



RACEPAD

CANBUS KEYPAD FOR STEERING WHEEL

RacePad is the ultimate CAN-bus steering wheel button panel designed by Blink Marine to elevate your racing experience to the next level. With 4 rotary knobs and 8 easy-to-reach buttons, RacePad is the perfect addition to any race car. RacePad allows you to fully customize your driving style with individualized button icons and LED colour selection, the possibilities are endless.



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.

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.

STANDARD FEATURES

- Reconfigurable keys
- Replaceable icon inserts
- Configurable LED
- High intensity LED status indicators
- RGB LED Indicators
- Laser etched icons
- Programmable functions (momentary, toggle, scroll...)
- Thousands of stock icons to choose from
- Two different knob types: with or w/o replaceable icon inserts
- 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

- Specific connectors and cables are available on request
- Custom mounting plate
- Pad printed logo

HARDWARE FEATURES

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. Thousands of different stock inserts can be viewed at blinkmarine.com, and it is possible to order customized ones.

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

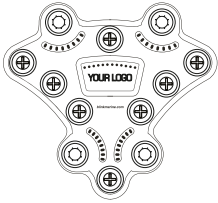
Encoder With Pushbutton – Use of the knob is both comfortable and immediate. For example, the knob allows its user to manage scroll & select operations without letting go of the handle.

4 additional 5V inputs – Allows the possibility to connect items such as analogue active sensors (such as pressure and temperature sensors), discrete switches (highside/lowside) and Hall Effect sensors.

Independent LED indicator lights – Each rotary encoder has 8 Blue LED light indicators, while all 8 pushbuttons are equipped with RGB LED rings. All LEDs can be independently programmed.

Custom backshell Option



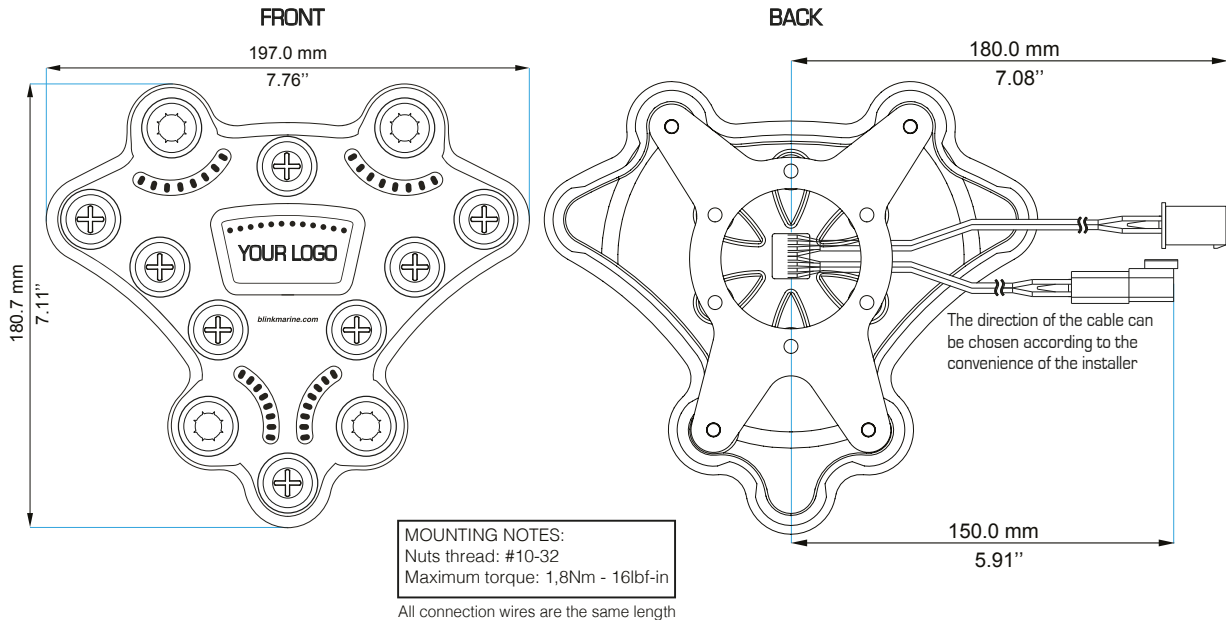


SPECIFICATIONS FOR STANDARD KEYPADS

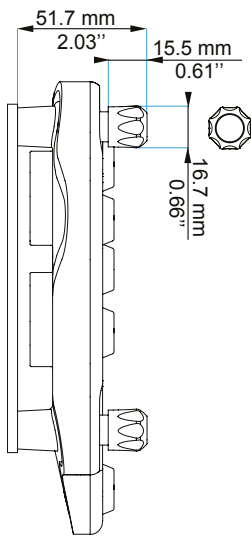
| ELECTRICAL | RACEPAD |
|-------------------|---|
| Supply Voltage | 12-24Vdc Nominal (8-32VDC) |
| Standby Current | <50 mA |
| Communication BUS | CANopen, J1939 |
| MTBF | 35543 hours (in accordance with MIL-HDBK-217-operating environment ground mobile) |

| MECHANICAL | RACEPAD |
|---------------------------|--|
| Standard Connector | Deutsch DT04-4P |
| Switch Life | 3 million operations |
| Rubber Specs | Silicone rubber with polyurethane hardcoat |
| PCB | 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 |
| 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 | IP54 |
| Weight | 300 gr |

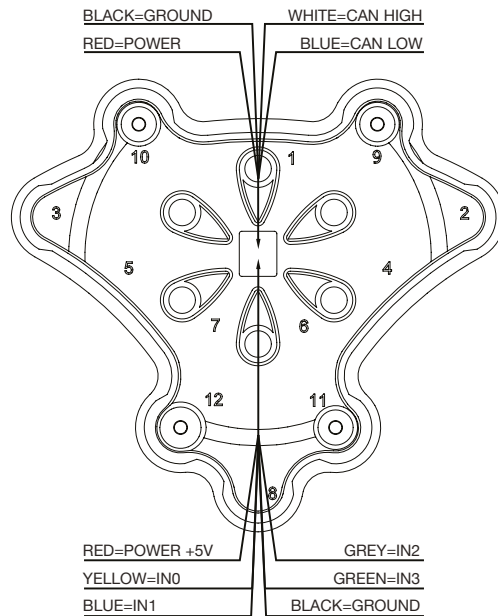
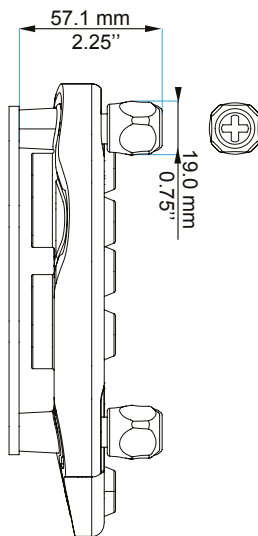




PLASTIC KNOB



RUBBER KNOB



STEERING WHEEL ADAPTER MOUNT HOLDER

Included



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.



| PIN | COLOUR | FUNCTION |
|-----|--------|-----------|
| 1 | Red | Power +5V |
| 2 | Yellow | IN0 |
| 3 | Blue | IN1 |
| 4 | Grey | IN2 |
| 5 | Green | IN3 |
| 6 | Black | GND |

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