RadioGate Plus Arma

Waterproof DMX wireless transceiver + DMX-Ethernet converter

RadioGate Plus Arma provides non-stop bidirectional DMX communication (up to 4 universes) between devices in 2.4 GHz ISM with RDM feedback and integrated bidirectional DMX/ArtNet/sACN converter. Maximum distance is up to 1500 metres with directional antennas. Adaptive Frequency Hopping (AFH) helps to avoid disturbance from any other wireless equipment. RadioGate is versatile transmitter+receiver, with one-button configuration. Packed into waterproof metal enclosure (IP65) specifically crafted for outdoor use, with galvanically isolated ports, RadioGate Plus Arma is a smart choice when wired DMX transmission is hindered. Available as DMX-only modification (RadioGate Arma) or IP44 modification for indoor application (RadioGate Plus Solid).

Advantages

2 or 4 DMX universes depending on modification

Maximum reliability of connection based on Bluetooth 5.0 protocol (beDMX)

Communication range up to 200 m (regular antenna) and 1500 m (directional antenna)

Maximum resistance to interference through Adaptive Frequency Hopping (AFH)

One-button programming, simple configuration

Ethernet port and integrated DMX/ArtNet/sACN converter

PoE support

Custom routing and merging of DMX streams, setup via web interface

Full RDM support

Diagnostics of DMX transmission quality

LED indication of communication status on transmitter

All devices are cross functional transmitter+receiver

Natural heat convection, no fans or coolers, no vent slots – full protection from dust and smoke increases product lifetime

Effective moulded thick metal case and metal buttons provide mechanical reliability

Full galvanic isolation of all ports

Maximum surge protection – power supply optimized for voltage from 100 to 300 V

DC 12-24V modification

Merging Options

HTP: highest takes precedence

LTP: latest takes precedence

AUTO: last modified takes precedence – intelligent merging mode that provides availability to manage installation from two consoles simultaneously

BACKUP: any network universe or local static scene can be selected for outputting when main source fails

PRIORITY: for sACN streams with priority tag, console with the highest priority for a given Universe will be in charge

TRIGGER and X-FADE: TRIGGER and X-FADE: switch dynamically between lighting desks, media servers, and other control sources

PoE 802.3af Power over Ethernet	**DMX Bi-Direct** DMX Bi-Direct	**DMX RDM** Supports RDM	**ULTRA START** UltraStart
Galvanic Isolated Ports	Natural Heat Convection	**IP65** Highest Ingress Protection	Back-Up Transmitter

Application

Bidirectional outdoor DMX/ArtNet/sACN transmission including communication through local network

Transmission when wired DMX/ArtNet/sACN transmission is hindered or impossible

Transmission from lighting console to stage in open spaces where lighting cables may be trampled down

Transmission to heritage assets and landmarked buildings

Transmission between architectural lighting installations

Transmission to moving objects and moveable bridges

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Technical Specifications

Mechanical

Housing: solid case
Material: metal
Dimensions (with cable glands and buttons), mm:
203.5(D) x 51(H) x 141.5(W)
Dimensions (without cable glands and buttons), mm:
172.2(D) x 51(H) x 120.2(W)
Mass: 1 kg
Mounting: Surface, Truss

Power & Electrical

Input Voltage: ~100-250 V, 50/60 Hz;
PoE 802.3af mode A, B or DC 12-24V
Max current consumption: 0.1A

Environmental

Operating Temperature: -40...+70°C
Storage Temperature: -50...+80°C
Operating Relative Humidity (max): 100%
IP Rating: IP 65, for use in any weather conditions
Certification: CE, RoHS
Warranty: 36 Month

Control / Data Connections

Supported protocols: DMX512, RDM,
ArtNet I, II, III, IV, sACN draft, release, KiNet v1, v2
RTTrPL sACN draft, release
Data refresh rate: 44 Hz
Transmission range: 200 m (regular antenna),
1500 m (directional antenna)
Communication protocol: beDMX
RF band: 2.4 GHz

Inputs / Outputs

DMX ports: 2 or 4 isolated (depends on modification)
DMX connectors: 15EDGV terminal blocks
Wireless channels: 2
Ethernet ports: 1

Configuration / Indication

Setup: buttons, web interface
Indication: LEDs for Ethernet, DMX and beDMX activity

Package Contents

RadioGate Arma
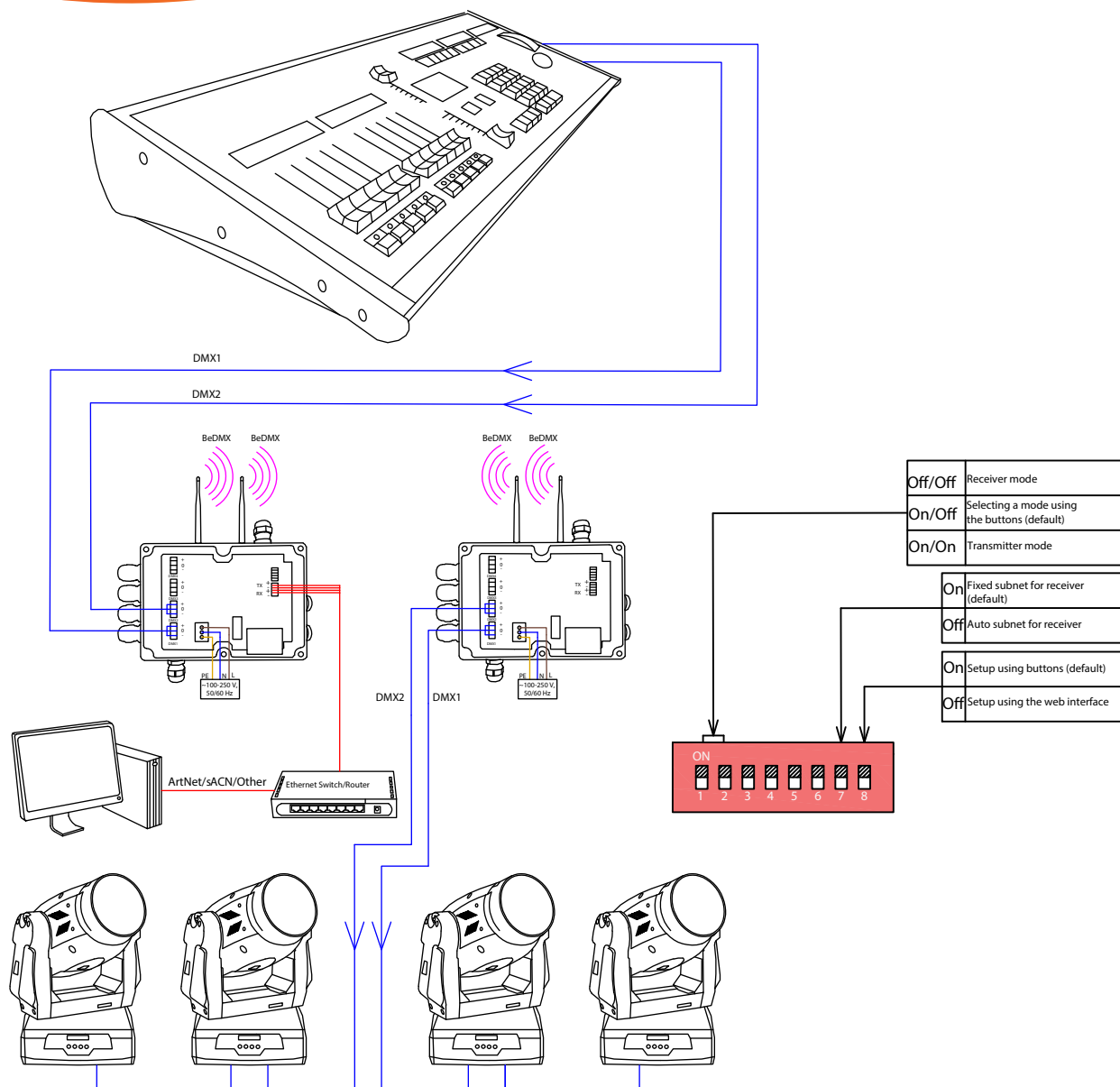**2.4GHz antenna(s)**

Product Line

Name	Modification	Product code
RadioGate Arma	2 DMX inputs / outputs, 1 Ethernet port, 2 DMX universes, AC 100-250V	RGA-0-2D2C-AC
	2 DMX inputs / outputs, 1 Ethernet port, 2 DMX universes, DC 12-24V	RGA-0-2D2C-DC
	4 DMX inputs / outputs, 1 Ethernet port, 4 DMX universes, AC 100-250V	RGA-0-4D2C-AC
	4 DMX inputs / outputs, 1 Ethernet port, 4 DMX universes, DC 12-24V	RGA-0-4D2C-DC

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Connection Scheme

Off/Off	Receiver mode
On/Off	Selecting a mode using the buttons (default)
On/On	Transmitter mode

On	Fixed subnet for receiver (default)
Off	Auto subnet for receiver

On	Setup using buttons (default)
Off	Setup using the web interface

Accessories

Name	Product code
Truss mounting kit (Solid, Arma)	DMX-MCA-1-113
2 dbi 2.4GHz antenna	DMX-ACC-ANT-2
5 dbi 2.4GHz antenna	DMX-ACC-ANT-5
Antenna Cable 5m	DMX-ACC-ANT-050

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