Starfield Distribution Unit

Model No: TBC

DATASHEET

Introduction

The Starfield Distribution Unit Receives one universe of DMX/RDM signal as well as a 48VDC power input. It then distributes eight output feeds via standard CAT5e/6 cables. Each of the eight feeds can supply up to 100W.



Key features

- Simple connectivity using standard RJ45 connectors
- Compact design for discreet installation
- Auto discovery and addressing of the Starfield Driver
- RDM compatibility
- Device monitoring via RDM
- Output LED fault indicators
- Output overload protection

Specifications

Size	315 x 165 x 37mm
Approximate Weight (g)	TBC
Finish	Black Powder Coat
IP Rating	IP20
Operating Temp (°C)	-20 to +40
Communication Protocol	DMX512 + RDM
Voltage Range	40-60VDC
Max Input Current	20A
Max Output Current (Per Port)	2.35A
DMX Input Connector	RJ45
Power Input Connector	Phoenix Terminal 20A (PC 4/ 2-STF-7.62)
Output Connectors	RJ45

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+44 (0)117 325 0063
www.gds.uk.com

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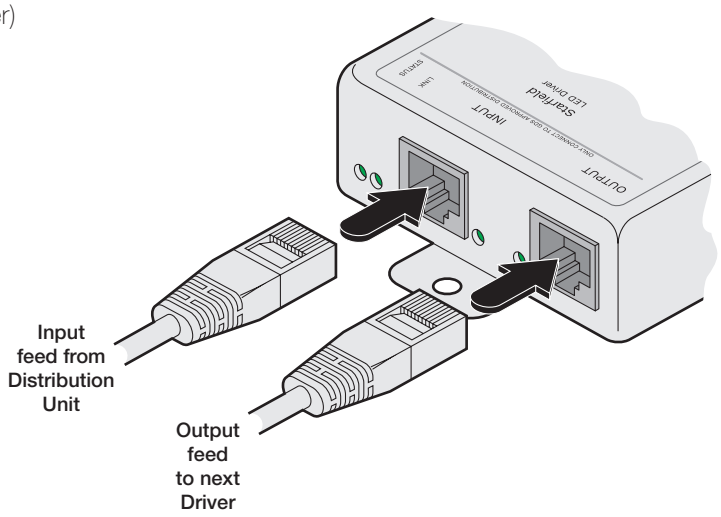
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Distribution Unit - Driver Connection

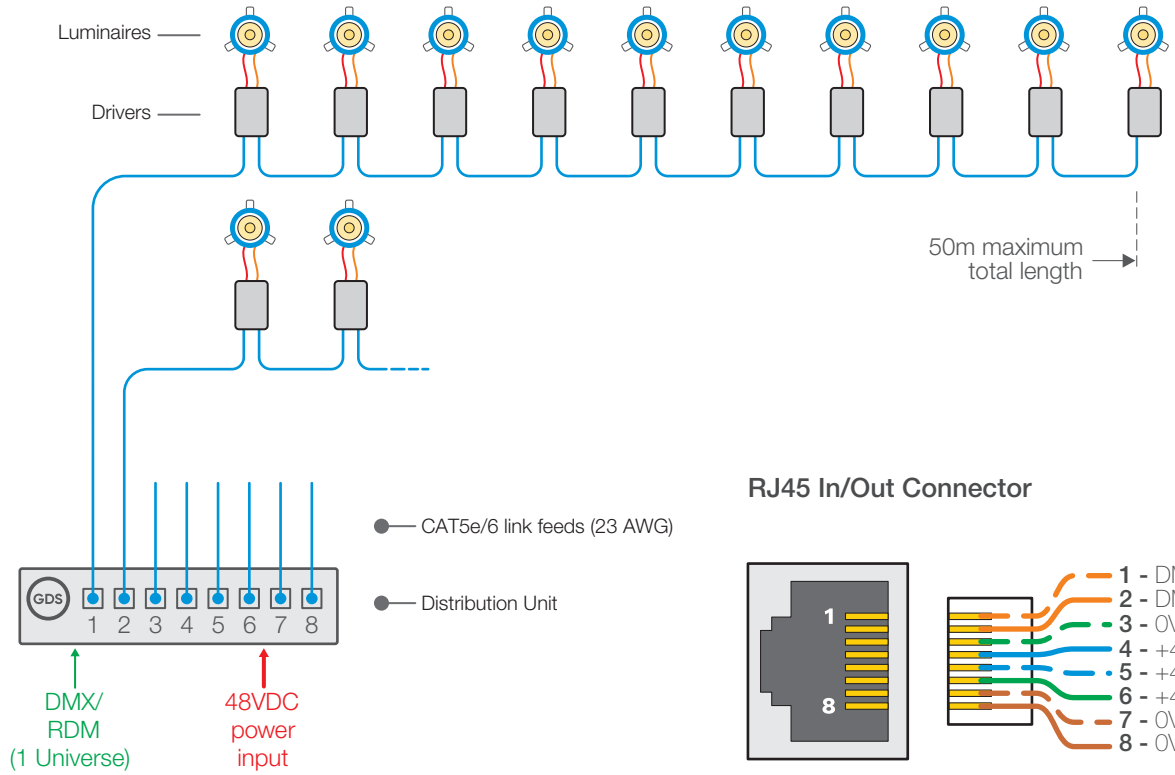
Driver input voltage:	48VDC (From distribution unit)
Driver maximum power:	32.8W
Driver connector(s):	RJ45 (2 off)
	Molex Micro-Fit (single-row) 2-way
	Molex Micro-Fit (single-row) 5-way

Standard CAT5e/6 cables (straight through, no crossover) are used to make the link between the Distribution Unit and the first Driver; then from the first Driver to the next and so on in a daisy-chain arrangement. All cables used should have a minimum conductor size of 23 AWG and the total combined length of CAT5e/6 cables in any one daisy-chain run should not exceed 50 metres.



⚠ WARNING: Do not connect any networking equipment to the RJ45 in/out connector.

Driver Wiring



RJ45 In/Out Connector

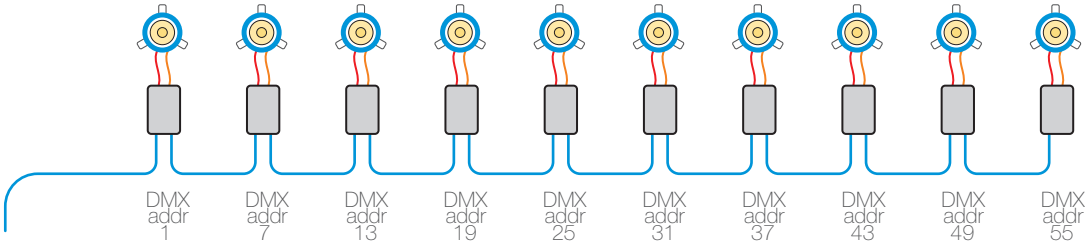
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Configuration

To ensure maximum speed and efficiency during installation, the system employs automated addressing and active power management. Once the Driver and Luminaire runs are connected and power is applied, the commissioning engineer will press the DISCOVERY button located on the Distribution Unit circuit board. The Distribution Unit will initiate a search process whereby the Drivers are polled in sequence and given unique addresses:



As each Driver is configured, the Distribution Unit will maintain a tally of power requirements in order to ensure that no daisy-chain can be accidentally overloaded. Once the maximum limit of Drivers have been configured in a line, no attempt will be made to contact or enable further units.

RDM Support

The following RDM fixture parameters are remotely configurable from the controller via the DMX/RDM link:

Dimming curve:	Linear, Square Law, GDS Incandescent
PWM frequency:	300Hz, 600Hz, 1200Hz, 19.2kHz
Response Time (mS):	0, 50, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000
Minimum output level:	0 to 255
Maximum output level:	0 to 255

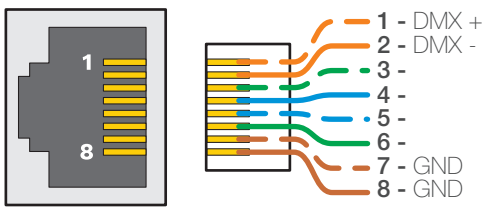
Power + Data Input Connections

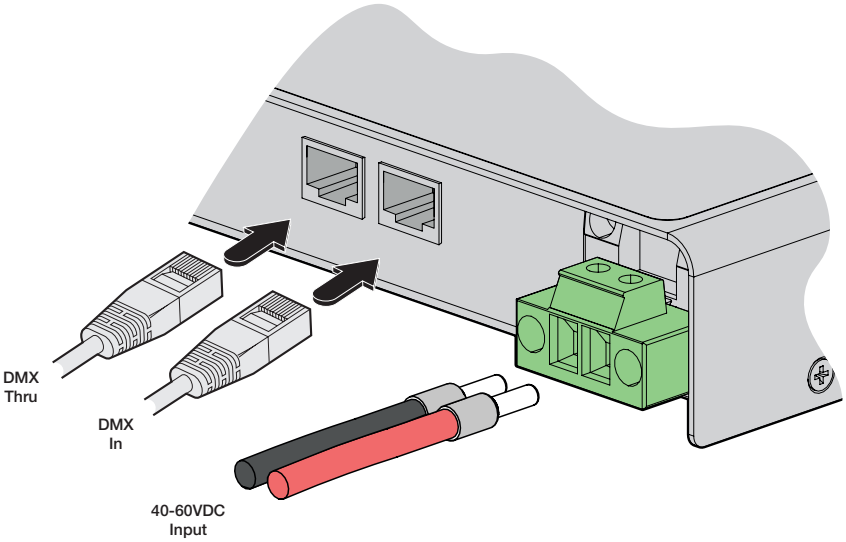
The power input connector (Phoenix PC 4/ 2-STF-7.62) will accept DC power from 40 to 60VDC. The terminals will accept cable cross-sections from 1mm² to 4mm².

The cable specification should allow for the total connected load (Up to 20A).

The DMX in/thru ports will accept an RJ45 connector, terminated to CAT5e/6 cable.

DMX In/Thru Connector



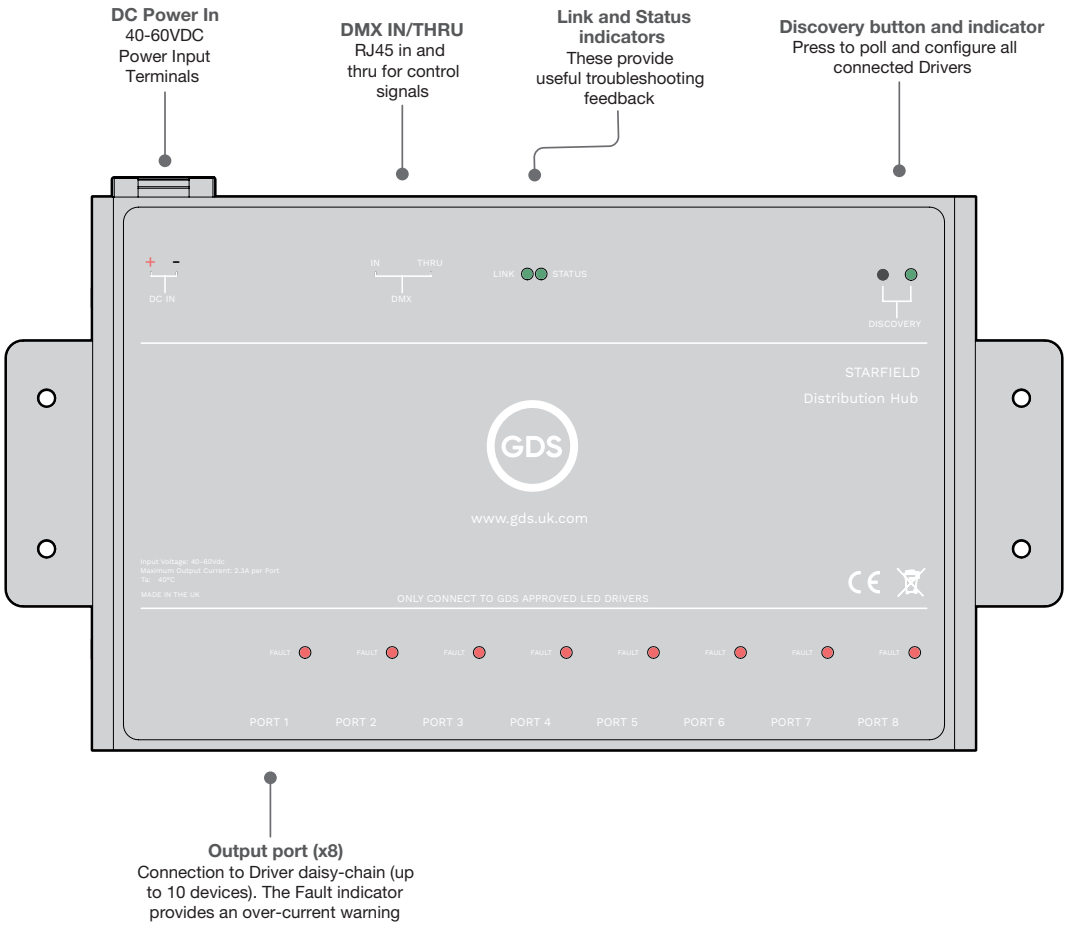


⚠ WARNING: Do not connect any networking equipment to the DMX in/out connector.

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Ports & Indicators

The Distribution Unit has a number of ports and indication LEDs:



LED Indicators

Link LED

Off - No DMX Signal

Solid - DMX Signal Present

Flashing - DMX Signal Lost

Discovery LED

Off - Idle

Flashing - Discovery in Progress

Status LED

Off - Processor Fault

Solid - Processor Fault

Flashing - Processor Running

Output Fault LED

Off - Output Status OK

Solid - Overload/Cable Fault

Driver Discovery Button

Short Press - Port-Based Addressing **-** Sequential addressing from output port start address

Long Press - Route Device Addressing **-** Sequential addressing from route device start address, accross all ports

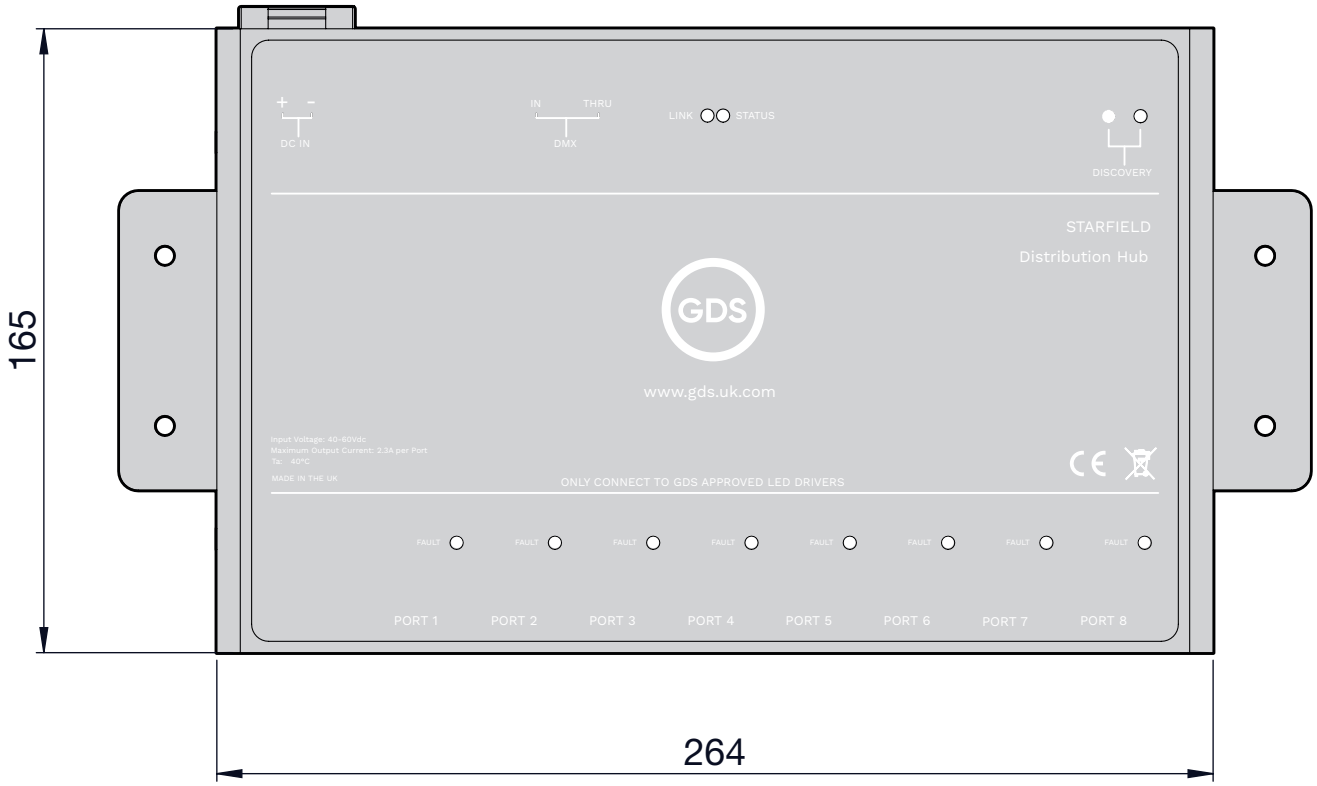
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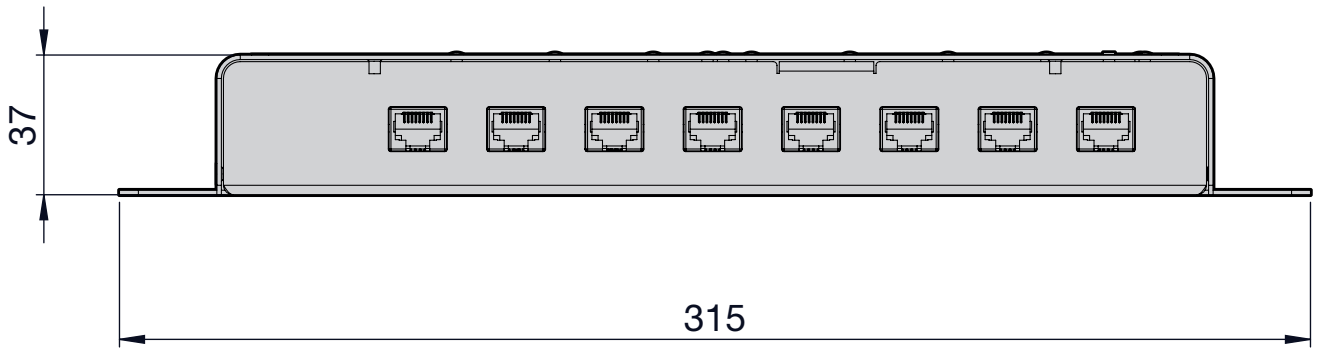
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Dimensions





*Specifications are subject to change without notice.

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