

# CS-DMX Series

## Programmable Manual DMX Control Stations



### Multi-Station, multi-room manual DMX controls for a full DMX universe of control!

Value, power and complete flexibility in a “green”, user friendly, cost-effective package! The DMX Series of controls are the most capable manual “stand-alone” DMX controls available. These field programmable controls support 512 channels of DMX data with digitally adjustable fade times. Multiple stations can be daisy-chained together on the same control wire permitting multiple stations per room. Each station can be individually programmed with our wireless infrared hand-held programmer permitting any slider/channel assignments imaginable.

Available from single to 12 channels with master, preset and take control functions. Two and three button entrance station can be remotely “locked out” for application where access needs to be limited. This series of controls will operate on DC supply voltages up to 18 volts. Adjustable time fade and LED intensity allow customization for demanding applications. Durable powder-coat finish is available in either black or white.



*These products are energy efficient and consume less than 1 watt. Compliance with the International Energy Agency's “One Watt Initiative”.*

- ✦ Manual DMX at your fingertips.
- ✦ Six models/sizes available including two and three button entrance stations.
- ✦ 512 DMX channels of control per station.
- ✦ Multiple stations can be daisy-chained on the same DMX line.
- ✦ Digitally adjustable fade-times and LED brightness.
- ✦ Station programming via low cost, wireless infrared hand-held remote.
- ✦ Local or remote/entrance station lockout options.
- ✦ Short-circuit and over-current protection.
- ✦ Ruggedly built for reliability and longevity.
- ✦ Tough, durable powder coat paint on 0.080” aluminum laser cut faceplate for a scratch resistant non-glare finish.
- ✦ Color matched and sized for use with Johnson Systems AP Series adapter plates where necessary to adapt to existing (larger) electrical back boxes.
- ✦ Metal shaft sliders and machine screw mounting help prevent broken or missing parts.
- ✦ Heavy-duty “high tactile” pushbutton switches are rated for 5 million operations.
- ✦ Optional 6 Port Cascading Installation Merger permits low cost DMX universe combining.



**JOHNSON SYSTEMS INC.**

*“PROGRESSIVE ALTERNATIVES IN LIGHTING CONTROL”*

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# SPECIFICATIONS

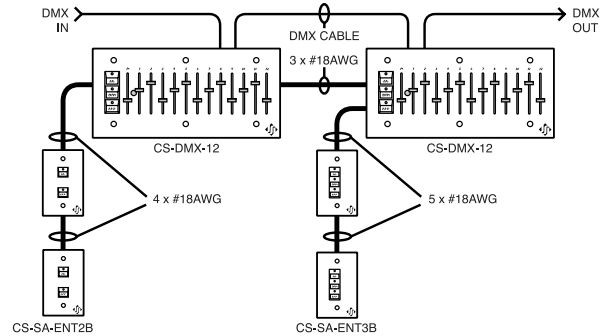
## 1.0 CS-DMX Series - GENERAL

- 1.1 Stations shall be available in three, six, nine or twelve channel configurations along with two or three button entrance stations.
- 1.2 Control stations shall require flush mounted masonry type back boxes. Such boxes should have a minimum depth of 2.00" and must be grounded (earthed) in accordance with local wiring practice to facilitate a direct discharge path to ground for static electricity. MBD 3" depth back boxes are preferable where possible.
- 1.3 A series of color matched adapter plates shall permit the adaptation of any CS-DMX Series control stations into any larger standard multi-gang back box up to 6 gangs.
- 1.4 Control station pushbutton switch caps shall be available in either black or white with integral blue LED indicators. These caps shall be clearly identified for pushbutton function. LED intensity shall be adjustable through the full range of operation.
- 1.5 Stations shall operate from a 10.6-18VDC regulated power supply.
- 1.6 Station sliders shall be individually programmable with any combination of DMX channels via the CS-IPRO hand-held programmer. All programming shall be securely stored in EEPROM memory. CS-IPRO menus shall include:
  - Check Patch
  - Edit Patch
  - Clear Patch
  - Set Control Station Patch
  - Get Control Station Patch
  - Save Patch to Memory Module
  - Load Patch from Memory Module
  - EEPROM Type-Firmware or Patch
  - EEPROM Firmware Copy to Memory Module
  - EEPROM Firmware Load from Memory Module
  - Edit Security Key
  - Set Security Key
  - Get Security Key
  - Monitor Slider
  - Check Control Station Firmware
  - Firmware Version Display
  - Serial #
  - Battery Power Level Check
  - Printout Patch to Optional Printer
  - LCD View Adjust
- 1.7 Programmable fade-times from 0 to 60 seconds between station function/preset buttons.
- 1.8 Stations shall employ both short circuit current limit detection and output overload shutdown with automatic recovery and indication. 100mA short-circuit limit, 0.6W power dissipation with thermal shutdown.
- 1.9 Each station shall comply with the International Energy Agency's "One Watt Initiative" for standby power consumption.
- 1.10 Local and remote lockout modes with indication permit remote/entrance station lockout.

- 1.11 The control station shall be fastened by means of flush mounting 6-32 machine screws. The use of adhesives, magnets, setscrews or tension shall not be considered acceptable for long-term faceplate retention.
- 1.12 Station faceplates shall be fabricated from 0.080" aluminum and shall be supplied in black or white powder coat finish.
- 1.13 Control stations shall employ heavy-duty pushbutton switches, rated at five (5) million operations minimum.
- 1.14 Control stations shall employ metal shaft sliders with a total travel of 45mm (1.75") and black or white slider knobs. The use of plastic shaft sliders shall not be considered acceptable for resistance to breakage and station longevity.
- 1.15 All control wire terminations shall be via a premium quality "break-away" style screw terminal plug and socket to facilitate ease of station removal while maintaining continuity of power and "take control" to other room stations. For ease of serviceability, it shall be possible to remove any station PCB individually without the need to disconnect any terminated wiring.
- 1.16 All control stations shall employ "auto-resetting" fuse protection on their DC power inputs for protection against voltage spikes.
- 1.17 Circuit board copper plating shall be 1.5 oz. minimum. Circuit board material shall be glass-epoxy with a flame retardant rating of FR-4, 0.062" thickness. All circuit boards shall be solder masked and silk screened with component legends.

Specifications subject to change without notice.

Typical Wiring Riser Diagram



Model	Description	# Wires	Back Box	Minimum PCB Clearance
CS-DMX-3	3 channel manual control w/master slider, on, preset, and off	2 x #18 AWG +DMX	2 gang	3.60"W x 2.75"H x 2.00"D 9.1cm x 7.0cm x 5.1cm
CS-DMX-6	6 channel manual control w/master slider, on, preset, and off	2 x #18 AWG +DMX	3 gang	5.50"W x 2.75"H x 2.00"D 14.0cm x 7.0cm x 5.1cm
CS-DMX-9	9 channel manual control w/master slider, on, preset, and off	2 x #18 AWG +DMX	4 gang	7.30"W x 2.75"H x 2.00"D 18.5cm x 7.0cm x 5.1cm
CS-DMX-12	12 channel manual control w/master slider, on, preset, and off	2 x #18 AWG +DMX	5 gang	9.10"W x 2.75"H x 2.00"D 23.1cm x 7.0cm x 5.1cm
CS-SA-ENT2B	1 gang, 2 button (on/off) entrance station with adjustable "on" voltage for stand-alone applications	5 x #18 AWG	1 gang	1.80"W x 2.75"H x 2.00"D 4.6cm x 7.0cm x 5.1cm
CS-SA-ENT3B	3 button entrance station w/on, preset, and off	6 x #18 AWG	1 gang	1.80"W x 2.75"H x 2.00"D 4.6cm x 7.0cm x 5.1cm
CS-IPRO	Hand-held Infrared Station Programmer 2.75"W x 4.95"H x 1.00"D (70cm x 125cm x 25cm)	Wireless	N/A	N/A
DMX-6PIM	DMX 6 Port (6IN/1OUT) Cascading Merger 9.5"W x 12"H x 3.5"D (24cm x 30cm x 9cm)	120VAC + 7 DMX or CAT5E	Wall Mount or Flush Mount	N/A

### Wiring Termination - Control PCB

- COM DC Low Voltage Common
- V+ 10.6 - 18 Volt DC Supply
- RST Reset Take Control For Remote "OFF"
- DIM Dim Take Control For Remote "DIM"
- ON Full On Take Control For Remote "ON"
- MP Master Pot Output

### Wiring Termination - DMX PCB

- DMX IN-J1 Shield/Common
- Data -
- Data+
- DMX OUT-J2 Shield/Common
- Data -
- Data+

"Take Control" of control stations shall require one (1) wire per button function between separate control stations. A maximum of three (3) wires shall be required for all "Take Control" functions (ON, DIM, and OFF).



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