

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.

Ensure the cable chosen are appropriately rated for install to run with mains cables if they are be installed within the same compartments. Otherwise they may need to run within data voltage rated cables instead.

Recommended cable options in order of preference.

Backbone network cables

Preferred cable types	Network connection cores	Suitable to run with mains?
Cat5e UTP 600v	CAN A = blue and white/green CAN B = orange and white/orange 0v = green and white/blue	Yes
Cat5e UTP	CAN A = blue and white/green CAN B = orange and white/orange 0v = green and white/blue	No
Belden 8719NH.00305 (600v)	CAN A = white CAN B = black 0v = drain wire (screen)	Yes

Floor network cables

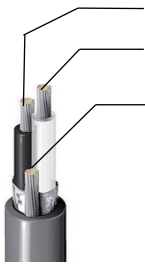
Preferred cable types	Network connection cores	Suitable to run with mains?
Belden 8719NH.00305 (600v)	CAN A = white CAN B = black 0v = drain wire (screen)	Yes
Cat5e UTP 600v	CAN A = blue and white/green CAN B = orange and white/orange 0v = green and white/blue	Yes
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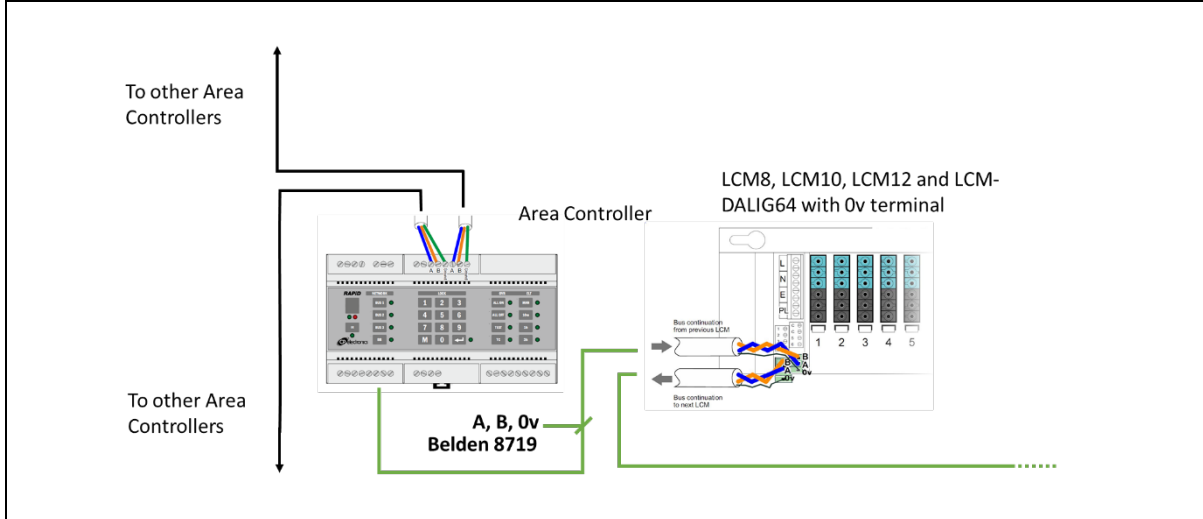
DALI network cables

DALI bus is intended to be installed within mains rated containments and MUST therefore be given the same insulation safety considerations against electric shocks as that of mains cable.

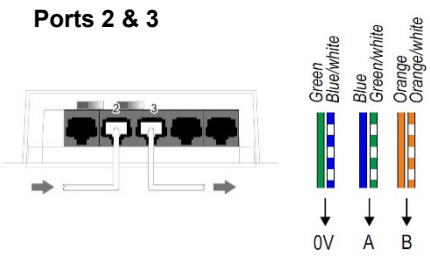
Preferred cable types	Distance	Network connection cores	Suitable to run with mains?
Belden 8719 (600v) 16 AWG	300m	Da or D - = white Da or D+ = black Drain wire (screen) unconnected	Yes
FS Cable 1801PUYH01 18 AWG (1.3 sq mm)	200m	Da or D - = black Da or D+ = red	Yes
Generic 600v cable 1.5 sq mm 1.0 sq mm 0.5 sq mm	300m 150m 100m		Yes

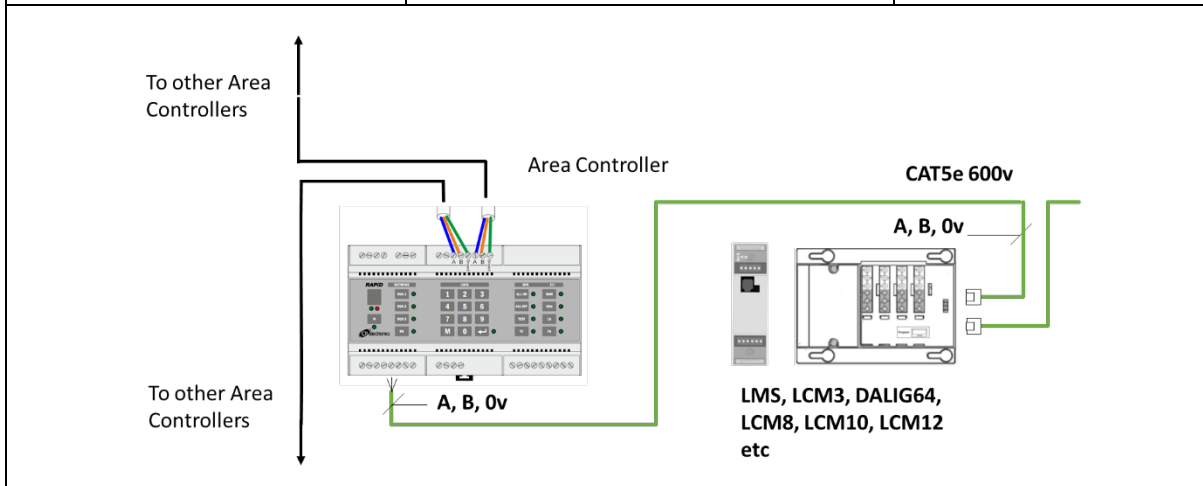
Floor network bus details - Belden cabling

Recommended Cable	RAPID network connection cores	Suitable to run with mains?
Belden 8719NH.00305	 <p>Black wire – CAN B White wire – CAN A Drain wire – 0v</p>	YES

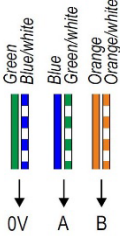


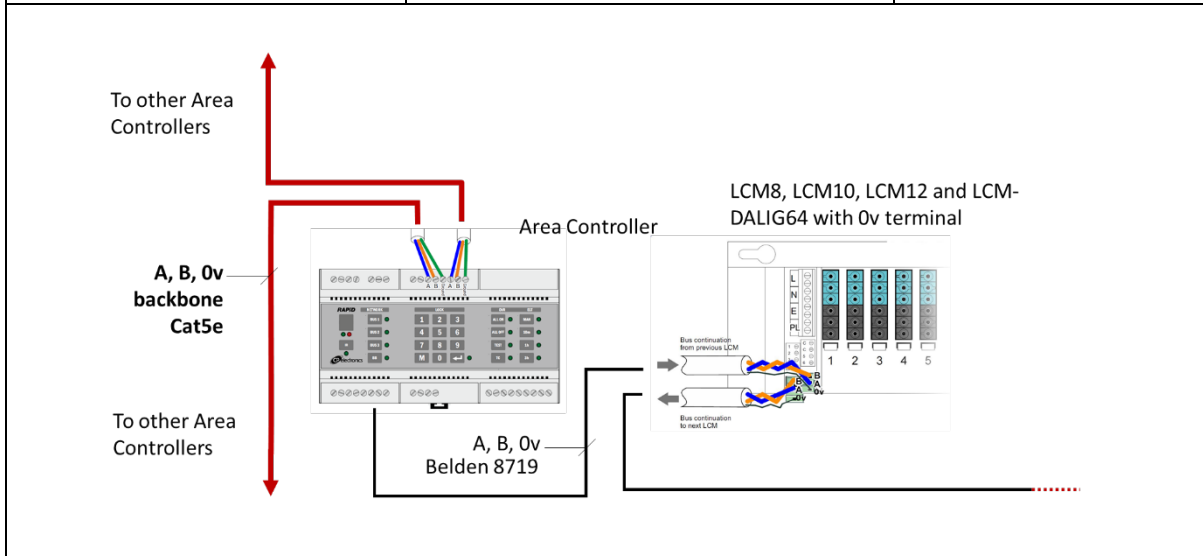
Floor network bus details - CAT5e patch cabling

Recommended Cable	RAPID network connection cores	Suitable to run with mains?
CAT5e (600v preferred)	<p>Ports 2 & 3</p>  <p>Green/Blue/White Blue Green/White Orange/Orange/White</p> <p>0v A B</p>	NO (Unless industrial 600v CAT5)



Backbone network bus details – CAT5e cabling

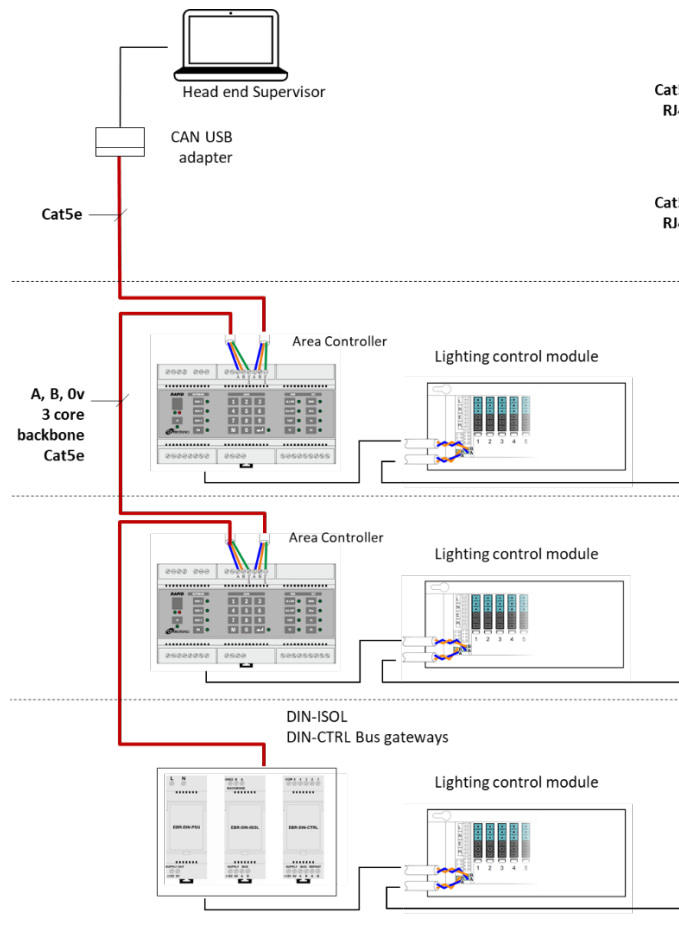
Recommended Cable	RAPID network connection cores	Suitable to run with mains?
<p>CAT5e 6-cores used (3 main + 3 backup)</p>		<p>No (unless 600v rated)</p>



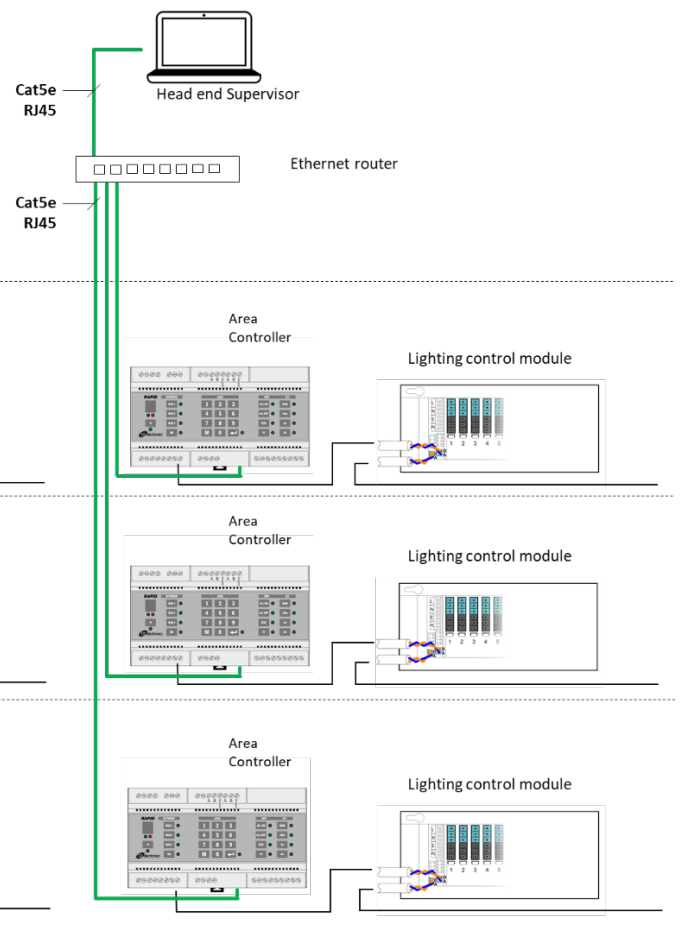
Backbone CANBus or Ethernet Options

The backbone network connects area controllers together to the head end supervisor. The backbone network should use either CANBus connection **OR** Ethernet IP connection method but **NOT both!!**

Backbone by CANBus CAT5e Cabling



Backbone by Ethernet IP CAT5e



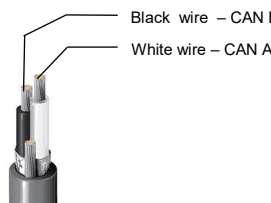
Legacy Systems

Older legacy products can be distinguished as they have hardware build version numbers (or earlier) below:

Stock code	description	Version	.	Release
AP-EBR-LCM3-1DD	RAPiD Pluggable 1DD 1ch LCM	1	.	07
AP-EBR-LCM8-8DD	RAPiD Pluggable 8DD 8ch LCM	1	.	08
AP-EBR-LCM8-8AD	RAPiD Pluggable 8AD 8ch LCM	1	.	05
AP-EBR-LCM10-10DD	RAPiD Pluggable 10DD 10ch LCM	1	.	08
AP-EBR-LCM10-10AD	RAPiD Pluggable 10AD 10ch LCM	1	.	08
AP-EBR-LCM12-12DD	RAPiD Pluggable 12DD 12ch LCM	1	.	08
AP-EBR-LCM12-12AD	RAPiD Pluggable 12AD 12ch LCM	1	.	05
AP-EBR-LCM-DALIG64	RAPiD Pluggable DALI LCM	1	.	07

Floor network bus details for Legacy Products

- Belden cabling

Recommended Cable	RAPiD network connection cores	Suitable to run with mains?
Belden 8719		YES

