

Wieland/Harting 16-Pin Connector Wiring

Subject: Wiring Scheme for 6-Circuit Multicore Cables	
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Connector Wiring

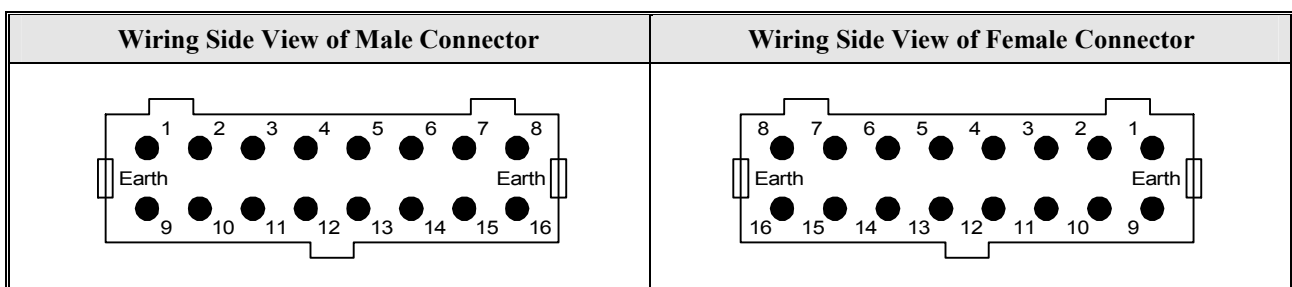
Recommended Wiring Scheme			
Pin	Purpose	Pin	Purpose
1	Phase 1	9	Neutral 1
2	Phase 2	10	Neutral 2
3	Phase 3	11	Neutral 3
4	Phase 4	12	Neutral 4
5	Phase 5	13	Neutral 5
6	Phase 6	14	Neutral 6
7	Earth	15	Earth
8	Earth	16	Earth
Shell	Earth	Shell	Earth

Alternative Wiring Scheme			
Pin	Purpose	Pin	Purpose
1	Phase 1	9	Phase 4
2	Neutral 1	10	Neutral 4
3	Phase 2	11	Phase 5
4	Neutral 2	12	Neutral 5
5	Phase 3	13	Phase 6
6	Neutral 3	14	Neutral 6
7	Earth	15	Earth
8	Earth	16	Earth
Shell	Earth	Shell	Earth

Notes:

1. There is no standard wiring scheme for these connectors in the stage lighting industry, however the recommended scheme above is most commonly used. All cables manufactured by Adena use the recommended wiring scheme.
2. Some rental companies use the alternative wiring scheme shown above and some “abuse” the sixteen-pin connector by using it for ten or twelve channels with shared neutrals. Another alternative wiring scheme provides eight channels wired as for the recommended wiring scheme above but with pins 7 & 15 for phase and neutral 7 respectively, and pins 8 and 16 for phase and neutral 8 respectively.
3. All pins are wired through the multicore cable pin for pin (pin-1 to pin-1, pin-2 to pin-2, pin-3 to pin-3, etc).
4. Select cable types with a minimum of sixteen conductors plus an earth conductor. If possible use a cable type that has seventeen or eighteen conductors plus an earth and wire the extra conductors in parallel with the earth conductor to improve the current carrying capacity of the earth.
5. All earths should be connected together but ONLY in the spiders, NEVER in the multicore cable.
6. The cables must be PAT tested and tagged to AS/NZS 3760 by an electrician or electrical service technician.

Connector Pins Layout



WARNING Do NOT mix the tails for multicore cables from different manufacturers and/or rental companies unless you have tested and are certain they are all wired according to the same wiring scheme. If the tails from two different wiring schemes are plugged onto opposite ends of a multicore cable a life threatening electrical hazard will result and serious damage to other connected equipment is likely.