Table *power and data* integration: cable routes, modules and safety

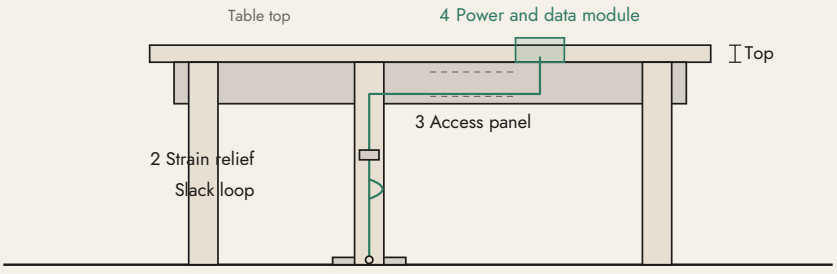
Power and data in a table: the route, the checks and the papers to ask for. Electrical values belong to the electrician.

Compliance guidance. Guidance, not electrical, legal or engineering advice. Electrical values, circuit protection and testing belong to a qualified electrician working to the current edition of BS 7671 and to the product standards that apply. BS 7671, BS 1363 and BS 6396 were not read for this sheet. Check the edition and the status of each with your electrical adviser and building control.

AT A GLANCE

Ref	Decide	Why it matters	Ask the supplier for
1	Where the supply comes from	A floor box, a wall box or a battery decides the cable route and who connects it.	A route drawing from the supply point to the module.
2	Mains, low voltage or both	Mains-voltage items sit inside the electrical safety regulations; a USB-only module still needs a power supply.	A rating plate and the supply voltage.
3	Cable protection and strain relief	Cords in a moving or sat-at table are pulled, trodden on and kicked.	A drawing showing clamps and where the cable is fixed.
4	Cut-out in the top	Stone, glass and veneered tops are weakened by openings and may be tested before cutting.	Cut-out size, edge treatment and the top thickness it was designed for.
5	Heat	Power supplies warm up and sit in closed spaces.	A statement of operating temperature and the clearance round the unit.
6	Access	A failed module should come out without lifting the top.	An access panel or a module that can be reached from above.
7	Spills and cleaning	Restaurant tops are wiped and drinks are spilt.	The protection rating of the module as sold, and the cleaning guidance.
8	Documents	Someone has to be the manufacturer of the finished piece.	Declaration of conformity, instructions, markings and the test evidence behind them.

Example decision list. No electrical values are given on this sheet: they belong to the electrician and the standards named below.



Numbers match the at-a-glance table. Schematic: not to scale, cable sizes and routes are examples.

Cable route into a table, side view. 1 floor box, 2 strain relief, 3 access panel, 4 power and data module. Original schematic by Make Bespoke Studio, not to scale.

SPECIFICATION WORDING

POWER AND DATA ROUTE

Table to be supplied with [power and data modules, number [ ]] fed from [a floor box at the position shown on drawing [ ]]. The supplier is to provide a route drawing showing cable path, strain relief at each entry point, a slack loop of [ ] mm where parts of the table move, and the clearance round any power supply of [ ] mm.

CUT-OUTS AND ACCESS

Cut-outs for modules to be [ ] mm by [ ] mm with edges treated as shown on the shop drawing, in a top of [ ] mm [timber / stone / glass]. Each module to be removable [from above / through an access panel [ ] mm by [ ] mm in the rail] without lifting the top.

CONFORMITY AND TESTING

Power and data modules to be supplied with the supplier's declaration of conformity, instructions and rating plate, and the standards relied on to be listed. The finished table to be handed over with a named responsible manufacturer, a schematic of the internal wiring, and a test record for the supply by a competent electrician. Values and protection to be set by [the project electrician] to the current edition of BS 7671.

TERMS USED

BS 7671
The UK standard for electrical installations in buildings; it governs how fittings are fixed, wired, protected and tested on site.

Floor box
A box set in the floor, with a lid, that gives a table or seat a power and data connection from the building's installation.

Strain relief
A clamp or fitting that holds a cable where it enters equipment, so a pull on the cable is taken by the clamp and not by the connections.

Grommet
A lined hole or ring in a table top that lets cables pass through and protects them from the cut edge.

Declaration of conformity
A document in which a manufacturer states that a product meets the requirements that apply and lists the standards relied on.

Pop-up module
A power or data unit that sits flush in a table top and rises or opens when needed.

STANDARDS AND SOURCES

- Electrical Equipment (Safety) Regulations 2016 (SI 2016/1101): regulation 3 and Schedule 1 read on legislation.gov.uk, 8 Nov 2026.
- BS 7671 (Requirements for Electrical Installations): Not read. Confirm the current edition and amendments with your electrician.
- BS 6396 (electrical systems in furniture): Not read; edition history disagrees between sources. Confirm the current edition on BSI Knowledge.
- IET Wiring Matters, autumn 2010: Electrical fixtures in furniture: read in full; dated, used for scope and direction only.

Full guide: https://makebespoke.com/trade/technical/table-power-and-data-integration. Make Bespoke Studio coordinates manufacture through its partner workshops. Figures are guidance only and your specification governs; some may be superseded, so contact the studio to verify.