

DMXS STANDARD CONNECTIONS AND SETTINGS GUIDE

SOME OPTIONS NOT AVAILABLE ON ALL FIXTURES. CONSULT SPECIFICATION SHEETS. SEE INDIVIDUAL SPECIFICATION SHEETS OR CONSULT FACTORY FOR ADDITIONAL INFORMATION.

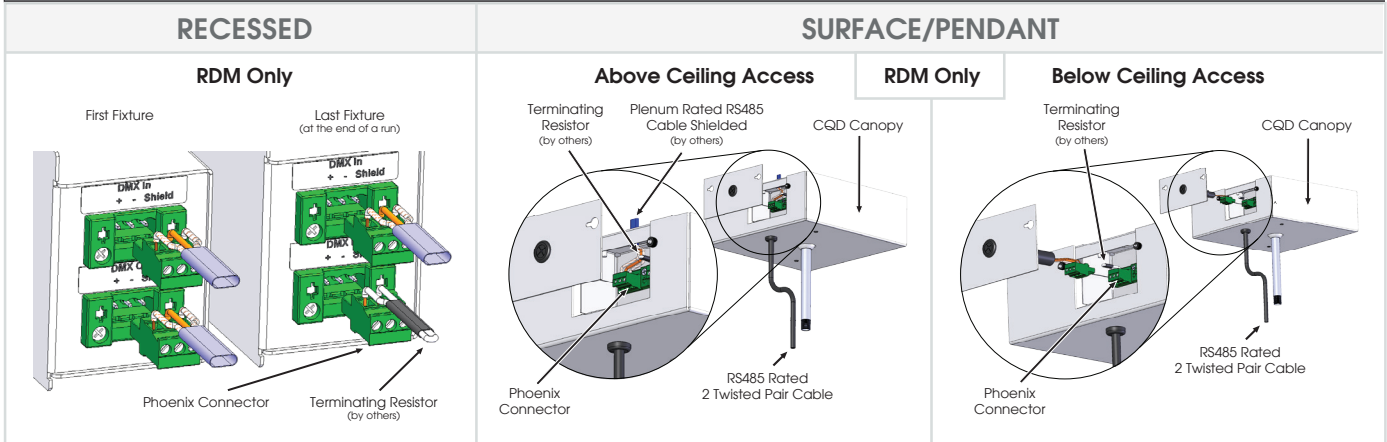
dimming
options



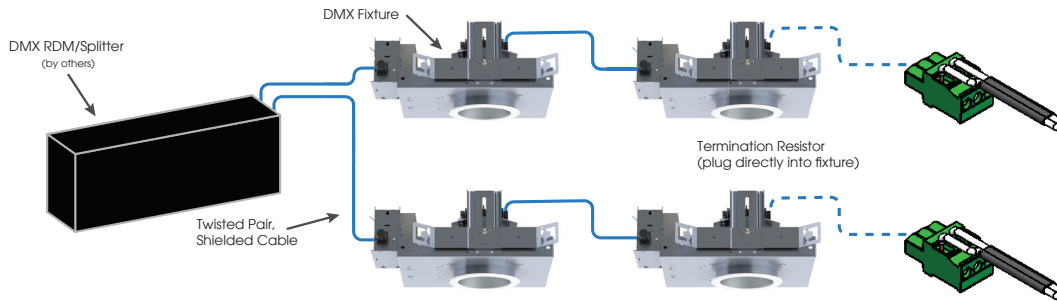
DMXS - STANDARD CONNECTIONS/ADDRESSING (RECESSED & SURFACE/PENDANT)

- PHOENIX CONNECTORS
- LOGARITHMIC DIMMING
- REQUIRES DMX SIGNAL TO TURN ON
- 8-BIT NETWORK RESOLUTION
- ADDRESS OF 1
- WILL DIM TO DARK

Figure 1 - STANDARD CONNECTIONS



DMX wiring must be daisy chained from fixture to fixture.



- Customer is responsible for providing two sets of low impedance cables to the fixtures.
- Customer is responsible for accounting for various state and local building codes when handling wiring applications for DMX signals.
- For recessed fixtures, removable Phoenix connectors with screw terminals will be used to secure the flying leads from the DMX cable (cable by others). (For more details on the pluggable terminals, refer to Phoenix Contact 1792537)
- For Surface/Pendant fixtures, customer will pull the appropriate RS485 rated cable either through or below the ceiling into the fixture's CQD canopy assembly. Removable Phoenix connectors with screw terminals will be used to secure the flying leads from the DMX cable (cable by others). (For more details on the pluggable terminals, refer to Phoenix Contact 1792537).
- A RDM is required for assigning DMX addresses, only.
- Customer is responsible for providing 120 Ohm termination resistor(s) for fixtures at the end of each fixture string.

DMXC - NON STANDARD CONNECTORS/ADDRESSING

PLEASE CONTACT QUOTES@SPECLIGHT.COM OR YOUR LOCAL REPRESENTATIVE FOR CUSTOM ADDRESSING, PROGRAMMING OR CONNECTORS.

**Two Sets* refers to set of DMX-In and DMX-Out Connections

DMXS STANDARD QUESTIONNAIRE / CHECK SHEET GUIDE

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dimming
options



1. Will the fixture be controlled directly with a DMX512 signal or a phase dimming source?

Phase Dimming: If a phase dimming source is being used, will the source be a forward phase or reverse phase?

- After the phase type is selected, apply the appropriate catalog nomenclature from the spec sheet.

DMX512 Signal: If a DMX512 source is being used:

- All fixtures will be RDM compatible.
- All fixtures will have dim-to-dark feature, unless otherwise requested by customer.
- All lights will be off when no DMX signal is detected, unless otherwise requested by customer.

2. Will the fixture be expected to change colors? If so, how?

1. RGB
2. RGBW
3. Color Tuning (Lumenetix)
4. Tunable White Light (Lumenetix, other)

- Will the fixture share the same channels with other RGB(W) fixtures?
- Will the control system use a color-wheel like interface to control the fixtures?

3. Will the fixture be connected to a line voltage emergency generator?

Yes: If "yes", then be sure fixtures are separately ordered as emergency and non-emergency.

- Additional dialog will be required to accommodate generator function.

No: If "no", will there be a need for a battery backup system for each fixture?

- If "yes", fixtures may be equipped with emergency battery packs of various wattage ranges. (Consult sales for various power options.)

4. Regarding means of connecting DMX to a fixture, will the DMX fixture be installed for recessed or surface/pendant applications?

Recessed: For recessed fixtures, the method for assigning DMX addresses to the fixtures will determine if the fixture has two sets* of 3-port Phoenix Contacts with screw terminals will be provided on each fixture. (See Figure 1, Recessed)

Surface/Pendant: For surface/pendant mounted applications where fixtures are being addressed via RDM, a fixture canopy assembly will have access for cables with flying leads (cables supplied by others) from both above through and below a ceiling. (See Figure 1, Surface/pendant)

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DMXS STANDARD REQUIREMENTS AND RECOMMENDATIONS GUIDE

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dimming
options



Cable Options Reference

- Belden 9842 or 9841 equal
- CAT-5/CAT-5e/CAT-6 (twisted pair configuration).
- Rated cable impedance not to exceed 110-120 Ohm.

Requirements and Recommendations

- Label the building's DMX cables to prevent connection to other non-DMX devices.
- A splitter/repeater may be required when 30-32 devices are on one branch circuit.
- Repeaters may be required for runs in excess of 1000ft (300ft between fixtures).
- PIN out arrangement <Orange white is DMX(+), Orange is DMX(-) and brown white is common> (refer to ESTA standard).
- Audio type cables cannot be used for high speed DMX protocol.
- All end runs require a terminator resistor rated for 0.25-0.50W and 120 ohms. (Supplied by others)
- Understand how the fixture will interpret DMX commands.
 - Fixtures using Lumenetix product do not entirely behave in the same manner as RGB and RGBW fixtures.
- Spectrum Lighting will not be responsible for commissioning the DMX system, use of an integrator or informed contractor is recommended.
- Deciding on how the cables for DMX connections are going to be run between fixtures. Will the control cables run below the ceiling or from above the ceiling (For the "above the ceiling" application, the building must have access above the ceiling and use plenum rated cables.)?
- As a default, Spectrum Lighting's DMX fixtures will dim to dark.
- Customer responsible for end of line resistor.

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