The MBL 400-LD is a LED flashing beacon of medium and long range, with a great optical output, providing light beams of high precision. Its luminous source consists of high-power LED diodes, obtaining a range of up to 24 nautical miles. Intended to be placed in onshore aids-to-navigation locations, such as poles and towers, with a minimum maintenance, as well as hard-to-reach sites or under extreme environmental conditions.

Fitted with a high-precision lens made from UV-resistant acrylic and protected with a shock-resistant tempered glass lens cover. Manufactured with high-quality and resistant materials, the MBL 400-LD provides a long service life under the harshest marine conditions.

Designed according to IALA Recommendations.

Features:

- State-of-the-art LED technology.
- High-efficiency luminous system.
  Up to 16 nm (T=0.74), 24 nm (T=0.85).
- Vertical divergence of 2° (50%Io).
- UV-stabilised circular acrylic lens.
- Average operation lifetime over 15 years.
- Photocell adjustable in lux.
- IP 67 watertightness degree (immersion resistant).
- Linear adjustment of luminous intensity.
- Double RS-232 serial port for setting adjustments by PC and remote monitoring system.
- Programming, configuration and operating status via PC, IR programmer or Bluetooth.
- Short-circuit, reverse-polarity, over-temperature and transient over-voltage protections.
LED Marine Lanterns

Mediterráneo Señales Marítimas, S.L.
Pol. Ind. Mas de Tous - C/ Oslo 12
46185 La Pobla de Vallbona - Valencia SPAIN
+34 96 276 10 22
msm@mesemar.com
www.mesemar.com

Light source: Ultra-bright LED diodes, with high-precision acrylic lens.
Luminous range: Up to 16 nm (T=0.74) 24 nm (T=0.85).
Colours available: White, green, red and blue.
Vertical divergence: Up to 2° (50% Io).
LED average life: More than 100,000 hours.
Power supply: From 9 to 36V.
Lantern consumption: From 10 to 113W.

Electronic control
Flash rhythms: 256 (6 nos. user selectable).
Day/night threshold: Adjustable between 10 and 400 lux.
Settings: PC / IR programmer / Bluetooth.
Luminous intensity adjustment: Linear, between 10 and 100%.
Light intensity reduction due to low battery: Configurable by the user.

Materials and environment
Lantern: Marine aluminium, with polyurethane finishing.
Lens cover: UV stabilised tempered glass.
Watertightness degree: IP 67.
Fixings: 4 bolts in a 200mm diameter.
Humidity resistance: 100%. Pressure-compensation valve to avoid condensation.
Temperature range: From -30º to 70ºC.
Inside hardware: Stainless steel.

Peak intensities (Cd)

<table>
<thead>
<tr>
<th>Power (W)</th>
<th>White (Cd)</th>
<th>Power (W)</th>
<th>Green (Cd)</th>
<th>Power (W)</th>
<th>Red (Cd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>7,500</td>
<td>29</td>
<td>3,000</td>
<td>16</td>
<td>1,700</td>
</tr>
<tr>
<td>60</td>
<td>15,000</td>
<td>56</td>
<td>6,000</td>
<td>32</td>
<td>3,400</td>
</tr>
<tr>
<td>60</td>
<td>20,000</td>
<td>113</td>
<td>12,000</td>
<td>64</td>
<td>6,800</td>
</tr>
</tbody>
</table>

Options
Infrared (IR) programmer.
PC programming kit.
RS-485 MODBUS serial port.
Other specifications available under request.
MBL 400-LD-SYNC (GPS synchronisation).
MBL 400-LD-TG (GSM remote monitoring).
MBL 400-LD-TR (Radio remote monitoring).
MBL 400-LD-TS (Satellite remote monitoring).
MBL 400-LD-AIS (AIS AtoN).