# Colour Change

Our RGBW range of colour change products provides increased flexibility to improve the atmosphere of indoor and outdoor spaces. The difference between RGB and RGBW is a white LED. Adding white to the colour mix gives the option to create pastel shades as well as vibrant colour choices. RGBW can also be run on white, giving you the option of more natural lighting when required.

To complement our RGBW products we also offer a new control system range. This makes it easy to create different lighting zones allowing individual control of separate areas using a single hand held control, wall mounted control or a smart device App for Android and iOS.



# 3 Simple steps

## Remote to product

Follow the guide below to set up your colour change installation.

#### **Products**

What products do you want?

You will need cable to connect your products to your drivers

#### **Drivers**

You will need at least one driver per zone, dependant on how many products you would like to install within that zone.

Are you using an RF remote, DMX or DALI control system?

What wattage driver do you need to power your products?



If you want to colour cycle across mutiple zone we recommend using power repeaters or for larger projects DMX drivers.

#### Remotes

How many zones / rooms do you need?

Which remote covers the number of zones you need?

Is a DMX control system already in place or do you need more than 8 zones? (Use a DMX control system in this case)



It is not advised to put RGB & RGBW products in the same zone, as the colours will not always match.



#### **Constant current products**



#### Constant voltage product



# 2 Choose control method and driver

#### Constant current 75W drivers





**75W RF, DMX** and DALI drivers See page 424



#### Constant voltage 24V 100W drivers





100W RF, DMX and DALI drivers See page 424



#### Constant Voltage 24V 200W drivers



**200W RF, DMX and DALI drivers** See page 424

## 3 Choose your controller (RF only)



Wall mounted

#### CCWALLRFW / CCWALLRFB

Zones 1 - 4

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**Hand held** 



#### **CCREMOTEB**

Zones 1 - 4

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Phone App

#### CollingwoodRGBW App

Zones 1 - 8

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**CCRFCONVWIFI** 

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## **Zones**

#### Remotes

A zone can cover any space you choose. They are often assigned to rooms so that you can have different colour settings for each room and be able to adjust them completely independently from one another using your remote control. For example...

**House front** 





**Bedroom 1** 



Zone 1



Zone 2





Zone 4

Remember you can assign any room to any zone number

Once you have decided how many zones you require, you will need to select a remote that is capable of covering that number of

zones. You are able to use multiple remotes as long as they are all capable of covering the number of zones you have.

Zone 3

Wall mounted remote control - CCWALLRFW / CCWALLRFB - 1-4 zones

Hand held remote control - CCREMOTEB - 1-4 zones

CollingwoodRGBW app - with CCRFCONVWIFI - 1-8 zones

Zone 1/1 Room

Zone 2 / 2 Rooms

Zone 3 / 3 Rooms

Zone 4 / 4 Rooms

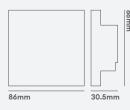
#### CCWALLRFW / CCWALLRFB

Wall mounted RGBW remote control

Controlling Collingwood Lighting's RGB & RGBW ranges could not be easier with this wall mounted remote control. Using radio frequency (RF) removes the need to connect a signal cable to the controller for a cleaner and quicker installation. By simply touching the screen, select solid colours or start a cycle to change the atmosphere. Colours can also be dimmed by holding down the colour button. Select up to 4 zones to give individuality to each room.

Note: The CCWALLRF requires 240V AC supply.





#### CCREMOTEB

Handheld remote control

Controlling RGB & RGBW lights could not be easier with this remote control. Using RF removes the need to connect a signal cable to the controller for a cleaner and quicker installation. Select solid colours or start a colour changing cycle to create the perfect atmosphere. Colours can also be dimmed by holding down the colour button. From just one remote control you can select up to 4 different rooms and change the colours individually to suit. A maximum of 8 remote controls can be used and programmed to store your favourite colours.

**Note:** Requires 3 x AAA batteries (not included)



Bedroom 2

Zone 5



Zone 6

Garden



**Dining room** 

Zone 7

Stairs / Hallway



Zone 8

If you require more than 8 zones you will need to use a DMX control system

Zone 5 / 5 Rooms

Zone 6 / 6 Rooms

Zone 7 / 7 Rooms

Zone 8 / 8 Rooms

## CollingwoodRGBW App

iPhone, iPad & Android app for wireless control

Control RGB & RGBW products with a smart device for up to 8 zones. By simply touching the screen, select solid colours, start a cycle or control lights via a sound to light option. The app can be downloaded for free on Android and iOS.

Note: Use in conjunction with CCRFCONVWIFI



#### **CCRFCONVWIFI**

WiFi to RF converter

Controlling RGB & RGBW products with a phone, computer or tablet could not be easier with the CCRFCONVWIFI. Simply add this unit into your Collingwood Lighting colour change installation and select millions of colours in comfort.

Using the CollingwoodRGBW app simply connect directly to the CCRFCONVWIFI or via your own WiFi.





# **Drivers**

# Which one and what power supply?

Choose the driver that is required for your installation.

	RF drivers	DMX drivers	DALI drivers	
Which driver type do you need?	RF drivers allow wireless control from a hand-held remote controller, a wall mounted touch panel or a phone app via the Wi-Fi converter. A driver can be paired with up to 8 individual remotes and each remote can control multiple drivers in up to 8 zones.	DMX allows for wired control of up to 128 different zones, and multiple drivers can be assigned to each zone to keep the lights perfectly in sync. These drivers also support RDM for more advanced control and management with RDM-enabled controllers.	Use a DALI driver for integration with an existing DALI control system. These drivers allow for up to 16 RGBW zones or up to 64 single-colour zones on a standard DALI system.	
75W Driver for all RGBW products excluding LED Strip	CCDRV75RF	CCDRV75DMX	CCDRV75DALI	244mm 64mm 32mm
<b>100W Driver</b> For LED Strip only	CCDRVIOORF	CCDRV100DMX	CCDRV100DALI	244mm 64mm 32mm
<b>200W Driver</b> For LED Strip only	CCDRV200RF	CCDRV200DMX	CCDRV200DALI	330mm 79mm 39mm



If you want to colour cycle across mutiple zone we recommend using power repeaters or for larger projects DMX drivers.

#### Constant current switchable mA drivers

All our 75W constant current drivers are mA switchable, giving you 16 options to choose from, 250mA - 1500mA



Drive current mA switches

### Calculate how many drivers you need for the products you have

Must have at least one driver per zone. Can have mutiple drivers per zone to get more products within the zone.

#### 75W Constant current drivers

Product code	Product family	Max products per 75W driver	Drive current mA setting
DL329RGBW	Downlight	13	350mA
LL030CARGB	Downlight	13	350mA
LL090RGBW	Downlight	4	350mA
GL016RGBW	Ground Light	13	350mA
GL040CARGB	Ground Light	13	350mA
GL050RGBW	Ground Light	13	350mA
GL090RGBW	Ground Light	4	350mA
GLTXS119RGBW	Ground Light	4	300mA
GLTXS147RGBW	Ground Light	2	300mA
GLTXS165RGBW	Ground Light	1	300mA
GLTXS193RGBW	Ground Light	3	900mA
GLTXS223RGBW	Ground Light	1	600mA
FOUX167RGBW	Ground Light	1	600mA
UL010RGBW	Feature Light	13	350mA
UL030RGBW	Feature Light	4	350mA
UL345CARGB	Uplight	1	350mA
UL346CARGB	Uplight	1	350mA
UL347CARGB	Uplight	1	350mA
WL070RGBW	Wall Light	1	350mA

#### 100W Constant voltage drivers

Product code	Product family	Max metre length per 100W driver
 LSR05	RGBW Strip	6m

#### 200W Constant voltage drivers

Product code	Product family	Max metre length per 200W driver
LSR05	RGBW Strip	13m

## Cable run guidance, from controller to products

#### 350mA RGBW products

From power repeater to 350mA product when using **0.5mm cable**, the maximum distance cable run is **50m** 

From power repeater to 350mA product when using **0.75mm cable**, the maximum distance cable run is **75m** 

From power repeater to 350mA product when using **1.0mm cable**, the maximum distance cable run is **100m** 

From power repeater to 350mA product when using **1.5mm cable**, the maximum distance cable run is **150m** 

#### 24V RGBW strip

From controller to strip when using **0.75mm cable**, the maximum distance cable run is **20m** 

From controller to strip when using 1.5mm cable, the maximum distance cable run is 40m

# **Power repeaters**

## Which one and how many?



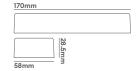
If you are using RF control and you need several different circuits to colour cycle together, you can use power repeaters to extend the output of the driver.

# For all constant current products use the PR3011

PR3011 - 350mA RGB & RGBW Power repeater

A 350mA power supply for the RGB & RGBW product range. Simply wire up to 100 PR3011 to a driver for a quick and simple colour change installation, giving you the ability to have as many as 600 luminaires per zone.





# Calculate how many PR3011's you need for the products you have

NOTE: Tilt and Fountain lights are not suitable with PR3011

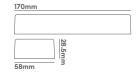
Product code	Product family	Max. per PR3011
DL329RGBW	Downlight	6
GL016RGBW	Ground Light	6
GL040CARGB	Ground Light	6
GL050RGBW	Ground Light	6
GL090RGBW	Ground Light	2
LL030CARGB	Downlight	6
LL090RGBW	Downlight	2
UL010RGBW	Pond Light	6
UL030RGBW	Pond Light	2
UL345CARGB	Uplight	1
UL346CARGB	Uplight	1
UL347CARGB	Uplight	1
WL070RGBW	Wall Light	1

# For all constant voltage products use the PR3002

PR3002 - 24V RGB & RGBW Power repeater

A 24V power supply for the strip product range. Simply wire up to 100 to a driver for a quick and simple colour change installation, giving you the ability to have as many as 1000 metres of LED strip per zone.





# Calculate how many PR3002's you need for the products you have

LSR05 (RGBW strip) - Bespoke lengths available

Length of strip per power repeater	Wattage driver needed	Product (driver)
Up to 2m per PR3002	50W	PS5024
Up to 5m per PR3002	120W	LSD12024
Up to 10m per PR3002	150W	PSIP15024



For all strip, you can put up to 5m on one circuit per PR3002, but for 5-10m you will need to put the strip on two circuits per PR3002 (see product instructions).



Don't forget you'll need 300mm of CF505RGBW cable for every power repeater you use.

## Don't forget your 24V driver to power your power repeater

Number of power repeaters	Wattage driver needed	Product (driver)
1	50W	PS5024
2-3	120W	LSD12024
4-5	150W	PSIP15024

The products will be powered by power repeaters that require a 24V driver. The table shows you which driver you need for the number of power repeaters you are using. If you require more than 5 power repeaters you will need another driver.

In the example we calculated that we need 3 x PR3011. Using the table to the left we can see that we need a 100W driver. This means that you will need to order the following...



x3 PR3011



# Wiring

# For your colour change products

You may need additional cables to connect your colour change products.



## CR575RGBW

5-core PVC cable

Product code	CR575RGBW
Construction material	Copper cable
Cable	PVC 5 x 0.75mm <sup>2</sup>
Guarantee	1 year extended warranty

#### Use in conjunction with:

All RGBW products	
JB7	464



## **LEDRGBWEXT**

Colour change extension lead for RGBW products

LEDRGBWEXT
Copper cable (PVC)
1m (AWG 24) (5 x 0.25mm²)
Series (Plug & Play)
1 year extended warranty

#### Use in conjunction with:

DL329RGBW	437
LL090RGBW	435
WL070RGBW	438



## CF505RGBW

5-core RGBW ribbon cable

CF505RGBW
Copper cable
(AWG 24) (5 x 0.25mm²)
1 year extended warranty

#### Use in conjunction with:

PR3011	426
PR3002	426



## **DMX RS 485 CABLE**

3-core shielded cable

Product code	DMX RS 485 CABLE
Construction material	Copper cable
Cable	0.15mm²
Guarantee	1 year extended warranty

#### Use in conjunction with:

CCDRV75DMX	424
CCDRV100DMX	424
CCDRV200DMX	424