



SmartCommand®





SmartCommand - the intelligent choice

SmartCommand is a powerful control system which integrates the latest in CANbus (Controller Area Network) technology in a user-friendly control head. This development utilizes ZF's fifty year's experience in the design of all kinds of controls systems.

The innovative and compact control head design combines an ergonomic lever shape with a user-friendly display where all functions can be easily selected using soft-touch pushbuttons. Visual indicators help to locate the neutral detent position and 2-color LED's indicate which control head is in command and whether the corresponding transmission is engaged.

SmartCommand puts you in complete control, offering special features for docking or trolling.

The dedicated control modes incorporated in SmartCommand include:

Easidock, Autotroll, Warm-up and One Lever Operation.

Cruise mode is the default operating condition. In this mode the operator has single lever control of clutch and throttle with one control lever for each engine.

EASIDOCK® mode ensures positive clutch response resulting in easy and precise maneuverability in confined waters. This provides the ability to modulate the clutches and control

the engine speed to obtain the optimum propeller speed for safely docking the vessel.

AUTOTROLL® mode permits a full range of low-speed control incorporating a sensor for closed-loop feedback to maintain the demanded propeller rpm. By this means, clutch slippage is controlled while maintaining slow engine speed.

Warm up mode is useful to increase engine speed with the transmission locked in neutral. This allows the engine to warm up to operating temperature more quickly while preparing to get underway.

One Lever mode allows you to enjoy the benefit of multi-engine operation with full shift and throttle control by simply operating a single lever.

SmartCommand's CANbus communication perfectly synchronizes engines automatically in any mode without the need for special buttons or switches.

SmartCommand is quick and easy to install requiring simple connections between the control head, engine and transmission.

Designed to be compatible with the most advanced propulsion systems, SmartCommand works with electronically governed engines and all electrically controlled ZF transmissions.

Normal-profile SC Control Head



Low-profile SC Control Head

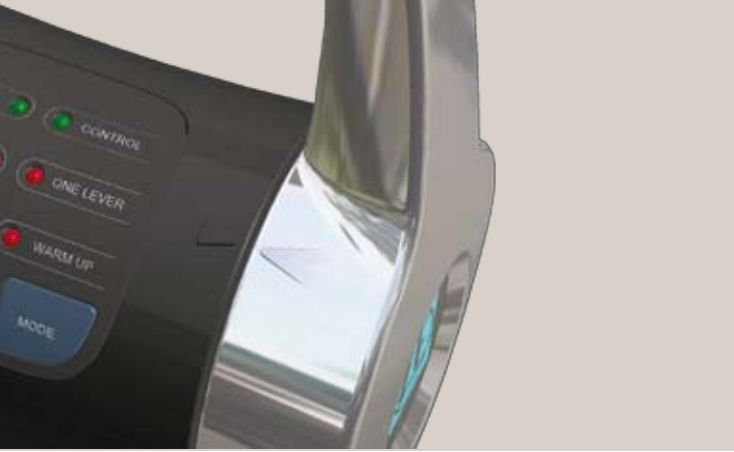


SC Processor



SC Display





for complete propulsion control

Available Options

- Low profile control head – fits neatly in enclosed consoles (normally used as an additional station on the aft deck)
- LCD Display - shows which station is in command, propeller rpm and engine rpm
- Tournament Levers with detached selection panel – typically used on sport fishing boats
- Automatic Power Selector - for increased power supply redundancy
- Handheld Remote
- Smart Backup - for engine and transmission override in case of main system failure
- Single screw applications
- Triple screw applications
- Joystick Maneuvering System (JMS) interface
- SteerCommand interface
- One button one function control panel allows the use of any ZF produced control head to operate with SC system
- 2-Speed processor version: automatically controls the upshift and downshift transition based on engine rpm

Technical features

- Compatible with 12 V or 24 V power systems
- Metal, watertight enclosure which never needs opening
- CANbus protocol used for communication between control head and main processor
- Control head provided with two microprocessors (one per lever) for converting analog into digital CANbus output, ensuring a high level of redundancy
- Two independent CANbus lines for connecting up to three control heads per line (maximum six stations), ensuring high flexibility to define the shortest path for connection as well as redundancy
- Throttle control signals available as Voltage – Current – PWM, compatible with all types of electronically controlled engine models
- Feedback signals from two independent sensors located on the transmission, measuring input shaft rpm and propeller shaft rpm
- Plug-in connections to reduce installation time and prevent incorrect wiring
- 4-digit LED display and keypad on the main processor simplify the set-up configuration and ease troubleshooting by displaying error codes
- CE marked and designed to meet major classification society standards
- J-1939 and NMEA 2000 compliant interface

MC2000 Control Head



One button one function control panel



Handheld Remote



Joystick Maneuvering System



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