Manuals+ — User Manuals Simplified.

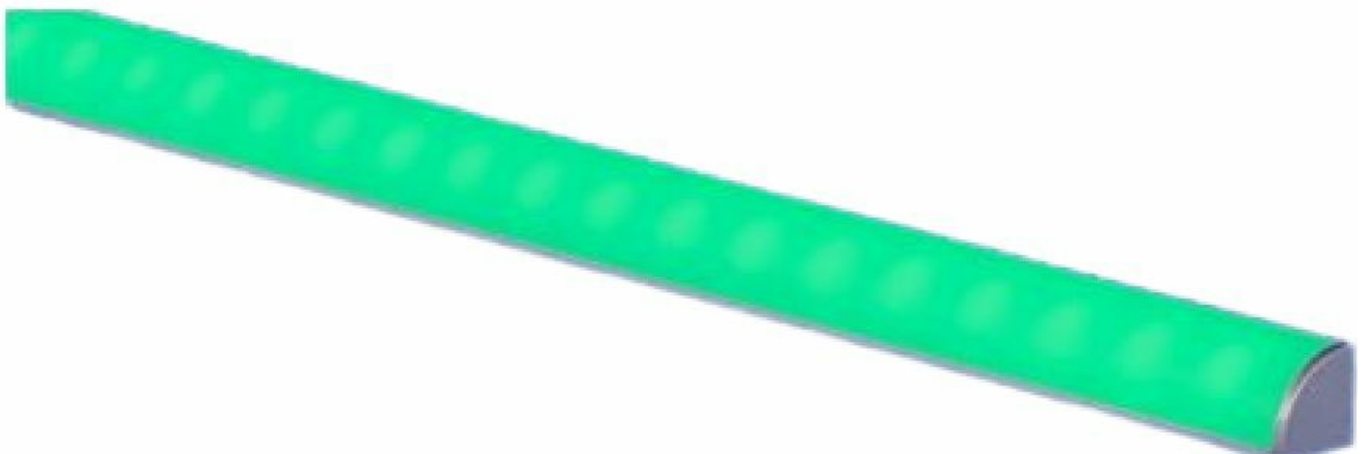# Q-TRAN AK1RGB Linear Fixtures Surface Owner's Manual

Contents

Q-TRAN AK1RGB Linear Fixtures Surface

Product Information

Specifications

- **Product:** AK1RGB
- **Watts/Ft:** 6.0
- **CCT:** RGB
- **Rated Efficiency:** Standard
- **Lens:** Diffused
- **Wire Input:** Bare Wire (Standard 24)
- **Wire Output:** Closed End (No feed)
- **Wire Color:** White
- **Wire Type:** Class 2
- **Mounting:** Stainless Steel Plastic Clip
- **Finish:** Satin Black
- **Length (in):** Exact/Optimal

Product Usage Instructions

Step 1: Mounting

Attach the provided stainless steel plastic clips to the desired surface. For fixtures that are 4′ or less, use 2 clips. For fixtures that are greater than 4′, use 4 clips. If additional clips are needed, you can order them separately using SST-03.

Step 2: Wiring

Connect the wires to the fixture using the following instructions:

Wire Input:

The standard wire input is bare wire (standard 24). Connect the white wire to the positive terminal and the black wire to the negative terminal.

Wire Output:

The standard wire output is closed end (no feed). Connect the white wire to the positive terminal and the black wire to the negative terminal.

Note:

If you need a custom wire length, you can request it by writing the desired length next to "BW" in the part number. For example, if you need a 48-inch wire, write "BW48" in the part number.

Step 3: Power Supply

Refer to the last page of the manual for compatible power supplies. Make sure to use a Q-Tran power supply for the 5-year warranty to be valid.

Step 4: Diode Visibility and Photometric Performance

For representation of LED visibility and beam angles, refer to the Diode Visibility and Photometric Performance sections on the following pages.

FAQ

Q: What is the warranty for this product?

A: The product comes with a 5-year warranty. Please note that the warranty is only valid when used with Q-Tran power supplies.

Q: Can I make modifications to the product in the field?

A: No, field modifications will void the warranty. Please consult a professional if any modifications are required.

Q: Are there any temperature ratings for this product?

A: The temperature ratings are not specified in the user manual. Please refer to the specifications section for more detailed information.

Q: What are the configuration options for wire input/output?

A: The standard configuration is bare wire (BW) for wire input and closed end (CLS) for wire output. No further specifications are needed for these options.

Q: What wire colors are available?

A: The available wire colors are white and black. Please select the appropriate wire color based on your preference or installation requirements.

ARKA-FLAT (01) RGB

Linear Fixtures – Corner & Surface
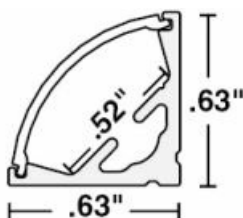
- Produces a wide 130º beam angle perfect for corner mount installations
- Ideal for cove, under cabinet and millwork applications

**Sample Part Number:** AK1RGB-6.0-RGB-DRY-STD-DF-P1-BW-BW-BK-CL2-SST-BK-48″-E

Overview

1 PRODUCT	2 WATTS/FT	3 CCT	4 RATED	5 EFFICIENCY	6 LENS
AK1RGB See last page for compatible power supplies.	**6.0** 6.0W/ft	**RGB**	**DRY** IP20 **DMP** IP54 **WET** IP67	**STD** Standard **WO** White Optics WhiteOptics - Internal coating, greater lumen output	**DF** Diffused **PR** Polar **FR** Frosted **CL** Clear For representation of LED visibility, see Diode Visibility section on following pages. For beam angles, see Photometric Performance section on following pages.

7 WIRE INPUT/OUTPUT	8 CONNECTOR/WIRE IN	9 CONNECTOR/WIRE OUT	10 WIRE COLOR
S1 Single 1 (Input only) - End Feed	**BW** Bare Wire (Standard 24") **CON6** Connector 6" **CON24** Connector 24" Connector/Wire In not needed to specify product. Typical selection is BW. BW: Standard length is 24", Max length is 120". Request custom length by writing in part number next to BW (example: BW48)	**CLS** Closed End (No feed)	**WH** White **BK** Black
P1 Pass Through 1 (Input/output) - End Feed	**BW** Bare Wire (Standard 24") **CON6** Connector 6" **CON24** Connector 24" Connector/Wire In not needed to specify product. Typical selection is BW. BW: Standard length is 24", Max length is 120". Request custom length by writing in part number next to BW (example: BW48)	**BW** Bare Wire (Standard 24") **CON6** Connector 6" **CON24** Connector 24" Connector/Wire Out not needed to specify product. Typical selection is CLS or BW. BW: Standard length is 24", Max length is 120". Request custom length by writing in part number next to BW (example: BW48)	

| 11 WIRE TYPE	12 MOUNTING	13 FINISH	14 LENGTH (IN)	15 EXACT/OPTIMAL
CL2 Class 2 **CL2P** Plenum Rated CL2P only available with bare wire leads (BW)	**SST** Stainless Steel **PL** Plastic Clip	**ST** Satin **BK** Black **BZ** Bronze	Fixture length min 12", max 98.43" not including end caps. Tolerance +0 – 1/8". Consult factory for lengths under 12".	**O** Optimal Illumination **E** Exact Specified Length Exact fixtures are the length specified. Optimal fixtures' length is rounded down with illumination end to end. All fixtures' tolerance is +0 – 1/8". See charts on following pages.

PRODUCT – DIMENSIONS

Profile

.52" .63" .63"
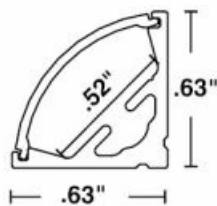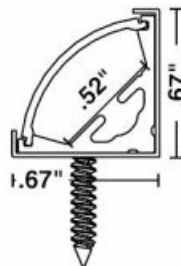
Profile with stainless steel mounting clip

.52" .67" .67"
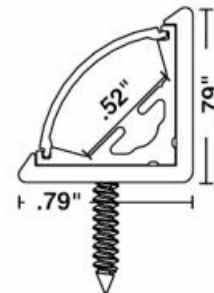
Profile with plastic mounting clip

.52" .79" .79"

DELIVERED LUMENS
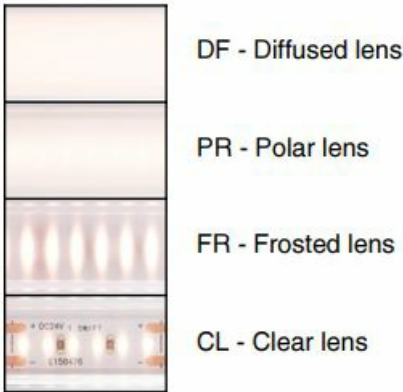
[Calculated L70 = 52000 hrs]
Tested with AK1RGB-6.0-RGB-DRY-STD

	Red	Green	Blue
	LM/FT	LM/FT	LM/FT
CL	95	192	54
FR	93	188	53
PR	86	174	49
DF	79	160	45

[Calculated L70 = 52000 hrs]
Tested with AK1RGB-6.0-RGB-DRY-WO

	Red	Green	Blue
	LM/FT	LM/FT	LM/FT
CL	102	206	58
FR	101	204	58
PR	106	214	60
DF	108	218	62

DIODE VISIBILITY

DF - Diffused lens

PR - Polar lens

FR - Frosted lens

CL - Clear lens

PHOTOMETRIC PERFORMANCE

Nominal beam spread shown, beam spread varies based on light engine. For more detailed information, see photometric data.

CL

130°

Clear 130°
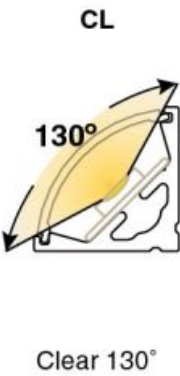
TEMPERATURE RATINGS

Light Engine (LED Strip)	W/FT	Minimum Limit (°F)	Maximum Limit (°F)
RGB	6.0	-14	105

WIRE INPUT/OUTPUT

SINGLE (Input only)

S1

IN

End Feed
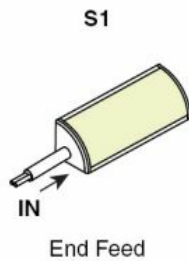
PASS THROUGH (Input/Output)

P1

OUT

IN

End Feed

CONFIGURATION OPTIONS

.07" width of end cap

.07" width of end cap

S1

Single End Feed

S1

P1

Non-Continuous End Feed

S1

S1

.14" width of end caps

Continuous End to End Feed
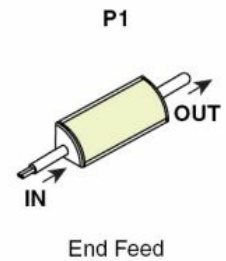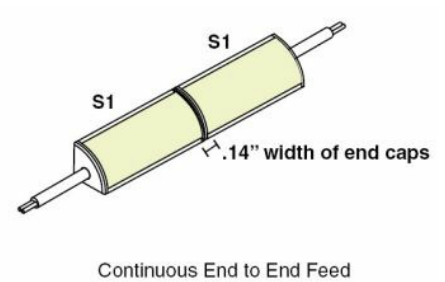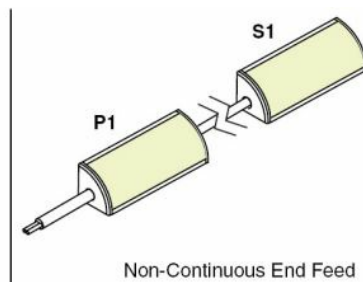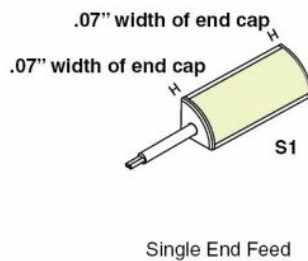
CONNECTOR/WIRE – IN/OUT

Connector/Wire In or Out not needed to specify product. Standard configuration is BW for Wire In and CLS for Wire out

BW

.14"

Bare Wire 24"
24 AWG

CON6/CON24

1.65"

.57"

1.61"

.57"

6" or 24" Overall
Wire Connector | 24 AWG
IP67 Rated, UL Listed

WIRE COLOR

White

Black
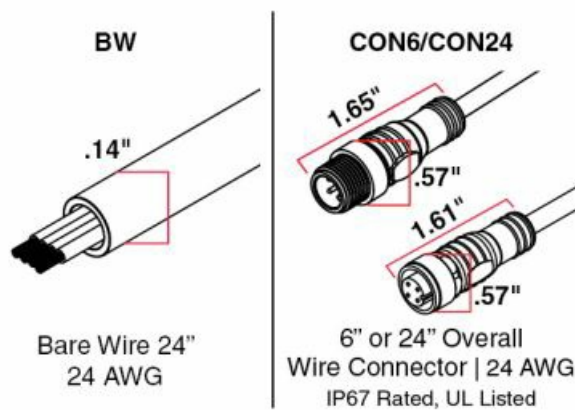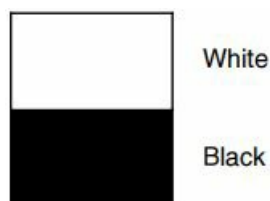
MOUNTING

SST
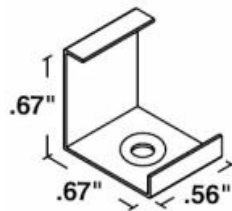
2 clips provided for 4′ or less; 4 clips provided for greater than 4′ To order separately use SST-03 Each clip comes with a #4 x 5/8″ Flat Head SS

PL

Plastic Clip

2 clips provided for 4′ or less; 4 clips provided for greater than 4′ To order separately use PLC-02 Each clip comes with a #4 x 5/8″ Flat Head SS

EXACT/OPTIMAL FIXTURE LENGTH

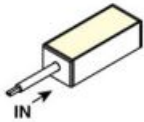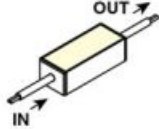EXAMPLES OF 12″ OPTIMIZED STATIC WHITE FIXTURES WITH DIFFUSED LENS

S1

P1

RGB DRY, DMP LENGTHS BY INCH

Exact fixtures are the length specified. Optimal fixtures' length is rounded down with illumination end to end. All fixtures' tolerance is +0 − 1/8". Consult factory for lengths under 12″.

EXACT LENGTH

Requested Length	Potential dim spot on either end of fixture
12"	1"
13"	0.5"
14"	1"
15"	0.5"
16"	1"
17"	0.5"
18"	1"
19"	0.5"
20"	1"
21"	0.5"
22"	1"
23"	0.5"
24"	1"
36"	1"
48"	1"
60"	1"
72"	1"
84"	1"
96"	1"

OPTIMAL LENGTH: highlighted rows are closest to requested nominal length

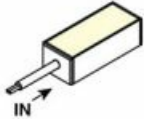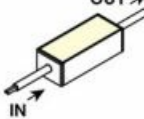| Requested Nominal Length	S1 (End Feed)	P1 (End Feed)
12"	10.5"	10.75"
13"	12.5"	12.75"
14"	12.5"	12.75"
15"	14.5"	14.75"
16"	14.5"	14.75"
17"	16.5"	16.75"
18"	16.5"	16.75"
19"	18.5"	18.75"
20"	18.5"	18.75"
21"	20.5"	20.75"
22"	20.5"	20.75"
23"	22.5"	22.75"
24"	22.5"	22.75"
36"	34.5"	34.75"
48"	46.5"	46.75"
60"	58.5"	58.75"
72"	70.5"	70.75"
84"	82.5"	82.75"
96"	94.5"	94.75"

RGB WET LENGTHS BY INCH

Exact fixtures are the length specified. Optimal fixtures' length is rounded down with illumination end to end. All fixtures' tolerance is +0 – 1/8". Consult factory for lengths under 12″.

EXACT LENGTH

Requested Length	Potential dim spot on either end of fixture
12"	1"
13"	0.5"
14"	1"
15"	0.5"
16"	1"
17"	0.5"
18"	1"
19"	0.5"
20"	1"
21"	0.5"
22"	1"
23"	0.5"
24"	1"
36"	1"
48"	1"
60"	1"
72"	1"
84"	1"
96"	1"

OPTIMAL LENGTH: highlighted rows are closest to requested nominal length

Requested Nominal Length	S1 (End Feed)	P1 (End Feed)
12"	10.625"	10.875"
13"	12.625"	12.875"
14"	12.625"	12.875"
15"	14.625"	14.875"
16"	14.625"	14.875"
17"	16.625"	16.875"
18"	16.625"	16.875"
19"	18.625"	18.875"
20"	18.625"	18.875"
21"	20.625"	20.875"
22"	20.625"	20.875"
23"	22.625"	22.875"
24"	22.625"	22.875"
36"	34.625"	34.875"
48"	46.625"	46.875"
60"	58.625"	58.875"
72"	70.625"	70.875"
84"	82.625"	82.875"
96"	94.625"	94.875"

COMPATIBLE POWER SUPPLIES

See power supplies cut sheets for more information. Data subject to change, all data has +/- 5% tolerance.

DIM TO LEVEL	INDOOR	OUTDOOR
	RGB	RGB
0.1%	QTM-eLED+DMX QZ-DMX	Q-SET-QZ-DMX QOM-eLED+DMX QZ-DMX
1%	QTM-eLED+DALI-DT8	QOM-eLED+DALI-DT8
10%	Non-Dim Power Supply with RGB App Dongle	

DIMMING PROTOCOL	INDOOR	OUTDOOR
	RGB	RGB
DMX	QTM-eLED+DMX QZ-DMX	Q-SET-QZ-DMX QOM-eLED+DMX QZ-DMX
DALI-2: DT8	QTM-eLED+DALI-DT8	QOM-eLED+DALI-DT8
SCENE App Dimmed	Non-Dim Power Supply with RGB App Dongle	

ACCESSORIES

COMPATIBLE MOUNTING ACCESSORIES

HINGE - HMB-M	HINGE - HMB-L	HINGE - HMB-XL	Q-PIVOT	Q-ANGLE	QUOVA-STANDARD	VHB
1.41" .71"	1.46" 1.29"	1.46" 4"	.75" 1.03"	2.23" 1.38"		
Adjustable mounting bracket - Medium	Adjustable mounting bracket - Large	Adjustable mounting bracket - XLarge	Small mounting accessory	Adjustable mounting accessory	QUOVA Knife Edge	Double sided mounting tape

COMPATIBLE WIRING ACCESSORIES

CON-EXT

10ft Con cable extender

COMPATIBLE CONTROL ACCESSORIES

SCENE APP DONGLE

1.36"

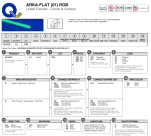2.58"

Wi-Fi or Bluetooth Connectivity

- 155 Hill St. Milford, CT 06460 |
- 203-367-8777 |
- **sales@q-tran.com** |
- **www.q-tran.com**

Documents / Resources

[AK1-FLAT thumbnail]	**Q-TRAN AK1RGB Linear Fixtures Surface** [pdf] Owner's Manual AK1RGB Linear Fixtures Surface, AK1RGB, Linear Fixtures Surface, Fixtures Surface, Surface

References

- Your Name as Your Email | Hover Realnames
- LED Lighting Systems, Linear LED Lights, LED transformers | Q-Tran
- LED Lighting Systems, Linear LED Lights, LED transformers | Q-Tran
- User Manual