



PK Series

PK23 and PW24 With 6/8 keys in less than 50 cm² and an attractive design, the PK23 is an extremely compact keypad that guarantees high button density and uncompromising design. The IP67 protection rating makes it perfect for outdoor installations as well. In addition to the icons for each button, it is possible to configure the color and number (from 0 to 3) of the RGB LED points present on each button.

SOFTWARE FEATURES

CAN Keypad Addresses – Assign any valid CAN address to the keypad.

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 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 can be adjusted in a wide range.

Smart LED Management – Each light spot consists of three different colored LEDs (RGB). In this way it is possible to independently adjust color and intensity gradient of light spots.

HARDWARE FEATURES

IP67/IP69K Waterproof Rating – Guaranteed to be dust tight and sealed against water immersion to a depth of 1 meter for up to 1 hour. The IP69K rating provides protection against high pressure water at high temperature spray downs.

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

Concave Keys – The ergonomic design simplifies touch navigation of the quick-pick keys.

A membrane compensation valve which self compensate the internal pressure within the keypad, alleviating mechanical stresses that can be produced by shifts in external temperatures.

The rubber is molded on the backside in such a way that it acts as a gasket, blocking liquids and preventing them from leaking in through the attachment holes located on the support upon which the keypad is installed.

Independent Key – The device is able to support any multiple pressure key combination.

RGB LED – Both the LED points on each key and the backlighting can be calibrated to display various colors within the RGB spectrum.

STANDARD FEATURES

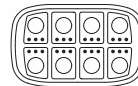
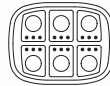
- Configurable LED
- Multicolor LED backlight
- High intensity LED status indicators
- RGB LED Indicators
- LED backlit icons
- Programmable functions (momentary, toggle, scroll...)
- Vertical or horizontal mount
- Compact design
- Protected from inverted polarity

SOFTWARE FEATURES

- Change CAN keypad addresses independently
- Periodic Status transmission
- Heartbeat
- Event status transmission
- LED acknowledgement
- Address claim transmission
- CANopen and J1939 communication protocol
- Plug-and-play reconfigurability
- Detailed user manuals available

OTHER BENEFITS

- Custom laser etched icons
- Specific connectors and cables are available on request



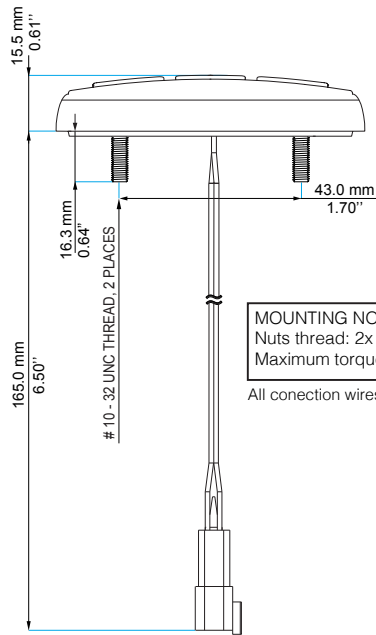
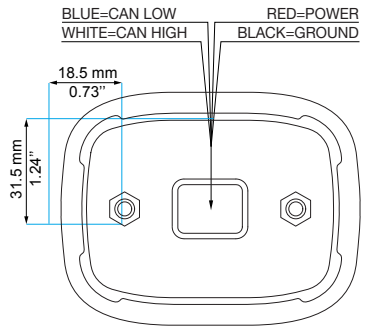
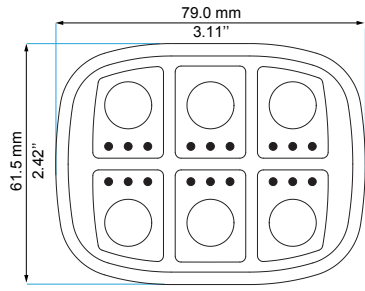
SPECIFICATIONS FOR STANDARD KEYPADS

ELECTRICAL	PK23	PK24
Supply Voltage	12-24Vdc Nominal (8-32VDC)	
Standby Current	<50 mA	
Communication BUS	CANopen, J1939	
MTBF	142106	137000
	hours (in accordance with MIL-HDBK-217-operating environment ground mobile)	

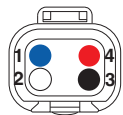
MECHANICAL		
Standard Connector	Deutsch DT04-4P	
Switch Life	3 million operations	
Mounting Studs	2x #10-32 Steel	
Rubber Specs	Silicone rubber with polyurethane hardcoat	
PCB	1,6mm thick, Nema Grade FR-4, double clad with 1oz copper	
Operating Temperature	-40°C to +70°C	
Storage Temperature	-40°C to +85°C	
Thermal Shock	-40°C to +85°C According to table 2 of ISO16750-4	
Mechanical Shock Test	IEC 60068 2-27 3-axis X,Y,Z 50Gs 11 ms	
Vibration Test	IEC 60068 2-6 3-axis X,Y,Z 10-150Hz 0.15mm	
UV Protection	UVB 400 hours	
Salt Spray	Per ASTM B117	
Chemical Resistance	Engine Cleaner, Isopropyl Alcohol, Suntan Lotion, Multi-Purpose Cleaner, Muriatic Acid	
Ingress protection Rating	IP67/IP69K	
Weight	90 gr	110 gr



PK23



MOUNTING NOTES:
Nuts thread: 2x #10-32
Maximum torque: 1,8Nm - 16lbf-in
All connection wires are the same length



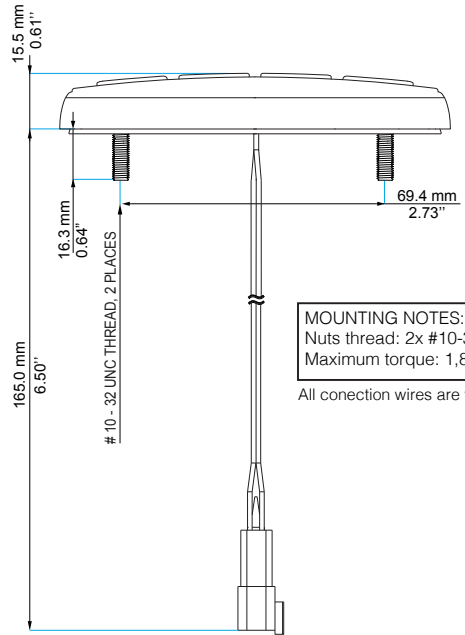
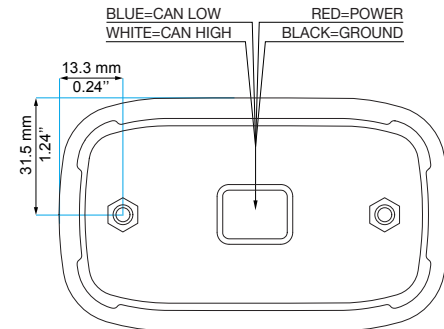
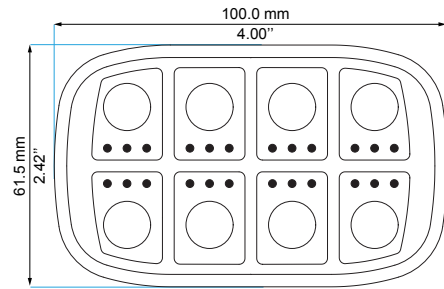
WIRE SIDE

CONNECTOR STANDARD PINOUT

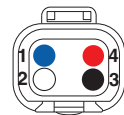
PIN	COLOUR	FUNCTION
1	Blue	CAN L
2	White	CAN H
3	Black	Negative battery
4	Red	Vbatt. (12-24V)

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

PK24



MOUNTING NOTES:
Nuts thread: 2x #10-32
Maximum torque: 1,8Nm - 16lbf-in
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PowerKey Series

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.

SOFTWARE FEATURES

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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.

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

Smart LED Management – The intensity of the LEDs can be adjusted, whilst any LED indicator – whether fixed or blinking – can be personalized according to color preference. Backlighting for the keypad is also adjustable.

HARDWARE FEATURES

IP67/IP69K Waterproof Rating – Guaranteed to be dust tight and sealed against water immersion to a depth of 1 meter for up to 1 hour. The IP69K rating provides protection against high pressure water at high temperature spray downs.

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

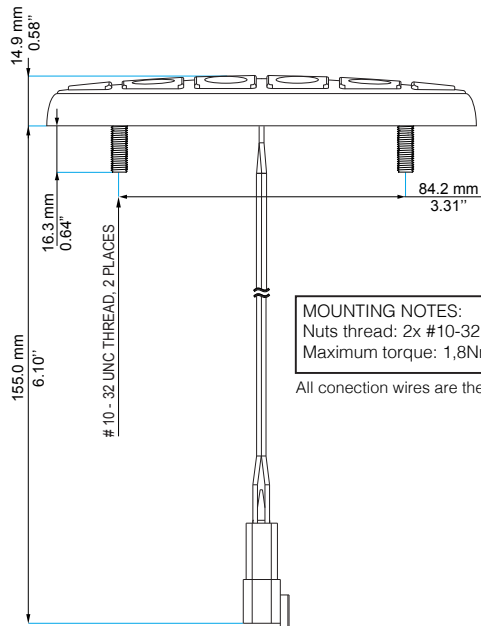
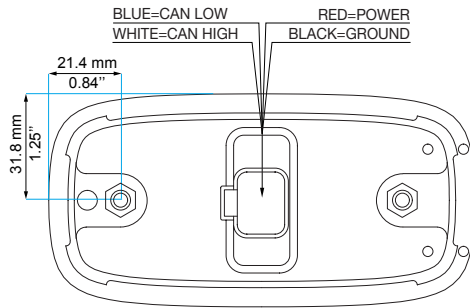
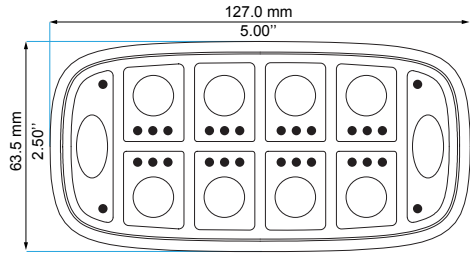
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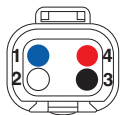
The rubber is molded on the backside in such a way that it acts as a gasket, blocking liquids and preventing them from leaking in through the attachment holes located on the support upon which the keypad is installed.

Independent Key – The device is able to support any multiple pressure key combination.

PK1000



MOUNTING NOTES:
Nuts thread: 2x #10-32
Maximum torque: 1,8Nm - 16lbf-in
All connection wires are the same length



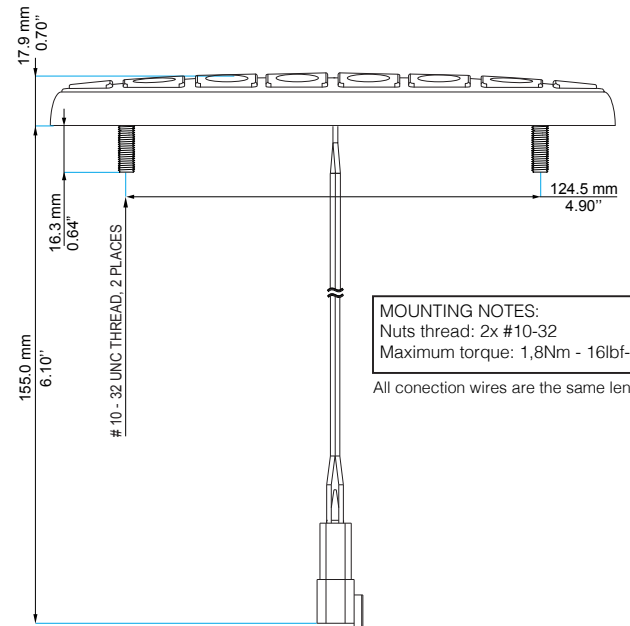
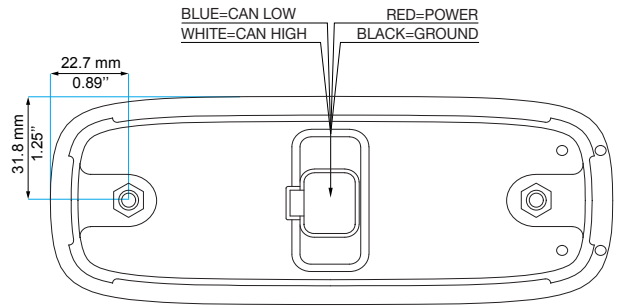
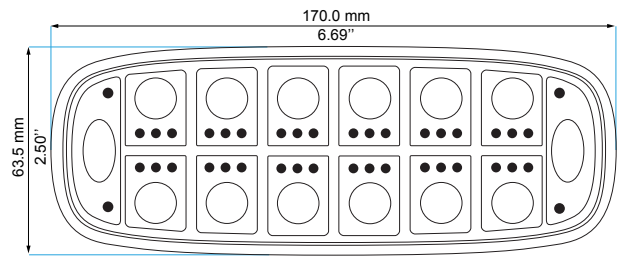
WIRE SIDE

CONNECTOR STANDARD PINOUT

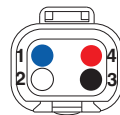
PIN	COLOUR	FUNCTION
1	Blue	CAN L
2	White	CAN H
3	Black	Negative battery
4	Red	Vbatt. (12-24V)

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

PK1400



MOUNTING NOTES:
Nuts thread: 2x #10-32
Maximum torque: 1,8Nm - 16lbf-in
All connection wires are the same length



WIRE SIDE

CONNECTOR STANDARD PINOUT

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.

blink
MARINE

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