



Setting Standards for Safer Boating

ABYC P-24 July, 2013

**Machinery Division Standard
Control Systems Project Technical
Committee**

The ABYC Standards and Technical Information Reports for Small Craft are the product of a consensus of representatives of government, industry and public sectors. It is intended solely as a guide to aid manufacturers and the marine community in the design, construction, equipage and maintenance of small craft.

ABYC reviews each standard at least every five years at which time it may be reaffirmed, revised, or withdrawn. ABYC welcomes any written comments on the Standards and Technical Information Reports.

ABYC P-24

ELECTRIC/ELECTRONIC PROPULSION CONTROL SYSTEMS



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This list represents the membership at the time the Committee was balloted.

NOTE: Membership on a committee shall not in and of itself constitute an endorsement of ABYC or any document developed by the committee on which the member serves.

This standard was developed under procedures accredited as meeting the criteria for American National Standards. The Project Technical Committee that approved the standard was balanced to ensure that individuals from competent and concerned interests have had an opportunity to participate.

This standard, which is the result of extended and careful consideration of available knowledge and experience on the subject, is intended to provide minimum performance requirements.

ABYC's Project Technical Committee meetings are open to the public. All contact regarding standards activity, interpretations, or meeting attendance should be directed to the ABYC Technical Department at comments@abycinc.org.

ABYC and its committees do not "approve", "certify", or "endorse" any item, construction, or proprietary device.

REQUEST FOR INTERPRETATIONS

Upon written request, the Control Systems PTC will render an interpretation of any requirement of the standard. The request for interpretation should be clear and unambiguous. Requests should be presented to the PTC in a manner in which they may be answered in a yes or no fashion.

The Committee reserves the right to reconsider any interpretation when or if additional information which might affect it becomes available to the PTC. Persons aggrieved by an interpretation may appeal to the Committee for reinterpretation.

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P-24 ELECTRIC/ELECTRONIC PROPULSION CONTROL SYSTEMS

Based on ABYC's assessment of the existing technology, and the problems associated with achieving the goals of this standard, ABYC recommends compliance with this standard for all boats, associated equipment, and systems manufactured after July 31, 2014.

24.1 PURPOSE

This standard is a guide for the design, construction, testing, and installation of systems for electric/electronic remote control of forward and reverse thrust, speed, and trim/tilt of propulsion machinery on boats.

24.2 SCOPE

This standard applies to wired electric/electronic remote control systems for propulsion machinery on boats, and to the marking and orientation of the trim/tilt adjustment mechanisms.

EXCEPTIONS:

- 1. Electrical on/ off switches addressed by [P-14, Mechanical Propulsion Control Systems](#).**
- 2. Electric propulsion motors that produce less than 115 pounds (512 Newtons) thrust.**
- 3. Hull mounted trim plane systems.**
- 4. Bow and/or Stern thruster systems.**
- 5. Personal Water Craft**

NOTES:

- 1. There is no ABYC standard for wireless control systems.**

24.3 REFERENCES

The following publications form a part of this standard. Unless otherwise noted the latest version of the referenced standards shall apply.

24.3.1 ABYC - American Boat & Yacht Council, Inc., 613 Third St., Suite 10, Annapolis, MD 21403. Phone: (410) 990-4460. Fax: (410) 990-4466. Website: www.abycinc.org

[ABYC E-11, AC and DC Electrical Systems on Boats](#)
[ABYC H-2, Ventilation of Boats Using Gasoline](#)
[ABYC H-30, Hydraulic Systems](#)
[ABYC P-14, Mechanical Propulsion Control Systems](#)

24.3.2 ASTM - American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2951 Phone: (610) 832-9585. Fax: (610) 832-9555. Website: www.astm.org

ASTM B117, *Method of Salt Spray (Fog) Testing*

24.3.3 ISO – International Organization for Standardization (ISO), 1, ch. De la Voie-Creuse, Case postale 56, CH-1211 Geneva 20, Switzerland. Phone: +41 22 749 02 22. Fax: +41 22 749 01 55. Website: www.standardsinfo.net

ISO 11192, *Small Craft-Graphical Symbols*.

24.3.4 SAE - Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale, PA 15096 Phone: (724) 776-4841. Fax: (724) 776-5760. Web Site: www.sae.org

SAE J1113-12 *Electrical Interference by Conduction and Coupling - Capacitive and Inductive Coupling via Lines Other than Supply Lines*
SAE J1449, *Graphic Symbols for Boats*