

BANNER
BANNER R95-8M125
Series I/O Junction
Block



BANNER R95-8M125 Series I/O Junction Block Owner's Manual

[Home](#) » [BANNER](#) » BANNER R95-8M125 Series I/O Junction Block Owner's Manual 

Contents

- [1 BANNER R95-8M125 Series I/O Junction Block](#)
- [2 Product Usage Instructions](#)
- [3 Features](#)
- [4 Models](#)
- [5 Product Overview](#)
- [6 Mechanical Installation](#)
- [7 Specifications](#)
- [8 Dimensions](#)
- [9 Accessories](#)
- [10 Maintenance and Service](#)
- [11 Documents / Resources](#)
 - [11.1 References](#)
- [12 Related Posts](#)



BANNER R95-8M125 Series I/O Junction Block



Specifications

- Voltage Input Range: 30 V DC
- Maximum Current: 8A total, 2A max. per connector

Product Overview

Banner's Molded Junction Blocks are designed to help customers reduce wiring and to simplify connecting multiple products.

Mechanical Installation

Install the R95 I/O Junction Block to allow access for functional checks, maintenance, and service or replacement. All mounting hardware is supplied by the user. Fasteners must be of sufficient strength to guard against breakage. Use of permanent fasteners or locking hardware is recommended to prevent the loosening or displacement of the device. The mounting hole (4.5 mm) in the R95 I/O Junction Block accepts M4 (#8) hardware. See the figure below to help in determining the minimum screw length.

CAUTION: Do not overtighten the R95 I/O Junction Block's mounting screw during installation. Overtightening can affect the performance of the R95 I/O Junction Block.

Product Usage Instructions

Wiring

LED Models:

Refer to the wiring diagram for LED models provided in the manual and ensure proper connection according to the color codes.

Flying Lead Model:

Follow the wiring instructions for the flying lead model as outlined in the manual. Connect the appropriate wires to their corresponding ports.

M23 Model:

For M23 models, refer to the wiring diagram provided in the manual and connect the wires accordingly based on the pin configuration.

Accessories

Cordsets are available for additional connectivity options. Refer to the accessories section of the manual for more information on compatible cordset models.

FAQ

- **Q: Can I use this Junction Block with voltages other than 30 V DC?**

A: No, the specified voltage input range for this product is 30 V DC. Using higher voltages may damage the device.

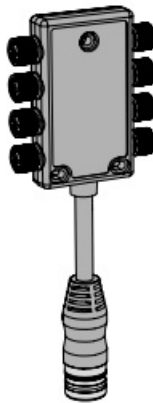
- **Q: What is the maximum current rating per connector?**

A: The maximum current per connector is 2A, with a total maximum current of 8A across all connectors.

R95 I/O Junction Block Product Manual

Features

8-Port Junction Block with 16 Signals



- Capable of handling 16 individual PNP signals into a singular point of entry Supports 8A combined between all devices connected
- Pin 2 and Pin 4 on the M12 for each individual signal
- Home run cabling options include a flying lead exit in varying lengths or a short 0.3 m M23 male 19-pin quick-disconnect connector
- Fully overmolded with a rugged TPU body
- Immediate field feedback with LEDs for signal and power status
- Wiring diagram included on body for quick problem diagnosis

Models

LED Models

Model	Ports	Home Run Connector	Wiring
R95-8M125-C1-D24P	(8) Integral 5-pin M12 female quick-disconnect connectors	1 m (3.28 ft) black PVC cable with flying leads	See “Wiring” on page 2
R95-8M125-0.3M23-D24P		0.3 m (0.98 ft) black PVC cable with a 19-pin M23 male quick-disconnect connector	

Non-LED Models

Model	Ports	Home Run Connector	Wiring
R95-8M125-C1-D24	(8) Integral 5-pin M12 female quick-disconnect connectors	1 m (3.28 ft) black PVC cable with flying leads	See “Wiring” on page 2
R95-8M125-0.3M23-D24		0.3 m (0.98 ft) black PVC cable with a 19-pin M23 male quick-disconnect connector	

Product Overview

Banner’s Molded Junction Blocks are designed to help customers reduce wiring and to simplify connecting multiple products.

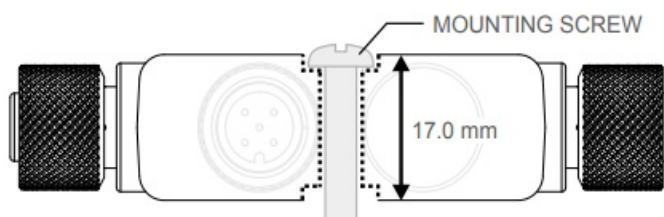
The 8-Port I/O Junction Block:

- Allows up to 16 individual PNP devices connected
- Provides 8A of power shared between all devices connected on the 18 Awg power conductors from a panel or control source Includes a singular connection back to the control device or panel to manage all of these devices on 22 awg wire
- Has non-LED options to allow for any signal type to be combined into the block

Mechanical Installation

Install the R95 I/O Junction Block to allow access for functional checks, maintenance, and service or replacement.

All mounting hardware is supplied by the user. Fasteners must be of sufficient strength to guard against breakage. Use of permanent fasteners or locking hardware is recommended to prevent the loosening or displacement of the device. The mounting hole (4.5 mm) in the R95 I/O Junction Block accepts M4 (#8) hardware. See the figure below to help in determining the minimum screw length.

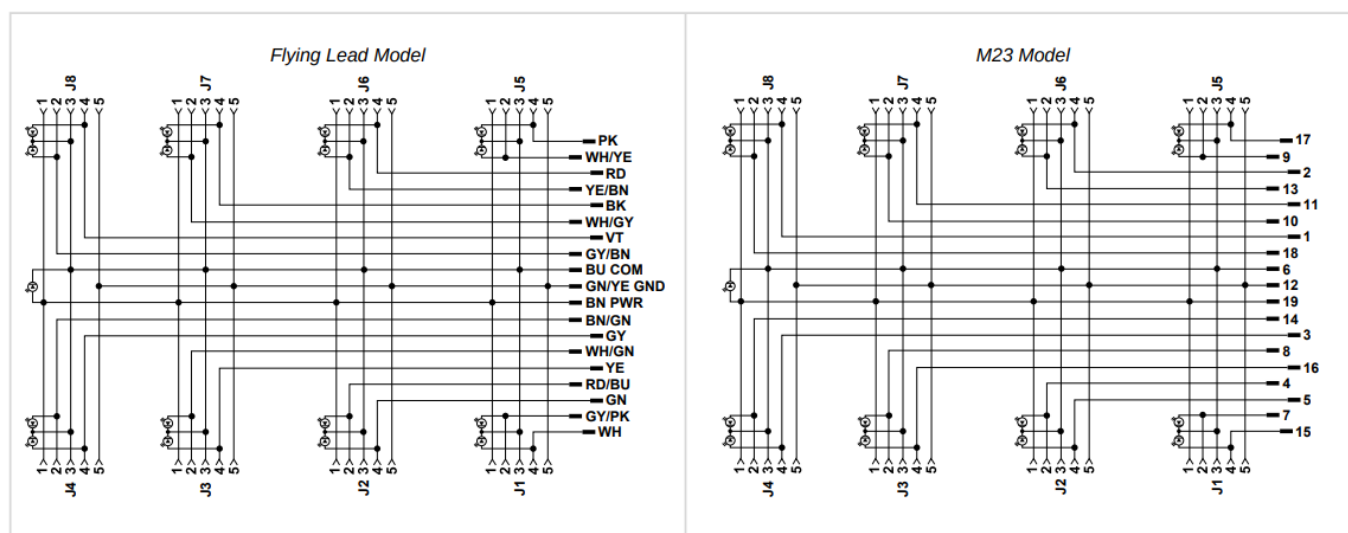


NOTE: The dotted line indicates the profile of the counterbore.

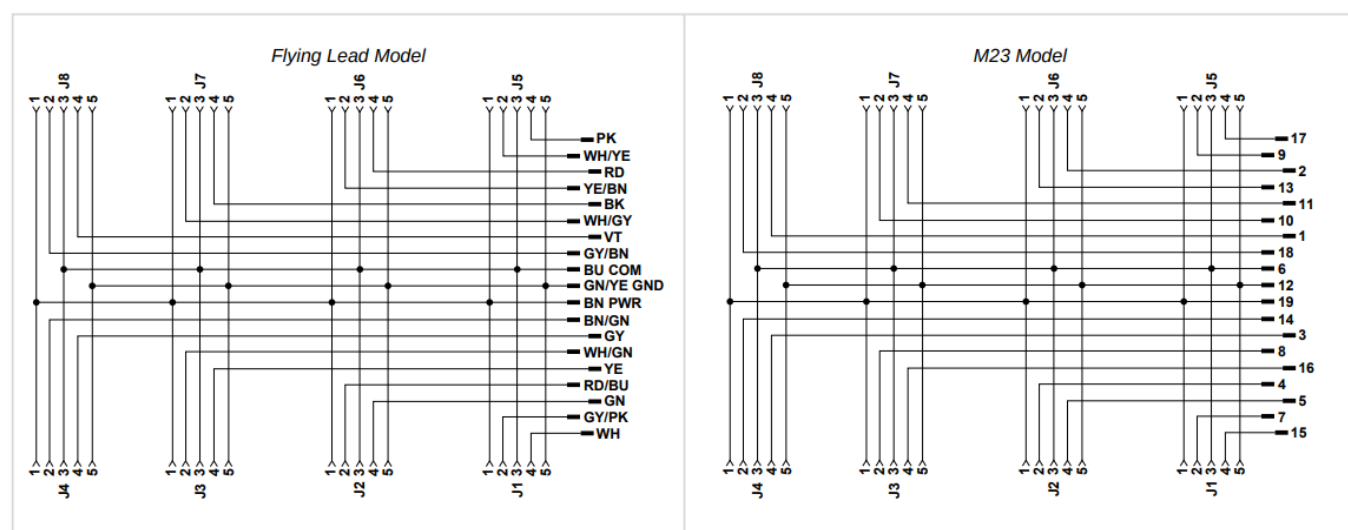
CAUTION: Do not overtighten the R95 I/O Junction Block’s mounting screw during installation. Overtightening can affect the performance of the R95 I/O Junction Block.

Wiring

LED Models



Non-LED Models



Specifications

- **Voltage Input Range**
- 30 V DC
- **Maximum Current**
- 8A total
- 2A max. per connector

Construction

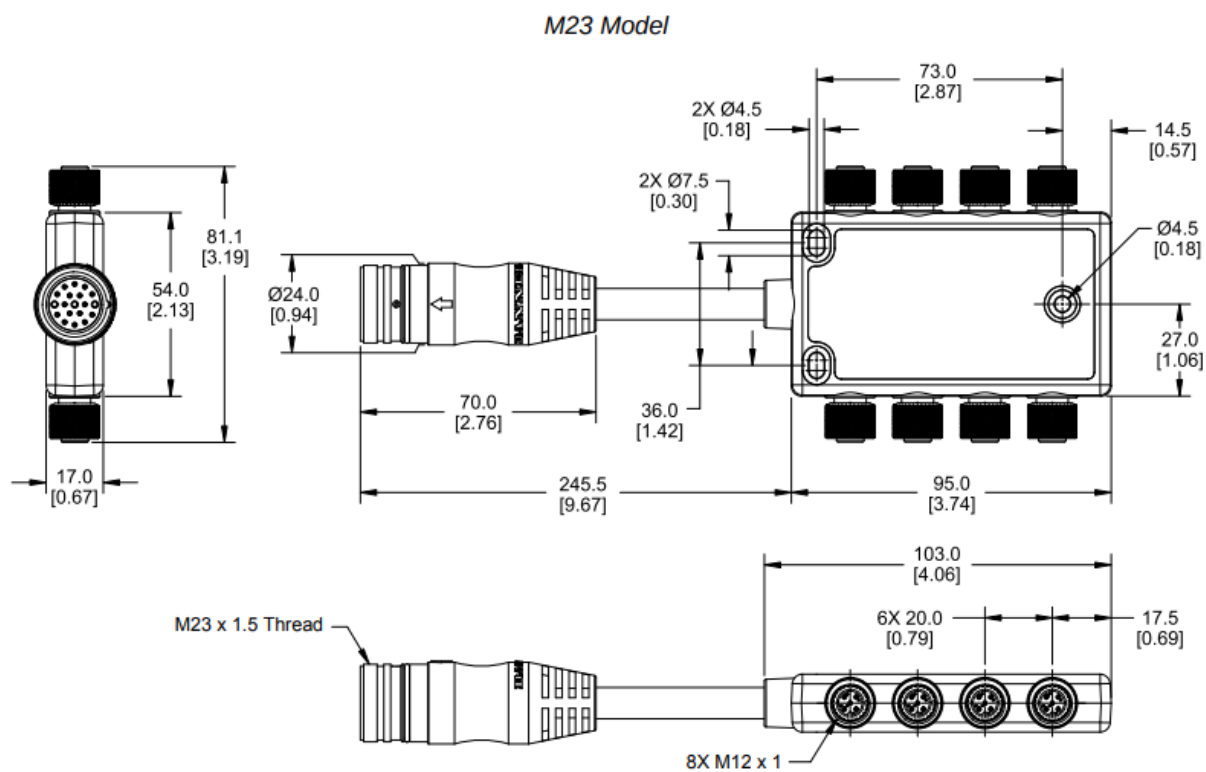
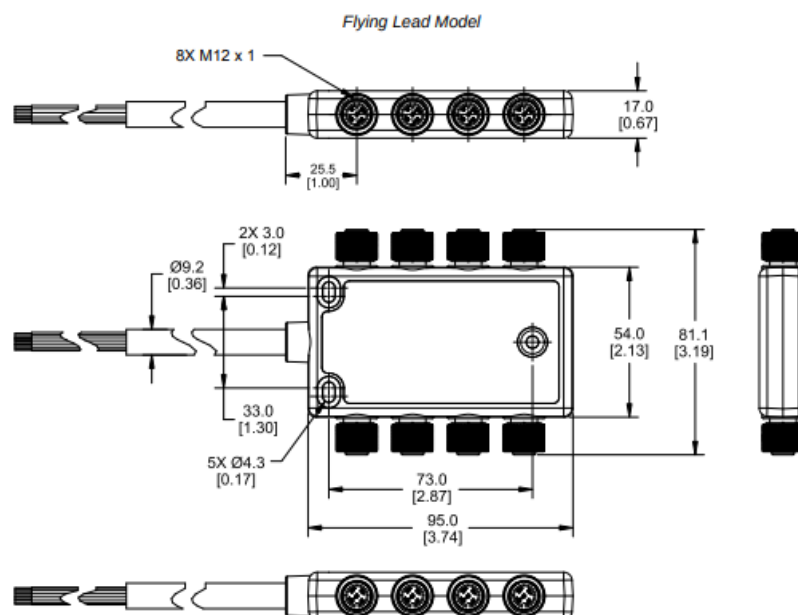
- Coupling Material: Nickel-plated brass
- Connector Body: TPU black

Operating Conditions

- 40 °C to +70 °C (−40 °F to +158 °F)
- 90% at +70 °C maximum relative humidity (non-condensing)
- Storage Temperature: −40 °C to +80 °C (−40 °F to +176 °F)

Dimensions

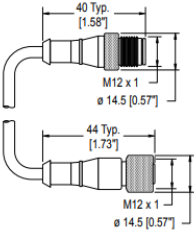
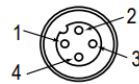
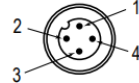
All measurements are listed in millimeters [inches], unless noted otherwise. The measurements provided are subject to change.



Accessories

Cordsets

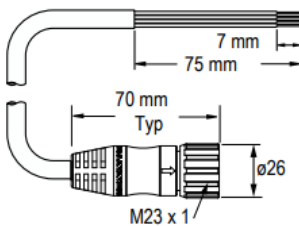
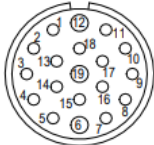
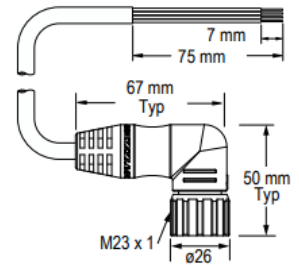
4-pin Double-Ended M12 Female to M12 Male Cordsets

Model	Length	Dimensions (mm)	Pinouts	
BC-M12F4-M12M4-22-1	1 m (3.28 ft)		Female	<div>1 = Brown</div> <div>2 = White</div> <div>3 = Blue</div> <div>4 = Black</div>
BC-M12F4-M12M4-22-2	2 m (6.56 ft)			
BC-M12F4-M12M4-22-5	5 m (16.4 ft)		Male	
BC-M12F4-M12M4-22-8	8 m (26.25 ft)			
BC-M12F4-M12M4-22-10	10 m (30.81 ft)			
BC-M12F4-M12M4-22-15	15 m (49.2 ft)			

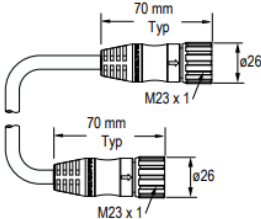
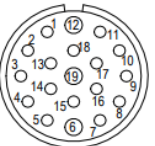
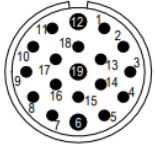
5-pin Double-Ended M12 Female to M12 Male Cordsets

Model	Length	Dimensions (mm)	Pinouts	
BC-M12F5-M12M5-22-0.16M	0.16 m (0.52 ft)		Female	<div>1 = Brown</div> <div>2 = White</div> <div>3 = Blue</div> <div>4 = Black</div> <div>5 = Gray</div>
BC-M12F5-M12M5-22-1	1 m (3.28 ft)			
BC-M12F5-M12M5-22-2	2 m (6.56 ft)		Male	
BC-M12F5-M12M5-22-5	5 m (16.4 ft)			
BC-M12F5-M12M5-22-8	8 m (26.25 ft)			
BC-M12F5-M12M5-22-10	10 m (30.81 ft)			
BC-M12F5-M12M5-22-15	15 m (49.2 ft)			

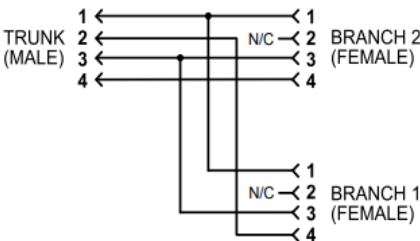
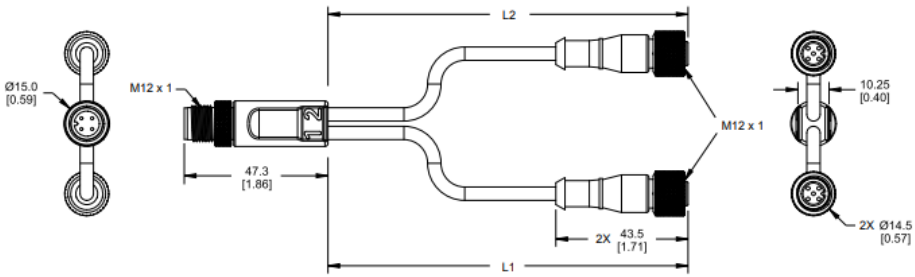
19-pin Single-Ended M23 Female Cordsets

Model	Length	Dimensions (mm)	Pinout (Female)	
BC-M23F19-1822-1	1 m (3.28 ft)			<ul style="list-style-type: none">1 = Purple2 = Red3 = Gray4 = Red/Blue5 = Green6 = Blue (18 AWG)7 = Gray/Pink8 = White/Green9 = White/Yellow10 = White/Gray11 = Black12 = Green/Yellow (18 AWG)13 = Yellow/Brown14 = Brown/Green15 = White16 = Yellow17 = Pink18 = Gray/Brown19 = Brown (18 AWG)
BC-M23F19-1822-2	2 m (6.56 ft)			
BC-M23F19-1822-5	5 m (16.4 ft)			
BC-M23F19-1822-10	10 m (32.8 ft)			
BC-M23F19-1822-15	15 m (49.2 ft)			
BC-M23F19-1822-20	20 m (65.6 ft)			
BC-M23F19A-1822-2	2 m (6.56 ft)			
BC-M23F19A-1822-5	5 m (16.4 ft)			
BC-M23F19A-1822-10	10 m (32.8 ft)			

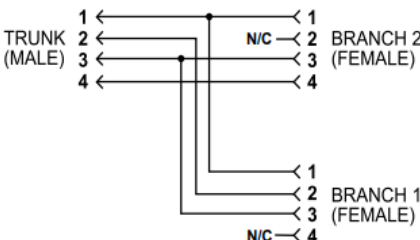
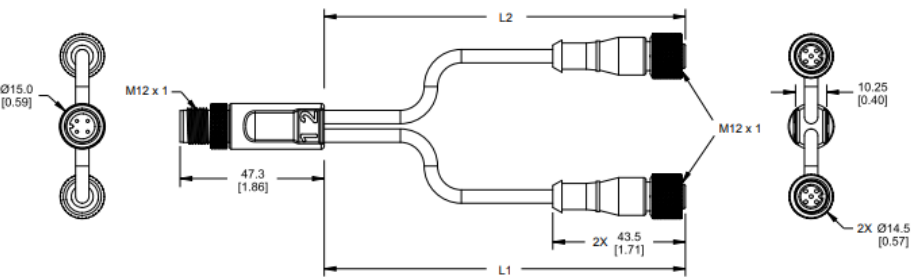
19-pin Double-Ended M23 Female to M23 Male Cordsets

Model	Length	Dimensions (mm)	Pinout (Female)	Pinout (Male)
BC-M23F19-M23M19-1822-1	1 m (3.28 ft)			
BC-M23F19-M23M19-1822-2	2 m (6.56 ft)			
BC-M23F19-M23M19-1822-5	5 m (16.4 ft)			
BC-M23F19-M23M19-1822-10	10 m (32.8 ft)			
BC-M23F19-M23M19-1822-15	15 m (49.2 ft)			
BC-M23F19-M23M19-1822-20	20 m (65.6 ft)			

4-Pin M12 Male to 5-Pin M12 Female Splitter Cordset

Model	Branches (Female)	Wiring
S15YA4-M124-M124-0.2M	L1, L2 2 × 0.2 m (7.9 in)	
		

4-Pin M12 Male to 5-Pin M12 Female Splitter Cordset

Model	Branches (Female)	Wiring
S15YA24-M124-M124-0.2M	L1, L2 2 × 0.2 m (7.9 in)	
		

Other Accessories

ACC-CAP M12-10

- 10 Caps
- Seal and protect exposed, unterminated cascade quick-disconnect connectors



Maintenance and Service

Do not use alcohol-based cleaning agents. The R95 I/O Junction Block is maintenance-free.

Banner Engineering Corp Limited Warranty

Banner Engineering Corp. warrants its products to be free from defects in material and workmanship for one year following the date of shipment. Banner Engineering Corp. will repair or replace, free of charge, any product of its manufacture which, at the time it is returned to the factory, is found to have been defective during the warranty period. This warranty does not cover damage or liability for misuse, abuse, or the improper application or installation of the Banner product.

THIS LIMITED WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER EXPRESS OR IMPLIED (INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), AND WHETHER ARISING UNDER COURSE OF PERFORMANCE, COURSE OF DEALING OR TRADE USAGE.

This Warranty is exclusive and limited to repair or, at the discretion of Banner Engineering Corp., replacement. IN NO EVENT SHALL BANNER ENGINEERING CORP. BE LIABLE TO BUYER OR ANY OTHER PERSON OR ENTITY FOR ANY EXTRA COSTS, EXPENSES, LOSSES, LOSS OF PROFITS, OR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES RESULTING FROM ANY PRODUCT DEFECT OR FROM THE USE OR INABILITY TO USE THE PRODUCT, WHETHER ARISING IN CONTRACT OR WARRANTY, STATUTE, TORT, STRICT LIABILITY, NEGLIGENCE, OR OTHERWISE.

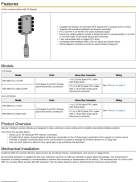
Banner Engineering Corp. reserves the right to change, modify or improve the design of the product without assuming any obligations or liabilities relating to any product previously manufactured by Banner Engineering Corp. Any misuse, abuse, or improper application or installation of this product or use of the product for personal protection applications when the product is identified as not intended for such purposes will void the product warranty. Any modifications to this product without prior express approval by Banner Engineering Corp will void the product warranties.

All specifications published in this document are subject to change; Banner reserves the right to modify product specifications or update documentation at any time. Specifications and product information in English supersede that which is provided in any other language. For the most recent version of any documentation, refer to www.bannerengineering.com.

For patent information, see www.bannerengineering.com/patents.

© Banner Engineering Corp. All rights reserved.

Documents / Resources

	<p>BANNER R95-8M125 Series I/O Junction Block [pdf] Owner's Manual R95-8M125-C1-D24P, R95-8M125-0.3M23-D24P, R95-8M125-C1-D24, R95-8M125-0.3M23-D24, R95-8M125 Series I O Junction Block, R95-8M125 Series, I O Junction Block, Junction Block, Block</p>
---	--

References

-  [Patents](#)
- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.