

Harmony Series

Sirius 40

DATASHEET



Introduction

The Harmony Series Sirius 40 is a high output, multi-emitter fixture which reproduces a wide spectrum of saturated colours plus high quality dynamic white light in a range of colour temperatures.

Sirius fixtures use an ingenious method to allow multiple units to be powered and controlled via a single two-core legacy cable. This makes them the perfect solution for venues that need to upgrade their house lights without disrupting their cable infrastructure.

To suit each installation, the Sirius 40 is available in yoke, recessed and pendant form factors:



Recessed

Yoke

Pendant

Key features

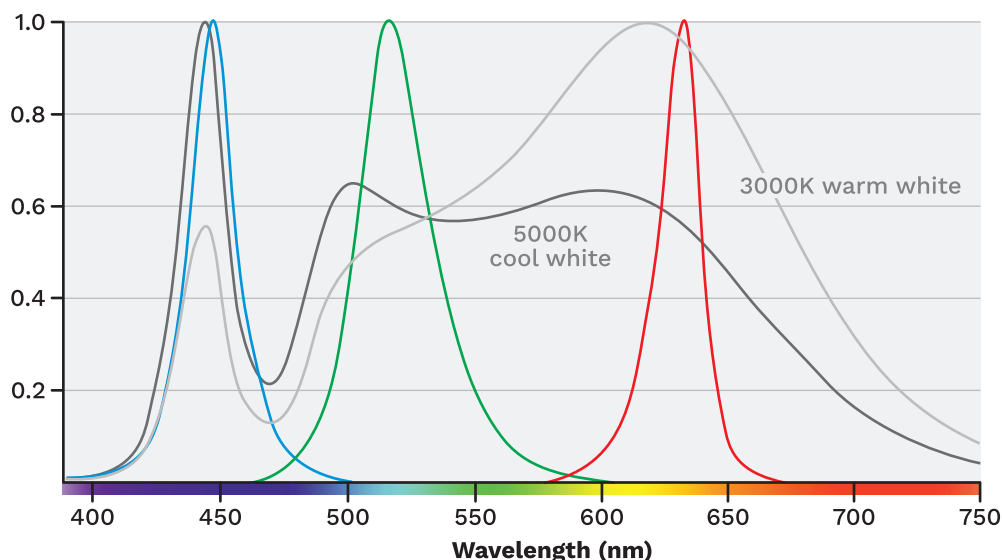
- RGB saturated colours plus high quality 3000K and 5000K white emitters with 90CRI.
- 40 or 60 degree beam angle options paired with a high efficiency reflector.
- Silent passive cooling.
- Dynamic Power Regulation (DPR) and Thermal Throttling systems actively manage output and temperature.
- Multiple Sirius 40 fixtures, up to a theoretical maximum load of up to 500W*, can operate across a single legacy two-core cable.
- Each Sirius 40 fixture is directly driven by an IPM² Smart BOB.

* Actual limits will vary depending on factors such as cable length, cable type, and installation conditions.

Wide gamut colour mixing

- High CRI dynamic white mixes from warm 3000K to cool 5000K.
- Saturated colour mixes using the RGB emitters.
- Subtle pastels by combining the RGB and high power white emitters.

Relative spectral distribution



Dynamic Power Regulation

The Sirius 40 delivers silent operation through fully passive cooling. *Dynamic Power Regulation* (DPR) continually monitors control inputs to maintain accurate colour mixing while keeping LED power within safe operating limits.

Alongside DPR, our real time *Thermal Throttling* system tracks LED and driver temperatures, making subtle, imperceptible adjustments whenever needed to protect the LED emitters and ensure safe operation, even if cooling performance is compromised.

Together, these systems enable maximum output, intelligent thermal protection, and silent, maintenance free performance, even in elevated ambient conditions.

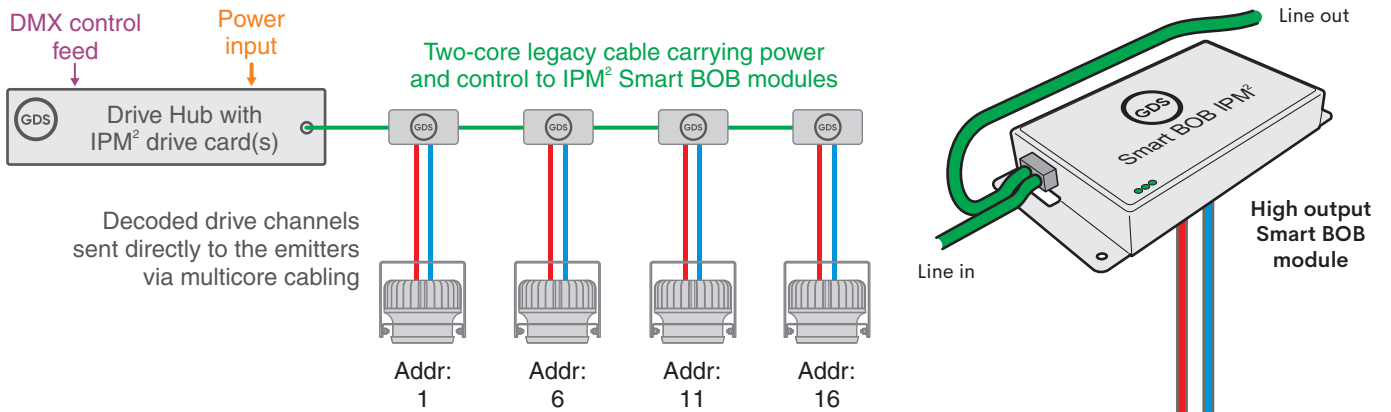
Light output

Colour	40° beam	60° beam	Power consumption
Red	701 lm	722 lm	14.8W
Green	1188 lm	1224 lm	14.8W
Blue	170 lm	173 lm	14.8W
Cool white (5000K)	1776 lm	1714 lm	22.2W
Warm white (3000K)	1465 lm	1416 lm	22.2W
All emitters at full	2057 lm	1927 lm	44.4W

Multiple fixtures, multiple channels - only two wires

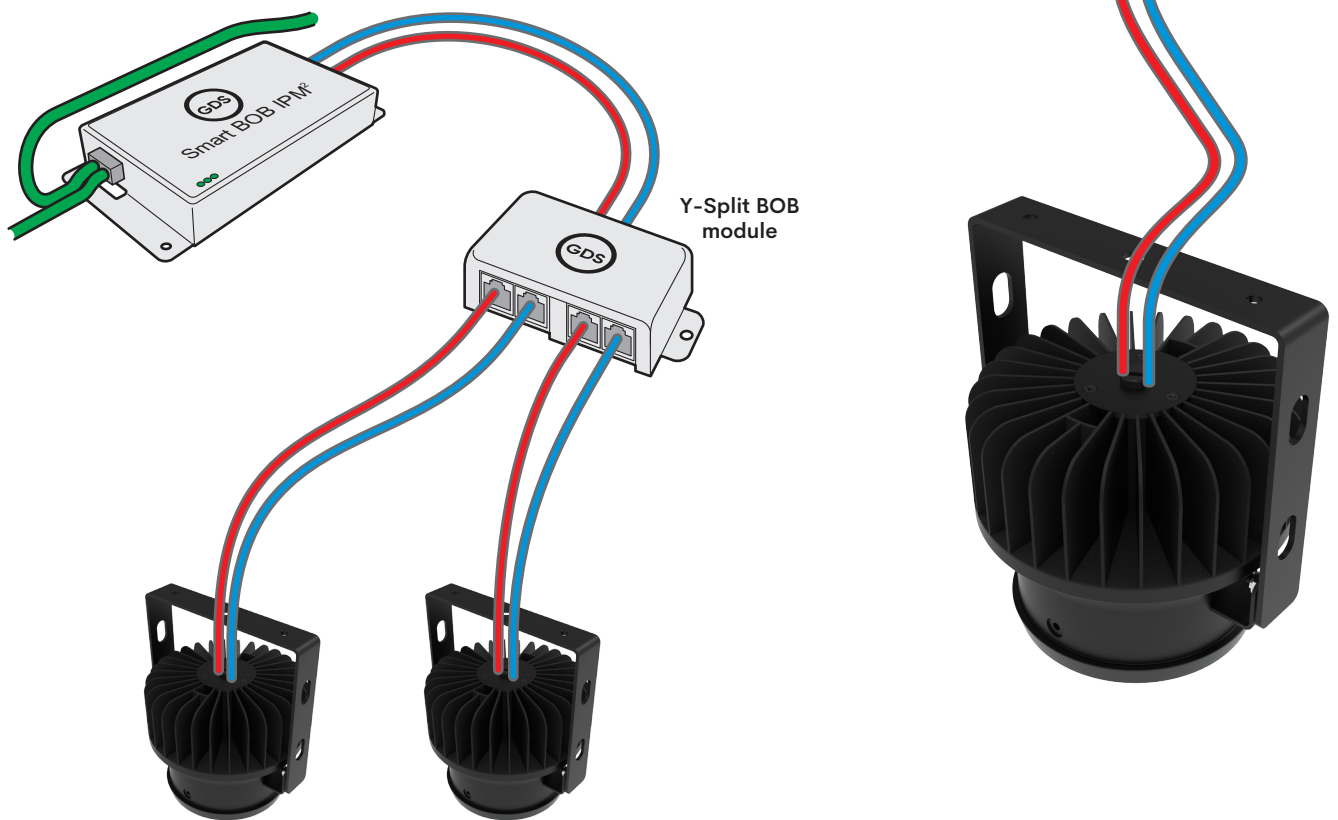
Sirius 40 fixtures are compact multi-channel fittings specifically designed to operate using only a two-core legacy cable. It all starts at a central location:

An **IPM² driver card**, located within a standard GDS Drive Hub Card Frame, Mini Pack or Micro Pack receives incoming DMX control signals. In response, the driver card feeds proprietary IPM² control signals plus 48VDC power onto the legacy two-core cable. Situated along the cable are multiple **IPM² Smart BOBs**. Each IPM² Smart BOB provides power and decodes the control signals for its attached Sirius fixture:



Two for one

With the addition of an optional Y-Split BOB, it is possible to drive two Sirius 40 fixtures from a single IPM² Smart BOB. Both fixtures will respond in an identical manner to the same channels:



Notes: A Y-Split BOB module is not required if you are driving a single Sirius 40 fixture. A Y-Split BOB module cannot be used with Sirius 80 or 120 fixtures.

Adjustable parameters

In addition to DMX values being sent out to each IPM² Smart BOB via the two-core cabling, certain parameters are also supported to maximise flexibility from a centralised control point:

- Fixture DMX address
- DMX personality selection: (see below)
- Dimming curve selection: Linear, Square Law, GDS Incandescent
- Minimum output level: 0 to 255
- Minimum output level: 0 to 255
- PWM frequency: 300Hz, 600Hz, 1200Hz, 19.2kHz
- Dimming response time (mS): 0, 50, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000

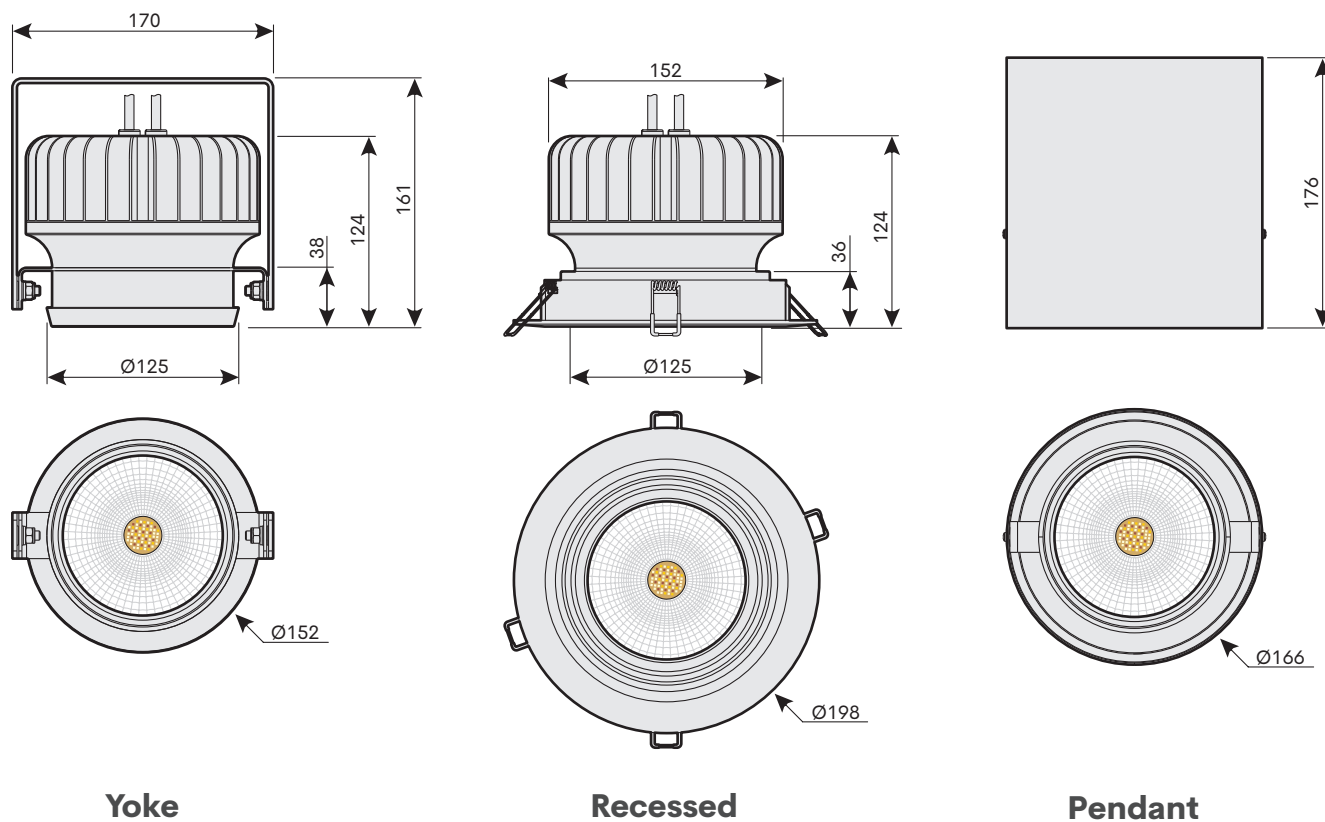
IPM² addressing

The IPM² protocol allows a full DMX universe of 512 control channels to be transmitted across a legacy two-core cable run to multiple fixtures. Each fixture requires multiple channels and is given a particular start address by the centrally located Drive Hub. Fixtures can be spread across unique address ranges or combined onto common addresses, as dictated by the installation layout.

IPM² DMX personalities

DMX address	5-Channel mode	6-Channel mode	6-Channel CCT mode
Start	Red	Master	Master
Start + 1	Green	Red	Red
Start + 2	Blue	Green	Green
Start + 3	Cool white (5000K)	Blue	Blue
Start + 4	Warm white (3000K)	Cool white (5000K)	White
Start + 5		Warm white (3000K)	CCT (0=3000K, 255=5000K)

Dimensions



Yoke

Recessed

Pendant

Recommended cut-out for recessed versions:
Ø170 to Ø190mm

Specifications are subject to change without notice.