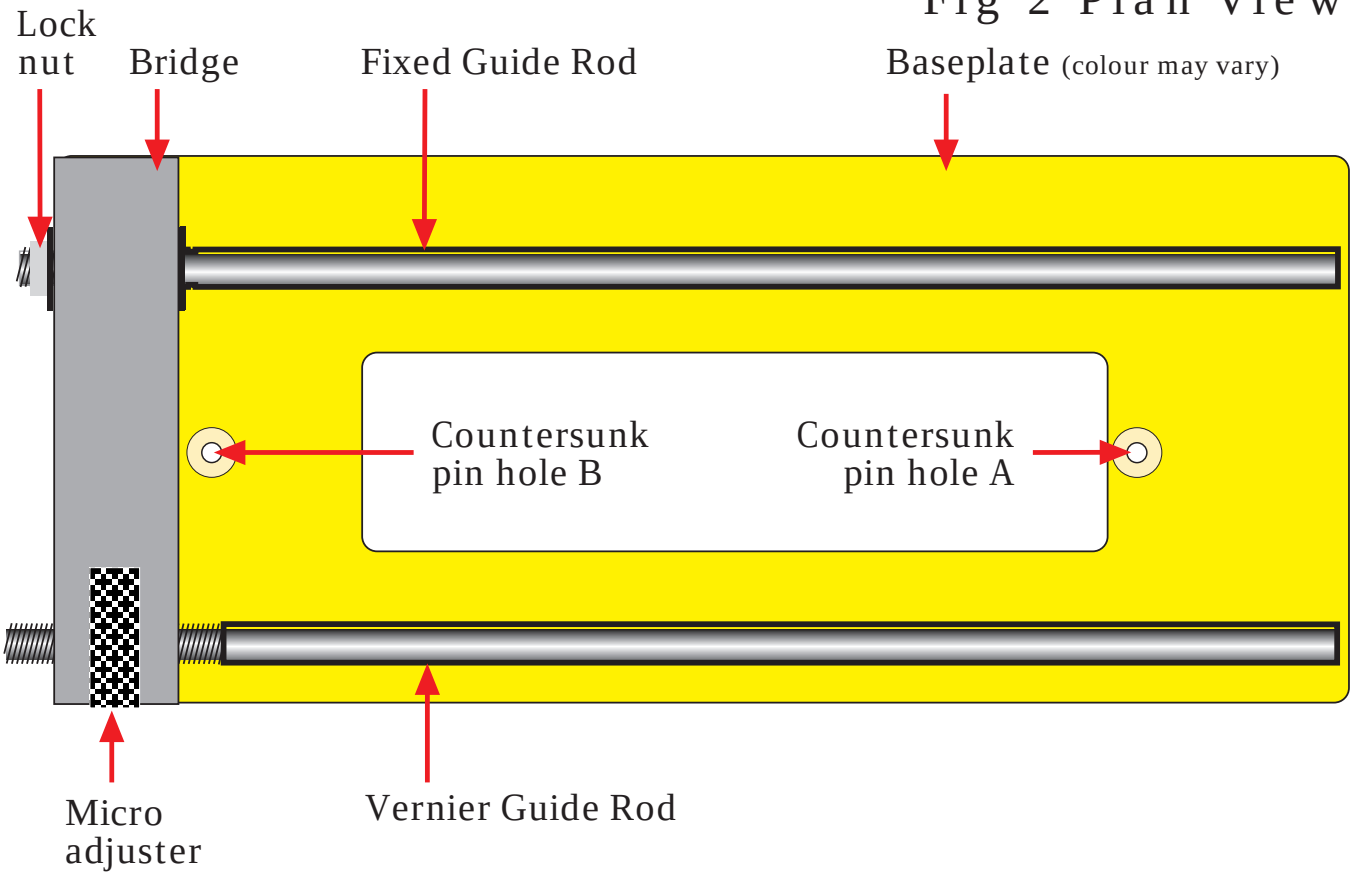


Fig 2 Plan View



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SAFETY

The following symbol is used throughout this instruction manual:-

⚠ Denotes risk of personal injury, loss of life or damage to the tool in case of failure to observe these instructions.

INSTRUCTIONS

Routing a Circle or Arc

Mark out the desired dimensions of the circle/arc on your workpiece.
Drill a 1/4” hole (at least 1/4” deep) in the workpiece at the geometric centre of the desired circle/arc. (see hints 1 & 4)
Place the N. Compass™ and router assembly onto the workpiece, ensuring that the pivot pin is located in the previously drilled hole.
Slide the router along the guide bars to align the router cutter with the marked circle/arc dimensions and lock both router thumb screws.
To use the micro adjustment, loosen the router thumb screw holding the fixed guide rod and lock the router thumb screw holding the vernier uide rod.
Rotate the micro adjuster to align the router cutter precisely with the marked circle/arc dimensions.
Lock the router thumb screw on the fixed guide rod.
Ensure all router thumb screws are secure and the router depth stop is set appropriately.
Proceed to cut by rotating the router around the pivot pin (see hint 3)

Large Radius cutting with M.POWER™ Mod.Rods™

The N.Compass™ is compatible with M.POWER™ Mod.Rods™. Simply screw the Mod.Rods™ into the threaded ends of the N.Compass™ guide rods and you’ll have the facility to rout larger circles.
When using the N.Compass with the Mod.Rod™ accessories, the pivot pin should be positioned in countersunk hole B (Figs 2 & 4). The radius of the cut will be limited by the number of Mod.Rods™ you possess. (see WARNING)

WARNING: Inexpert use of even a small router is potentially dangerous. In some configurations ,use of more than one set of Mod.Rods™ may promote unstable cutting. Do not configure the N.Compass™ assembly such that the cutter is ‘pulling in’ or side loads are applied to the guide rods.

Fig 3 - Cutting small Radius

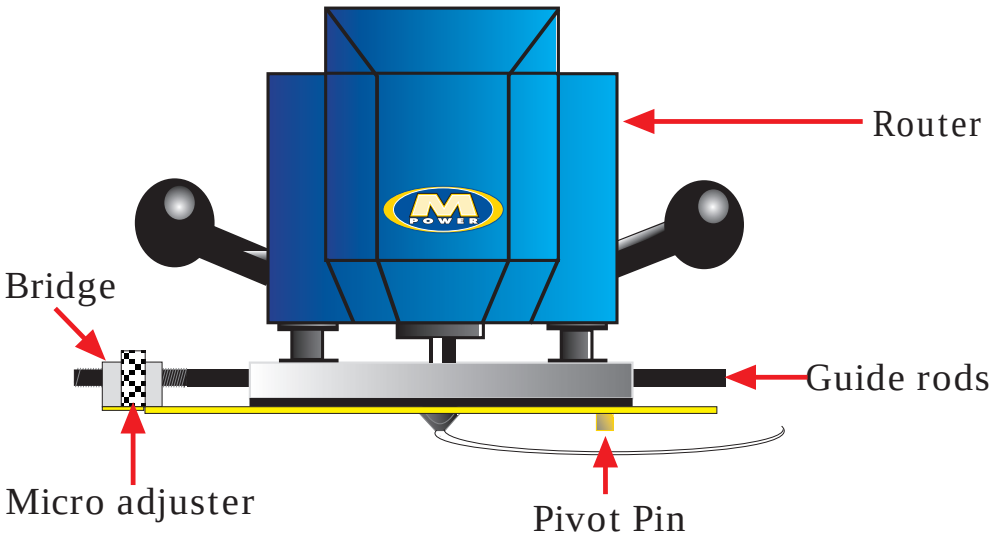
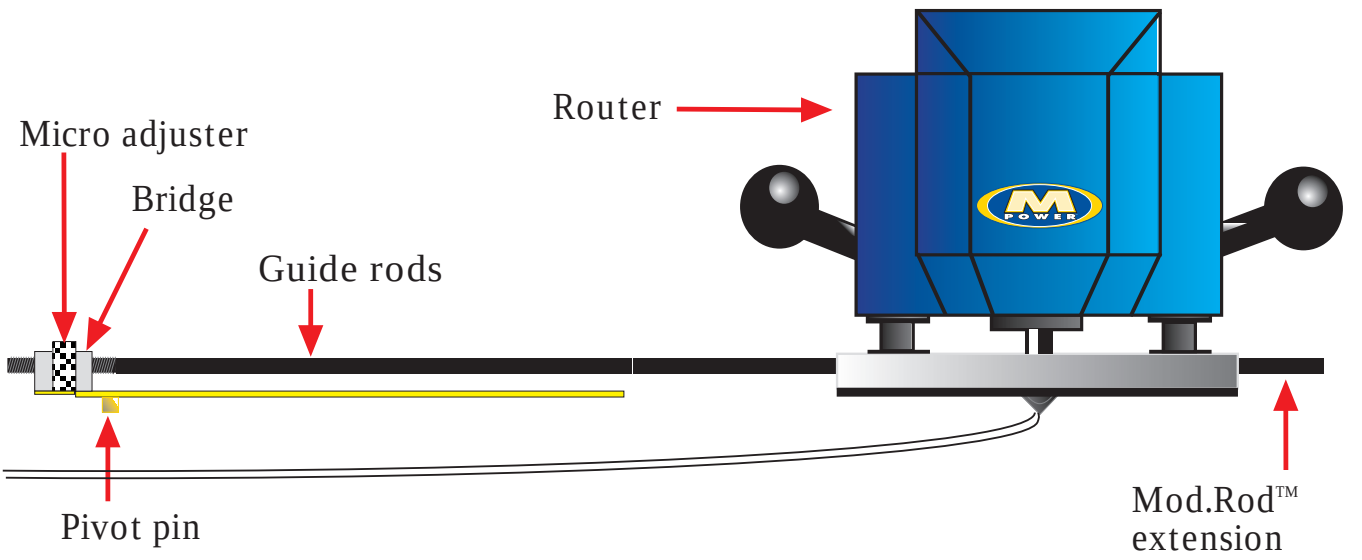


Fig 4 - Cutting Large Radius



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Handy Hints and Safety precautions

1. If a centre hole must be avoided in the workpiece, use a 1/4” (6.35mm) thick overlay secured with double-sided adhesive tape or any similar method - e.g. cramps, screws etc - and drill a 1/4” diameter hole in the overlay.

2. When using the supplied Pivot Pin, always ensure that it is secured firmly to the M4 screw through the baseplate and that there is no tendency for it to ’lift’ out of the drilled hole (see hint 4) .

3. Always ensure that the Router is held in a stable manner; ideally, hold the Router handles as this will ensure that the Router does not tilt or fall. If your position becomes uncomfortable when cutting a curve, stop the Router and reposition for best control before continuing.

4. For difficult or heavy cuts ,the Pivot Pin may be replaced with a countersunk woodscrew secured into the workpiece. This screw should be a snug fit in the Baseplate to avoid ‘chatter’.

5. Until familiar with the ‘feel’ of the N.Compass™ it is best initially to take several shallow cuts.

6. If unsure of any cutting configuration, always seek advice from an expert Router user.

7. Always wear a dusk mask and protective glasses when routing.

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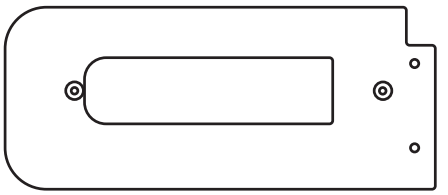
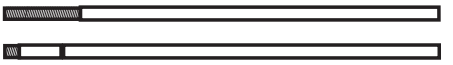
Component listing - (not to scale)

4mm BASEPLATE

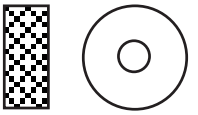


BRIDGE

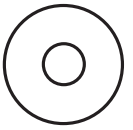
GUIDE RODS (x 2)



KNURLED ADJUSTER



ALI WASHER X 2



LOCK NUT

6mm PIVOT PIN

CIRCLIP

M5 COUNTERSUNK SCREW (x 2)

M4 COUNTERSUNK SCREW

BRIDGE SHIM SPACER
1x1.0mm thick
2x0.5mm thick

NYLON WASHER