BeveLED Mini® Infinite Color+® - B3RD-FC1
3” Round Downlight

Field Convertible from Trimless or Millwork to Trimmed

Trimmed - B3RDF-FC1

Trimless - B3RDL-FC1

Millwork - B3RDM-FC1

BeveLED Mini Infinite Color+® - the smallest member of our iconic BeveLED family to offer full color + tunable white light flexibility. Access to a wide variety of perfect architectural whites, saturated colors, neutrals, and pastels are possible with DMX controls. Infinite opportunities abound for residential, hospitality and retail lighting applications, and any project requiring full color and white light flexibility.

FEATURES
• Full color and white light flexibility
• Dry/damp/wet location rated for showers
• Field convertible from trimless or millwork to trimmed

DOWNLIGHT PERFORMANCE DATA

<table>
<thead>
<tr>
<th>Wattage</th>
<th>Source Lumens</th>
<th>Lumens Per Watt</th>
<th>Delivered Lumens</th>
</tr>
</thead>
<tbody>
<tr>
<td>17W</td>
<td>1100</td>
<td>48</td>
<td>850</td>
</tr>
<tr>
<td>18W</td>
<td>1200</td>
<td>50</td>
<td>925</td>
</tr>
</tbody>
</table>

Wavelength (nm)

Relative Output (W/nm)

Independently mix white light with color in any combination imaginable to create a uniquely personal light source.
1. Specify fixture part number and options.

<table>
<thead>
<tr>
<th>BeveLED Trim Style</th>
<th>Wattage Options</th>
<th>Beam Options</th>
<th>Lens Options</th>
<th>Bevel Trim Finish Options</th>
<th>Housing Options</th>
<th>Remote Dimming Driver</th>
<th>Accessories (Optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>18FC1 18W LED</td>
<td>50° beam</td>
<td>SF</td>
<td>WH White</td>
<td>FT Flat Housing</td>
<td>RM Remote Dimming</td>
<td>CB27 27&quot; C-Channel Bars</td>
</tr>
<tr>
<td></td>
<td>70° beam</td>
<td></td>
<td></td>
<td>SC Conduit Silver</td>
<td>New Construction</td>
<td></td>
<td>CB52 52&quot; C-Channel Bars</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>GR Grey</td>
<td>FTA Flat</td>
<td></td>
<td>CM27 27&quot; C-Channel Bars</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BL Black</td>
<td>Adjustable</td>
<td></td>
<td>(use with FT housing only)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BZ Bronze</td>
<td>Housing</td>
<td></td>
<td>CM52 52&quot; C-Channel Bars</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PR Primer Finish</td>
<td>NC1 New</td>
<td></td>
<td>(use with FT housing only)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AC Clear Matte</td>
<td>Construction</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>All-in-One</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>NCCP Chicago</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Plenum</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>NCIC Insulation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Contact</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rated / Airtight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L</td>
<td></td>
<td></td>
<td></td>
<td>PR Primer Finish</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AC Clear Matte</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TRIM FINISH OPTIONS**

- White
- Grey
- Black
- Bronze
- Custom RAL (example)
- Custom RAL (example)

Custom colors and primer finish also available

*Leave blank for Trimless

2. Specify Remote Power Supply

<table>
<thead>
<tr>
<th>Remote Power Supply</th>
<th>Fixtue Wattage</th>
<th>Voltage</th>
<th>Remote Dimming Driver Type*</th>
<th>Cabling Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>RPB-01</td>
<td>18FC1 18W LED</td>
<td>UNV 120V - 277V</td>
<td>D23X1 EldoLED DMX 0.1% dimming, manual addressing using RDM protocol, 8 bit</td>
<td>RJ RJ45 Jacks</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>D23X2 EldoLED DMX 0.1% dimming, manual addressing using RDM protocol, 16 bit</td>
<td>WR Manual Wire Splice Connection</td>
</tr>
</tbody>
</table>

*Requires remote enclosure by others, minimum size 9"L x 4"W x 2"H

**NOTE:** Remote Power Supplies Require Enclosures by Others. See Page 6 for Details.
BeveLED Mini® Infinite Color+® - B3RD-FC1
3” Round Downlight

TRIM DETAILS

Trimmed - B3RDF-FC1

Clear acrylic overspray protector provided standard with every housing to keep out dust and contaminants during construction. Allows for use as work light.

HOUSING OPTIONS

Flat Housing - FT

Flat Adjustable Housing - FTA

New Construction Housing - NC1
Insulation-Contact Rated - NCIC
Chicago Plenum Rated - NCCP
BeveLED Mini® Infinite Color+® - B3RD-FC1
3” Round Downlight

TRIM DETAILS

Trimless - B3RDL-FC1

Bevel Finish
Glass Lens

1 3/4” Regress
3” Ø

Clear acrylic overspray protector provided standard with every housing to keep out dust and contaminants during construction. Allows for use as work light.

HOUSING OPTIONS

Flat Housing - FT

Flat Adjustable Housing - FTA

New Construction Housing - NC1
Insulation-Contact Rated - NCIC
Chicago Plenum Rated - NCCP
BeveLED Mini® Infinite Color+® - B3RD-FC1
3” Round Downlight

TRIM DETAILS

Millwork - B3RDM-FC1

Millwork collar finish provided to match bevel finish unless otherwise specified.

Glass Lens

Clear acrylic overspray protector provided standard with every housing to keep out dust and contaminants during construction. Allows for use as work light.

HOUSING OPTIONS

Flat Housing - FT

Flat Adjustable Housing - FTA

New Construction Housing - NC1
Insulation-Contact Rated - NCIC
Chicago Plenum Rated - NCCP
FIELD REPLACEABLE LED LIGHT ENGINE
is serviceable through the aperture with a Philips screwdriver. All USAI Lighting light engines feature industry-leading color consistency.

REMOTE LOCATION DRIVER
BeveLED Mini Infinite Color+ is supplied with quick connects for use with remotely located driver. Driver is provided separately for remote location on site, enclosure to be provided by others. Remote dimming driver power supply option must be clearly specified in the “RP” table. Remote power supplies require enclosures by others that meet local codes and must be located in an accessible service panel within 100ft of the light fixture; see remote driver table below for coordination of enclosure sizes and wire gauges required. All dimming drivers comply with IEEE C62.41 surge protection.

Remote Power Supply Requirements and Wiring Diagrams Note: Must be wired in homeruns per wiring diagram “A” below.

<table>
<thead>
<tr>
<th>Remote Power Supply Dimming Option</th>
<th>Wire Gauge Required</th>
<th>Minimum Enclosure Size Required (by others)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RPB-01-18FC1</td>
<td>18/16</td>
<td>9” W x 4” L x 2” H</td>
</tr>
</tbody>
</table>

* Wire gauge 18/16 = Maximum distance from light fixture to remote power supply is 100’ using 16 gauge wire, 50’ using 18 gauge wire.

**CABLING:** Data cables must be run in series between fixtures. Choose your preferred method of connection when specifying. To avoid signal transmission problems, a DMX link terminator should be used in the last fixture in a series on a given DMX bus. NOTE: Data communication cables and AC power lines must not be run in the same conduit.

- **RJ Cabling Option:** If the RJ cabling option is specified, the remote power supply is provided with a DMX interface board that has RJ45 jacks for data connection with CAT5 cable terminated with RJ45 connectors. A link termination dip switch is provided at the connector board; no separate link termination device is required.

- **WR Cabling Option:** If the WR cabling option is specified, the remote power supply is provided with a DMX interface board with terminal blocks for wires to be manually spliced for data connection. A link termination dip switch is provided at the connector board; no separate link termination device is required. The data cable used must meet the following requirements:
  - type: shielded, 2-conductor twisted pair
  - maximum capacitance between conductors: 30 pF/ft
  - maximum capacitance between conductor and shield: 55 pF/ft
  - maximum resistance: 0.02 ohms/ft
  - normal impedance: 100-140 ohms
  - conductive core: 24 AWG is recommended

**NOTE:** If 3-wire data cables are preferred, we suggest a Belden 9841 or equivalent cable which meets the specifications for EIA RS-485 applications. Do not use standard microphone cables; they cannot transmit DMX512 data reliably over long distances.
BeveLED Mini® Infinite Color+® - B3RD-FC1
3” Round Downlight

BEVELED MINI INFINITE COLOR+ SPECIFICATIONS

HOUSING
All BeveLED Mini fixtures are field-flexible which allows for field changes from trimless or millwork to trimmed with a simple components change with parts from USAI. Housings are fabricated of 20 ga. steel construction and are supplied with quick connects and wire connections for use with remotely located driver. Driver is provided separately for remote location on site, enclosure to be provided by others.

MOUNTING
B3RDF overlap flange fixtures are designed for use in sheetrock, acoustical ceiling tile, and many other ceiling materials. B3RDL trimless fixtures are provided with a spackle collar and are designed for use in sheetrock/mud-in ceiling applications. B3RDM millwork fixtures are provided with a millwork collar and are designed for use in wood/millwork and stone construction applications. Butterfly brackets and adjustable nailer bars extendible from 14” to 24” centers with integral nails are provided for attachment to building structure. C-channel bars are optionally available for acoustical ceiling applications. If channel bars are specified for FT housing, special reduced height channel bars (CM27 or CM52) will be provided.

FIXTURE WEIGHT
FT housing weigh 4 lbs. FTA housing weighs 10 lbs. NC1, NCIC, and NCCP housings weigh 11 lbs.

WARRANTY
Based on IESNA LM80-2008, BeveLED has a 50,000 hour rated life at 70% lumen maintenance (L70). USAI Lighting Warranty covers replacement parts for 5 years from date of shipment. Ambient temperatures at fixture location should not exceed 40°C during normal operation.

CEILING CUT OUT
B3RDF Trimmed with Overlap Flange: 3-5/8”Ø
B3RDL Trimless Spackle-in: 4-3/16”Ø
B3RDM Millwork Knife-edge: 3-9/16”Ø

LISTINGS
Dry/Damp/Wet location. AC and AB trim finishes are dry/damp only. UL2043 rated for use in air handling plenums. NRTL/CSA-US tested to UL standards. IBEW union made.

NOTES
• Not for use in corrosive environment
• Use of pressure washer voids warranty

PHOTOMETRICS
Consult factory or website for IES files. Tested in accordance with IESNA LM79.
IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS

1. Keep these instructions in a safe place for future reference.
2. Only qualified electricians in accordance to local codes should install these fixtures.
3. De-energize the electrical circuit at the circuit breaker prior to installation process or servicing.
4. Make sure all connections are in accordance with the National Electrical Code and any local regulations.

D23X1: EldoLED DMX dimming with manual addressing, 8-bit (Dims down to 0%)
D23X2: EldoLED DMX dimming with manual addressing, 16-bit (Dims down to 0%)

**RJ CABLE OPTION**
**RJ45 JACKS**

**WR CABLE OPTION**
wire splice connection

-WR Cabling Option: cables must be spliced connection. The data cable used must meet the following requirements:
  - type: shielded, 2-conductor twisted pair
  - maximum capacitance between conductors: 30 pF/ft
  - maximum capacitance between conductor and shield: 55 pF/ft
  - maximum resistance: 0.02 ohms/ft
  - normal impedance: 100-140 ohms
  - conductive core: 24 AWG is recommended

If 3-wire data cables are preferred, we suggest a Belden 9841 or equivalent cable which meets the specifications for EIA RS-485 applications. Do not use standard microphone cables: they cannot transmit DMX512 data reliably over long distances.
**IMPORTANT SAFETY INSTRUCTIONS**

**SAVE THESE INSTRUCTIONS**

1. Keep these instructions in a safe place for future reference.
2. Only qualified electricians in accordance to local codes should install these fixtures.
3. De-energize the electrical circuit at the circuit breaker prior to installation process or servicing.
4. Make sure all connections are in accordance with the National Electrical Code and any local regulations.

**DMX MUST BE DAISY CHAINED IN SINGLE LINE**

**CORRECT !**

![Correct Wiring Diagram](image)

**INCORRECT !**

![Incorrect Wiring Diagram](image)

**NOTES:**

1. Maximum distance from light fixture to remote power supply is 100' using 16 gauge wire, 50' using 18 gauge wire.
2. Minimum enclosure size required is 9”W x 4”L x 2”H. Enclosure supplied by others.
3. Remote Power Supplies can only be used with specific fixture types. Confirm power supply compatibility on light fixture label.
4. DMX signal cable must NOT be run in same conduit as high voltage AC power lines.
5. Remote Power Supplies must be daisy chained in one serial line using Data in and Data out
6. Maximum of 32 DMX devices on single DMX bus
7. Maximum of 1600’ serial communication link distance
8. To avoid signal loss, DMX signal terminator should be used on last Remote Power Supply in line. This is provided through a dip-switch on the DMX512 interface board.