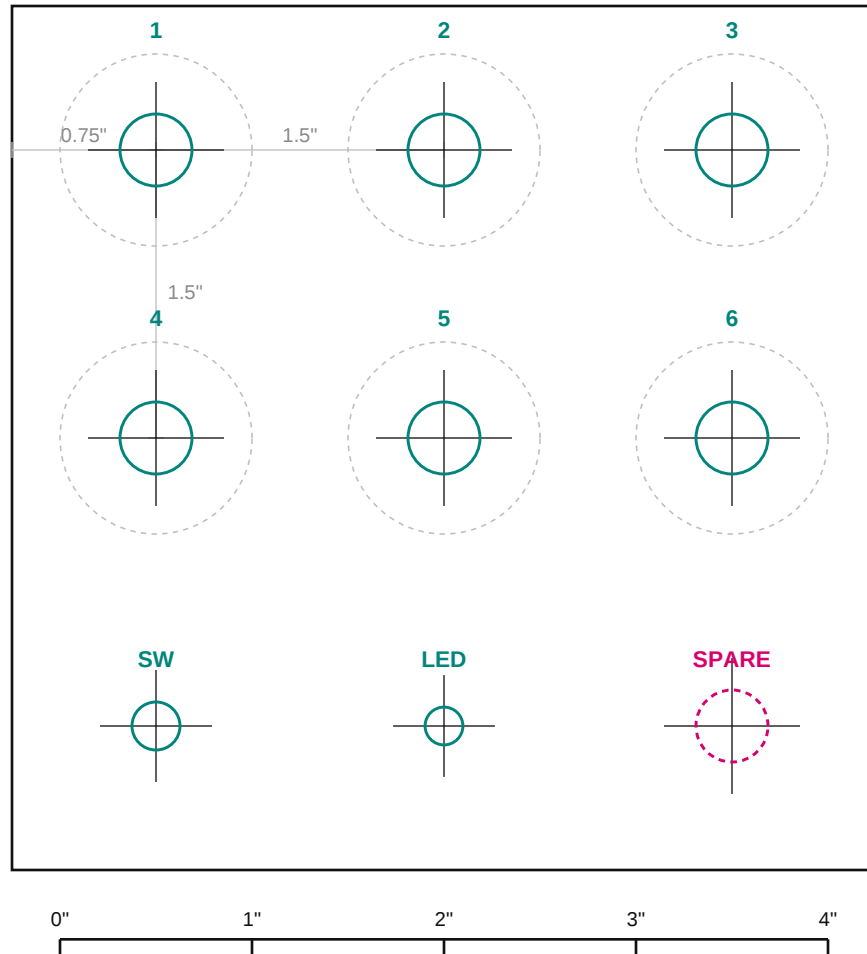


DEAD-BUG HIVE - TIN DRILLING TEMPLATE

4.5" square tin | 3x3 grid, 1.5" centres | 6 pots + power switch + LED + 1 spare



SCALE CHECK - this bar must measure EXACTLY 4 inches (101.6 mm).

Print at 100% / "Actual size" - NOT "Fit to page." The tin square should also measure 4.5".

HOLE SIZES

Pots 1-6	3/8" (9.5-10 mm)	16 mm alpha B-series - measure your bushing, drill one bit larger
SW	1/4" (6.5 mm)	typical mini-toggle bushing - check yours, some are 6 mm
LED	5 mm (3/16")	bare 5 mm LED. Using a bezel/holder instead? That wants ~8 mm
SPARE	3/8" (9.5 mm)	drill only if needed - a 1/4" jack, body contact or CV socket later

DRILLING A TIN - NOT THE SAME AS PLASTIC

1. Tin is thin and it GRABS. Use a step drill (Unibit), not a twist bit - a twist bit will catch, snatch the panel round and tear a triangular hole. This is the whole ballgame.
2. Back the tin with scrap wood and clamp it. Drill through into the wood.
3. Centre-punch LIGHTLY. Tin dents easily - you want a dimple to guide the bit, not a crater.
4. Deburr both sides. Tin throws a razor-sharp burr and this is a box you'll be handling.
5. Check depth before you commit: a 16 mm pot needs ~20 mm behind the panel, plus room for the dead-bug circuit and the cell. Shallow tins run out of room fast.