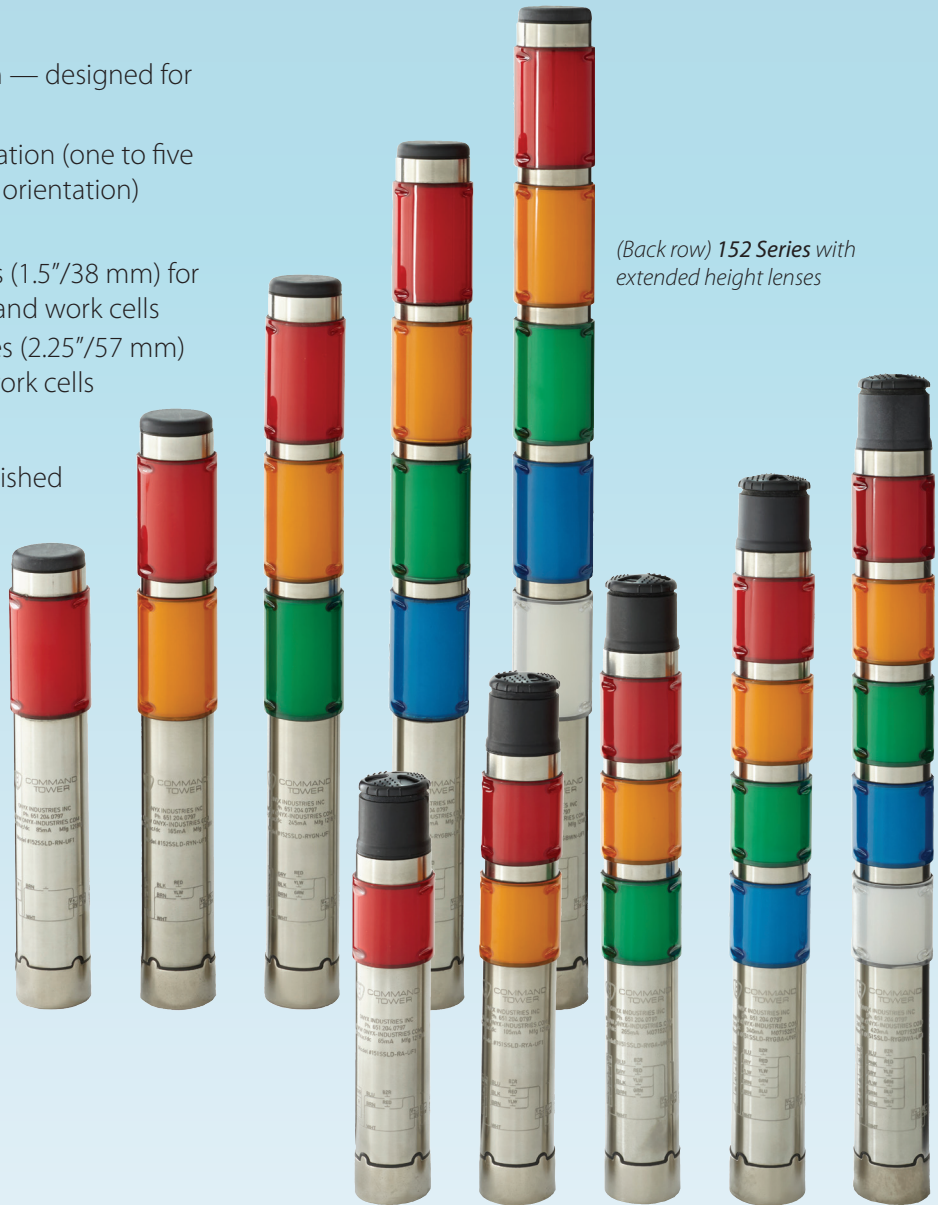


# 150 Compact Series

## Stack Lights

- All-metal, heavy-duty construction — designed for harsh Industrial environments
- Long life, super-bright LED Illumination (one to five color lenses, arranged in any color orientation)
- 1.5" (38 mm) diameter with:
  - 151 Series** standard height lenses (1.5"/38 mm) for small-to-medium sized machines and work cells
  - 152 Series** extended height lenses (2.25"/57 mm) for medium sized machines and work cells
- 24 VDC (sink or source)
- Housing finish options include polished 304SS or black hardcoat paint
- Base finish options include nickel plating (with 304SS housing) or black hardcoat paint
- Available with or without adjustable volume buzzer alarm
- Pre-wired with PVC jacketed multiconductor cable or M12 pigtail quick disconnect
- Shipped fully assembled, ready-to-use
- 3 year warranty!



(Back row) 152 Series with extended height lenses

(Front row) 151 Series stack lights with standard height lenses, shown with buzzer option



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# 150 Compact Series Stack Lights

## Specifications

<b>Housing</b>	<ul style="list-style-type: none"> <li>Ø1.5" (38 mm) stack light</li> <li><b>151 Series:</b> Standard height color segment lens –1.5" (38 mm)</li> <li><b>152 Series:</b> Extended height color segment lens –2.25" (57 mm)</li> </ul>
	<ul style="list-style-type: none"> <li>#1 - 304SS housing, solid aluminum base (nickel plated). Polished with brushed finish.</li> <li>#2 - Carbon steel housing with solid die-cast aluminum base, black hardcoat paint (electrostatic e-coat finish).</li> </ul>
	<ul style="list-style-type: none"> <li>Seals/Gaskets: Neoprene, Buna-N Viton O-rings</li> </ul>
<b>Illumination</b>	<ul style="list-style-type: none"> <li>See chart below for complete specifications</li> </ul>
	<ul style="list-style-type: none"> <li>≤ 1 MHz switching frequency</li> </ul>
	<ul style="list-style-type: none"> <li>68% nominal luminous transmission</li> </ul>
<b>Electrical</b>	<ul style="list-style-type: none"> <li>24Vdc nominal, ±15% (see table below for current requirements)</li> </ul>
	<ul style="list-style-type: none"> <li>Wiring: 22 AWG, stranded, multiconductor PVC cable or M12 quick disconnect</li> </ul>
	<ul style="list-style-type: none"> <li>1-3 color segments = 5 conductors; 4-5 color segments = 8 conductors</li> </ul>
	<ul style="list-style-type: none"> <li>Sink or source connection based on DCOM (White) wire connection</li> </ul>
	<ul style="list-style-type: none"> <li>Connection: Standard Duty 6', 12', 30' (2, 4, 10 m) PVC jacketed multi-conductor cable (or customer specified length) M12 male quick disconnect with 6" (0.15 m) pigtail M12 male quick disconnect w/mating female connector cable – 6', 12', 30' (2, 4, 10 m) length</li> </ul>
<b>Buzzer Option</b>	12mA @ 24Vdc, adjustable output from 92-103 dB @ 0.6m via mechanical baffle; continuous tone standard (contact factory for other tones)
<b>Installation</b>	<ul style="list-style-type: none"> <li>Internal ½-14 NPSM (straight) pipe thread, ¾ inch depth. 22 mm mounting available on request.</li> </ul>
	<ul style="list-style-type: none"> <li>Units can be mounted direction to panels, with wall mount style brackets, base mount brackets and extension poles. See page 4 for graphical representation of mounting options. M12 connectors fit through all standard mounting components, including poles.</li> </ul>
	<ul style="list-style-type: none"> <li>Onyx accessories have 1/2-14NPS straight threads as standard, verified for fit. Poles are threaded at both ends, minimum ¾ long thread. M12 QD Connectors supplied by Onyx Industries will fit through I.D. of Poles and Brackets. Contact factory for other cabling/connector options.</li> </ul>
<b>Environmental</b>	Designed for Indoor use; 32 to 122°F (0-50 °C); dust tight
<b>Warranty</b>	<p>Product is warrantied for 3 years from date of shipment covering material defects and workmanship.</p> <p>Warranty will replace or repair units determined to be defective from the factory. Warranty does not apply to failures due to misuse, abuse or installation that does not follow generally accepted best engineering practices.</p>

Illumination Performance by Color		151 Series (12 LED Segments)		152 Series (20 LED Segments)	
	Wavelength (nm)	Luminous Intensity (mcd)	Current <sub>Max</sub> (mA)	Luminous Intensity (mcd)	Current <sub>Max</sub> (mA)
Red	625	9,139	45	15,232	65
Yellow	590	7,344	45	12,240	75
Green	527	14,688	50	24,480	65
Blue	467	4,896	50	8,160	85
Clear (Cool White)	6K	24,480	50	40,800	75



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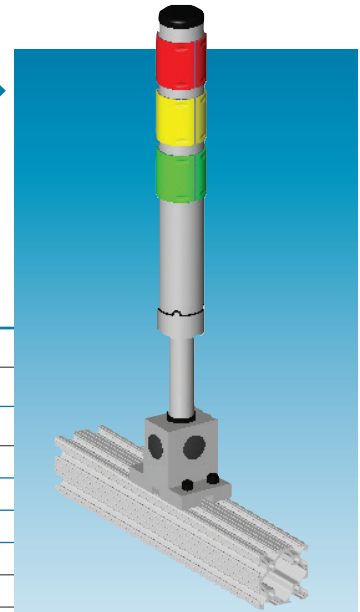
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## Configuration Key

**Example:** ① 151 ② SS L D - ③ RYG ④ N - ⑤ P10UP6 ⑥ M15C2

Units ordered as a configuration include the indicator light, wiring, and mounting options as a single line item and are assembled at the factory prior to shipment. Cable and M12 pigtail lengths will take mounting lengths into account at time of assembly (ex. A configuration with a 12 inch pole and M12 quick disconnection option will extend the M12 pigtail 6 inches out the base of the pole at no additional cost). Alternatively, parts making up a configuration can be ordered individually for standard field assembly.

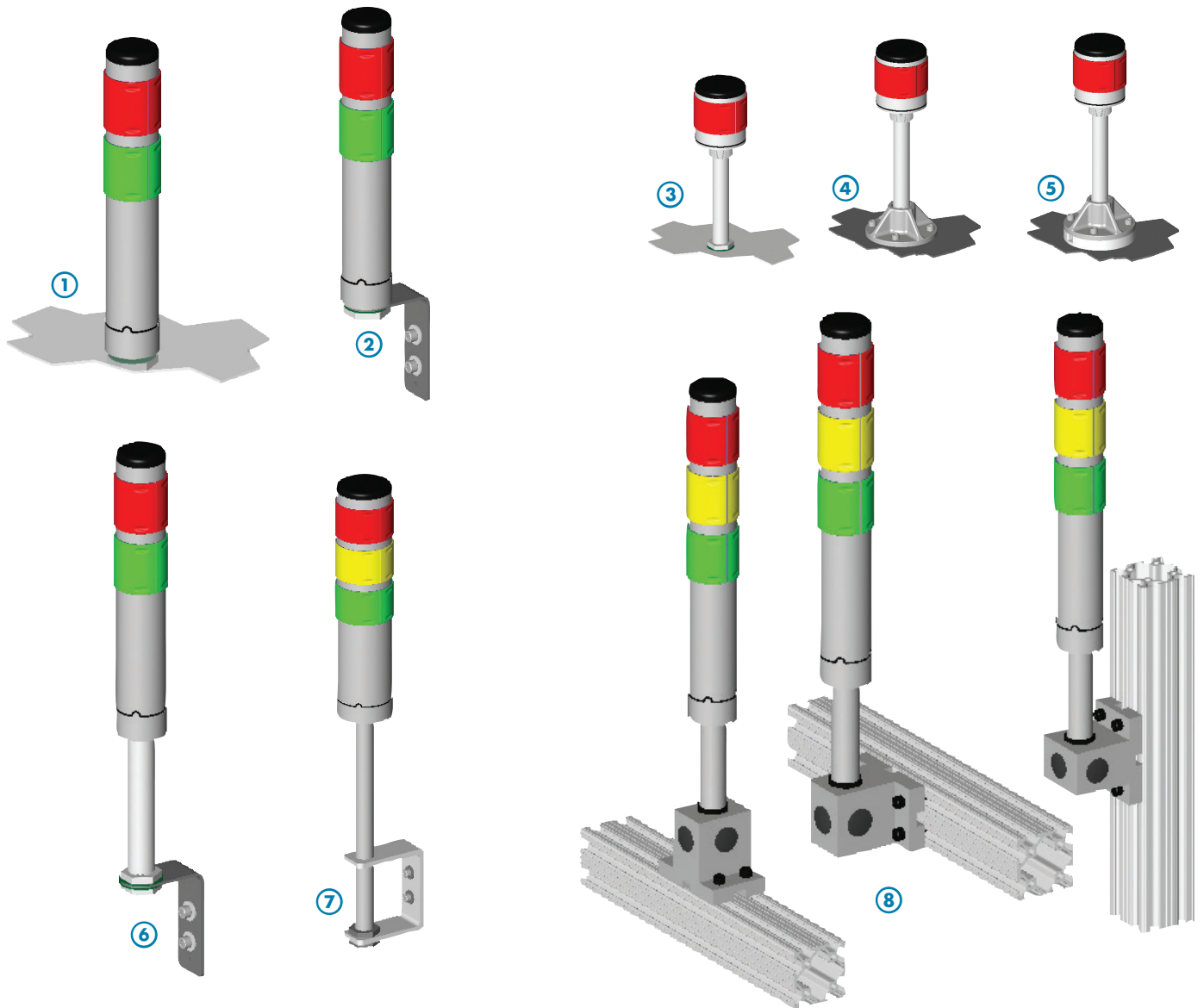
① <b>Series</b>	151	Ø1.5" (38 mm) stack light with standard height lens		
	152	Ø1.5" (38 mm) stack light with extended height lens		
② <b>Housing</b>	SS	304 stainless steel with aluminum base		
	CS	Electrostatic e-coat (Black)		
<b>Illumination Source</b>		L	LED	
<b>Voltage</b>		D	24 VDC	
③ <b>Color Segments</b>  (Specified in any combination from top to bottom in 1 to 5 segments)	R	Red LED with red lens		
	Y	Yellow LED with yellow LED		
	G	Green LED with green LED		
	B	Blue LED with blue lens		
	C	White LED with clear lens		
	2R	Red LED with white translucent lens		
	2Y	Yellow LED with white translucent lens		
	2G	Green LED with white translucent lens		
	2B	Blue LED with white translucent lens		
	2C	White LED with white translucent lens		
④ <b>Buzzer Option</b>	A	Buzzer option		
	N	No buzzer		
	N	No mounting (user supplied)		
	D	Direct mount to panel (1/2-14 flange nut included)		
⑤ <b>Mounting</b>  All necessary hardware is included with mounting options  (See illustrations next page for reference)	DL	"L" bracket (1/2-14 flange nut included)		
	PJNx	Pole with jam nut base mount	x = P6	6" pole
	PBx	Base mount bracket with pole mount	x = P10	10" pole
	PBWx	Base mount bracket with wire exit pole mount	x = P12	12" pole
	PLx	"L" bracket with pole mount	x = P18	18" pole
	PUx	"U" bracket with pole mount	x = P24	24" pole
	P10Ux	Universal pole mount base (for 80-20 Series 10 or equivalent structural framing); 1" o.c. T-slots	x = P36	36" pole
			x = P48	48" pole
	P15Ux	Universal pole mount base (for 80-20 Series 15 or equivalent structural framing); 1.5" o.c. T-slots	x = P72	72" pole
			x = PX	Customer specified length pole
⑥ <b>Wiring Options</b>	Sx	PVC jacketed cable, standard duty	x = 1	6' (2 m) exposed length
			x = 2	12' (4 m) exposed length
	Fx	PVC jacketed cable, high flex duty	x = 3	30' (10 m) exposed length
			x = 4	Customer specified length
	M15	M12 5-pin male quick disconnect for 1 – 3 color segments, 6" pigtails		
	M18	M12 8-pin male quick disconnect for 4 – 5 color segments, 6" pigtails		
	M15Cx	M12 5-pin male quick disconnect and mating female M12 cable for 1 – 3 color segments, PVC jacketed flex duty	x = 1	6' (2 m) exposed length
			x = 2	12' (4 m) exposed length
	M18Cx	M12 8-pin male quick disconnect and mating female M12 cable for 4 – 5 color segments, PVC jacketed flex duty	x = 3	30' (10 m) exposed length



- ① Standard height lens stack light
- ② Stainless steel housing
- ③ Red, yellow, green LEDs
- ④ No buzzer
- ⑤ Universal pole mount base with 6" pole
- ⑥ M12 male quick disconnect w/female connector with 12' cable (not shown)

# 150 Compact Series Stack Lights

## Mounting Options



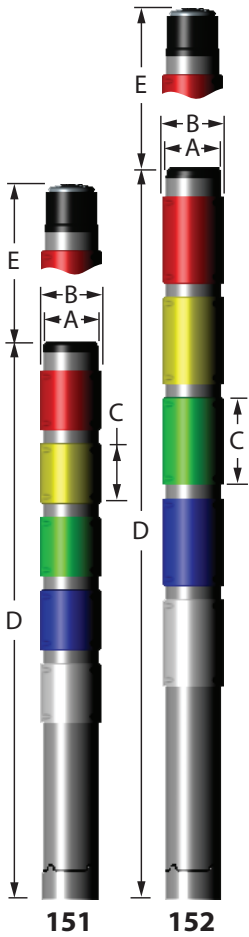
①	<b>D</b>	Direct mount to panel (1/2-14 flange nut included)
②	<b>DL</b>	"L" bracket (1/2-14 flange nut included)
③	<b>PJN<sub>x</sub></b>	Pole with jam nut base mount
④	<b>PB<sub>x</sub></b>	Base mount bracket with pole mount
⑤	<b>PBW<sub>x</sub></b>	Base mount bracket with wire exit pole mount
⑥	<b>PL<sub>x</sub></b>	"L" bracket with pole mount (using L15 bracket & jam nuts)
⑦	<b>PU<sub>x</sub></b>	"U" bracket with pole mount
⑧	<b>P10U</b>	Universal pole mount, solid 6061 aluminum. Mounting holes match 8020 and other aluminum profiles with 1.00" or 25 mm center-to-center T-slots (ex. 80-20 Inc. #1020 or #2020 profiles)

All mounting hardware shown included with kit; poles shown are ordered separately



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Dimensions



		151 Series		152 Series	
		in	mm	in	mm
<b>A</b>		1.5	38	1.5	38
<b>B</b>		1.6	42	1.6	42
<b>C</b>		1.5	38	2.25	57
<b>D</b>	# of Segments				
	1	7.3	185	9.0	229
	2	9.3	236	11.3	286
	3	11.3	286	14.5	368
	4	13.3	337	17.3	438
	5	15.3	388	20.0	508
<b>E</b>	Buzzer Option Height Adder	1.1	28	1.1	28

# 150 Compact Series Stack Lights

## Wiring Connections

### For Units with 1-3 Segments (5c Cable):

White	DCOM
Brown	Segment 1 (Bottom-most)
Black	Segment 2
Gray	Segment 3
Blue	Buzzer

\* AIC illuminated cap option with 3 segments will use 8c Cable/M12

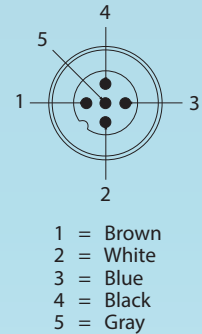
### For Units with 4-5 Segments (8c Cable):

White	DCOM
Brown	Segment 1 (Bottom-most)
Green	Segment 2
Yellow	Segment 3
Grey	Segment 4
Pink	Segment 5
Red	AIC Option
Blue	Buzzer

## M12 Quick Disconnect Specifications

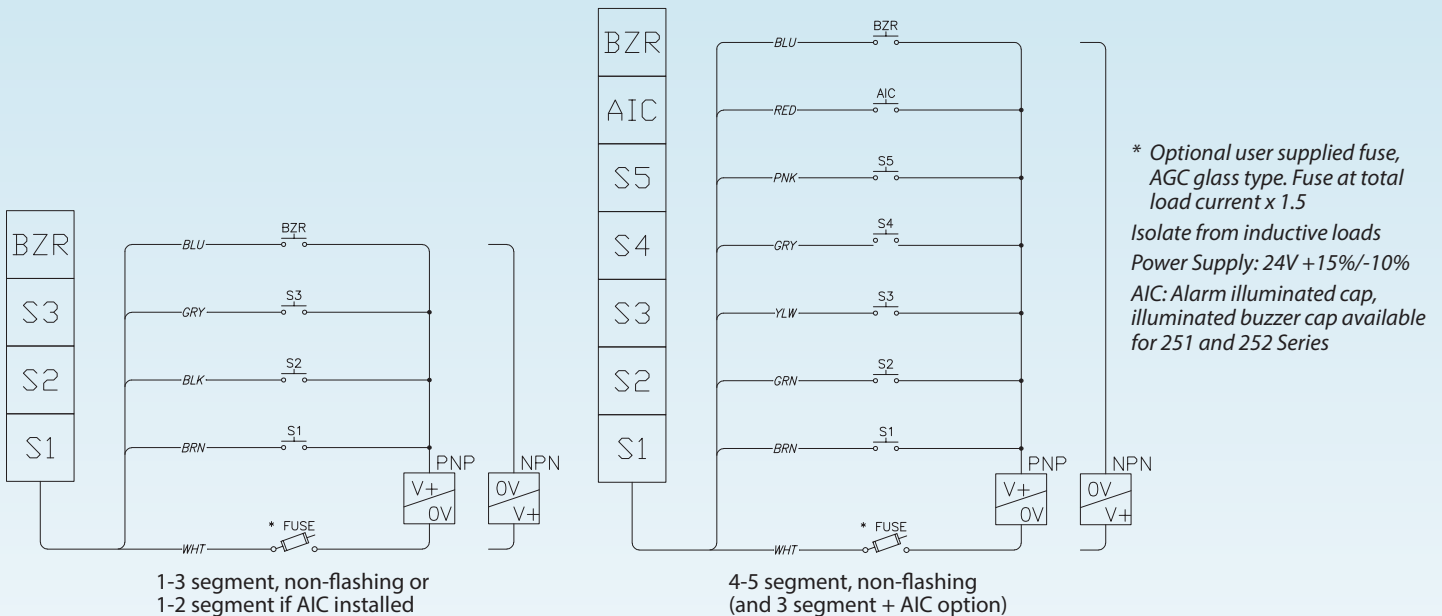
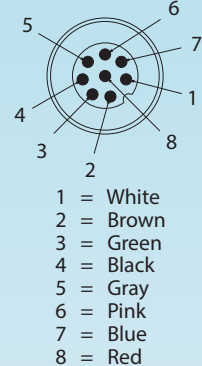
### For Units with 1-3 Color Segment:

- M12 (5c) male quick disconnect at 6" (~0.25 m) pigtail
- Mating cable: M12 (5c), Binder #77-3430-0000-20005-xx00 or equal



### For 4-5 Color Segment units:

- M12 (8c) male quick disconnect at 6" (~0.25 m) pigtail
- Mating cable: M12 (8c), Binder #77-3430-0000-20708-xx00 or equal



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