

LC-70 Lampchanger



TIDELAND SIGNAL CORPORATION

Tideland Signal's LC-70 lampchanger utilises a 75-watt High Intensity Discharge (HID) Metal Halide lamp that produces a light with a range in excess of 24 NM when used in the TRB-400 MaxLumina® Gearless Drive Rotating Beacon.

FEATURES:

- HID Metal Halide lamps provide long service life and high efficiency
- Special operations to maintain HID lamps provided by a robust three-place lamp turret and electronic control circuit
- HID lamps, rated life of 6,000 hours, give LC-70 low-maintenance service with a combined lamp life of over 3-1/2 years under normal conditions
- Lamps are powered through a commutator designed to regulate high-voltage pulses
- Commutator housing is high temperature fiberglass-reinforced plastic, safely shielding user from high voltages
- Commutator housing withstands sun's high temperature focused by TRB-400 lenses
- Two-phase unipolar stepper motor rotates turret
- Stepper motors use induction techniques rather than brushes, conserving power, increasing reliability and service life
- Full monitor and control access
- Microcontroller manages all high level functions

Main Control and Microcontroller Features:

- Records lamp burntime
- Monitors position and optical sensors
- Controls turret
- Communicates with external monitor
- Monitors rotation, assuring that rotation speed matches settings



LC-70 lampchanger is shown atop TRB-400 gearless direct-drive motor and electronic control module.

The main control unit allows the lamp to light if the following conditions exist:

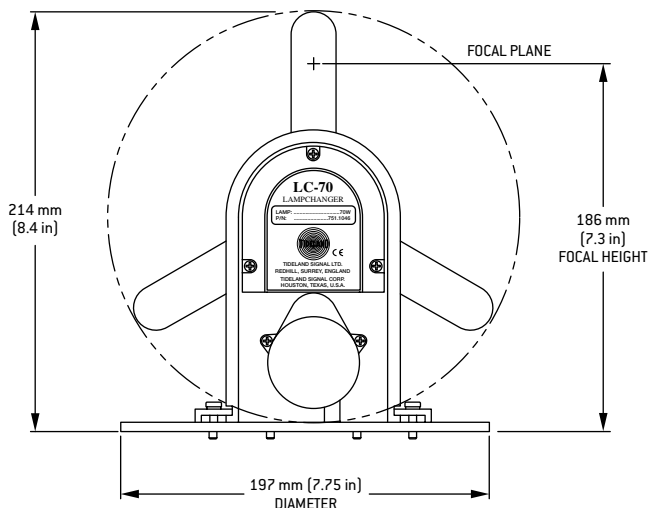
- Sunswitch indicates nighttime, or turn on command has been issued via communication program
- Turn off command has not been issued via communication program
- No detected failures
- Not configured as a standby lantern paired with main lantern

The main control unit turns off power to the lamp if one of the following conditions occurs:

- Lens rotation failure
- No good lamps left in lampchanger

Like many of Tideland's lampchangers, the LC-70 offers remote monitor and control capability through transmission of serial data and sync signals via Tideland's OMNCOMM or NavLink® systems.

When redundancy is required, the TRB-400 equipped with an LC-70 can be paired with another Tideland Signal lantern as a standby lantern that automatically begins flashing in the event the primary TRB-400 fails.



SPECIFICATIONS

Input Voltage	21 to 33 VDC
Quiescent Current	6 mA
Lamp Power Consumption	98 Watts
Efficiency	> 70%
Lamps	75 Watt Metal Halide
Lamp Type	Ushio UHI-S75 DWS/UVP
Operating Temperature	-40°C to +70°C
Relative Humidity	5% – 100% non-condensing
Sunswitch Threshold	30 lux to 90 lux
Position Sensors	Magnetic Hall-Effect
Optical Sensor	Silicon Phototransistor

NOTE: Specifications are subject to change.



TIDELAND SIGNAL CORPORATION CORPORATE HEADQUARTERS

P.O. Box 52430
Houston, Texas 77052-2430, USA
4310 Directors Row
Houston, Texas 77092 USA
PH: + 1 713-681-6101
FAX: + 1 713-681-6233
E-MAIL: hq@tidelandsignal.com

P.O. Box 52370, O.C.S.
Lafayette, Louisiana 70505-2370, USA
PH: + 1 337-269-9113
FAX: + 1 337-269-9052
E-MAIL: lafayettesales@tidelandsignal.com

TIDELAND SIGNAL CANADA LTD.
#2170-21331 Gordon Way
Richmond, B.C., Canada V6W 1J9
PH: + 1 604-247-0988
FAX: + 1 604-247-0987
E-MAIL: sales@tidelandsignalcanada.com

TIDELAND SIGNAL PTE. LTD.
Crystal Time Building
16 Tannery Lane #04-00
Singapore 347778
PH: + 65 6333-0078
FAX: + 65 6333-0079
E-MAIL: sales@tidelandsignal.com.sg

TIDELAND SIGNAL LIMITED
Unit B, Kendal House
Victoria Way
Burgess Hill, Sussex, RH15 9NF, UK
PH: + 44 (0) 1444 872240
FAX: + 44 (0) 1444 872241
E-MAIL: sales@tidelandsignal.ltd.uk

TIDELAND SIGNAL LTD. (UAE)
FZS1 BB03, JAFZA South
Jebel Ali Free Zone, Dubai, U.A.E.
PH: + 971 4-886-0180
FAX: + 971 4-886-0181
E-MAIL: sales@tidelandsignal.ltd.uk

WEB SITE: www.tidelandsignal.com



Tideland Signal Corporation maintains ISO 9001:2000 accreditation. It is company policy to provide products and services that meet the highest standards of quality in the industry.

Membership Organisations



PRINTED IN U.S.A.

© Tideland Signal Corporation 2006 –
SMD14R2