INSTRUCTION MANUAL LHS300

LITHEAUDIO

CEILING SPEAKER HOLE SAW

This adjustable hole saw from Lithe Audio is designed to make mess-free, accurate and fast circular holes for ceiling speakers (as well and downlight fittings).

This tool is capable of cutting round holes of 40mm - 300mm diameter with a max. cutting depth of cut -30mm (max. 1 mm in metal)

THIS KIT CONTENTS:

- 2x Tungsten Carbide Tipped blades (TCT) used for cutting aluminium, sheet iron, plastic & wood.
- 2x High Strength Steel blades (HSS)
 used for the cutting of wood and plastics.
- 2x locking key's
- Allen Kev
- Pilot drill bit
- Protection cowl and dust Catcher



BEFORE USE PLEASE READ COMPLETELY AND USE THE PRODUCT IN ACCORDANCE WITH THESE SAFETY INSTRUCTIONS.

CAUTION - READ BEFORE USING THE PRODUCT

- · When cutting into walls, floors or ceilings, ALWAYS check to ensure that no electric cables
- or water pipes etc are in the vicinity of the proposed cut.
- ALWAYS keep the cutting blades sharp.
- DO NOT use undue force, or too great a drill speed (see chart overleaf)
- Ensure the cutting blade holders are tight before use.
- ensure the cutting blades are the correct way round

SETUP

Using the Allen Key supplied, adjust the cutting blade holders so that the cutting blades are at the desired diameter.

The inner edge of the holders should line up with the appropriate graduation on the arm. See diagram A.

It is important to note the orientation of the cutting blades, ensure they are correct. They should both be pointing the same way as in the diagram B.

ASSEMBLING & USING

STFP 1.

With the cutter blades correctly adjusted and holders perfectly secure, slide the spindle through the hole in the protection cowl.

STEP 2.

Slide the compression spring on to the protruding spindle.

STEP 3.

Screw the wing nut on to the threaded end of the spind le in the manner shown so that the assembly is secure.

Attach the assembly to a suitable variable speed hand drill ensuring the spindle is perfectly secure. Select a speed in accordance with the chart below.

Very carefully offer the complete assembly up to the workpiece, switch ON and allow the pilot drill to begin its work.

The protection cowl will quickly come into contact with the workpiece, ensure it is SQUARE.

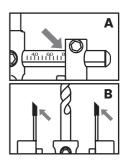
Continue to push the spindle inwards, but DO NOT force it, allow the cutters to come into contact with the work very gently. If the cutters grab, the tool could be wrenched from your grasp. Take care at this point.

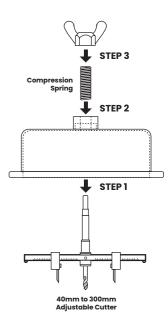
NOTE: Depth of cut may be set by adjusting the compression spring wing nut, noting that it has a left hand thread.

Please note that it is possible to cut material, up to 34mm in thickness. However, th is could cause damage to the perifery of the hole in the material being cut, as the cutting blade holders would create score marks on the surface. It is preferable therefore to restrict cutting thickness to 30mm.

If it is possible to cut from both sides of the workpiece, then the maximum thickness that may be cut is 60mm (or 68mm if scoring of the work is not a problem).

In order to do this, first proceed to cut from one side as described, then using a 8mm drill bit, drill the pilot hole through the remaining thickness. Finally, very carefully cut from the reverse side of the workpiece ensuring the pilot drill of the cutter, neatly enters the pilot hole previously drilled.





CUTTING SPEEDS		
Hole Dia (mm) Drill S	Speed	l (RPM)
40 - 49 mm	800	RPM
50 - 69 mm	600	RPM
70 - 89 mm	400	RPM
90 - 119 mm	200	RPM
120 - 199 mm	100	RPM
200 - 300 mm	50	RPM