ELATION EWDMX IP Professional IP Wireless Transceiver User Manual

EWDMX IP™
user manual

Elation Professional USA | 6122 S. Eastern Ave. | Los Angeles, CA. 90040
323-582-3322 | 323-832-9142 fax | **www.elationlighting.com** | **info@elationlighting.com**
Elation Professional B.V. | Junostraat 2 | 6468 EW Kerkrade, The Netherlands
+31 45 546 85 66 | +31 45 546 85 96 fax | **www.elationlighting.eu** | **info@elationlighting.eu**

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DOCUMENT VERSION

Please check **www.elationlighting.com** for the latest revision/update of this manual.

Date	Document Version	Notes
8/17/15	1	Updated manual format.
4/14/21	2	Updated Operation Guide.

GENERAL INFORMATION

INTRODUCTION
Congratulations, you have just purchased one of the most innovative and reliable wireless DMX IP-rated devices on the market today! The device has been designed to perform reliably for years when the guidelines in this booklet are followed. Please read and understand the instructions in this manual carefully and thoroughly before

attempting to operate this unit. These instructions contain important information regarding safety during use and maintenance.

IP65 RATED

An IP-rated device is commonly installed in outdoor environments and has been designed with an enclosure that effectively protects the ingress (entry) of external foreign objects such as dust and water. The **International Protection (IP)** rating system is commonly expressed as "IP" (Ingress Protection) followed by two numbers (i.e. IP65) where the numbers define the degree of protection. The first digit (Foreign Bodies Protection) indicates the extent of protection against particles entering the fixture and the second digit (Water Protection) indicates the extent of protection against water entering the fixture. An IP65 rated device such as the **EWDMX IP™** is one, which has been designed and tested to protect against the ingress of dust (6) and low-pressure water jets from any direction (5).

MARINE/COASTAL ENVIRONMENT INSTALLATIONS!

Please note although this device is IP rated, the device is NOT suitable for marine and/or coastal environment installations. Installing this device in a marine and/or coastal environment may cause corrosion and/or excessive wear to the interior and/or exterior components of the fixture. Damages and/or performance issues resulting from installation in a marine and/or coastal environment will void the manufactures warranty and will NOT be subject to any warranty claims and/or repairs.

Ensure ALL connections and end caps are properly sealed with a non-conductive dielectric grease (available at most electrical suppliers) to prevent water ingress/condensation and/or corrosion.

OPTIONAL CORROSION- RESISTANT COATING

Optional Corrosion-Resistant Coatings may be available for this device.
Please consult your Elation Professional sales representative for details.

UNPACKING

Every unit has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your unit for damage and be sure all accessories necessary to operate the unit have arrived intact. In the event, the damage has been found or parts are missing, please contact our customer support team for further instructions. Please do not return this unit to your dealer without first contacting customer support at the number listed below. Please do not discard the shipping carton in the trash. Please recycle whenever possible.

BOX CONTENTS

- (1) IP Rated Power Cable
- (1) IP Rated 3pin Male DMX Input Cable
- (1) Clamp Mounting Bracket & (2) Screws
- Manual & Warranty Card

CUSTOMER SUPPORT

Elation Professional® provides a customer support line, to provide set up help and to answer any question should you encounter problems during your set up or initial operation. You may also visit us on the web at **www.elationlighting.com** for any comments or suggestions. For service-related issues please contact Elation Professional®.
ELATION SERVICE USA – Monday – Friday 8:00am to 5:00pm PST
Voice: 323-582-3322 Fax: 323-832-9142
E-mail: **support@elationlighting.com**

ELATION SERVICE EUROPE – Monday – Friday 08:30 to 17:00 CET
Voice: +31 45 546 85 30
Fax: +31 45 546 85 96
E-mail: **support@elationlighting.eu**

WARRANTY REGISTRATION
Please complete and mail in the enclosed warranty card or register online: **http://www.elationlighting.com/Login.aspx** to validate your purchase. All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem, as well as the R.A. number, must also be written down on a piece of paper and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. Items returned without an R.A. number clearly marked on the outside of the package will be refused and returned at the customer's expense. You may obtain an R.A. number by contacting customer support.

IMPORTANT NOTICE!
There are no user-serviceable parts inside this unit. Do not attempt any repairs yourself; doing so will void your manufactures warranty. Damages resulting from modifications to this fixture and/or the disregard of safety and general user instructions found in this user manual void the manufactures warranty and are not subject to any warranty claims and/or repairs.

LIMITED WARRANTY

A. Elation Professional® hereby warrants, to the original purchaser, Elation Professional® products to be free of manufacturing defects in material and workmanship for a period of two years (730 days), and Elation Professional® product rechargeable batteries to be free of manufacturing defects in material and workmanship for a period of six months (180 days), from the original date of purchase. This warranty excludes discharge lamps and all product accessories. This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.
B. For warranty service, send the product only to the Elation Professional® factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, Elation Professional® will pay return shipping charges only to a designated point within the United States. If any product is sent, it must be shipped in its original package and packaging material. No accessories should be shipped with the product. If any accessories are shipped with the product, Elation Professional® shall have no liability whatsoever for loss and/or damage to any such accessories, nor for the safe return thereof.

C. This warranty is void if the product serial number and/or labels are altered or removed; if the product is modified in any manner which Elation Professional® concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the Elation Professional® factory unless prior written authorization was issued to purchaser by Elation Professional®; if the product is damaged because not properly maintained as set forth in the product instructions, guidelines and/or user manual.
D. This is not a service contract, and this warranty does not include any maintenance, cleaning, or periodic check-up. During the periods as specified above, Elation rofessional® will replace defective parts at its expense and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of Elation Professional® under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Elation Professional®. All products covered by this warranty were manufactured after January 1, 1990, and bear identifying marks to that effect.

E. Elation Professional® reserves the right to make changes in design and/or performance improvements upon its products without any obligation to include these changes in any products theretofore manufactured.
F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with the products described above. Except to the extent prohibited by applicable law, all implied warranties made by Elation Professional® in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty periods set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said periods have expired. The

consumer's and/or dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall Elation Professional® be liable for any loss and/or damage, direct and/or consequential, arising out of the use of, and/or the inability to use, this product.

G. This warranty is the only written warranty applicable to Elation Professional® products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

SAFETY INSTRUCTIONS

⚠️	This device is an extremely sophisticated piece of electronic equipment. To guarantee a smooth operation, it is important to follow the guidelines in this manual. The manufacturer of this device will not accept responsibility for damages resulting from the misuse of this device due to the disr egard of the information printed in this manual.
⏚	This device falls under PROTECTION CLASS 1. It's essential this device is grounded properly, a nd only qualified personnel perform all electrical connections.

- For proper operation, only qualified and certified personnel should perform the installation of this device. Do not attempt installation and/or operation without proper knowledge of how to do so. Any modifications to this device will void the original manufactures warranty and increase the risk of damage and/or personal injury.

- Always disconnect from the main power source before performing any type of cleaning procedure and/or when this device is not in use. Only handle the power cord by the plug end, never pull out the plug by tugging wire the cord.

- Do not operate the device if the power cord has become frayed, crimped, and/or damaged. If the power cord is damaged, replace it immediately with a new one of a similar power rating.

- **DO NOT** operate the device in locations above 113°F (45°C) or below 14° F (-10° C).

- **DO NOT** operate the device in areas subject to extreme vibrations or bumps.

- Please make sure there are **NO FLAMMABLE MATERIALS** close to this device while operating, to prevent any fire hazard.

- Do not permit operation by persons who are not qualified for operating this type of device. Most damages are the result of operations by nonprofessionals.

- Please use the original packaging and materials to transport this device for service.

GENERAL GUIDELINES

- The device must be installed in a location where the antenna is not blocked or hidden from view.

- DO NOT attempt installation and/or operation without knowing how to do so.

- DO NOT allow persons to operate this type of device who is not qualified. Most damages are the result of operations by nonprofessionals.

- DO NOT shake the device, avoid brute force when installing and/or operating.

- When installing a device overhead in a suspended location, always install with an appropriate safety cable. When installing the fixture in a suspended environment, always use mounting hardware that is no less than M10 x 25 mm, also be sure the hardware is inserted in the pre-arranged screw holes in the bracket of the fixture.

- Use the original packaging and materials to transport the device for service.

DEVICE OVERVIEW
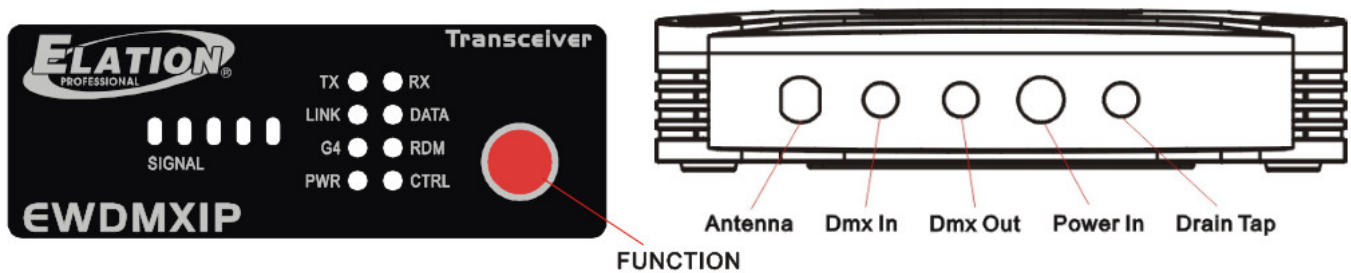
SIGNAL
In **"Receiver Mode"** – Indicates the strength of receiving wireless signal.

In **"Transmitter Mode"** – Indicates Operating Mode (See page 14 for more details)
TX/RX
Indicates current operating mode of the unit
TX = Transmitter Mode
RX = Receiver Mode

LINK – TX (Transmitter) MODE LED INDICATOR
ON: Normal Operation
FLASH: Unlinking All Wireless Receivers
RAPID FLASH: Linking With All Wireless Receivers
LINK – RX (Receiver) MODE LED INDICATOR
ON: Not Linked To A Wireless Transmitter
FLASH: Linked To A Wireless Transmitter
RAPID FLASH: Linking To A Wireless Transmitter
DATA
Both modes (TX / RX) Indicates the presence of a wireless DMX signal
G4
Both Modes (TX / RX) Indicates G4 mode is active
RDM
Both Modes (TX / RX) Indicates the presence of an RDM signal
CTRL
Both Modes (TX / RX) Indicates Control mode is active
POWER
Both Modes (TX / RX) Indicates device is receiving the required AC power
FUNCTION BUTTON
Used to activate modes as listed above
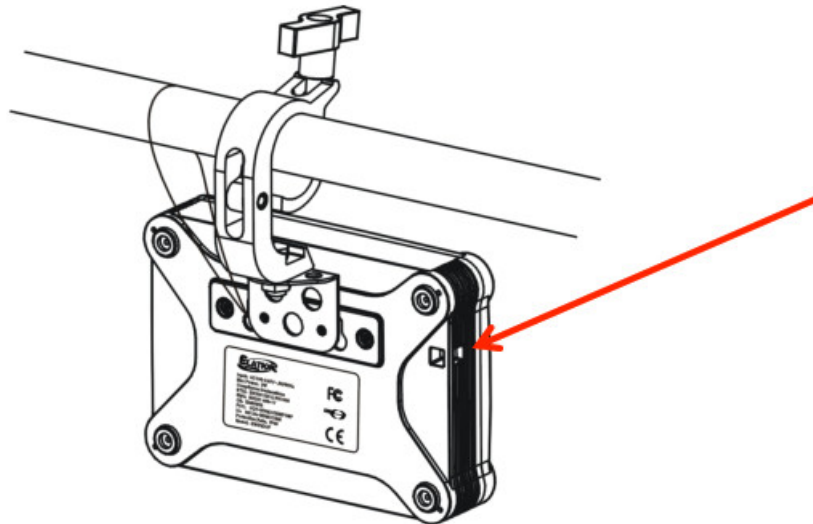

DEVICE INSTALLATION

⚠️	**FLAMMABLE MATERIAL WARNING** Keep fixtures at least 5.0 ft (1.5m) away from any flammable materials, decorations, pyrotechnics, etc.
⚠️	**ELECTRICAL CONNECTIONS** A qualified electrician should be used for all electrical connections and/or installations.

CAUTIONS

- For added protection, mount the device in areas outside walking paths, seating areas, or in areas where unauthorized personnel might reach the fixture.
- Before mounting the device to any surface, make sure the installation area can hold a minimum point load of 10 times the weight of the fixture.
- Device installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.
- Never stand directly below the device when mounting, removing, or servicing.
- The applicable operating temperature for the device is between -10°C to 45°C. Do not use the device under or above this temperature range.
- ☞ Ensure ALL connections and end caps are properly sealed with dielectric grease (available at most electrical suppliers) to prevent water corrosion and/or an electrical short circuit.

INSTALLATION VIA INCLUDED BRACKET

TRUSS MOUNTING INSTALLATION
1) Insert the quick-lock fasteners of the included bracket into the respective holes on the bottom of the device. Tighten the quick-lock fasteners fully clockwise.
2) Loop the safety cable through the opening on the bottom of the base indicated by the red arrow, and over the trussing system or a safe fixation spot. Hook the end of the safety cable onto the attached carabineer.

PERMANENT INSTALLATION
1) Remove the attached mounting bracket and set it on a flat surface or secure it to a wall using the 2 slotted screw-mounting points.

INSTALLATION LOCATION GUIDELINES

Wireless DMX signals can penetrate walls, glass, metal, and most objects. However, there are many factors that can affect and/or interrupt the wireless DMX signal, one of which is people. Therefore it is highly recommended to position the wireless antenna a minimum of 9.8 ft. (3m) above audiences and/or above ground level. Careful planning and testing of the selected installation location is critical to ensure optimum and reliable wireless DMX operation.

The maximum wireless DMX range is up to **1,640 ft. (500m)**, based on general testing of the EWDMX IP ™ in an outdoor urban area with normal interference, installed in a location **9.8 ft. (3m) ABOVE AUDIENCES and/or GROUND LEVEL**, with a **DIRECT LINE OF SIGHT** (Tx Antenna to Rx Antenna), and with 80% or greater signal strength. (See diagram below)
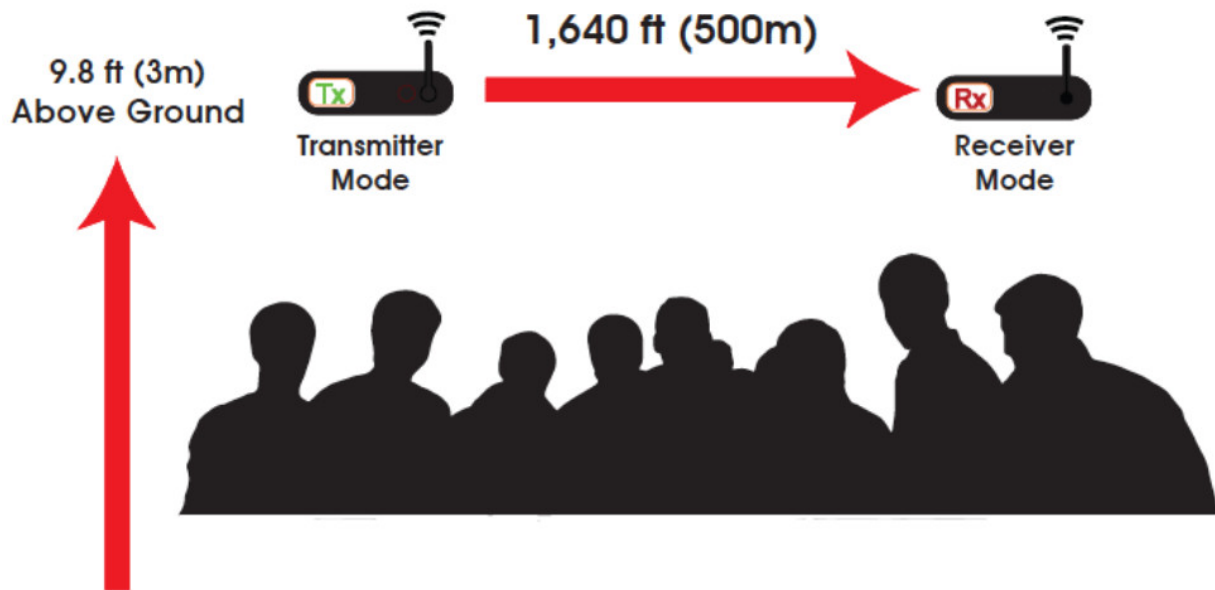
OPERATION GUIDE
SYNCHRONIZING RECEIVERS TO A TRANSMITTER

Note: You can add receivers at any time, even during operation.

1. Power on the **RECEIVER** unit(s) and ensure that they are not linked with any other

   TRANSMITTER (LINK indicators should be OFF and RX indicator should be ON). If the units are linked, follow

   the instructions in the next section to unlink receivers.

2. On the **TRANSMITTER** unit, press and release the **RED FUNCTION** button quickly.

   The **TRANSMITTER** will scan for all unlinked **RECEIVERS** for a period of ten seconds the LINK indicator will

   flash rapidly.

If successful, each **RECEIVER's** LINK and SIGNAL indicators will go ON. If failed (i.e. the LINK indicator fails to go solid after 10 seconds on the **RECEIVER),** check if the **RECEIVER** is in range and repeat the procedure.

CLEARING A RECEIVER LINK TO A TRANSMITTER
On the **TRANSMITTER** unit, press the **RED FUNCTION** button and hold for 3 seconds. All display LEDs will go out, and the **LINK LED will be blinking slowly. Release the RED FUNCTION** button at this point, and all connected **RECEIVERS** will be unlinked.

TO UNLINK AN INDIVIDUAL RECEIVER
On the **RECEIVER,** press and hold the **RED FUNCTION** button until the LINK indicator goes OFF except for POWER and RX indicators. The **RECEIVER** is now unlinked.

SWITCHING BETWEEN TX AND RX MODES

The **EWDMX IP™** can switch between transmit and receive modes, allowing the unit to be used as a **TRANSMITTER or a RECEIVER.**

1. Remove power from the unit by disconnecting the power cable

2. Push and hold the **RED FUNCTION** button

3. Reconnect power while still holding the **RED FUNCTION** button

4. Release the **RED FUNCTION** button

5. The **TX (TRANSMITTER) or RX (RECEIVER) LEDs** indicate the mode of the unit.

G3/G4 MODES, & RDM OPERATION

EWDMX IP™ can change between the Generation 3 protocol (compatibility for older units), and the new Generation 4 protocol, which supports Invisiwire, Datasafe, and RDM **(Remote Device Management)**. G4 receivers automatically detect the mode the transmitter is in, so you only need to change the mode of the transmitter to change the mode of the entire system. When the protocol mode has been changed, receivers need to be re-connected to their respective transmitters.

TO CHANGE MODES

1. Hold down the RED FUNCTION button for over 10 seconds. Initially, you will see the LINK light blinks slowly. Do not release the RED FUNCTION button at this point, as this will disconnect all RECEIVERS. Wait until you see ALL of the LEDs light up, then the RED CTL light illuminates, before releasing the RED FUNCTION button.

2. Press and release the RED FUNCTION button to change between the (3) modes.
   Note that each time the RED FUNCTION is pressed, the unit will toggle between all the different modes.

3. Once the desired mode is set, power cycle the unit to begin use in that mode.

The Following Modes Can Be Set:

➢ **G4 2.4GHz** (First green SIGNAL indicator on the left and G4 Light is static on).

➢ **G4 RDM** (First green SIGNAL indicator on the left is off but G4 Light is static on).

➢ **G3 2.4GHz** (First green SIGNAL indicator on the left is static on but G4 Light is off).

☞ **Note: Units ship standard as G3, 2.4GHz for backward compatibility reasons**

SWITCHING RDM MODE

1. Press and hold the RED FUNCTION button for approximately 10 seconds. The TX, RX, Data, and Link indicator lights will begin flashing in sequence to indicate that RDM The mode can now be set up. Release the RED FUNCTION button at this time.

2. Press the RED FUNCTION button repeatedly until the G4 indicator light comes on, and the left-most Signal indicator light turns off.

3. Press and hold the RED FUNCTION button until the TX, RX, Data, and Link indicator lights stop flashing. The device is now configured to run in RDM mode.

TECHNICAL SPECIFICATIONS

FEATURES

IP65 Wireless DMX Transceiver with 2dbi Outdoor Antenna
Up To 1,640 ft. (500m) Wireless DMX Range* (*See page 12 for more information)
FHSS (Frequency Hoping Spread Spectrum) 1,800 tps
Datasafe Tech – Wireless Fidelity and Error Correction
Invisi-wire High-Fidelity Tech – Output Matches Input
Easy-To-Use Single Push Button Function Control
RDM (Remote Device Management) Support
2.4GHz Radio – License Free Worldwide
TDMA (Time Division Multiple Access)
W-DMX G4 Protocol Support
Rugged Hard Plastic Case
Single DMX-512 Universe

CONTROL / CONNECTIONS

Multi-Function Single Push Button
Antenna Port
IP Rated 3pin Male + 3pin Female Attached DMX In/Out Cables
IP Rated 3pin Attached Power In Cable

SIZE / WEIGHT

Length: 9.4" (240mm)
Width: 6.7" (170mm)
Vertical Height: 2.2" (56.5mm)
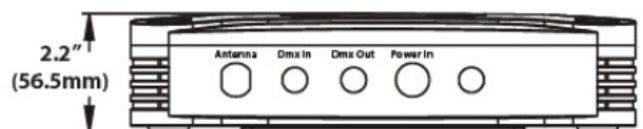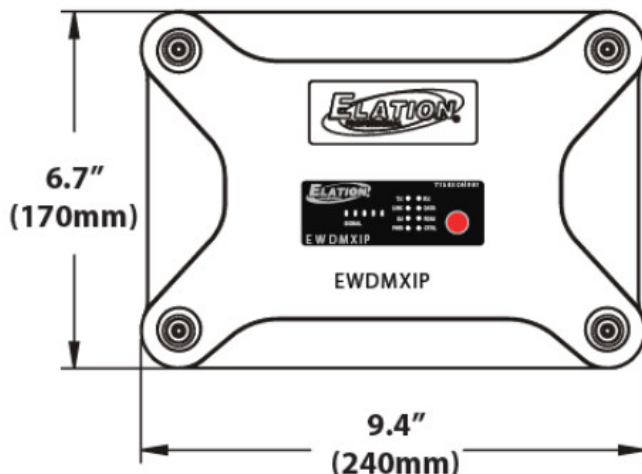Weight: 4.6 lbs. (2.1kg)

ELECTRICAL / THERMAL

AC 100-240V – 50/60Hz
3W Max Power Consumption
14°F (-10°C) to 113°F (45°C)

APPROVALS / RATINGS

CE | IP65

DIMENSIONAL DRAWINGS

Please Note: **Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.**

OPTIONAL ACCESSORIES

ORDER CODE	ITEM
TRIGGER CLAMP	Heavy Duty Wrap Around Hook Style Clamp
8.04E+11	3pin IP to Edison Plug Power Cable
8.04E+11	10 ft. (3m) IP Power Extension Cable
8.04E+11	32.8 ft. (10m) IP Power Extension Cable
8.04E+11	3pin Female DMX to 3pin Male IP Cable
8.04E+11	3pin Male DMX to 3pin Female IP Cable
8.04E+11	10 ft. (3m) 3pin Female IP to 3pinMale IP Data Extension Cable
8.04E+11	32.8 ft. (10m) 3pin Female IP to 3pin Male IP Data Extension Cable

Documents / Resources

ELATION EWDMX IP Professional IP Wireless Transceiver [pdf] User Manual
EWDMX IP, Professional IP Wireless Transceiver

References

- **Ε Elation Professional - Professional Lighting Products**
- **Ε Search results for: 'Login aspx'**
- **E Elation Professional EUROPE - Professional Lighting Products**