

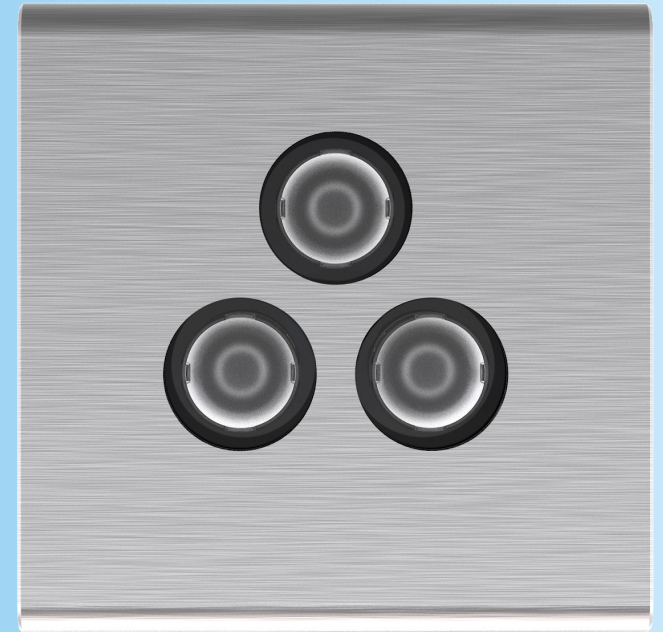


## SHOCKWAVE ECKO | WHITE SERIES

The SACO Shockwave ECKO is a stylish, compact accent light fixture using high-performance LEDs to deliver precise lighting, from cool to warm white. The ECKO is highly adjustable and is great end-to-end, stacked, or positioned around complex structures.

ECKO comes in narrow, medium, wide, and a variety of oval optic options making this a versatile lighting solution for most projects.

<b>HIGH RESOLUTION</b>	SACO's proprietary V-STREAM high-speed, high-resolution video pixel control. DMX compatible.
<b>BRIGHT FIXTURE</b>	SACO's intelligent control maximizes output for the brightest whites
<b>COMPACT SIZE</b>	Ultra-compact design and remote V-BRAIN power allows for low-profile installation and discreet integration.
<b>MODULAR</b>	Build the perfect performer by combining and stacking fixtures to suit.
<b>HEAT MANAGEMENT</b>	Efficient heat dissipation. No dirt traps.



ACTUAL SIZE

SACO



## FEATURES GUIDE



### PHYSICAL

CONSTRUCTION	Machined high grade 6061-T6 aluminum Machined scratch resistant clear polycarbonate face (0.2", 4.5mm thickness) Sturdy stainless steel hardware High-pressure silicone rubber seal (temp range -60°F to 400°F, -50°C to 200°C)
MOUNTING	Standard 304 stainless steel aimable mounting bracket (0.1", 2.6mm thickness) 180° tilt, 90° pan around central pivot Micro-adjustable for perfect aiming Locking bracket accommodates 1/4" (6mm) mechanical screws
SURFACE FINISH	Standard brushed anodized finish Custom painted colors also available
WEIGHT	1.0lb (0.5kg), with standard cable + mounting bracket

### THERMAL

HEAT CONTROL	Use of entire fixture's surface area for ideal heat dissipation No fins, no dirt buildup
SURFACE FINISH	Anodized for better emissivity
OPERATING TEMP	-40°F to 185°F (-40°C to 85°C)

### ELECTRICAL

INPUT VOLTAGE	24VDC (CLASS 2)
POWER	4.5W Maximum
V-BRAIN LIMIT	16 (Connect maximum 4 per V-Brain 100 output. Please refer to specification guide)
CABLE	Standard 4' (1.2m) cable with quick connector (Q804), or optional 10' (3m) pigtail cable for fixed color applications (P210)
CONTROL INPUT	SACO Video (Up to 16 bit resolution) DMX512 (8 bit resolution) DMX512 with RDM (Remote Device Management) (8 bit) On/Off without control signal for fixed whites

### OPTICAL

WHITE SERIES	High-intensity discrete LEDs Wide CCT range (2700, 4000, 5700K) Wide range of CRI (70 to 90+), high R9 value available upon request Binning as low as 3 MacAdam steps for consistent whites
LUMEN OUTPUT	From 270 to over 300 delivered lumens in warm white (WW), depending on source/optics combo
PERFORMANCE	From 60 to over 70lm/W, in warm white (WW) depending on source/optics combo
REFRACTORS	Injection molded PMMA total internal reflection collimators (TIR) Variety of axial and transverse beam angles, from circular to oval light spreads Factory installed for enhanced optical precision

### SHOCKWAVE ACCESSORIES

EXTENSION CABLES	10' (3m) EXT10 and 20' (6m) EXT20 fixture extension cables may be used to lengthen standard cable to a maximum of 60' (18m) IP67 quick connectors for easy connections to V-BRAIN
MOUNTING	Multiple mounting and joining bracket options available See accessories guide for options
OPTICAL ACCESSORIES	Multiple optical accessories are available See accessories guide for options
CONTROLLERS	Multiple Shockwave video and DMX512 control options are available See accessories guide for options
MORE	Please refer to accessories guide for more information

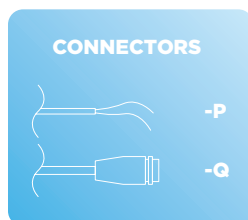
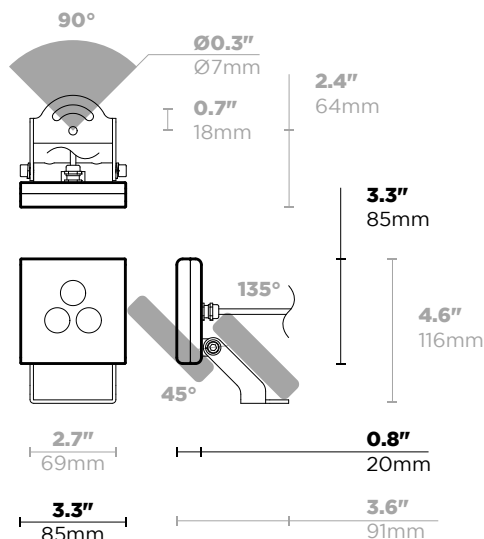
### ADDITIONAL INFORMATION

CERTIFICATION	ETL listed as per UL 2108, CSA C22.2 N° 250.0 CE IP 66, suitable for wet locations Roadway and Area Lighting Equipment Luminaire Vibration as per ANSI C136.31
WARRANTY	5 years
ORIGIN	Designed and made in North America





## SPECIFICATIONS GUIDE



-TP MOUNTING HARDWARE VERSION, SEE ACCESSORIES GUIDE FOR MORE.  
(ADJUSTABILITY AND MOUNTING DIMENSIONS IN GREY)



Copyright © 2018 by SACO. All Rights Reserved. Shockwave® is a registered trademark of SACO. All specifications subject to change without notice. Information furnished by SACO is believed to be accurate and reliable. However, no responsibility or liability by SACO for its use, nor for infringement of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or other rights by SACO.

## PRODUCT ORDERING CODE

### MODEL #

### WHITE LIGHT SOURCE

<b>CW</b>	Cool White (Max 4.5W, 330lm approx.. 5700K, 70 CRI min)
<b>NW</b>	Neutral White (Max 4.5W, 330lm approx.. 4000K, 80 CRI min)
<b>WW</b>	Warm White (Max 4.5W, 275lm approx.. 2700K, 90 CRI min)
<b>DW</b>	Dynamic White (Max 4.5W, 2700-5700K)

### LIGHT SPREAD (AXIAL + TRANSVERSE) <sup>1,2</sup>

<b>N+N</b>	Narrow (Circular beam, nominal 15° TIR lens)
<b>M+M</b>	Medium (Circular beam, nominal 30° TIR lens)
<b>W+W</b>	Wide (Circular beam, nominal 50° TIR lens)
<b>M+N</b>	Medium + Narrow (Oval beam, nominal 35°x15° TIR lens)
<b>W+M</b>	Medium + Wide (Oval beam, nominal 55°x40° TIR lens)

<sup>1</sup>All beam angle values (FWHM) may vary depending on specified light color.  
Please refer to photometric guide for corresponding beam angles.

<sup>2</sup>Factory installed. Please refer to accessories guide for field-adjustable optical accessories.

### CONTROL SPECIFICATION <sup>3</sup>

<b>SVD</b>	SACO Video (Up to 65,536 shades per color, dimming down to 0%)
<b>DMX</b>	DMX512 <sup>4</sup> (Up to 256 shades per color, dimming down to 0%)
<b>RDM</b>	DMX512 <sup>4</sup> + RDM (Up to 256 shades per color, dimming down to 0%)
<b>OFF</b>	On/Off (No dimming)

<sup>3</sup>Remote power supply and control gear to be ordered separately.  
Please refer to specification guide.

<sup>4</sup>DMX addresses must be identified on order.

### CABLE HARNESS CONNECTOR

<b>Q</b>	Quick connector <sup>5</sup> (8-pin, overmolded IP67)
<b>P</b>	None, pigtail <sup>6</sup> (2 conductors, stripped wire ends, no connector)

<sup>5</sup>Default option, 8-conductor maximum cable length is 4' (1.2m), see below. Make sure connector choice corresponds with that of remote power supply.

<sup>6</sup>2-conductor cable compatible only, see below.

### CABLE HARNESS LENGTH

<b>801.2</b>	8-conductor, 4' (1.2m) <sup>7</sup>
<b>8_ _ _</b>	8-conductor, custom length (please specify, in meters) <sup>8</sup>
<b>203.0</b>	2-conductor, 10' (3m) <sup>9</sup>
<b>2_ _ _</b>	2-conductor, custom length (please specify, in meters) <sup>10</sup>

<sup>7</sup>Default length option, comes fitted with 8-pin quick connector only (-Q, see above).

<sup>8</sup>Minimum 8-conductor cable length is 6" (0.15m) and maximum 10' (3m). Longer runs can be achieved using extensions. Refer to V-Brain wiring guide for details.

<sup>9</sup>2-conductor cables have pigtailed ends as standard (-P only, see above).

<sup>10</sup>Maximum 2-conductor cable length option is 80' (24m) length.

### SURFACE FINISH

<b>CLA</b>	Clear Anodized
<b>BAK</b>	Black Anodized
<b>_ _ _</b>	Custom, please specify

### MOUNTING HARDWARE <sup>11</sup>

<b>TP</b>	Tilt + Pan mounting bracket (Tilt 180°, Pan 90°)
<b>NO</b>	None
<b>_ _</b>	Custom, please specify

<sup>11</sup>Tilt and pan aimable mounting bracket factory installed as standard. Please refer to accessories guide for further mounting options.

### MOUNTING FINISH <sup>12</sup>

<b>SS</b>	Stainless Steel
<b>_ _</b>	Custom, please specify

<sup>12</sup>Bracket finish is exposed stainless steel, Custom finish to be applied to stainless steel. Consult your sales agent for compatible finishes, price and availability.



## PHOTOMETRICS GUIDE



### A NOTE ON PERFORMANCE

**WHITE LIGHT** All of the photometrics below are based on a warm white light source (-WW). Beam angle (FWHM) may vary depending on specified light color, as well as on fixture finish.

Photometric performance is measured in compliance with IESNA LM-79-08. Consult SACO website for the latest IES files.

**LIGHT SPREAD** Optics code sequence describe the type of light spread achieved both axially and transverse, in that order.

AXIAL + TRANSVERSE

