# Modular Wiring Solutions A Complete Pluggable System



# Hassle-free Modular Wiring Solutions

CP Electronics has been a leading manufacturer of energy saving lighting controls for over 40 years. We understand that market forces within the construction industry present many challenges to designers and installers – none more so in terms of time and cost.

When deadlines are tight and budgets are stretched, we offer a complete pluggable connection solution for your lighting installation, providing quick and easy connection of lighting.

The CP Electronics range of modular wiring products allows any lighting installation to be completed in minimal time using just five key components. These five products are compatible with all of CP Electronics range of Lighting Control Module (LCM) based systems including Vitesse Modular 6, Vitesse Plus and RAPID.

# Industry standard connectors

All CP Electronics pluggable products use the series 166 connector format. This ensures compatibility with the luminaire manufacturer who may supply their luminaires with a connector of this type.







### Connectors

ur range of connectors are vailable in both male and emale, with black/blue or lack/grey coding and with ither red or white covers.

# **Ceiling Rose**

Dur 6 pole ceiling rose can be used when there is a need to take power and a dimming signal from a conduit box. It has significant termination space.

# Luminaire Leads

We provide a full range of luminaire leads. All luminaire connections use the series 166 connector system with a side latch and low profile hood.



Extender Leads Used for connection between tee modules.



Office configuration using modular wiring solutions

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### **Tee Modules**

Our 6 pole tee module is used to provide a simple interlinking connection of lighting within fixed wiring installations.

# Understanding the key components within Modular Wiring

It's important to understand what the main components within a modular wiring system are, and what they do. Once you know, you'll soon realise how quick and easy it is to set up and use.

#### Male and Female: Know the Difference

One of the first and most important things to understand is the interlocking male and female connectors.



#### Male Connector

A male connector has solid metal pins. This always receives the power from the corresponding female.



#### **Female Connector**

A female connector has split hollow pins. The power is always fed from a female pin (as used on all CP Electronics Lighting Control Modules) as these are fully shrouded to prevent electric shock.

**Tee Modules** 



The new range of 6 pole tee modules allows simple interlinking of cables between a lighting control module and a group of luminaires. Each luminaire will require a tee module.



# **System Components**

#### Tee Modules – see page 8





Black/**blue** coding

Black/grey coding

#### Extender Leads – see page 10





White plug, black/**blue** coding

Red plug, black/**blue** coding



White plug, black/grey coding

Red plug, black/grey coding

#### Ceiling Roses - see page 11





Black/blue coding

Black/grey coding

Luminaire Leads – see page 9



White plug, black/**blue** coding



White plug, black/grey coding



Red plug, black/**blue** coding



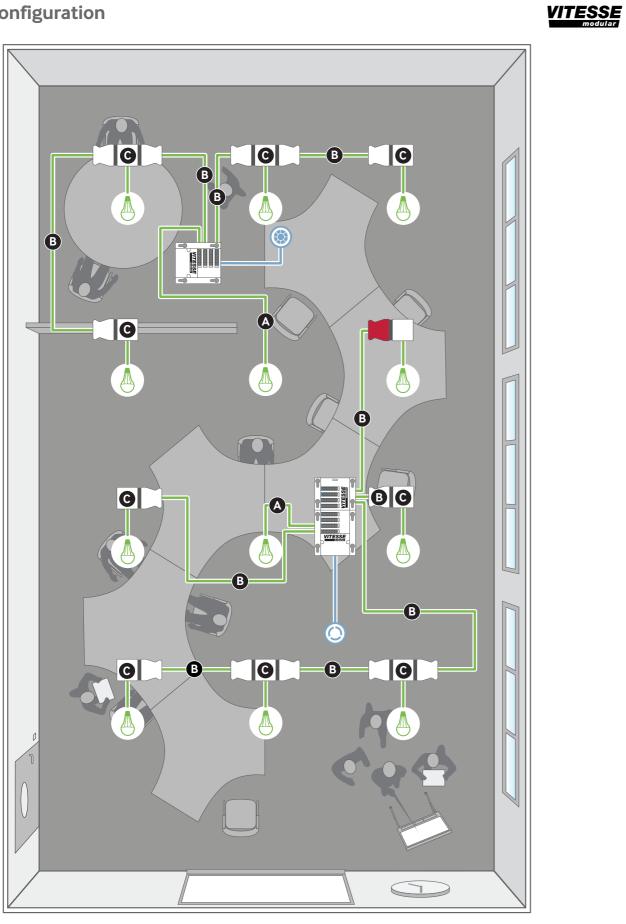
Red plug, black/grey coding

Connectors – see page 11 White plug, Red plug, black/**blue** coding black/**blue** coding

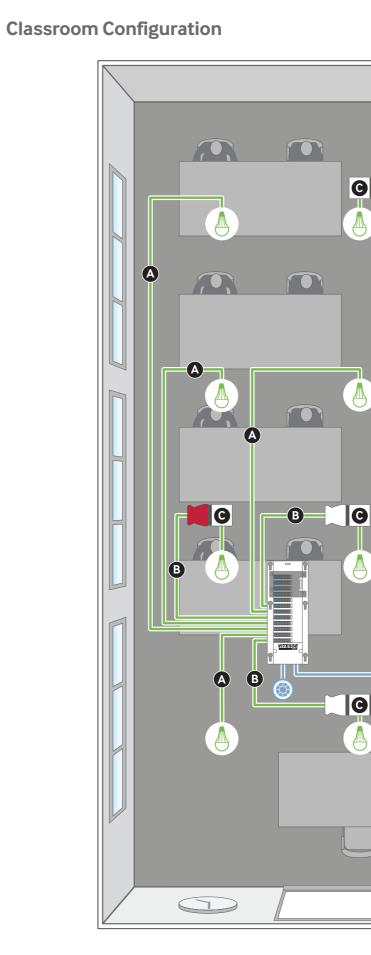
Red plug, black/grey coding

White plug, black/grey coding

# **Office Configuration**



Microwave Detector A Luminaire Leads B Extender Leads C Tee Modules

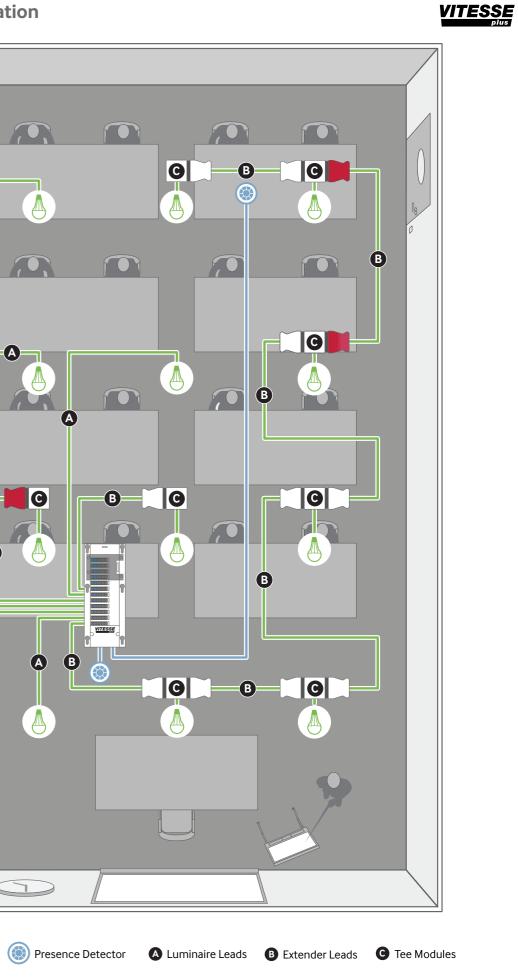


A Light fittings

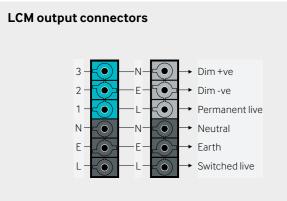
Presence Detector

Light fittings

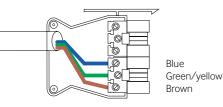
6



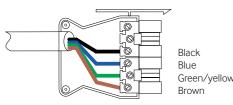
# Wiring and Connection Configuration



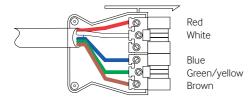
#### 3 core wiring – switching luminaires



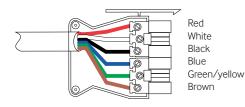
#### 4 core wiring – switching and emergency luminaires



#### 5 core wiring – dimming luminaires



#### 6 core wiring – dimming and emergency luminaires



# **Tee Modules**



#### Black/blue coding

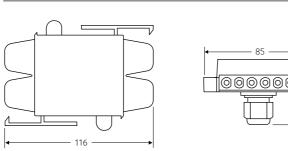
Order Code	Description
BVITM6-L3T500	6 pole, 3 core, 0.5m lead, 1mm², tee module, white housing, black/blue coding
BVITM6-L4T500	6 pole, 4 core, 0.5m lead, 1mm², tee module, white housing, black/blue coding
BVITM6-L5T500	6 pole, 5 core, 0.5m lead, 1mm², tee module, white housing, black/blue coding
BVITM6-L6T500	6 pole, 6 core, 0.5m lead, 1mm², tee module, white housing, black/blue coding



### Black/grey coding

Order Code	Description
VITM6-L3T500	6 pole, 3 core, 0.5m lead, 1mm², tee module, white housing, black/grey coding
VITM6-L4T500	6 pole, 4 core, 0.5m lead, 1mm², tee module, white housing, black/grey coding
VITM6-L5T500	6 pole, 5 core, 0.5m lead, 1mm², tee module, white housing, black/grey coding
VITM6-L6T500	6 pole, 6 core, 0.5m lead, 1mm², tee module, white housing, black/grey coding

#### Dimensions (mm)



# Luminaire Leads

Luminaire leads have a male connector which will connect to an LCM output, ceiling rose or end of line tee module. The free end has a 70mm strip for the inner cores with a 10mm ferrule. To understand the difference between male and female connectors please see page 4.



#### Black/blue coding

3 core – switching luminaires

Order Code	Description
BVITM6L303100W	6 pole, 3 core, 3m, 1mm², LSF, luminaire lead, white plug, black/blue coding
BVITM6L305100W	6 pole, 3 core, 5m, 1mm², LSF, luminaire lead, white plug, black/blue coding
BVITM6L308100W	6 pole, 3 core, 8m, 1mm², LSF, luminaire lead, white plug, black/blue coding
4 core – switching and	d emergency luminaires
4 core – switching and Order Code	d emergency luminaires Description
0	
Order Code	Description 6 pole, 4 core, 3m, 1mm <sup>2</sup> , LSF, luminaire lead,
Order Code BVITM6L403100R	Description         6 pole, 4 core, 3m, 1mm², LSF, luminaire lead, red plug, black/blue coding         6 pole, 4 core, 5m, 1mm², LSF, luminaire lead,

#### 5 core – dimming luminaires

Order Code	Description
BVITM6L503100W	6 pole, 5 core, 3m, 1mm², LSF, luminaire lead, white plug, black/blue coding
BVITM6L505100W	6 pole, 5 core, 5m, 1mm², LSF, luminaire lead, white plug, black/blue coding
BVITM6L508100W	6 pole, 5 core, 8m, 1mm², LSF, luminaire lead, white plug, black/blue coding

#### 6 core – dimming and emergency luminaires

Description
6 pole, 6 core, 3m, 1mm², LSF, luminaire lead, red plug, black/blue coding
6 pole, 6 core, 5m, 1mm², LSF, luminaire lead, red plug, black/blue coding
6 pole, 6 core, 8m, 1mm², LSF, luminaire lead, red plug, black/blue coding





## Black/grey coding

3 core – switching luminaires

Order Code	Description
VITM6L303100W	6 pole, 3 core, 3m, 1mm², LSF, luminaire lead, white plug, black/grey coding
VITM6L305100W	6 pole, 3 core, 5m, 1mm², LSF, luminaire lead, white plug, black/grey coding
VITM6L308100W	6 pole, 3 core, 8m, 1mm², LSF, luminaire lead, white plug, black/grey coding

4 core – switching and emergency luminaires

Order Code	Description
VITM6L403100R	6 pole, 4 core, 3m, 1mm², LSF, luminaire lead, red plug, black/grey coding
VITM6L405100R	6 pole, 4 core, 5m, 1mm², LSF, luminaire lead, red plug, black/grey coding
VITM6L408100R	6 pole, 4 core, 8m, 1mm², LSF, luminaire lead, red plug, black/grey coding

#### 5 core – dimming luminaires

Order Code	Description
VITM6L503100W	6 pole, 5 core, 3m, 1mm², LSF, luminaire lead, white plug, black/grey coding
VITM6L505100W	6 pole, 5 core, 5m, 1mm², LSF, luminaire lead, white plug, black/grey coding
VITM6L508100W	6 pole, 5 core, 8m, 1mm², LSF, luminaire lead, white plug, black/grey coding

#### 6 core – dimming and emergency luminaires

Order Code	Description
VITM6L603100R	6 pole, 6 core, 3m, 1mm², LSF, luminaire lead, red plug, black/grey coding
VITM6L605100R	6 pole, 6 core, 5m, 1mm², LSF, luminaire lead, red plug, black/grey coding
VITM6L608100R	6 pole, 6 core, 8m, 1mm², LSF, luminaire lead, red plug, black/grey coding

# **Extender Leads**



### Black/blue coding

#### 3 core – switching luminaires

Order Code	Description
BVITM6-3-LL-03	6 pole, 3 core, 3m, 1.5mm², LSF, extender lead, white plug, black/blue coding
BVITM6-3-LL-05	6 pole, 3 core, 5m, 1.5mm², LSF, extender lead, white plug, black/blue coding
BVITM6-3-LL-08	6 pole, 3 core, 8m, 1.5mm², LSF, extender lead, white plug, black/blue coding

#### 4 core – switching and emergency luminaires

Order Code	Description
BVITM6-4-LL-03	6 pole, 4 core, 3m, 1.5mm², LSF, extender lead, red plug, black/blue coding
BVITM6-4-LL-05	6 pole, 4 core, 5m, 1.5mm², LSF, extender lead, red plug, black/blue coding
BVITM6-4-LL-08	6 pole, 4 core, 8m, 1.5mm², LSF, extender lead, red plug, black/blue coding

#### 5 core – dimming luminaires

Order Code	Description
BVITM6-5-LL-03	6 pole, 5 core, 3m, 1.5mm², LSF, extender lead, white plug, black/blue coding
BVITM6-5-LL-05	6 pole, 5 core, 5m, 1.5mm², LSF, extender lead, white plug, black/blue coding
BVITM6-5-LL-08	6 pole, 5 core, 8m, 1.5mm², LSF, extender lead, white plug, black/blue coding

#### 6 core – dimming and emergency luminaires

Order Code	Description
BVITM6-6-LL-03	6 pole, 6 core, 3m, 1.5mm², LSF, extender lead, red plug, black/blue coding
BVITM6-6-LL-05	6 pole, 6 core, 5m, 1.5mm², LSF, extender lead, red plug, black/blue coding
BVITM6-6-LL-08	6 pole, 6 core, 8m, 1.5mm², LSF, extender lead, red plug, black/blue coding



# Black/grey coding

#### 3 core – switching luminaires

Order Code	Description
VITM6-3-LL-03	6 pole, 3 core, 3m, 1.5mm², LSF, extender lead, white plug, black/grey coding
VITM6-3-LL-05	6 pole, 3 core, 5m, 1.5mm², LSF, extender lead, white plug, black/grey coding
VITM6-3-LL-08	6 pole, 3 core, 8m, 1.5mm², LSF, extender lead, white plug, black/grey coding

#### 4 core – switching and emergency luminaires

Order Code	Description
VITM6-4-LL-03	6 pole, 4 core, 3m, 1.5mm², LSF, extender lead, red plug. black/grey coding
VITM6-4-LL-05	6 pole, 4 core, 5m, 1.5mm², LSF, extender lead, red plug. black/grey coding
VITM6-4-LL-08	6 pole, 4 core, 8m, 1.5mm², LSF, extender lead, red plug, black/grey coding

#### 5 core – dimming luminaires

Order Code	Description
VITM6-5-LL-03	6 pole, 5 core, 3m, 1.5mm², LSF, extender lead, white plug, black/grey coding
VITM6-5-LL-05	6 pole, 5 core, 5m, 1.5mm², LSF, extender lead, white plug, black/grey coding
VITM6-5-LL-08	6 pole, 5 core, 8m, 1.5mm², LSF, extender lead, white plug, black/grey coding

#### 6 core – dimming and emergency luminaires

Order Code	Description
VITM6-6-LL-03	6 pole, 6 core, 3m, 1.5mm², LSF, extender lead, red plug, black/grey coding
VITM6-6-LL-05	6 pole, 6 core, 5m, 1.5mm², LSF, extender lead, red plug, black/grey coding
VITM6-6-LL-08	6 pole, 6 core, 8m, 1.5mm², LSF, extender lead, red plug, black/grey coding

# Connectors

Using the series 166 connector format CP Electronics range of connectors are available in both male and female, with black/blue or black/grey coding and with either red or white covers. The patented design also allows for rear or side entry, allowing the installer to make up his own leads on site to suit any application.



#### Black/blue coding

Order Code	Description
BVITM6-LPR	6 pole, male connector, red plug, black/blue coding
BVITM6-LPR-F	6 pole, female connector, red plug, black/blue coding
BVITM6-LPW	6 pole, male connector, white plug, black/blue coding
BVITM6-LPW-F	6 pole, female connector, white plug, black/blue coding

# **Ceiling Roses**

Available with and without a connector plug.

#### Black/blue coding

Order Code	Description
VITM6-ROSE-B	6 pole, female ceiling rose, black/blue coding, c/w white male connector plug
VITM6-ROSE-B-R	6 pole, female ceiling rose, black/blue coding, c/w red male connector plug
VITM6-ROSE-B-NP	6 pole, female ceiling rose, black/blue coding, no connector plug

#### Black/grey coding

Order Code	Description
VITM6-ROSE-G	6 pole, female ceiling rose, black/grey coding c/w white male connector plug
VITM6-ROSE-G-R	6 pole, female ceiling rose, black/grey coding, c/w red male connector plug
VITM6-ROSE-G-NP	6 pole, female ceiling rose, black/grey coding, no connector plug



# Black/grey coding

Order Code	Description
VITM6-LPR	6 pole, male connector, red plug, black/grey coding
VITM6-LPR-F	6 pole, female connector, red plug, black/grey coding
VITM6-LPW	6 pole, male connector, white plug, black/grey coding
VITM6-LPW-F	6 pole, female connector, white plug, black/grey coding



# CP Electronics modular wiring solutions are compatible with:



















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