

# POWERKEY PRO 2200



DESIGN YOUR OWN  
PROTOTYPE ONLINE



CANopen  
J1939



## FLEXIBLE - SMART - RUGGED

**PowerKey PRO 2200** boasts four distinct keys, making it the most essential Blink Marine keypad. It is highly resistant to weather and can survive extreme environments, making it perfect for installation outside driver cabs. The keys are large and well-spaced, allowing for a reliable pressure sensation even when wearing work gloves. Keypads in the PRO series are the only ones currently on the market that boast keys with removable inserts. The symbol on each PowerKey PRO 2200 key is laser-printed on a 24 mm insert (compatible with PKP 2400) that can easily be removed and substituted without needing to take apart the rest of the keypad or cockpit. The use of open protocols makes keypads in the PRO series perfect for both automotive and nautical markets.

### 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.

**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.

**Customizable inserts** – The replacement system for individual inserts makes modifying the keypad layout simpler and more economical. Hundreds of different pre-existing keys can be viewed at [blinkmarine.com](http://blinkmarine.com), and it is possible to order customized inserts.

**Online Set-up** – An online set-up system makes it possible to select and design your own prototype, then order it directly on [blinkmarine.com](http://blinkmarine.com)

**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.

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

### HARDWARE FEATURES

**IP67/NEMA6 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.

**Customizable inserts** – The replacement system for individual inserts makes modifying the keypad layout simpler and more economical. Hundreds of different stock inserts can be viewed at [blinkmarine.com](http://blinkmarine.com), and it is possible to order customized ones.



Icons shown on this keypad are for visual demonstration only.

## STANDARD FEATURES

- Reconfigurable keys
- Overlay
- Relegendable buttons
- Laser etch
- LED state & status configurable
- Pad print
- Vertical or horizontal mount
- ON/OFF, momentary, toggle & scroll
- Flush or front mount
- Hundreds of stock icons to choose from
- LED backlit icons
- Multicolor indicator rings

## SOFTWARE FEATURES

- Change CAN or RS485 keypad addresses independently
- Event status transmission
- Periodic status transmission
- LED acknowledgement
- Heartbeat
- Address claim transmission
- RS485, CANopen, J1939

## OTHER BENEFITS

- Programmer's manual available to help support plug-and-play reconfigurability

## SPECIFICATIONS FOR STANDARD KEYPADS

ELECTRICAL	
Supply Voltage	12-24Vdc Nominal (8-32VDC)
Standby Current	<50 mA
Communication BUS	RS485, CANopen, J1939
MECHANICAL	
Connector	Deutsch DT04-4P, Molex 19418-0004, Micro-C and more
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 CDA-510 phosphor bronze, electroplated bright tin
Keypad	Silicone rubber with polyurethane hardcoat
PC Board	1,6mm thick, Nema Grade FR-4, double clad with 1oz copper
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
Thermal Shock	-40°C to +72°C @ 4°C/Min
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, Muriatic Acid
Ingress protection Rating	IP67/NEMA6

# blink

M A R I N E

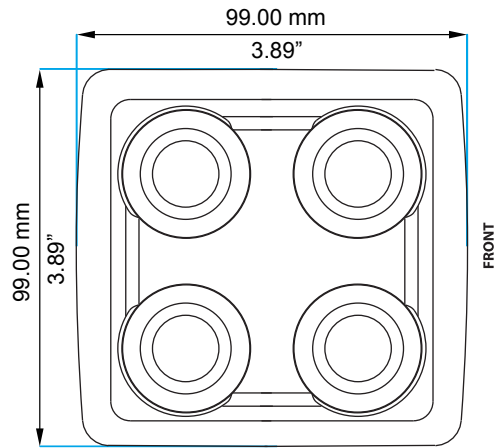
**Blink S.r.l.**

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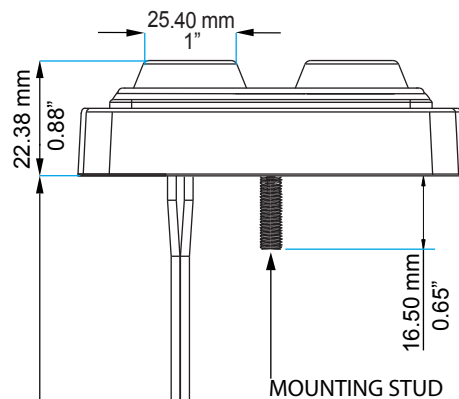
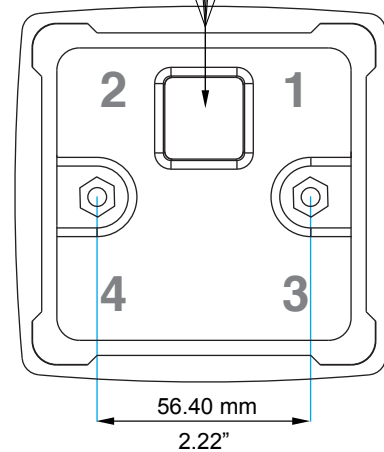
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GREEN= TxRx-(RS485)      ORANGE= TxRx+(RS485)  
 BLACK=GROUND          WHITE=CAN HIGH  
 RED=POWER              BLUE=CAN LOW



**MOUNTING NOTES:**  
 Nuts thread: #10-32  
 Maximum torque: 0,8Nm

**NOTE: ALL CONNECTION WIRES ARE THE SAME LENGTH**