

POWERKEY 1000 CAN 1400 CAN

AUTOMOTIVE - MARINE



CANopen
J1939



FLEXIBLE - SMART - RUGGED

PowerKey1000 and **PowerKey1400** are the flagship model for Blink Marine's IP67 keypads. They boast 10/14 keys and are available with CANopen and J1939 protocols. Compact and elegant, the rubber of the PowerKey can be personalized for both the icons and the numbers of led assigned to each individual key. The keypads are also clearly visible in the dark thanks to RGB backlight.



Icons shown on this keypad are for visual demonstration only.

SOFTWARE FEATURES

CAN and RS485 Keypad Addresses – Assign any valid CAN (J1939) address to the keypad while also assigning the same or a different RS485 address. Communicate on either BUS simultaneously.

CANopen Communications Protocol – Fully compliant with Device Profile 401d.

J1939 Address Claim Transmission – Keypads no longer have to be pre-programmed to a specific address. This enables customers that work in applications in the field without access to a GUI to use any replacement keypad on-hand. The keypad can be configured to automatically announce its address and accept a new address assignment as appropriate.

Event Status Transmission – The keypad can send messages to the BUS indicating a button press or a button release event has occurred. This confirmation allows digital systems to have the same input acknowledgements as that of the latching position of a mechanical switch.

Periodic Status Transmission – The keypad sends a continuous broadcast of messages indicating the press or release status of each button at that instance. The frequency of these messages but can be adjusted in a wide range.

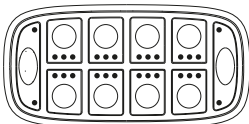
Periodic Heartbeat – The keypad sends a continuous broadcast of messages indicating it is functioning correctly. The frequency of these messages but can be adjusted in a wide range.

HARDWARE FEATURES

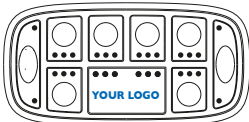
IP67/IP69K rating – Guaranteed to be dust tight and sealed against water immersion to a depth of 1 meter for up to 1 hour.

UV Protected – UVB 400 hours: Keypad is highly resistant to deterioration caused by exposure to sunlight.

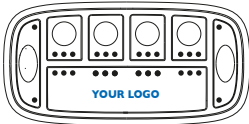
PK1000 THREE MODELS



10 Keys

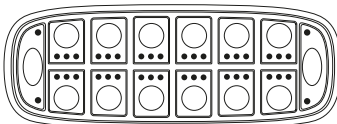


8 Keys

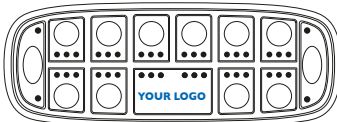


6 Keys

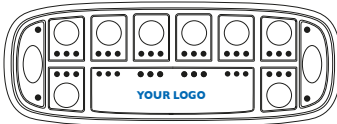
PK1400 THREE MODELS



14 Keys



12 Keys



10 Keys

STANDARD FEATURES

- Custom laser etched icons
- Multiple LED status indicators per function
- Low profile
- Compact
- Vertical or horizontal mount
- Overlay
- Laser Etch
- Pad Print
- LED backlit icons
- ON/OFF, momentary, toggle & scroll

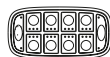
SOFTWARE FEATURES

- Change CAN keypad addresses independently
- Periodic Status transmission
- Heartbeat
- Event status transmission
- LED acknowledgement
- Address claim transmission
- CANopen, J1939

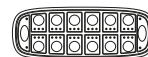
OTHER BENEFITS

- Programmer's manual available to help support
- plug-and-play reconfigurability
- Available in fixed legends

SPECIFICATIONS FOR STANDARD KEYPADS



PK1000



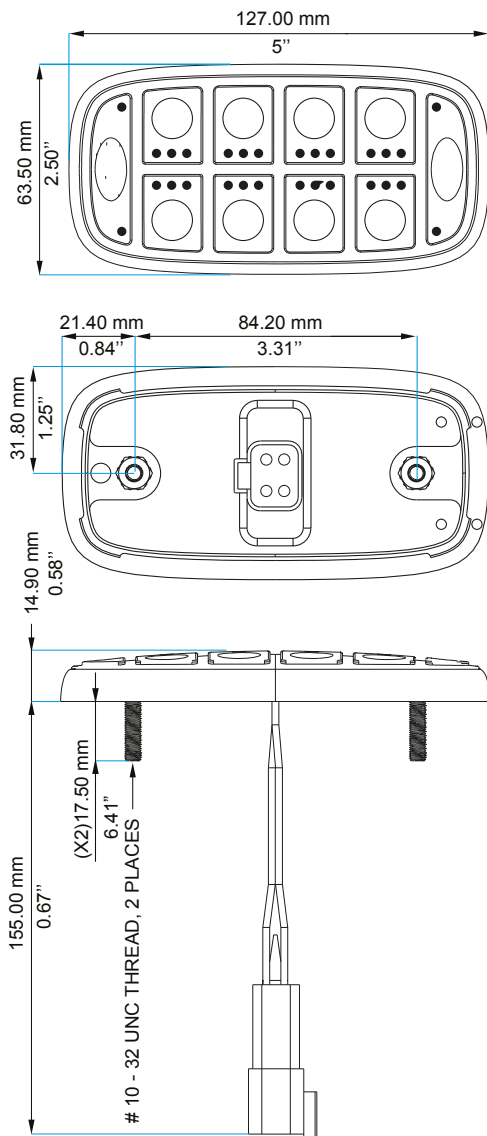
PK1400

ELECTRICAL

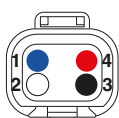
Supply Voltage	12-24Vdc Nominal (8-32VDC)
Standby Current	<50 mA
Communication BUS	CANopen, J1939

MECHANICAL

Connector	Deutsch DT04-4P
Switch Life	3 million operations
Mechanical Shock	X, Y, Z 50Gs 11ms
Vibration	X, Y, Z 10 - 150Hz 0.15mm amp
Mounting Studs	#10-32 Steel
Keypad	Silicone rubber with polyurethane hardcoat
PC Board	1,6mm thick, Nema Grade FR-4, double clad with 1 oz copper
Operating Temperature	-40°C to +70°C
Storage Temperature	-40°C to +85°C
Thermal Shock	-40°C to +85°C According to table 2 of ISO16750-4
Humidity	0 to 98% (no condensation)
UV Protection	UVB 400 hours
Salt Spray	Per ASTM B117
Chemical Resistance	Deet, Engine Cleaner, Isopropyl Alcohol, Suntan Lotion, Multi-Purpose Cleaner, Orange Citrus Cleaner
Ingress Protection Rating	IP67/IP69K
Weight	120 gr 160 gr



CONNECTOR STANDARD PINOUT



WIRE SIDE

PIN	COLOUR	FUNCTION
1	Blue	CAN L
2	White	CAN H
3	Black	Negative battery
4	Red	Vbatt. (12-24V)

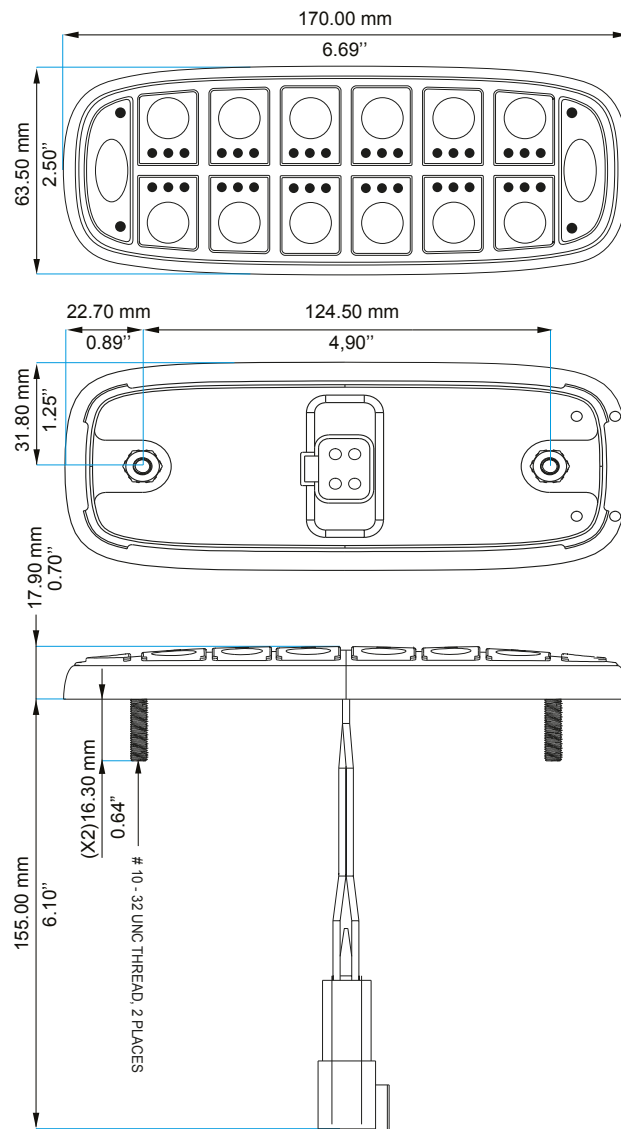
The one illustrated above is the standard pinout; however, some keypads may be supplied with alternative pinouts or connectors.

MOUNTING NOTES:

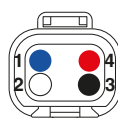
Nuts thread: #10-32

Maximum torque: 1,8Nm - 16lbf-in

NOTE: ALL CONNECTION WIRES
ARE THE SAME LENGTH



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