TOMAR OFF-ROAD, a division of TOMAR Electronics, Inc., is an innovator and leading manufacturer of high quality, highly reliable and extremely efficient LED and strobe light systems with over 47 years experience in the explosion-proof, heavy industry and emergency vehicle markets.

Now TOMAR brings its years of experience to the Off-Road lighting market. The TRX series off-road LED lightbars set a new standard in performance, configurability and maintainability. All TOMAR products are designed, engineered, assembled and serviced in our state of the art, ENERGY STAR® certified factory located in Gilbert, Arizona, USA.

Here are a few of the unique features of Tomar’s TRX series lighting system:
- Low current switching eliminates the need for relays
- Dimming capability
- Field-interchangeable lamp modules for customizable beam spread
- True amber/white dual color modules
- Individual activation of spot and flood modules in the same lightbar
- Individual activation of required running lights on properly configured models
- Designed to eliminate wind noise
- SOS distress flash pattern
- Available Lengths: 3”, 6”, 10”, 15”, 20”, 25”, 30”, 35”, 40”, 45”, 50”, 60”
Water and Dust-Proof, the TRX series lightbars are rated IP-68 and IP-69K. Each component of the TRX lightbar is individually waterproofed eliminating the need for a failure-prone external gasket. Each light module is hermetically sealed using linear vibration welding and a patented over-molded heat extraction technology. The internal control module is completely encapsulated in a urethane potting. Deutsch waterproof connectors are used for all external wire interconnects.

Internal Controller - The internal controller provides power and control functionality to all lamp modules. Low current input lines means no additional relays are required. Up to five unique features can be activated with no additional hardware needed. Additionally, the controller provides a DC voltage feed to power all switches used to operate the lightbar.

Multiple Color Modules - True amber/white dual color modules mean you don’t have to sacrifice white light intensity to have full amber capability. The TRX internal controller lets you change the lightbar from white to amber with the flip of a switch.

Dual Pattern Activation – When running a TRX lightbar with two beam patterns the internal controller allows independent control of each beam pattern. No additional hardware to buy or install.

Running light override – For those situations where a white light is required to the front at all times, switching the lightbar to all amber could mean trouble. The TRX internal controller provides an override setting that forces one lamp module to remain white while the others switch to amber.

Multiple Function Lightbars – The TRX series lightbars have the flexibility to adapt to any situation. Whether the situation requires steady amber lights, flashing amber lights, blue lights, stop/tail lights or turn signal lights the TRX series lightbars have it covered.

Dimming – All 20” and longer lightbars have built in dimming capability. With the flip of a switch the internal controller reduces the light output by 50%. The dim setting has no effect on stop/tail lamps or turn signal lamps.
Modular Design

In addition to making the TRX the most maintainable lightbar on the market the individually replaceable lamp modules make changing beam angles in the field a snap. Replacing a lamp module can be done in less than one minute by simply removing two screws, disconnecting the lamp at the waterproof connector and plugging in a new lamp. The basic building blocks of the TRX lightbar are 3” and 6” lamp modules. Lamp modules are available in the following configurations:

3” SPOT
11° Beam Angle
3 Cree® XPG2 White LEDs
or 3 Cree® XPE Amber LEDs

3” FLOOD
85° Beam Angle
3 Cree® XPG2 White LEDs
or 3 Cree® XPE Amber LEDs

3” COMPOSITE
20° Beam Angle
3 Cree® XPG2 White LEDs
3 Cree® XPE Amber LEDs
Or 3 IR LEDs

6” SPOT - WHITE
6.5° Beam Angle
3 Cree® XP-L LEDs

6” FLOOD - WHITE
85° Beam Angle
3 Cree® XP-L LEDs

6” COMPOSITE - WHITE
20° Beam Angle
3 Cree® XP-L LEDs

6” FLOOD - AMBER/WHITE
120°/85° Beam Angle
6 Cree® XQ-E, 3 Cree® XP-L LEDs

6” WARNING
SAE-J595, CCR 13 Compliant
6 Cree® XBD LEDs
Amber, Blue, Red or Green

With the TRX series modular lightbar you can combine lamp modules of different beam angles for a light that is custom fit to your needs. The TRX Series can easily be configured to meet the UTV Racing Association requirements for race lights with two tail/ brake lights, two amber lights; one flashing amber, one steady amber and a steady blue light.
Mounting Brackets
The universal mounting brackets, supplied standard with each lightbar, are ideal for mounting the lightbar on flat surfaces. All TRX brackets feature a two bolt system that allows you to adjust the angle of the lightbar then lock it in place. This effectively eliminates the problem of lamps dropping out of position while traversing rough terrain.

Bottom channel will accept 1/4 inch hex bolt for mounting lightbar without brackets

Tomar’s TRX Series Mounting Brackets allow you to adapt the lightbar to multiple configurations. Vehicle-specific mounting options are being added all the time, contact us for specific application options.

A. Single Lightbar U Mount Brkt 3” 6” 10”
B. Dual Lightbar Mount Brkt
C. Vehicle Specific Hood Mount
D. Universal Mount
E. 1.75 Tube Mount
F. Flange Mount 3” 6” 10”
G. Recess Mount Enclosure 3” 6” 10”
Custom mounts available for most models and years
A. Roof Mounts (Toyota Tundra shown)
B. Front Bumper Mounts (Toyota Tundra shown)
C. Hood Hinge Mounts (Toyota Tundra shown)
D. Rear Bumper Mounts (Toyota Tundra shown)

Custom Grills available for most models and years
(Chevy Tahoe shown) (Toyota Tundra shown)

Additional LED Lighting
UC-LED ultra-high intensity underbody Rock LEDs allow you to light up the ground under and around your vehicle.

LEDs available in White, Red, Amber, Blue and Green
UC-LED Kit includes 4 lights and 4 bezels
All TRX lamp modules are interchangeable and can be used in any position on the lightbar. This offers the flexibility to configure a lightbar for any mission with perfect balance of flood, spot or dual color amber/white modules.

- Heavy-duty 6063-T5 aluminum extrusion with large cooling fins for maximum heat dissipation
- Cast aluminum end caps with machined threads for mounting bracket attachment.
- Cree®’s latest high output XPL LEDs for maximum intensity
- Linear vibration welding makes the TRX water and dust proof without the need for a failure-prone rubber seal
- Collimator gathers the light then directs and focuses the light into a parallel beam
- Optically clear Lexan® lenses provide maximum light transmission and beam angle control
- Lamp clips secure the modules in place
TRX SERIES

3” 6” 10”
15”
25”
30”
35”
40”
45”
50”
60”

DIMENSION "A"
DIMENSION "B"

FULL LAMPS  NOMINAL LENGTH  DIMENSION "A"  DIMENSION "B"
5 3”  3.4
1 6”  5.7  7.9
2 10”  10.2  12.5
3 15”  14.8  17.0
4 20”  19.3  21.6
5 25”  23.9  26.1
6 30”  28.4  30.7
7 35”  32.9  35.2
8 40”  37.5  39.8
9 45”  42.0  44.3
10 50”  46.6  48.9
12 60”  55.7  58.0

*For reference only. Dimensional CAD models are available.
Beam Patterns

6.5° FWHM Beam Angle TRXF-LW-S

TRXF-LW-S rectangular isocandela

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>LENGTH (IN)</th>
<th># OF LAMPS</th>
<th># OF LEDS</th>
<th>WATTS</th>
<th>AMPS</th>
<th>RAW LUMENS</th>
<th>BEAM PATTERN</th>
<th>DISTANCE @ 1 Lux Meters/Foot</th>
<th>DISTANCE @ 25 Lux Meters/Foot</th>
<th>PEAK BEAM CANDELA</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRX-03X-S</td>
<td>3.41</td>
<td>1</td>
<td>3</td>
<td>16.6</td>
<td>1.2</td>
<td>1500</td>
<td>11° FWHM</td>
<td>155/509</td>
<td>310/1019</td>
<td>24100</td>
</tr>
<tr>
<td>TRX-06X-S</td>
<td>5.68</td>
<td>1</td>
<td>3</td>
<td>29.9</td>
<td>2.1</td>
<td>2760</td>
<td>6.5° FWHM</td>
<td>268/880</td>
<td>537/1761</td>
<td>72000</td>
</tr>
<tr>
<td>TRX-10X-S</td>
<td>10.23</td>
<td>2</td>
<td>6</td>
<td>58.0</td>
<td>4.2</td>
<td>5520</td>
<td>6.5° FWHM</td>
<td>378/1245</td>
<td>759/2490</td>
<td>144000</td>
</tr>
<tr>
<td>TRX-15X-S</td>
<td>14.78</td>
<td>3</td>
<td>9</td>
<td>86.9</td>
<td>6.3</td>
<td>6280</td>
<td>6.5° FWHM</td>
<td>465/1525</td>
<td>930/3050</td>
<td>216000</td>
</tr>
<tr>
<td>TRX-20X-S</td>
<td>19.33</td>
<td>4</td>
<td>12</td>
<td>115.9</td>
<td>8.4</td>
<td>11040</td>
<td>6.5° FWHM</td>
<td>537/1761</td>
<td>1073/3521</td>
<td>286000</td>
</tr>
<tr>
<td>TRX-25X-S</td>
<td>23.88</td>
<td>5</td>
<td>15</td>
<td>145.0</td>
<td>10.5</td>
<td>13800</td>
<td>6.5° FWHM</td>
<td>600/1998</td>
<td>1200/3927</td>
<td>380000</td>
</tr>
<tr>
<td>TRX-30X-S</td>
<td>28.43</td>
<td>6</td>
<td>18</td>
<td>173.9</td>
<td>12.6</td>
<td>16560</td>
<td>6.5° FWHM</td>
<td>657/2156</td>
<td>1315/4313</td>
<td>432000</td>
</tr>
<tr>
<td>TRX-35X-S</td>
<td>32.98</td>
<td>7</td>
<td>21</td>
<td>202.9</td>
<td>14.7</td>
<td>19320</td>
<td>6.5° FWHM</td>
<td>710/2329</td>
<td>1420/4658</td>
<td>504000</td>
</tr>
<tr>
<td>TRX-40X-S</td>
<td>37.53</td>
<td>8</td>
<td>24</td>
<td>231.8</td>
<td>16.8</td>
<td>22080</td>
<td>6.5° FWHM</td>
<td>758/2490</td>
<td>1518/4980</td>
<td>576000</td>
</tr>
<tr>
<td>TRX-45X-S</td>
<td>42.08</td>
<td>9</td>
<td>27</td>
<td>260.8</td>
<td>18.9</td>
<td>24840</td>
<td>6.5° FWHM</td>
<td>805/2641</td>
<td>1610/5282</td>
<td>648000</td>
</tr>
<tr>
<td>TRX-50X-S</td>
<td>46.53</td>
<td>10</td>
<td>30</td>
<td>288.8</td>
<td>21.0</td>
<td>27600</td>
<td>6.5° FWHM</td>
<td>849/2784</td>
<td>1697/5568</td>
<td>720000</td>
</tr>
<tr>
<td>TRX-60X-S</td>
<td>55.73</td>
<td>12</td>
<td>36</td>
<td>347.8</td>
<td>25.2</td>
<td>33120</td>
<td>6.5° FWHM</td>
<td>930/3050</td>
<td>1859/6089</td>
<td>846000</td>
</tr>
</tbody>
</table>
### Comp

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>LENGTH (IN)</th>
<th># OF LAMPS</th>
<th># OF LEDS</th>
<th>WATTS</th>
<th>AMPS</th>
<th>RAW LUMENS</th>
<th>BEAM PATTERN</th>
<th>DISTANCE @ 1 Lux Meters/Feet</th>
<th>DISTANCE @ .25 Lux Meters/Feet</th>
<th>PEAK BEAM CANDELA</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRX-06X-C</td>
<td>5.66</td>
<td>1</td>
<td>3</td>
<td>28.0</td>
<td>2.1</td>
<td>2760</td>
<td>20° FWHM</td>
<td>101/331</td>
<td>201/659</td>
<td>10100</td>
</tr>
<tr>
<td>TRX-10X-C</td>
<td>10.23</td>
<td>2</td>
<td>6</td>
<td>58.0</td>
<td>4.2</td>
<td>5520</td>
<td>20° FWHM</td>
<td>142/466</td>
<td>284/833</td>
<td>20200</td>
</tr>
<tr>
<td>TRX-15X-C</td>
<td>14.78</td>
<td>3</td>
<td>9</td>
<td>86.9</td>
<td>6.3</td>
<td>8280</td>
<td>20° FWHM</td>
<td>174/571</td>
<td>348/1142</td>
<td>30300</td>
</tr>
<tr>
<td>TRX-20X-C</td>
<td>19.33</td>
<td>4</td>
<td>12</td>
<td>115.9</td>
<td>8.4</td>
<td>11040</td>
<td>20° FWHM</td>
<td>201/659</td>
<td>402/1319</td>
<td>40400</td>
</tr>
<tr>
<td>TRX-25X-C</td>
<td>23.88</td>
<td>5</td>
<td>15</td>
<td>145.0</td>
<td>10.5</td>
<td>13800</td>
<td>20° FWHM</td>
<td>225/737</td>
<td>449/1475</td>
<td>50500</td>
</tr>
<tr>
<td>TRX-30X-C</td>
<td>28.43</td>
<td>6</td>
<td>18</td>
<td>173.9</td>
<td>12.6</td>
<td>16560</td>
<td>20° FWHM</td>
<td>246/808</td>
<td>492/1615</td>
<td>60600</td>
</tr>
<tr>
<td>TRX-35X-C</td>
<td>32.98</td>
<td>7</td>
<td>21</td>
<td>202.9</td>
<td>14.7</td>
<td>19320</td>
<td>20° FWHM</td>
<td>266/872</td>
<td>532/1645</td>
<td>70700</td>
</tr>
<tr>
<td>TRX-40X-C</td>
<td>37.53</td>
<td>8</td>
<td>24</td>
<td>231.8</td>
<td>16.8</td>
<td>22080</td>
<td>20° FWHM</td>
<td>284/933</td>
<td>569/1865</td>
<td>80800</td>
</tr>
<tr>
<td>TRX-45X-C</td>
<td>42.08</td>
<td>9</td>
<td>27</td>
<td>260.8</td>
<td>18.9</td>
<td>24840</td>
<td>20° FWHM</td>
<td>301/989</td>
<td>603/1978</td>
<td>90900</td>
</tr>
<tr>
<td>TRX-50X-C</td>
<td>46.53</td>
<td>10</td>
<td>30</td>
<td>289.8</td>
<td>21.0</td>
<td>27600</td>
<td>20° FWHM</td>
<td>318/1043</td>
<td>636/2085</td>
<td>101000</td>
</tr>
<tr>
<td>TRX-60X-C</td>
<td>55.73</td>
<td>12</td>
<td>36</td>
<td>347.8</td>
<td>25.2</td>
<td>33120</td>
<td>20° FWHM</td>
<td>348/1142</td>
<td>698/2284</td>
<td>121200</td>
</tr>
</tbody>
</table>
Extreme Performance
- Input Voltage: The standard TRX series operates on 12Vdc - 24Vdc. 36Vdc - 48Vdc versions also available. TRT Models 12Vdc only.
- Operating Temperature: -40°C to +60°C.
- Waterproof - IP68 and IP69K rated, immersion tested to 9 meters.
- Cree® XP-L LED’s with L70 lifetime >36,300 Hours.
- Salt-Fog Tested for corrosion resistance.
- SAE-J575 Vibration Tested.
- EMI/RFI protected.
- Reverse polarity protected.

Peak Beam Intensity
- The maximum luminous intensity typically along the central axis of a cone of light.
- This measures the brightest part of the beam. The value is reported in candela and does not change with distance.

Beam Distance
- The distance from the device at which the light beam is 0.25 lux. Results are reported in meters.
- The Inverse Square Law is used to calculate the beam distance to 0.25 lux. 0.25 lux is approximately the equivalent of the light emitted from the full moon “on a clear night in an open field”.

Light Output
- A measurement of the total quantity of emitted overall light energy as measured by integrating the entire angular output of the portable light source.
- The value is reported in lumens. Light Output is the total luminous flux.

Water Proof
- Submersible-IP68-Ingress of water in quantities causing harmful effects shall not be possible when the enclosure is continuously immersed in water under conditions which shall be stated by the manufacturer, but which are more severe than for IPX7.
- IP69K Protected against close-range, high temperature, high pressure spray downs.
The TRM Marine series provides the extra protection needed in salt water and other highly corrosive environments. The TRM is available in the same sizes and configuration as the TRX series.

- 2 step corrosion barrier powder coat finish with UV Stabilizer
- IP68 and IP69K rated
- Immersion tested to 9 meters
- Stainless steel mounting hardware

Also available are our waterproof RECT-13, 14 and 16 LED Lights

- LEDs available in red, blue, amber and white
- 3, 4 or 6 ultra high intensity LEDs
The TRT Tactical series lightbars combine the power of the TRX lights with Tomar’s high intensity warning lights. The TRT series includes all the features of the TRX series lightbars plus warning modules in Amber, Blue, Red or Green. All colors and flash patterns (including CA steady RED) comply with applicable SAE, CCR 13 and ECE 65 standards.
Ordering Guide

LIGHTBARS
TRX-10C-XXXX

<table>
<thead>
<tr>
<th>TOMAR</th>
<th>NORMAL LENGTH</th>
<th>WIRE CONFIGURATION</th>
<th>BEAM PATTERN</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRX</td>
<td>03</td>
<td>C WP Connectors</td>
<td>S 6.5° Spot</td>
</tr>
<tr>
<td>TRT</td>
<td>06</td>
<td>W Wires Only</td>
<td>F 85° Flood</td>
</tr>
<tr>
<td>TRM</td>
<td>10</td>
<td></td>
<td>C 20° Composite</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td></td>
<td>AC Amb/Wht Combo</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td></td>
<td>FS Flood/Spot Split</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td></td>
<td>SC Spot/Combo Split</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td></td>
<td>FC Flood/Combo Split</td>
</tr>
<tr>
<td></td>
<td>35</td>
<td></td>
<td>WxS Warning/6.5° Spot</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td></td>
<td>WxF Warning/85° Flood</td>
</tr>
<tr>
<td></td>
<td>45</td>
<td></td>
<td>WxC Warning/20° Combo</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td></td>
<td>WxAC Warning/Amb/Wht/Combo</td>
</tr>
<tr>
<td></td>
<td>60</td>
<td></td>
<td>WxFS Warning/Flood/Spot Split</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>WxSC Warning/Spot/Comp Split</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>WxFC Warning/Flood/Comp Split</td>
</tr>
</tbody>
</table>

The x in the warning model numbers can be 1, 2, 3 or 4 and correspond to the number of warning sets in the bar. Examples below:

TRT-40-W1S
TRT-40-W2F

LAMP MODULES
TRXH-LA-XX

<table>
<thead>
<tr>
<th>TOMAR</th>
<th>LAMP SIZE</th>
<th>LAMP COLOR</th>
<th>BEAM PATTERN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>H</td>
<td>LA LED AMBER</td>
<td>S 6.5° Spot</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>LW LED WHITE</td>
<td>F 85° Flood</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LAW LED Amb/Wht</td>
<td>S 20° FS Composite</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>AC Amb/Wht Combo</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
For over 48 years, TOMAR Electronics, located in Gilbert, Arizona, has engineered, designed, and manufactured the highest quality, most reliable and extremely efficient audible and visual warning signals. TOMAR Electronics is dedicated to perfecting strobe and LED technology and continues to define the standard for warning light performance into the twenty-first century.

From assemblers to administration, TOMAR is continuously improving manufacturing efficiencies while preserving the consistent quality of our work. We take great pride in our efforts toward providing innovative products that save lives.

Research and Development
The cornerstone of innovation.

The performance and reliability of TOMAR products evolves from a half century of intensive research and development of high efficiency electronic circuit designs and innovative optics.

TOMAR’s staff of highly specialized engineers employ state-of-the-art electronic design and testing equipment to create the most advanced warning signals available. TOMAR’s testing and research equipment includes:

· An advanced computerized circuit simulator that defines critical tolerance parameters and predicts for potential design weaknesses.
· Surface Mount Technology Computer Automated (SMT) Component Pick and Place Assembly
· A 100 foot light measurement tunnel which uses photometers calibrated to display measurements in candelas effective in accordance with FAA, SAE, ECE and IES standards. High speed photodiodes are used to measure and display light pulse wave shapes to insure accuracy in light intensity output specifications.
· A fully equipped test lab, capable of making all tests and measurements.
· A fast scanning spectroradiometer for color measurements.

Manufacturing and Quality Control Striving to produce high quality products.

Rigorous quality control standards and detailed inspections are implemented at various stages in the production process. All TOMAR products are 100% tested to ensure accurate and trouble free performance for the life of the product. Statistical Process Control is used to monitor production quality with detailed precision. TOMAR’s warranties are among the longest in the industry, made possible by the dedication to quality in both the design and manufacturing processes. A computerized system integrating order entry, inventory, and production control helps to facilitate rapid order fulfillment.

Tomar TRX Product Line Limited Lifetime Warranty
TOMAR Electronics, Inc. warranties all product catalog numbers beginning with TRX to be free from defects in workmanship and material for the lifetime of the product. TOMAR Electronics, Inc. ’s obligation under this warranty is limited to repair or replacement, at TOMAR’s option, of the defective product. Any and all costs of removal, installation, freight or incidental or consequential damages are expressly excluded from this warranty. TOMAR Electronics, Inc. is not responsible for damages and / or warranty of other vehicle parts related or non-related to the installation of TOMAR products. For this warranty, “lifetime of the product” means five years after the discontinuation of the warranted product’s catalog number, or five years from the date of purchase of the product, whichever is longer.