



2 0 1 9 / 2 0 2 0 W I R E L E S S D M X . C O M F B . C O M / W I R E L E S S D M X

#### WIRELESS SOLUTION

Wireless Solution Sweden AB was founded in 2003 by top professionals from the lighting industry and wireless communication engineers. The company designs and produces W-DMX $^{\rm IM}$ , the twice award winning Wireless DMX system that is today the un-official standard for those that require the most dependable product available for transmitting lighting control data wirelessly, no matter the distance or location.

Wireless Solution's W-DMX™ product line makes large, creative, or technically complex installations possible through the wireless distribution of lighting control signals. Award winning reliability and one-button-to-go setup allow for quick installation of lighting fixtures, on-time completion of time-sensitive projects and faster, more efficient and less labor intensive load-in and load-out of rental equipment.

Wireless Solution's product range boasts indoor as well as IP65 rated outdoor models and can be used in even the most complex lighting systems today. The only manufacturer on the market carrying a whole range of wireless equipment and accessories, even the most complex turnkey systems can be specified and supplied in their entirety by Wireless Solution.

#### W-DMX<sup>™</sup>

W-DMX™ is a true 'plug and play' system for transmitting both DMX and RDM data wirelessly, incorporating advanced technology including Adaptive Frequency Hopping Spread Spectrum (AFHSS) to dynamically avoid other radio frequency users, built-in tripleband for better performance in even the toughest environments, and RDM support to keep on top of your lighting system without fail. On top of this with new functions like Data-Safe for error correction and Invisi-Wire

Wireless Solution continues to invest tirelessly in R&D, and has a full gamut of products lined up for the future. Wireless Solution Sweden AB is, and will continue to be, the leader in Wireless lighting control worldwide. With over 50 OEM partners integrating W-DMX $^{\text{TM}}$  into a whole range of lighting products, and over 200,000 units manufactured, we are the true world leader in Wireless lighting control.

Wireless Solution Sweden AB works closely with major manufacturers, lighting designers and production companies to produce what the market wants and needs. Our products proudly carry a "Made in Sweden" stamp of approval, guaranteeing topnotch quality and reliability across the full range, in order not to compromise any job.

Are you wireless?





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#### **G5 FEATURES**

With development of the intrinsic technology, Wireless Solution has added a wider voltage range on all radio cards, from 3.3 to 24v support. The new technology also features an increased sensitivity, allowing to co-exist in this tougher wireless world.



#### TRIPLE-BAND<sup>1</sup>



Triple Band allows DMX and RDM data to be transmitted on the 2.4GHz and the less congested 5.2GHz and 5.8GHz bands at the same time.



Together with Adaptive Frequency Hopping – see below - W-DMX™ stands out as the most reliable and superior tool for wireless lighting control.



#### G3 & G4S COMPATIBLE



W-DMX<sup>™</sup> G5 units are all compatible with the previous G3 and G4 products, meaning that our newer equipment slots right into your existing network.



#### DATA-SAFE

W-DMX<sup>™</sup> data-safe technology protects your DMX and RDM data from corruption in the air. Using tough checks, and our patented method of error correction, W-DMX<sup>™</sup> corrects any corrupted data before it gets to your lighting equipment, resulting in a flicker free show.



## ADAPTIVE FREQUENCY HOPPING (AFHSS)

W-DMX™ adapts its radio transmission automatically depending on current radio traffic on both the 2.4GHz and 5 GHz bands, an industry first, ensuring transmission is conducted interference free not only for W-DMX™ systems, but for other radio systems in the vicinity as well.



#### INVISI-WIRE

W-DMX $^{\text{M}}$  G5 recreates the DMX signal at the end of its wireless link so accurately that it is the industry s true wireless replacement for a wire.



#### RDM<sup>2</sup>

W-DMX<sup>™</sup> supports RDM out of the box, allowing not only the W-DMX<sup>™</sup> system to be configured by any available RDM controller, but also providing the controller with access to any RDM devices downstream of any compatible RDM enabled W-DMX<sup>™</sup> receiver.



#### PERSONAL CONNECTIVITY

Generation 5 allows users to connect their personal devices via Wi-Fi, and use third-party control apps like Luminair® to control their fixtures. Personal connectivity is great for smaller events where it doesn't demand a control desk to operate the show.



#### **DOUBLE-UP!**

In G5 you can double the amount of DMX universes transmitted – this is available on all ranges but the Micro. Each F-1 can now transmit up to two universes, and up to four universes on the F-2 series.



#### ONE-BUTTON-2-GO

All W-DMX<sup>m</sup> features are fully automated, allowing the system to select the best operating characteristics automatically, all with a push of the single red function button on the front of every W-DMX $^m$  unit.



#### MULTIPOINT TO MULTIPOINT

W-DMX<sup>™</sup> G5 transmitters can connect as to as many W-DMX<sup>™</sup> G5 receivers as you wish, effectively working like a big, invisible wireless DMX splitter. For more universes, just add more transmitters, resulting in a true multipoint to multipoint functionality.



#### **ETHERNET**

W-DMX™ supports a full range of Ethernet protocols associated with the lighting industry. Out of the box, it supports not only Art-Net I/II/III, Streaming ACN, but will be updateable in the future with more protocols.

1) 5.2GHz and 5.8Ghz is not available in all countries.

 Covered by one or more claims of patent No 7.432,803, and/or by other patent applications and corresponding foreign patent applications pending.



#### ELĒKRŎN THE MOST ELECTRIFYING SHOW

The show was created by Stufish, an international award-winning entertainment supplier that have designed for Elton John, Madonna, U2, Beyonce, Rolling Stones, and many others. Elēkrön is the first major original production that features all-electric sports cars, FMX Trials and Motorbikes and customised buggies and quad bikes in an indoor action-packed arena-style spectacular. With Elēkrön, Stufish continues to redefine the experience of live entertainment globally.

Wireless Solution supplied four BlackBox F-2 G5 units and thirty-eight BlackBox R-512 G5 units, to be contained inside the moving vehicles and supply Wireless DMX data to the LED fixtures and atmospheric effects. Each unit was retrofitted and supplied power from a central battery supply, which then connected to the 12 VDC input on each receiver. The units operated at 5.8 GHz at a distance not higher than 100 meters. Each vehicle had an antenna placed on its frame, to avoid any possible interference from the metal enclosure.

#### **OUR PATENTS & TRADEMARKS**

Although Wireless Solution has been experiencing growth and success, the company is not one to rest on its laurels. In fact, the company has been investing in itself over the past few years to prepare for an even stronger future. The company is expanding its talented staff and continually working to seek patents and open doors to new opportunities around the globe. Wireless Solution has invested heavily in a new approval to Russia, being the first company outside the country that can carries an import approval and an import license. Wireless Solution is also the first European wireless DMX company that has completed both ETL and C/ETL (similar to UL and C/UL). In addition, the company has been awarded a new patent for Wireless Lighting Control in China and Germany.

In the USA, it has been granted by the Untied States Patent and Trademark Office (USPTO) to Interlite AB (mother company and patent owner) an invention patent in regards to their new technology for wireless communication using adaptive frequency hopping (US 8,340,157). In accordance with the granted patent, it is possible to, in a more precise way, handle an adaptive wireless environment, including a plurality of wireless devices competing for the available bandwidth. What this patent means is that W-DMX™ can now protect this technology and avoid interference from all manufacturers as it can infringe on the patent.

In recognition of its financial stability, Wireless Solution was nominated the highest ranking of financial strength in 2016 from International Dun & Bradstreet with AAA, which accounts for less than 2% of companies in Sweden.

Wireless Solution plans to continue this upward trajectory. Its strong core in both people and financial position set the company up for a powerful future.





#### KONUNGARIKET SVERIGE

VARUMÄRKE NUMMER 379836

W-DMX

Varumärkesansökan nummer 2005/09588 ingavs 2005-12-19 och registrerades 2006-03-31 under nummer 379836. Publiceringsdag 2006-03-31.

atent- och registreringsverket intygar härmed att ovan avbildade varumärke är inför

Patents ark projectoring constituted appgifter



#### **OUR CUSTOMERS**

























CIRQUE DU SOLEIL





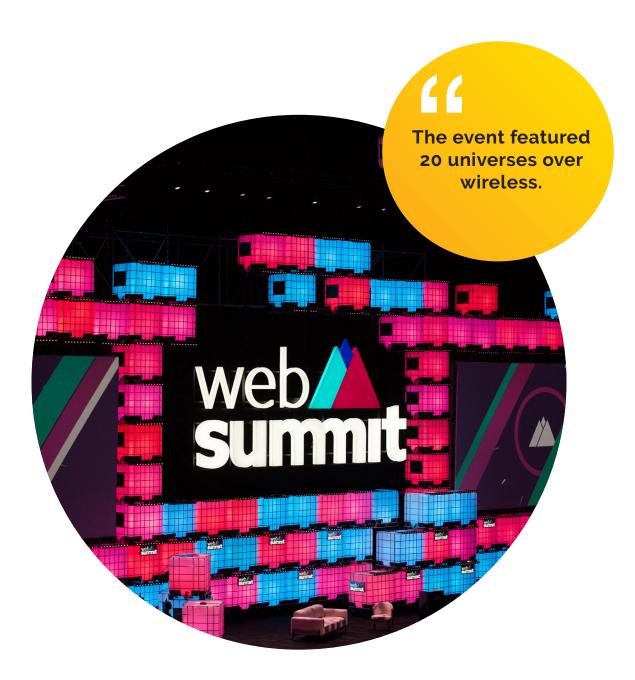


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#### WEB SUMMIT 2019 LISBON, PORTUGAL

The international technology conference Web Summit, held in Lisbon, Portugal, has recently featured equipment by Wireless Solution Sweden, the manufacturer of the W-DMX™ Wireless DMX technology. 20 universes of DMX data over wireless were used, combining 9x W-DMX™ BlackBox F-2 G5 transceivers plus 2x W-DMX™ BlackBox F-1 G5 transceivers. All the devices were setup in 2.4 GHz, controlling over 200 LED tubes around the circle seating in the arena.

The AV setup all the transceivers at FOH and transmitted to the units, utilizing the maximum channel count the units could do, so they could create pixel mapping effects. The distances were never above 100 meters, but what was most impressive was running such a large number of universes over wireless, in the same space.

#### W-DMX™ BLACKBOX G5

The W-DMX<sup>™</sup> BlackBox series is an industry leader for Wireless DMX and RDM control, packed into a tough, roadworthy die-cast metal casing. As with all our top W-DMX<sup>™</sup> technologies, the BlackBox series is built for the true lighting savvy. The W-DMX™ BlackBox uses our redesigned radio card with Generation 5 software. It now supports Triple-Band: 2.4 GHz, 5.2 GHz and 5.8 GHz frequency bands. It also features an improved Adaptive Frequency Hopping technology, that automatically avoids interference created by other wireless networks, with an increased bit-rate that enhances its sensitivity and detects transient interference from W-LAN networks, wireless intercoms, stage automation systems and more. The BlackBox also includes our improved method of error correction called Data-Safe that fixes any corrupt data before it gets to your lighting equipment. There is an optional Wi-Fi and Ethernet functionality, allowing to connect a personal mobile device to the transmitters and control the rig wirelessly.

The F-Series of BlackBox are the most versatile and flexible units on the market, that you can change on the fly between transmitter and receiver - pure transceiver technology.

All BlackBox G5 units are backward compatible with W-DMX<sup>™</sup> G<sub>3</sub> and G<sub>4</sub>S units, protecting your investment in the W-DMX<sup>™</sup> range.

A slot for the optional Ethernet or Wi-Fi PCB allows W-DMX™ BlackBox units to be enabled with Streaming ACN, Art-Net and other Ethernet based lighting protocol support, thus simplifying integration of the W-DMX™ BlackBox even into larger, more complex installations.

All Blackbox units come with automatic switching power supplies, meaning that no matter where you are in the world, the devices are ready to go. And W-DMX™ units can be supplied directly by a battery thanks to the Phoenix Gold 12V input, and over a network through PoE (Power over Ethernet), using the optional network card.

BlackBox units ship standard with a 3 dBi triple-band antenna, which provides up to an exceptional 500m of range (in 2.4 GHz). For links over greater distances, or for more complex projects, Wireless Solution provide a range of specific indoor and outdoor antennas that can be coupled through the N-Type connector in the front panel.

#### W-DMX™ BLACKBOX SERIES

Weight 1.2 Kg

235 x 150 x 45mm

F-1 G5

Article number A40001G5

Operational modes Transmitter/Receiver

1/23

Protocols DMX / RDM<sup>1</sup> / sACN<sup>2</sup> / Art-Net<sup>2</sup>

F-2 G5

Article number A40005G5

Operational modes Transmitter/Receiver/Repeater 2/43 in transmitter/receiver mode.

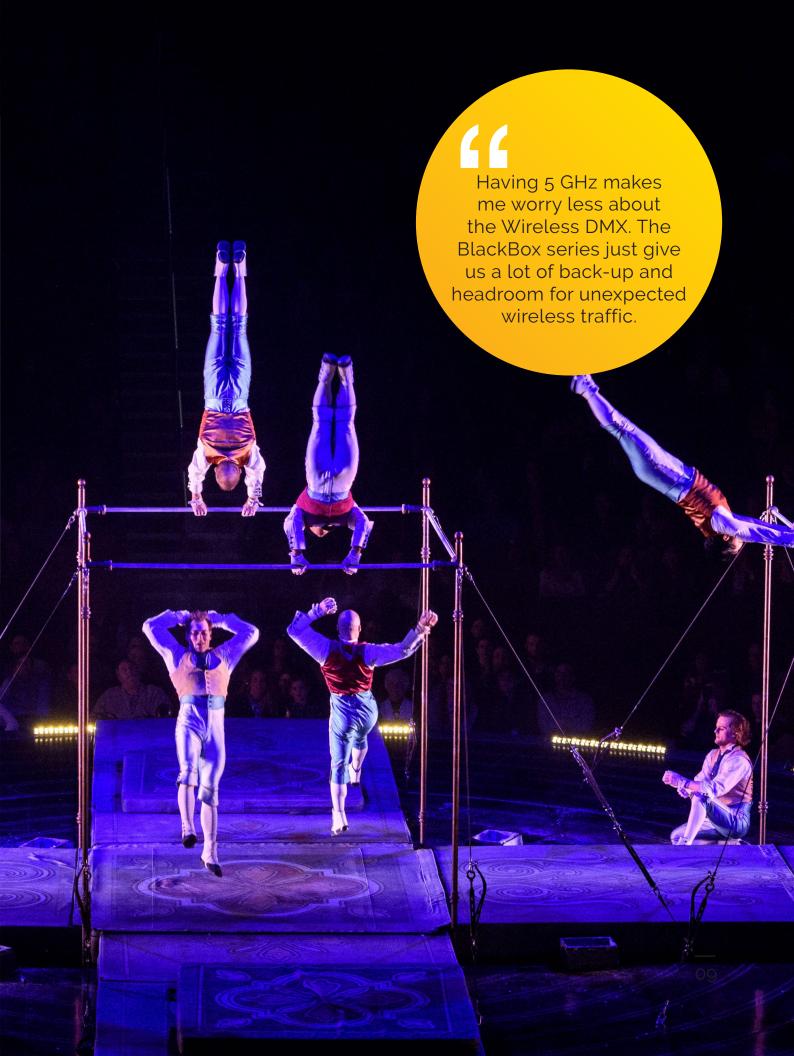
1 In repeater mode

DMX / RDM1 / sACN2 / Art-Net2

R-512 G5

Article number A40102G5 Operational modes Receiver DMX Protocols





#### W-DMX™ PROBOX F-2500 G5

The W-DMX™ ProBox F-2500 is our top of the line, 2 universe transmitter/receiver and 1 universe Repeater, all in a single box 19" Rack unit, with all the features from the previous two series built-in as standard. Built in a 1U case, the unit comes with ample connectors on the front and the back, and has built in support of Ethernet-based lighting protocols, including Art-Net and Streaming ACN. The ProBox F-2500 is designed for the large scale touring, rental and installation markets. It has an optional integration of Wi-Fi technology to enable Personal-Connectivity.

The W-DMX™ ProBox F-2500 now supports Triple-Band: 2.4 GHz, 5.2 GHz and 5.8 GHz frequency bands. It includes full RDM support, meaning the most complex installations, or even the ProBox F-2500 unit itself can be configured wirelessly. The ProBox F-2500 G5 units are backward compatible with W-DMX™ G3 and G4S units, protecting your investment in the W-DMX™ range.

It also features an improved Adaptive Frequency Hopping technology, that automatically avoids interference created by other wireless networks, with an increased bit-rate that enhances its sensitivity and detects transient interference from W-LAN networks, wireless intercoms, stage automation systems and more.

W-DMX<sup>TM</sup> PROBOX F-2500 G5

Article number A40007G5
Operational modes Transmitter/Receiver/Repeater
Universes 2/4³ in transmitter/Receiver mode.

1 in repeater mode
Protocols DMX / RDM³ / Art-Net II/III /

5/ACN
Dimensions 19", 1U

1) Covered by one or more claims of patent No 7.432.803, and/or by other patent applications and corresponding foreign patent applications pending.

2) Optional
3) In double up mode

W-DMX<sup>™</sup> ProBox F-2500 comes with an automatic switching power supply (90-260V) meeting all international standards, that ensures no matter where your rig goes, the ProBox F-2500 can follow. The unit also ships with two Triple-Band 3dBi antennas.

1) 5.2GHz and 5.8Ghz is not available in all countries.





#### W-DMX™ WHITEBOX G5

The W-DMX™ WhiteBox series is our solution for architectural and entertainment projects that require the reliability and ease of use of W-DMX™ products, in an improved weatherproof IP-66 rated casing. All the functions are the same as the BlackBox Series with standard RDM and optional Ethernet and Wi-Fi Support to convert any protocol or control the rig wirelessly.

The series have been upgraded to work as a hybrid between architectural and entertainment, with a new M10 thread for hook clamps or couplers, a new safety wire locker, and an improved wall plate for wall mounting. It can also be customised in any RAL colour, to best fit in fixed installations. The W-DMX™ WhiteBox contains features to ensure top-notch reliability, including an improved Adaptive Frequency Hopping technology to dynamically avoid interference from other radios in the vicinity without worrying, as the system adapts to its surroundings in real time. It now supports Triple-Band: 2.4 GHz, 5.2 GHz and 5.8 GHz frequency bands, meaning ever more reliability and robustness in any environment.

This series also include our advance functions from the W-DMX™ G5: Data-Safe, with automatic error correction, and Invisi-Wire. Built to be installed on the exteriors of buildings, large structures, or anywhere exposed to the elements, the WhiteBox series works tirelessly day in and day out, to transmit or receive DMX, RDM and Ethernet/Wi-Fi data around installations, from the outside of a building, over rivers and even across buildings. The units can even be powered by PoE (Power over Ethernet), using the optional network card.

With a range of IP-66 antennas available that have proven compatibility with the WhiteBox series, and on-site support services,

Wireless Solution can not only supply the whole range of Wireless equipment to an outdoor project, but also support to ensure that the installation is completed without any problems. Because our Generation 5 software is backward compatible, any existing installations can be expanded with ease.

5.2GHz and 5.8Ghz is not available in all countries.

F-1 G5

Article number A40002G5

Operational modes Transmitter/Receiver

Universes 1/2³

Protocols DMX / RDM¹ / ACN² / Art-Net² / WiFi²

F-2 G5

Article number A40004G5

Operational modes Transmitter/Receiver/Repeater

Universes 2/4³ in transmitter/receiver mode.

1 In repeater mode

Protocols DMX / RDM¹ / ACN² / Art-Net² / WiFi²

1) Covered by one or more claims of patent No 7.432.803, and/or by other patent applications and corresponding foreign patent applications pending.
2) Optional
3) In double up mode





#### W-DMX™ MICRO G5

The Micro series are the most compact W-DMX™ products available on the market with DMX and support of RDM. Built into a slim-line casing, with mounting options for any conceivable location or to practically any type of structure encountered in the entertainment and architectural lighting business, the Micro series is perfect for smaller events, or where space is a problem, such as inside trucked scenery, set pieces or in difficult to reach corners. The Micro units are also suitable for smaller rental applications where the distance does not need to exceed 200-meter lineof-sight, and where fewer universes need to be transmitted wirelessly in one area. The Micro Series include functions like the improved Adaptive Frequency Hopping technology, Data-Safe and Invisi-Wire.

The new sleek design brings a lot of needed updates to keep up with today's demanding environments – besides including a more robust housing, the new products in the Micro series include a Kensington security slot to prevent getting stolen.

The Micro series comes with a battery compartment that accepts 4 standard rechargeable AAA batteries, and a micro USB port to power the unit. This redesign completely alters the user experience, taking W-DMX's products to a new generation of standardized connectors across all industries. Thanks to its new hardware design, the Micro Series have improved 20%

#### MICRO F-1 G5

Article number A40006G5

Operational modes Transmitter/Receiver

Jniverses **1** 

Protocols DMX / RDM¹

#### MICRO R-512 G5

Article number A40100G5
Operational modes Receiver

Universes 1
Protocols DMX

Covered by one or more claims of patent No 7,432,803, and/or by other patent applications and corresponding foreign patent applications pending.

in signal reception, making them now the best wireless receiver in its segment.

The Micro series supports DMX/RDM through a standard 5 pin XLR connector, and a helpful display on the front of the unit conveys useful information at a glance. With our one-button-to-go technology, setting up a W-DMX™ system with Micro units is as simple as pushing a single red function button. And with compatibility with the whole W-DMX™ range, the W-DMX™ Micro series of products is at home in any lighting company inventory.









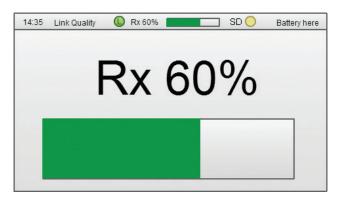


#### W-DMX™ UGLYBOX G5

The UglyBox is hailed as the 'riggers best friend', an indispensable tool in the lighting designer or technician's arsenal. With the capability to receive W-DMX™ signals to check their signal strength, as well as the output of DMX channels, the W-DMX™ UglyBox is great for testing the limits of the W-DMX™ radio system and/or checking DMX data, in a portable, pocket sized device.

The UglyBox is great for checking if a system will work before installation, and checking DMX levels in a system. The W-DMX™ UglyBox can also be used to check W-DMX™ signal history, allowing the user to see quickly any transient problems in the system. The Uglybox runs on standard AA batteries and last over 8 hours.

- Single universe DMX tester
- · Colour LCD screen
- W-DMX G5/G4S protocol in TX-mode.
   W-DMX G3/G4S/G5 protocol in RX-mode.
- Invisi-wire Technology
- Data-Safe Technology
- View received DMX channels on the LCD screen
- History View view signal strength over time
- One-button-to-go support
- · Improved Adaptive Frequency Hopping Radio
- Triple-Band 2.4GHz, 5.2 GHz and 5.8 GHz radio
- Compatible with all W-DMX™ OEM products





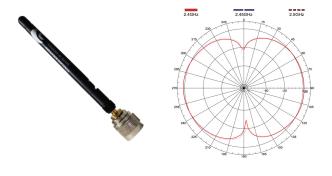
## W-DMX<sup>™</sup> UGLYBOX G5 Article number A40302G5 Product type Signal tester Universes 1

W-DMX



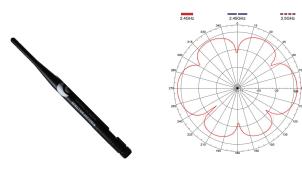


#### **INDOOR ANTENNAS**

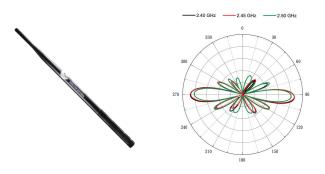


# W-DMX™ INDOOR 2 Article number A40501 Type Omni Frequency 2.4 GHz Boost 2 dBi Radiation (HxV) 360x360°

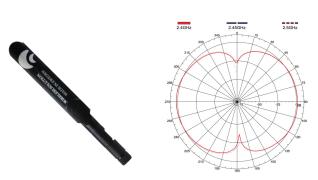
**RP-SMA Male** 



# W-DMX™ INDOOR 5 Article no A40502 Type Omni Frequency 2.4 GHz Boost 5 dBi Radiation (HxV) 360x30° Connection RP-SMA Male



W-DMX™ II	NDOOR 7
Article no	A40503
Туре	Omni
Frequency	2.4 GHz
Boost	7 dBi
Radiation (HxV)	360x20°
Connection	RP-SMA Male

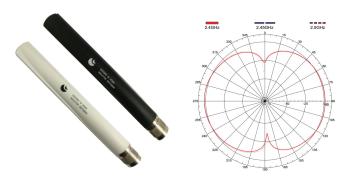


## Article no A40511 Type Omni Frequency 2.4 GHz / 5 GHz Boost 2 dBi / 4 dBi Radiation (HxV) 360x360° / 360x240°

RP-SMA Male

W-DMX™ INDOOR DUALBAND 2/4

#### **OUTDOOR ANTENNAS**



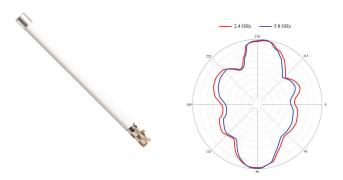
#### W-DMX™ OUTDOOR 3

Article number A40518G4
Type Omni

Frequency 2.4 GHz / 5 GHz

Boost 2 dBi
Radiation (HxV) 360x360°
Connection N Female.

Incl. Cable 75cm N Male-N Male



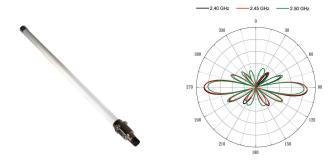
#### W-DMX™ OUTDOOR 6

Article number A40505MK2
Type Omni

requency 2.4 GHz / 5 GHz

Radiation (HxV) 360x30°
Connection N Female.

Incl. Cable 75cm N Male-N Male

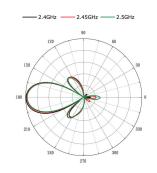


#### W-DMX™ OUTDOOR 8

Article number A40506
Type Omni
Frequency 2.4 GHz
Boost 8 dBi
Radiation (HxV) 360x20°
Connection N Female.

Incl. Cable 75cm N Male-N Male





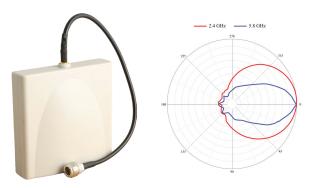
#### W-DMX™ OUTDOOR 12

Article number A40507MK2
Type Directional
Frequency 2.4 GHz
Boost 12 dBi
Radiation (HxV) 30x30°
Connection N Female.

Incl. Cable 75cm N Male-N Male

Bracket **Included** 

#### **OUTDOOR ANTENNAS (CONTINUED)**

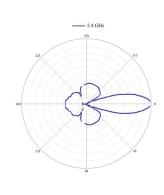


#### W-DMX™ OUTDOOR DUALBAND 8/10

Article number
A40512G4
Type
Directional
Frequency
Boost
Radiation (HxV)
Connection
A40512G4
Directional
2.4 GHz / 5 GHz
30x30\* / 25x25\*
N Female.

Incl. Cable 75cm N Male-N Male





#### W-DMX™ OUTDOOR 21

Article number A40508
Type Directional
Frequency 2.4 GHz
Boost 21 dBi
Radiation (HxV) 7x7°
Connection N Female.

Incl. Cable 75cm N Male-N Male

Bracket Included

#### ANTENNA ADAPTERS



#### N MALE-RP-SMA

A40621

Adapter for all Indoor Antenna.

N Male - RP-SMA Female



#### RP-SMA-N FEMALE

Article number

A40623

For indoor cable to mount outdoor

antenna.



#### N FEMALE-N FEMALE

Article number A40627

Used to put outdoor antenna directly

on an outdoor box.



#### N MALE-N MALE

A40628 Article number

Used to connect 2 outdoor cables

together for extension.



#### W-DMX™ LIGHTNING ARRESTOR A40622

N Male - N Female.

Requires Earth Ground.

Recommend for outdoor installation.



#### ANTENNA COMBINER

Article number

A40210

Antenna Combiner / Splitter. 2

Antenna for 1 Transmitter, Vice Versa

Receiver.

#### **ACCESSORIES**







#### AC/DC ADAPTER

Article number A40150G5

Description 90-250VAC to 4VDC Electronic

Transformer.

#### POWERCORD

Article number A40152

Description Powercon with Schuko 1.5m

Article no A40153

Description Powercon with Edison 5ft.

#### W-DMX™ CABLES

Loss/m 0,3 dBi (2.4 GHz) and 1,0 (5 GHz)

Connector N Male to N Male

Article number 1.5m A40607 3.0m A40608

5.0m A40609 10.0m A40610 15.0m A40611 20.0m A40612

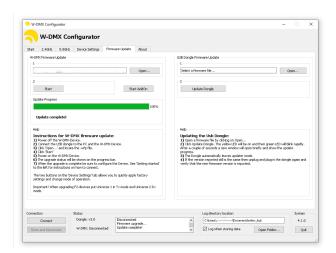
30.0m A40613

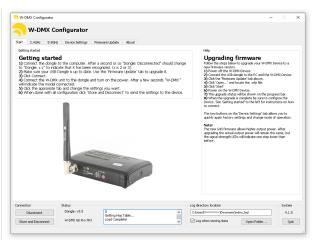
#### **DONGLE MK2**

The W-DMX<sup>™</sup> dongle is our ideal tool for configuring W-DMX<sup>™</sup> units, when the full power of the W-DMX<sup>™</sup> BlueBox RDM is not required. Channels in use can be manually configured (bypassing the AFHSS technology), and output power can be reconfigured quickly and easily.

With the basic mode, W-DMX $^{\text{TM}}$  channels can be disabled by selecting which Wi-Fi channels are in use, and in the advanced mode, power users can disable individual W-DMX $^{\text{TM}}$  channels for finer control of the radio spectrum.

The W-DMX Dongle also is used to update firmware on all W-DMX. We recommend you to have the dongle in the toolbox to make sure you always have the latest software from Wireless Solution.



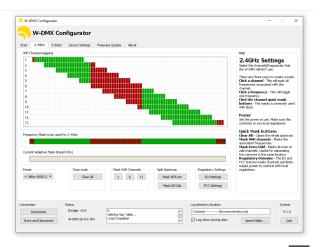


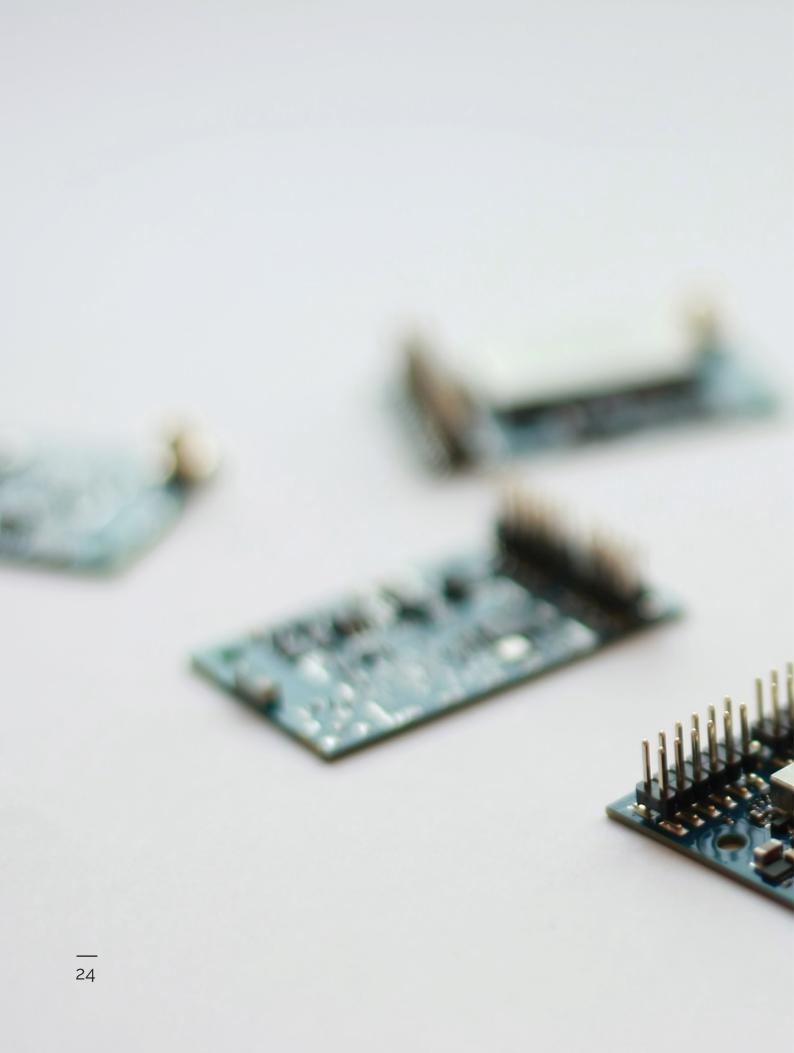
**DONGLE**Article number
Product type

A40303MK2 Configuration tool











#### A SELECTION OF OEM PRODUCTS

#### CHAUVET MAVERICK MK3 PROFILE

Maverick MK3 Profile features a searing output of over 51,000 source lumens and an advanced, 4-blade shutter frame system with the ability to fully blackout and a 120° rotation. It offers great static, rotating, and animation effects from its 2 gobo wheels (1 rotating, 1 static), animation wheel, 2 independent and



overlapping prisms and 2 frost options: superlight and medium. Control as you see fit with W-DMX,

#### CAMEO OPUS® SP5

Producing brilliant, lively colours, the super bright Cameo OPUS® SP5 profile moving head is your ideal multi-purpose tool for precision illumination with a rich variety of effects. It is equipped with a powerful 500 W cool white LED engine, a CMY colour mixing system and



linear CTO correction. An additional colour wheel with 7 dichroic filters enables instant colour changes and split colour beams.

#### INFINITY S601 PROFILE

A full feature movinghead where the most thinkable options are practically standard. One of these exceptional features are four very precise and separate controllable blades which can be rotated plus and minus 45°. If you need to create



various shapes very fast you can use the macros which have already been integrated. The 7:1 zoom ratio from 6.5° to 45°, the 2 rotating gobowheels with a total of 11 glass gobos and auto focus guarantee well-defined, crystal clear projections and the morphing possibilities —— leave nothing to be desired.

#### PROLIGHTS SMARTTOWER

SMARTOWER is a new concept of outdoor portable pixel and decor luminaire, featuring a full wireless operation and delivering a multitude of visual effects projecting a full 360°. SMARTOWER consists of a vertical tubular housing with pixel battens on 4 sides delivering both colourful accent lighting as well as eye-catching visual effects through the many built-in pixel macros

ly customised.

which can be easily individually customised.

#### PORTMAN P3

The Portman P3 Pix3l is a beautiful and high quality fixture, 3 separate DMX channels, Built in dimmers and electronic kit, 3 x 230W halogen bulbs. The new fixture has a similar look to the other two in the family,



and comes with optional Wireless DMX control with W-DMX $^{\text{TM}}$  G5.

#### ADB KLE-MANTIS

The new ADB
KLEMANTIS is an
asymmetric cyclight
based on a sixcolour LED module,
which uses cuttingedge HCR (High
Color Rendering)
LED technology to



deliver a wide selection of colors from bold hues to pastel shades. Thanks to an innovative algorithm, the unit is capable of achieving a stable CRI of over 97, as well as an impressive tunable white light ranging from 2500K to 8000K...

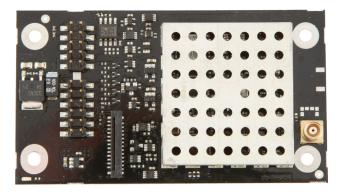


#### W-DMX™ OEM G5

The W-DMX™ OEM program comprises over 50 OEM manufacturers that make their products compatible with the W-DMX™ wireless protocol, ensuring that even with a range of brands and different types of products, a piece of lighting equipment with Wireless functionality will work with another piece of equipment with Wireless functionality.

To OEM customers, not only are we offering a complete solution for integrating wireless control into your fixtures, but we also keep on stock of a complete range of antennas as well a complete range of OEM Antenna cables that are suitable for your application. As the leading manufacturer of wireless lighting control solutions, we offer a complete range of products coupled with technical assistance in your R&D department to make installation of Wireless control as easy as possible.

Wireless Solution produces over 100 000 units per year. With over 750,000 units shipped worldwide since inception, installed in fixtures, dimmers, consoles, signal distribution units and more, Wireless Solution's W-DMX™ is the 'unofficial' standard for wireless lighting control worldwide.



#### OEM G5 SERIES

Universes :

Approvals CE, FCC, ETSI, RED

#### PRO TRIPLE-BAND

Article number See combinations

Frequency 2.45 GHz / 5.2 GHz / 5.8 GHz

Antenna MCX

Protocols DMX / RDM¹

DC Input 5V

Combinations Transmitter/Receiver (A40904G5-SPI)

Receiver (A40905G5-SPI)

#### W-DMX™ NANO G5 AND W-DMX™ COB G5

#### W-DMX™ NANO G5

is the smallest PCB available for OEM solutions in the W-DMX™ range, packing both DMX and RDM into

a form factor guaranteed to fit into the smallest of spaces. The PCB is available in two types - a DMX receiver. and a DMX/ RDM transceiver.



The transceiver supports our innovative Flex mode, meaning the card can be quickly and easily changed between transmitter and receiver.

With the compact form factor, yet still filled with all the innovative features from the W-DMX™ G5 range, the new W-DMX™ NANO OEM card allows products that were once impossible to be created - a truly innovative product.

#### W-DMX TINY SERIES

Is the newest and the smallest PCB available, with the

best features that W-DMX™ G5 packs. It was made to be fitted into the smallest spaces but with the possibility to easily maintain and replace.



#### W-DMX COB G5 (CHIP ON BOARD)

transceiver solution in an ultra compact 6x6mm size for OEM applications. Wireless Solution is the first to

launch the SMT mounted Chip On Board radio transceiver that supports both DMX and RDM in a QFN48 package.



The W-DMX™ COB is a low energy solution with only 40mA current consumption and facilitates distances up to 200 meters (In receiving mode) with a 3dBi standard antenna and BlackBox F-1.

#### OEM NANO AND COB SERIES

CE, FCC, ETSI, RED.

#### NANO TRX SERIES

Article number See combinations Operational modes Transmitter/Receiver

2.4 GHz DMX / RDM<sup>1</sup> Protocols

3.3/5V, Internal anntenna (A40891G5-SPI)

3.3V/5-26V, MCX (A40890G5-SPI)

#### NANO RX SERIES

Article number See combinations

Operational modes Receiver Frequency 2.4 GHz DMX / RDM<sup>1</sup> Protocols DC input 3.3V/5-18V MCX (A40895G5)

Internal antenna (A40896G5-SPI)

#### W-DMX™ TINY SERIES

Article number A40893G5 Operational modes Transcivier 2.45 GHz Internal antenna

DMX / RDM<sup>1</sup> Protocols

5V

50x20.8 mm

#### W-DMX™ COB

Article number A40880G5-0 Operational modes Transcivier Frequency 2.45 GHz Internal antenna

DMX / RDM<sup>1</sup>

3.3V 6x6 mm





























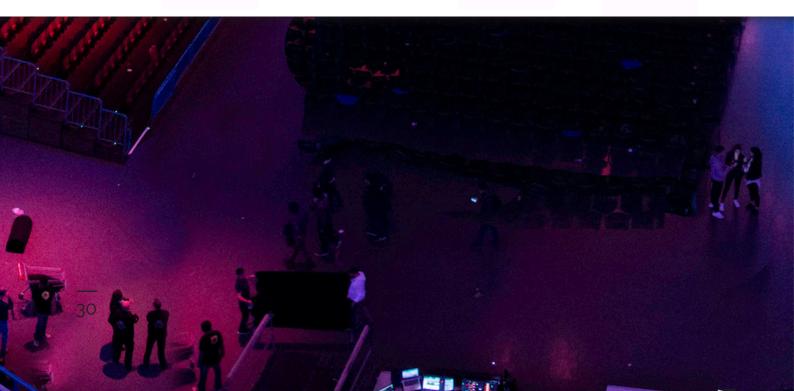














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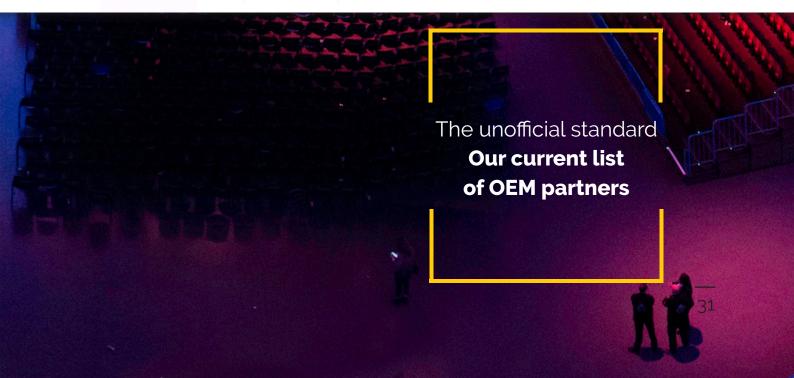












#### PROS AND CONS OF 2.4GHZ AND 5GHZ

All W-DMX™ G5 BlackBox, WhiteBox and ProBox series ship with triple-band 2.4 GHz, 5.2 GHz and 5.8 GHz as standard. Having all frequency bands out of the box (and all supporting our patented Adaptive Frequency Hopping technology) is a great option for any lighting installation or project, as you can take immediate advantage of the pro's and con's of each band at the push of a button.

#### 2.4 GHZ

#### Pros

- The longest range frequency band of the two
- The largest range of antennas available
- Penetrates through walls and other obstaclesbetter than the 5.2/5.8GHz band
- Low loss in Wireless Solution cable of less than
- 0.3dB per meter allows for long antenna cable runs

#### Cons

- High levels of traffic from Wireless LANs, which can create spectrum to be crowded.
- Mobile phone jamming systems (for Anti-Terrorist)
   cause interference on the 2.4GHz band as mobile
- Wireless Steadicam can cause issues in close distance

#### 5.2/5.8 GHZ

#### Pros

- Very little traffic on the 5.2/5.8GHz band ensures that the wireless DMX signal, and other radio signals on the frequency band don't suffer from congestion and interference.
- Frequency band is far away from bands that are commonly jammed, meaning that, especially on high profile events, the 5.2/5.8GHz band prevents interference

#### Cons

- Range is less than that of the 2.4GHz band.
- Higher loss in Wireless Solution cables (1dB permeter) in this frequency band means it is not recommended to have long antenna cables.
- 5.2/5.8GHz is not available in all countries.

In short, the performance of the 2.4GHz band makes it reliable for most events today, however when additional security and protection against interference is required, the 5.2/5.8GHz band is the ideal choice. 5.2/5.8Ghz is also the best choice when operating inside TV Studios or Live Recording environments, especially when there is the presence of many steadycams. Wherever there is the presence of high volumes of wireless traffic, the 5.2/5.8GHz band can really shine.



#### MOTO CIRQUE BIRMINGHAM, UNITED KINGDOM

Behind the LED integration into the FMX bikes was the UK-based Shock FX, who headed up system design and fitting lighting, drivers, and wireless receivers. "We used a total of 28x Micro R-512 G5 receivers, all connected to a single BlackBox F-1 G5 transmitter, located at front-of-house", said David Taylor, CEO of Shock FX. "There was a receiver on the bike's frame, another one on the rider's suit and a further two on each wheel so they could both have free movement".

#### **OUR PROCESS**



#### **R&D**

The research and development department works with our management team to define what are the industry-needs, and is tasked to create innovative and reliable products for the industry. The engineers work also closely with a team of external consultants who will help out with specific work necessary to accelerate development.

#### HARDWARE DESIGN

All product design is completely bespoke to W-DMX™, and a response to what the market demands from a Wireless DMX product. Because our business model is in volume manufacturing, all the products include all features that customers demand, with the best components on the market.



#### PCB MANUFACTURING

The manufacture of all electronics is 100% made in Sweden to guarantee top performance and best quality. Wireless Solution produces over 100,000 PCBs each year.

#### **PRODUCTION**

The production department is responsible for assembling finished-products, by picking all different components and building them together. There are a maximum of 20 diffrent parts in each product, making them easy and quick to assemble, allowing the manufacturer to make several hundred each month.







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