

KE ELECTRONIC CONTROL SYSTEMS

A new level of control performance for inboard, outboard or stern-drive engines

KE Control Systems are a perfect answer to smooth and easy shift and throttle control suitable for most applications. Modern styling, various color/finish control head options, single to quad engine capability. Designed specifically to meet the performance, reliability endurance and aesthetic requirements of today's modern boats.

KE+ Outboard Control Head



KE+ Inboard Control Head

KE Control Head

- 1 Port control lever**
With optional master trim control button. Individual trim control circuit also available as option.
- 2 Starboard control lever**
- 3 Throttle zone for lever**
- 4 LED's indicate shift position (FNR)**
- 5 LED indicates sync function**
- 6 SELECT & SYNC activation buttons**

KE CONTROLS SELECTION GUIDE

Control	Mechanical Throttle	Mechanical Shift	Electronic Throttle	Electronic Shift
KE-4 SERIES				
KE-5 SERIES				
KE-6 SERIES				
KE-7 SERIES				

FEATURES

- Designed for new installation or retrofit
- A new level of control performance for inboard, outboard or stern-drive engines; gas or diesel, 12V/24VDC common mode
- Up to 4 stations + 1 handheld
- Various color / finish control head options
- Neutral warm up function
- Complete self diagnostic system
- Adjustable shift / throttle settings
- Start in gear protection
- Single to quad engine capability

OPTIONAL FEATURES

- Idle control
- Audible alarm
- O/B style levers/ trim control
- Trolling outputs
- Display dimmer
- Handheld control
- System settings tool
- Integrated sync function
- Mechanical backup

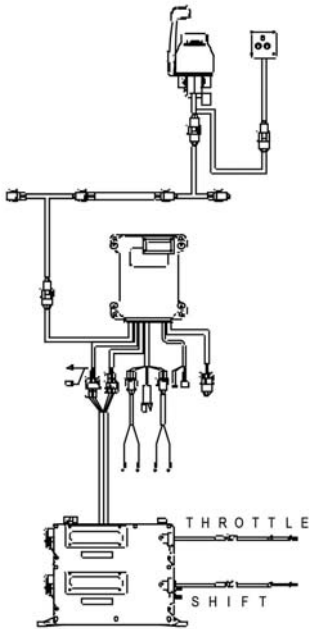


Optional Hand Held Remote Control



KE-4 SERIES ELECTRONIC CONTROL

For boats with:
Mechanical throttle
Mechanical shift

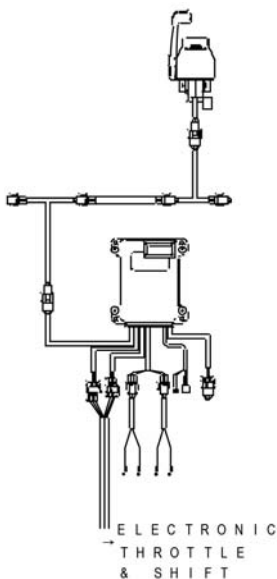


Simplified layout

KE-4 Series	
Maximum work load	343N (35 kgf)
Rated input voltages	12V/24V DC common mode (DC 9V-31V)
Current consumption	7A Typical
Starting current - motor	16A Max (49N (5 Kgf) load)
Operating Thrust	147N (15 Kgf)
Shift travel	40mm Max each (Fwd, Rev) - adjustable
Operating environment	-4°F/-20°C to +170°F/+77°C
Throttle travel	80mm Max - adjustable

KE-5 SERIES ELECTRONIC CONTROL

For boats with:
Electronic throttle
Electronic shift

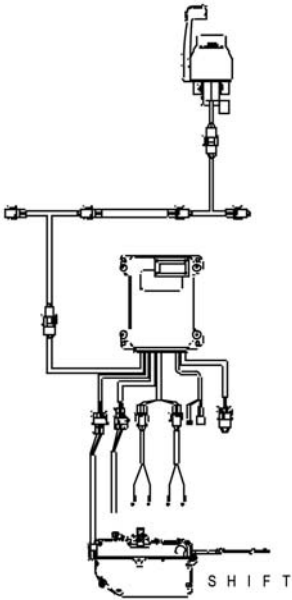


Simplified layout

KE-5 Series	
Supply Voltage	12V/24VDC common mode (DC 9V-31V)
Current Consumption	Control Unit - 10A Max
Throttle Output (Various settings available for each type)	Type 1 Current
	Type 2 Voltage
	Type 3 PWM
	Type 4 CAN (SAE J1939)
Shift Output	Solenoid Activation
IVS Switches	Normally open and Normally closed
Operating environment	-4°F/-20°C to +170°F/+77°C

KE-6 SERIES ELECTRONIC CONTROL

For boats with:
Electronic throttle
Mechanical shift



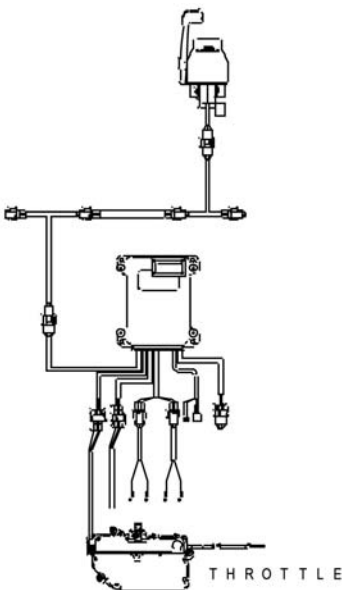
Simplified layout

KE-6 Series	
Supply Voltage	12 VDC or 24 VDC
Current Consumption	Shift Actuator - 7A typical
Throttle Output (Various settings available for each type)	Type 1 Current
	Type 2 Voltage
	Type 3 PWM
	Type 4 CAN (SAE J1939)*
Shift Output	Max 40mm travel each (forward & reverse)
IVS Switches	Normally open and Normally closed
Starting Current - motor	16A Max at 49N(5Kgf) load
Driving Current - Motor	7A Typical at 49N(5Kgf) load
Operating environment	-4°F/-20°C to +170°F/+77°C

* Feature expected to be available in 2016

KE-7 SERIES ELECTRONIC CONTROL

For boats with:
Mechanical throttle
Electronic shift



Simplified layout

KE-7 Series	
Supply Voltage	12VDC or 24VDC
Current Consumption	7A typical
Starting Current - Motor	16A Max at 49N(5Kgf) load
Driving Current - Motor	7A Max at 49N(5Kgf) load
Maximum working load	343N (35Kg)
Operating Environment	-4°F/-20°C to +170°F/+77°C