## Automatic Leveling Control

As wind shifts, water conditions change or passengers move about, the Automatic Leveling Control (ALC) will automatically adjust your trim tabs to maintain a level boat for a more comfortable and enjoyable ride.

The ALC automatically corrects the roll from side to side and pitch from fore to aft to enhance your boating experience and improve your fuel economy.

## FEATURES

- Microprocessor based automatic leveling trim tab control with LED tab position indicators
- Controls roll and pitch automatically
- Internal GPS - no GPS antenna or network required
- Automatically adapts to varying sea conditions
- Completely sealed and waterproof (IP68)
- UV protected - will not deteriorate in sunlight
- Prevents automatic corrections while turning
- Designed for planing and semi displacement hulls larger than 20ft
- Actuator's connect directly to ALC-1 display panel (no external power module box required)
- Automatically dims LED tab position indicators in darkness and brightens in sunlight
- Automatically retracts trim tabs when boat is off plane or using optional key switch connection
- Dual station operation available (ALC-1D and ALC-2D does require external power module)
- Operates on 10 to 30 Volits DC
- 2 Year Warranty
- CE Approved (Compliance with EMC regulations)


## SPECIFICATIONS

| Model Number | Display Color | Number of Stations | Actuators per tab plate | Overall Width | Overall Height/ Thickness | Mounting Hole Cutout (Diameter) | $\begin{gathered} \text { DC } \\ \text { Voltage } \end{gathered}$ | Fuse Size Power Input (1 Actuator per Tab) | Fuse Size Power Input (2 Actuators per Tab) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ALC-1 | Black | 1 | 1 | 3.15 "/ 80 mm | $\begin{aligned} & 3.0^{\prime \prime}(77 \mathrm{~mm}) / \\ & 437^{\prime \prime}(11 \mathrm{~mm}) \end{aligned}$ | 2"/50mm | 12/24 | $\begin{aligned} & 12 \mathrm{vdc}=15 \mathrm{amp} \\ & 24 \mathrm{vdc}=10 \mathrm{amp} \end{aligned}$ | N/A |
| ALC-2D | Black | 1 or 2 | 2 | 3.15 "/ 80 mm | $\begin{aligned} & 3.0^{\prime \prime}(77 \mathrm{~mm}) / \\ & 437^{\prime \prime}(11 \mathrm{~mm}) \end{aligned}$ | 2"/50mm | 12/24 | N/A | $\begin{aligned} & 12 \mathrm{vdc}=30 \mathrm{amp} \\ & 24 \mathrm{vdc}=20 \mathrm{amp} \end{aligned}$ |
| ALC-1D | Black | 1 or 2 | 1 | 3.15 "/ 80 mm | $\begin{aligned} & 3.0^{"}(77 \mathrm{~mm}) / \\ & 437^{\prime \prime}(11 \mathrm{~mm}) \end{aligned}$ | 2"/50mm | 12/24 | $\begin{aligned} & 12 \mathrm{vdc}=15 \mathrm{amp} \\ & 24 \mathrm{vdc}=10 \mathrm{amp} \end{aligned}$ | N/A |

Note: Second station keypad (ALC-2S) not included in ALC-2D and ALC-1D models.

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## AUTO LEVELING CONTROL WIRING ALC-1

(+) 12 or 24 VDC input power Use 14ga. wire
$12 \mathrm{vdc}=15$ or 20 amp fuse
$24 \mathrm{vdc}=10 \mathrm{amp}$ fuse
This input voltage must match the voltage rating on the actuators being used.
 lengths of $20^{\prime}(6.1 \mathrm{~m}), 30^{\prime}(9.1 \mathrm{~m})$ and $40^{\prime}$ (12.2m) and a "HK" terminal block and hardware mounting kit.
Typically used with $6^{\prime}(1.8 \mathrm{~m})$ actuator cable lengths.

PORT ACTUATOR

## AUTO LEVELING CONTROL (ALC) PROGRAMMING

|  | Program Mode Sequence |  |  | Adjustment |
| :--- | :---: | :---: | :---: | :---: |
| Function | Enter | Button Hold | Segin calibration | Store Memory |
| Calibration | BOW UP + BOW DOWN | 12 s | N/A |  |
| Attitude Set | N/A | N/A | Adjust tabs to best attitude | Press AUTO 4s |
| Gain Adjust | RIGHT + LEFT | $4 s$ | BOW UP + BOW DOWN | RIGHT + LEFT 4s |

## ADDITIONAL OPERATION FEATURES

## - Press AUTO to enter automatic leveling

- Press AUTO mode again to enter manual mode so tabs may be adjusted manually
- The ALC incorporates an "Adaptive system" to maintain optimum running attitude in varying sea conditions
- Reducing speeds below planing speed the ALC will not attempt to control attitude
- The ALC automatically starts correcting attitude during acceleration

