

# JS-100N™ 624 DMX

**6 x 2.4kW  
Distributed Dimming Strip**

Shown in optional white powdercoat finish  
with optional wireless DMX control

**“14,400 Watts of Wireless Hi-Performance Dimming!”**

**JS-100N™ Series** dimmers deliver the ultimate value in hi-performance distributed dimming. The rugged and simple design is ideal for use in applications where conventional “centralized dimmers” are not appropriate or cost prohibitive. Simple to install and operate, these dimmers can significantly lower electrical installation costs.

Features include a dedicated “contractor section” with a choice of terminal strip or magnetic breakers. Large wire capacity input permits feeder power up to 60 Amps at 120/240 Volt single phase or 40 Amps at 120/208 Volt three phase. Ease of installation and service with removable front panels and hinged control section access. Future “installed location” servicing of high voltage receptacles or electronic controls is fast and easy.

Large hi-performance chokes and “MagLev®” thermal management technology produces superior cooling that is virtually silent. All electronics are easily and remotely monitored with intuitive status LED’s. Wireless DMX 512 receiver optional. High-resolution (16 bit) fade standard.

- ✦ Six 2400 Watt dimmers in a package weighing approximately 45 lbs. (20.5 Kg).
- ✦ Dims standard or low-voltage incandescent quartz lamps.
- ✦ Superior 16-bit fade resolution provides unmatched performance.
- ✦ Both DMX 512 and individual analog inputs. Optional wireless DMX receiver.
- ✦ Available in terminal block or magnetic breaker.
- ✦ Over-heat and over-current protected.
- ✦ Dimmer SCR’s are 200% rated.
- ✦ “MagLev®” thermal management technology produces superior cooling that is virtually silent.
- ✦ Status LED’s allow easy remote setup and troubleshooting.
- ✦ Separate high voltage “contractor termination section”.
- ✦ Standard 78" (198.1 cm) length with optional “two-fered” 57" (144.8 cm) extension.
- ✦ Removable/serviceable connector panels.



**JOHNSON SYSTEMS INC.**

*“PROGRESSIVE ALTERNATIVES IN LIGHTING CONTROL”*

1923 Highfield Crescent S.E.  
Calgary, Alberta, Canada T2G 5M1  
tel: 403.287.8003  
fax: 403.287.9003  
e-mail: [info@johnsonsystems.com](mailto:info@johnsonsystems.com)  
website: [www.johnsonsystems.com](http://www.johnsonsystems.com)

MANUFACTURER MEMBER

**ESTA**



ENTERTAINMENT SERVICES &  
TECHNOLOGY ASSOCIATION

# JS-ICON™ 624 DMX CHARACTERISTICS

## Power Requirements

120/208 VAC 3Ø 5 wire up to 40A. Max. rating 14.4kW or 120/240 VAC 1Ø 4 wire up to 60A. Max. rating 14.4kW or six individual 120VAC 1Ø 3 wire circuits up to 20A each.

## Power Termination

Terminal block with optional 6 x 20A magnetic breaker protection.

## Environment

Temperature Range: 23°F (-5°C) to 113°F (45°C) ambient.  
Humidity Range: 0% to 90% non-condensing.

## Dimmer Capacity and Load Type

6 x 2.4kW incandescent quartz lamps and electronic (SCR dimmable) low voltage fixtures.

## Switch Type

200% rated, non-proprietary SCR solid state relay.

## Rise Time

300µs fully epoxy-encapsulated chokes are made from ultra low audible noise core material.

## Physical

Strip: 3.5" x 4.85" x 78" (8.9 cm x 12.3 cm x 198.1 cm).  
135" (342.0 cm) with optional extension.

Control box: 3.5" x 10" x 16" (8.9 cm x 25.4 cm x 40.6 cm).

## Weight

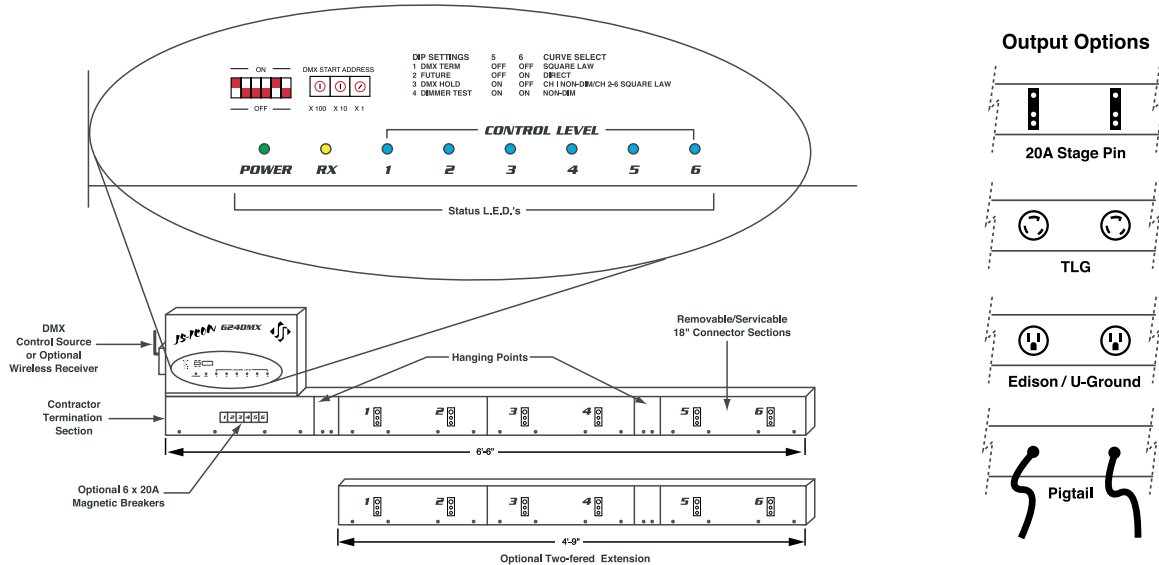
Approximately 45 lbs. (20.5 Kg).

## Material

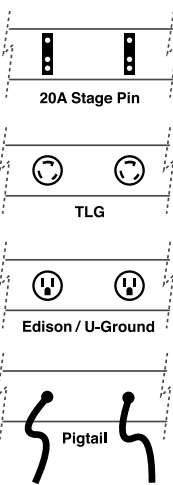
0.125" extruded aluminum (strip) / 18-gauge steel (control box).

## Finish

Textured black or white powdercoat.



## Output Options



# JS-ICON™ 624 DMX SPECIFICATIONS

- The **JS-ICON™ 624 DMX** shall be capable of dimming standard incandescent, quartz and SCR (silicon controlled rectifier) dimmable electronic low voltage fixtures.
- The **JS-ICON™ 624 DMX** enclosure shall contain six (6) dimmers each capable of controlling up to 2.4kW.
- The **JS-ICON™ 624 DMX** shall be powered by a 120/208 VAC 3Ø or 120/240 VAC 1Ø supply of up to 40/60 Amps respectively. Optional 6 x 20 Amp magnetic breakers shall permit full rated operation of 14.4kW in performance environments.
- The system SCR's shall be dual encapsulated units with a minimum of a 200% rating. The system SCR's will provide symmetrical AC output to the load throughout the entire control range of off to full intensity. The system SCR's will have a minimum of 2500 Volt isolation between the low and high voltage side of the component thereby ensuring data and DC isolation.
- The **JS-ICON™ 624 DMX** shall utilize "MagLev®" thermal management technology to produce superior cooling that is virtually silent. Fan noise shall not exceed 26dBA.
- The **JS-ICON™ 624 DMX** shall employ thermal shutdown circuitry that is redundant from electronic operation.
- Each dimmer shall be capable of a high resolution 16-bit output control of the load thereby permitting precise and smooth control of incandescent loads from full rating to as small as 5 Watts.
- The **JS-ICON™ 624 DMX** shall be controlled with DMX 512-A protocol via XLR or RJ-45 connectors. A "Wireless" DMX option shall permit wireless control up to a distance of 400 ft. (122 m).
- Each dimmer shall contain a high performance, copper wound, hybrid core toroidal magnetic filter (choke). Each choke shall be rated at 300µs and epoxy-encapsulated for maximum harmonic noise reduction. The choke will have a temperature rise of 156°F (69°C) max. at full load.
- Heat loss for each 2.4kW dimmer shall not exceed 48 Watts or 100 BTU's per hour per connected kW of load. Dimmers shall be capable of sustained operation at full loading with an ambient temperature of 113°F (45°C).
- Control wire to each **JS-ICON™ 624 DMX** shall be standard DMX control cable (Belden 9829 or equiv.) or CAT-5E.
- Each **JS-ICON™ 624 DMX** shall accept both DMX 512-A data and analog 0-10VDC input. Data and analog inputs shall overlap in a "highest takes precedence" (H.T.P.) fashion.
- All electronics shall be fully digital and microprocessor based. Such electronic circuitry shall permit real time signal monitoring and status LED indication to allow easy remote setup and troubleshooting.
- All printed circuit boards (PCB's) shall be FR4/G10 with U.L. 94V-0 Flame Class Rating.
- A dedicated and hinged enclosure shall contain all electronic circuitry. All PCB's shall employ "breakaway" style connectors to facilitate ease of service.
- The entire assembly shall be ETL Listed and comply fully with UL508 and CSA 22.2 safety approval standards.  
*Specifications subject to change without notice.*



**JOHNSON SYSTEMS INC.**

"PROGRESSIVE ALTERNATIVES IN LIGHTING CONTROL"

1923 Highfield Crescent S.E.  
Calgary, Alberta, Canada T2G 5M1  
tel: 403.287.8003  
fax: 403.287.9003  
e-mail: info@johnsonsystems.com  
website: www.johnsonsystems.com

MANUFACTURER MEMBER

**ESTA**



ENTERTAINMENT SERVICES & TECHNOLOGY ASSOCIATION