



Pluggable Distribution Box PDB

With two outlet blocks and ten plugs

VoltMaster Pluggable Distribution Box (PDB) fits through the cut-out of a standard 75mm light fitting, allowing future access.

Cabling from VoltMaster to PDB

From the remotely positioned VoltMaster transformer, a single feed cable, which can be of considerable length, is installed to run the bulk of the way to a central position with respect to the lamps and light fittings of that particular VoltMaster load circuit. This cable is terminated, **along with the voltage sensing cable**, into the distribution box input terminal. It is at this terminal that a stabilised optimum voltage of 11.8V (23.6V) is delivered.

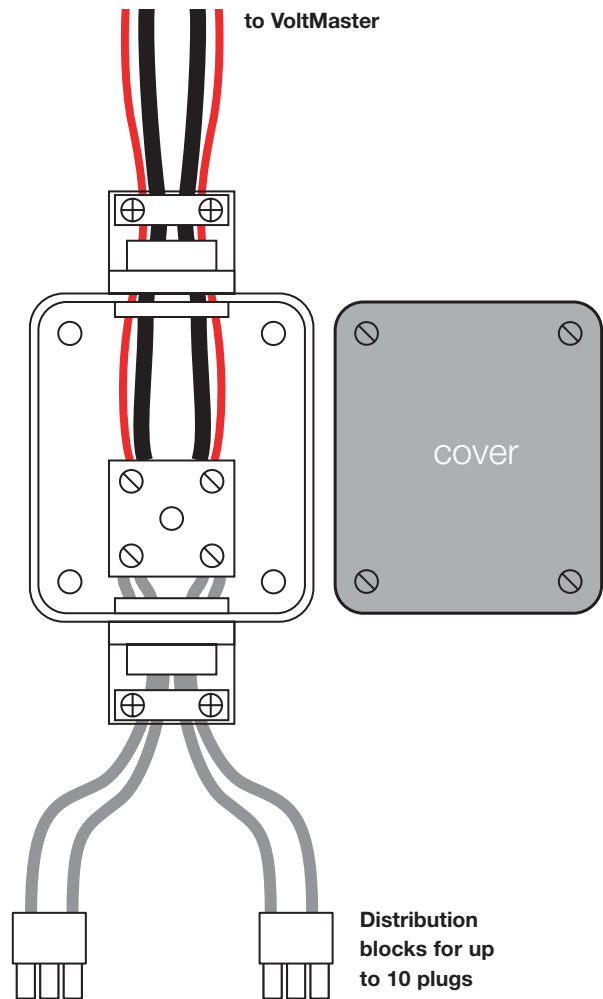
Table A, on the following page, shows the maximum length of this cable for three different size cables for loadings 300W or 400W, for both 12V (standard and extended cable run type) and 24V VoltMaster types.

Cabling from the PDB to the light fittings

Ten commoned pluggable outlets are provided which plug into the distribution 'blocks' (provided pre-wired into the PDB).

Pluggable output connection cables should be prepared, preferably of equal lengths for equal wattage lamps.

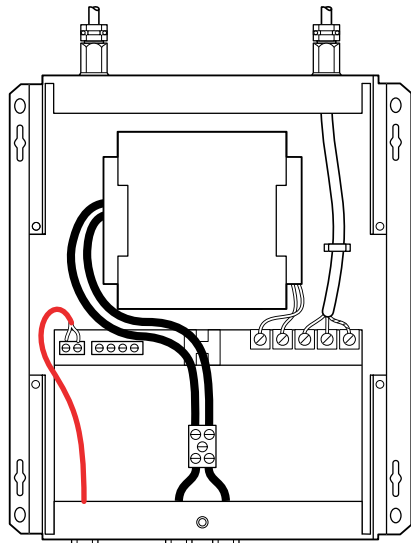
Table B, on the following page, shows the maximum length of these cables for three different fitting loads of 20W, 35W and 50W for 12V, and 50W, 100W and 150W for 24V, allowing the required thickness to be determined. For other loads and sizes refer to Load Wiring Design VMDLW001 and use the General Formula given; (found in the Technical Guides section of the website).



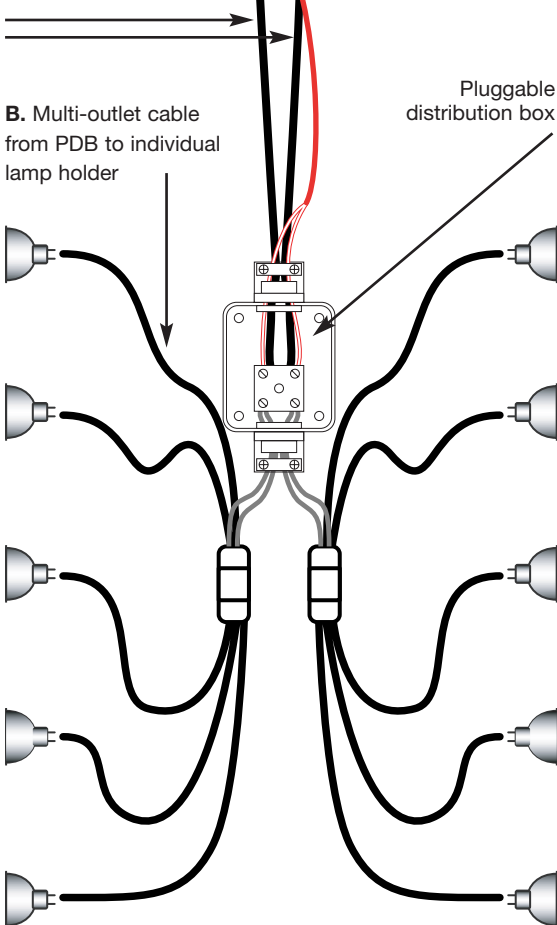


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A. Single overall outlet cable



B. Multi-outlet cable from PDB to individual lamp holder

Pluggable distribution box

A. Single overall outlet cable VoltMaster to PDB

VoltMaster® 12V VMD

Max overall cable length to PDB

Cable size	Max length	
	300W load	400W load
4.0 mm ²	10 metres	7.5 metres
6.0 mm ²	16 metres	12 metres
10.0 mm ²	28 metres	21 metres

VoltMaster® 12V VMDE non standard*

Non-standard: extended cable runs

Max overall cable length to PDB

Cable size	Max length
	300W load
4.0 mm ²	23 metres
6.0 mm ²	37 metres
10.0 mm ²	65 metres

* to be used when cable volt drop is greater than 3V

VoltMaster® 24V. VMD

Max overall cable length to PDB

Cable size	Max length	
	300W load	400W load
4.0 mm ²	40 metres	30 metres
6.0 mm ²	64 metres	48 metres
10.0 mm ²	112 metres	84 metres

B. Multi-outlet cable

PDB to individual lamp holder

VoltMaster® 12V

Multi-outlet to individual lamp holders

Max length from PDB to fitting terminal (metres)

Cable size	50W	35W	20W
	max tolerance length	max tolerance length	max tolerance length
1.0mm ²	2.25 metre	3.25 metres	5.5 metres
1.5mm ²	3.5 metres	5.0 metres	8.5 metres
2.5mm ²	5.5 metres	8.0 metres	14.0 metres
4.0mm ²	8.5 metres	12.5 metres	22.0 metres

VoltMaster® 24V

Multi-outlet to individual lamp holders

Max length from PDB to fitting terminal (metres)

Cable size	150W	100W	50W
	max tolerance length	max tolerance length	max tolerance length
1.0mm ²	3.0 metres	4.5 metres	9.0 metres
1.5mm ²	4.5 metres	7.0 metres	14.0 metres
2.5mm ²	7.0m metres	11.0 metres	22.0 metres
4.0mm ²	11.0 metres	17.5 metres	34.0 metres