

CAN Keypad CK-M12

www.bosch-motorsport.com



- ▶ 12 standard buttons with color indicator rings
- ▶ 9 additional digital switch inputs
- ▶ Moveable button inserts
- ▶ CAN input / output

The CAN Keypad CK-M12 allows for simplification of the dashboard by offering 12 buttons and 9 additional wired inputs to be evaluated and transmitted via CAN bus to other devices on the bus. Each button has an individually addressable LED indicating ring that can be used to acknowledge a button press event, indicate status of a device, or alert the driver to a fault condition. No special configuration software is needed, all feedback logic is done by PBX, DDU or ECU. Each keypad is supplied with 15 black inserts, optional insert kits are also available.

Application

Usage	PBX / DDU / ECU Interface
Temperature range	-40 to 85°C

Technical Specifications

Mechanical Data

Weight	280 g
Max vibration	11 ms 30 G peak
Sealing	IP68

Electrical Data

Power supply Vs	9 to 32 V
Average current draw	100 mA
Max current draw	250 mA

Characteristics

Signal output	CAN
CAN transmit rate	100 Hz*
CAN baud rate	1 Mbaud*
TX ID	0x800*
RX ID	0x801*
TX Data	1 bit status for each input
RX Data	4 bit integer for each indicator color, 4 bit integer for brightness

* Custom CAN IDs / baud Rate Optional Upon Request

Note: CK-M12 DBC file available for CAN configuration

Connectors and Wires

CK-M12 Termination	Flying Lead 24AWG
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
Recommended Connectors

CK-M12	AS610-35PN
Mating	AS110-35SN

































Wire Identification

Wire	Function
Red	12/24V Power
Black	Ground
Yellow	CAN high (CANH)
Green	CAN low (CANL)
White, Black Band	Digital Input 1 Activated by Ground
White, Brown Band	Digital Input 2 Activated by Ground
White, Red Band	Digital Input 3 Activated by Ground
White, Orange Band	Digital Input 4 Activated by Ground
White, Yellow Band	Digital Input 5 Activated by Ground
White, Green Band	Digital Input 6 Activated by Ground
White, Blue Band	Digital Input 7 Activated by Ground
White, Purple Band	Digital Input 8 Activated by Ground
White, Grey Band	Digital Input 9 Activated by Ground










Insert Kits**Insert Road Race Kit**

 A/C
 ABS
 Alarm Reset
 Anti-Lag
 Arrow x 4
 Brake Spray
 Boost Decrease
 Boost Increase
 Brightness Down
 Brightness Up





















Insert Road Race Kit

 Close Menu
 Cool Suit
 Cooling Fan
 Day/Night Mode
 Drink
 Flash Hi Beam
 Fuel Reserve
 Fuel Reset
 Full Course Yellow
 Function Toggle
 Gearbox Emergency
 Hazard Flasher
 Heated Windshield
 Helmet Fan
 High Beam
 Horn
 Launch
 Low Beam
 Map Down
 Map Up
 Neutral
 Open Menu
 Page Down
 Page Up
 PDU Reset
 Pit Switch
 Power
 Power Steering Reset
 Pump Out
 Push to Pass
 Radiator Spray
 Rain Light



















Insert Road Race Kit

-  Reset
-  Reverse
-  Select
-  Starter
-  Traction Control Down
-  Traction Control Up
-  Wet Mode
-  Windshield Spray
-  Windshield Wiper

Insert Drag Race Kit

-  A/C
-  Alarm Reset
-  Anti-Lag
-  Arrow x 4
-  Boost Decrease
-  Boost Increase
-  Brightness Down
-  Brightness Up
-  Burnout
-  Close Menu
-  Cooling Fan
-  Day/Night Mode
-  Function Toggle
-  Hazard Flasher
-  High Beam
-  Horn
-  Launch
-  Line Lock
-  Low Beam
-  Map Down

Insert Drag Race Kit

-  Map Up
-  Nitrous Arm
-  Nitrous Purge
-  Open Menu
-  Page Down
-  Page Up
-  PDU Reset
-  Power
-  Pump Out
-  Push to Pass
-  Reset
-  Select
-  Starter
-  Traction Control Down
-  Traction Control Up
-  Transmission Brake
-  Windshield Spray
-  Windshield Wiper

Insert Alpha/Numeric Kit

A	V
B	W
C	X
D	Y
E	Z
F	!
G	-
H	+
I	0
J	1
K	2
L	3

Insert Alpha/Numeric Kit

M	4
N	5
O	6
P	7
Q	8
R	9
S	10
T	11
U	12

Installation Notes

Installation on flat surface recommended

Bolt size #10-32

Tightening Torque 2.5 +/- 0.1 Nm

Ordering Information

CAN Keypad CK-M12
Order number **F 02U V0U 328-02**

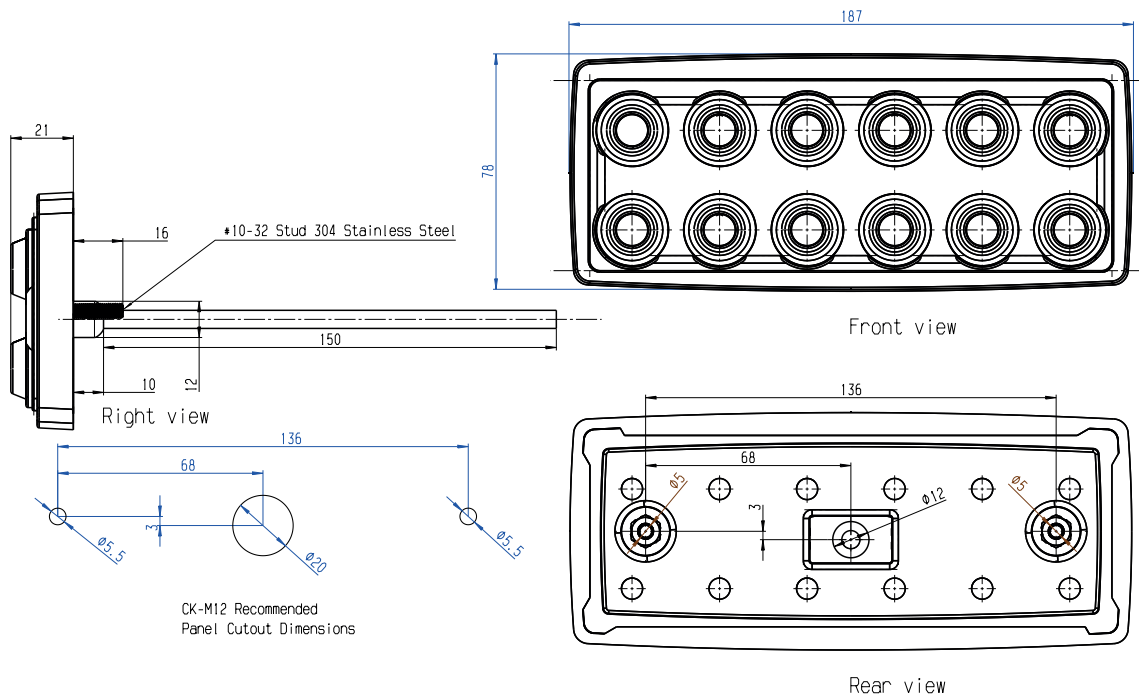
Accessories

Insert Road Race Kit
Order number **F 02U B0U 022-01**

Insert Drag Race Kit
Order number **F 02U B0U 023-01**

Insert Alpha/Numeric Kit
Order number **F 02U B0U 024-01**

Dimensions



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