

RECOMMENDED CABLE TYPES FOR NETWORKS

Please note that these recommendations are for the Rapid lighting control system only. It is always the electrical installer's responsibility to ensure that the control system is installed in a safe manner using suitable equipment in line with the latest edition of the electrical regulations.

These cable types have been tested and approved for use with Rapid systems. Should any other non-approved cable type be used then CP Electronics will not accept responsibility for non-functioning systems.

Use cable with a relatively low capacitance of about 50 nF/km (pF/m).

UTP (unscreened twisted pair) cable is preferable to STP (screened twisted pair) as it can be used for longer runs. If you use screened cable, screen should be trimmed back and not connected.

Make sure that the cable you choose is appropriate to the situation - some types must not carry mains power.

Recommended cable options in order of preference:

Floor networks

Preferred cable type	Rapid network connection cores	Suitable to run with mains?
Cat5e	<ul style="list-style-type: none"> CAN A = white/blue and blue CAN B = white/orange and orange 	No
Cat6	<ul style="list-style-type: none"> CAN A = white/blue and blue CAN B = white/orange and orange 	No
Belden 8719	<ul style="list-style-type: none"> CAN A = white CAN B = black 	Yes
Belcom 4969	<ul style="list-style-type: none"> CAN A = white/blue and blue CAN B = white/orange and orange 	Yes

Backbone networks

Preferred cable type	Rapid network connection cores	Suitable to run with mains?
Cat5e	<ul style="list-style-type: none"> CAN A = white/blue and blue CAN B = white/orange and orange Ground = white/green and green 	No
Cat6	<ul style="list-style-type: none"> CAN A = white/blue and blue CAN B = white/orange and orange Ground = white/green and green 	No
Belcom 4969	<ul style="list-style-type: none"> CAN A = white/blue and blue CAN B = white/orange and orange Ground = white/green and green 	Yes

DALI networks

Preferred cable type	Rapid network connection cores	Suitable to run with mains?
Belden 8719	<ul style="list-style-type: none">• Da or D- = white• Da or D+ = black	Yes

About DALI cable

DALI is isolated from mains by a level of insulation which is not sufficient to provide safety against electrocution. DALI is designed to run in the same cable as mains (on different cores).

Cross sectional area of cable	Maximum length
1.50mm ²	300m
1.00mm ²	150m
0.50mm ²	100m