

CANBUS ENABLED, WATERTIGHT OPERATOR CONTROL MODULE FOR HEAVY EQUIPMENT

CAN Keypad is a CANbus-enabled module with software-controllable programming options for intuitive operation of off-road vehicles and heavy equipment. The rugged module mounts horizontally or vertically into panels and armrests.

Each of the six buttons has three RGB LEDs on the outer edge that can be set to nearly any color and light intensity. The center encoder has configurable starting and roll-over position values.

The CAN Keypad can communicate with other CAN products, including OTTO Controls' CAN joysticks and CAN Rocker, on the same network. It can act as a base module for daisy-chaining up to seven CAN Rocker expansion modules.



## Features:

- CANbus J1939 or CANopen output
- Integral Deutsch® connector
- Easily snaps into panels or armrests
- Select RGB LED colors, brightness and either synchronized or individual flashing with CAN messages
- Customize legends or choose from many standard options
- Center encoder with pushbutton
- Separate input and output connector to easily daisy-chain devices
- Up to 1 million cycles
- Withstands -40°C to +85°C operating temperatures
- Sealed to IP68S

### Standard Characteristics/Ratings:

#### ELECTRICAL RATINGS:

Supply Voltage: 9-32 VDC

Electrical Life: 1,000,000 cycles

#### MECHANICAL:

Mechanical Life: 1,000,000 cycles

Enclosure Seal: IP68S

Temperature Range: -40°C to +85°C

#### PHYSICAL:

Keypad Material: Silicone Rubber

Base Material: Thermoplastic

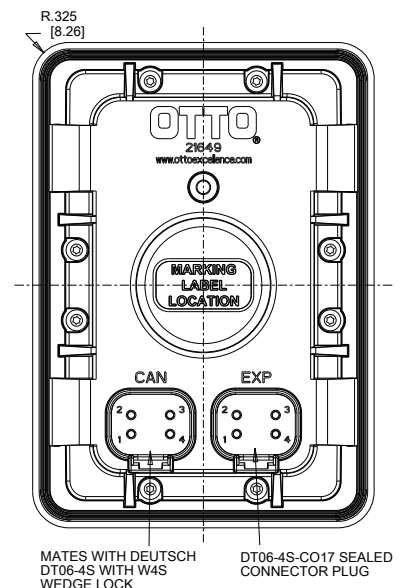
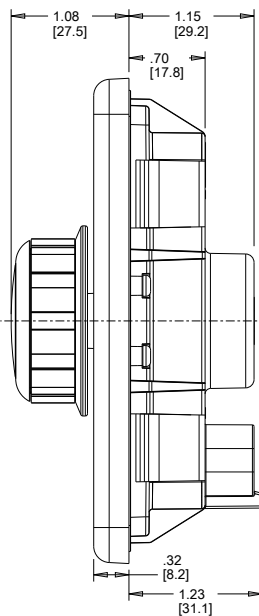
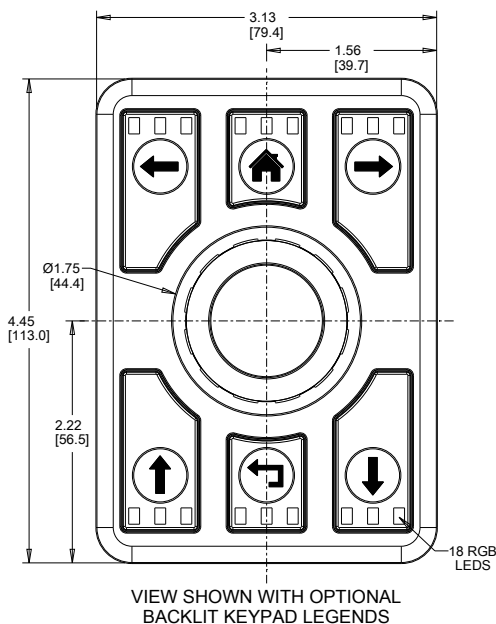
Knob Material: Thermoplastic

Knob Grip Material: Silicone Rubber

Cover Material: Thermoplastic

Illumination: Programmable RGB LED for each Keypad Indicator (18 total)

Connector: Compatible with DT06-4S

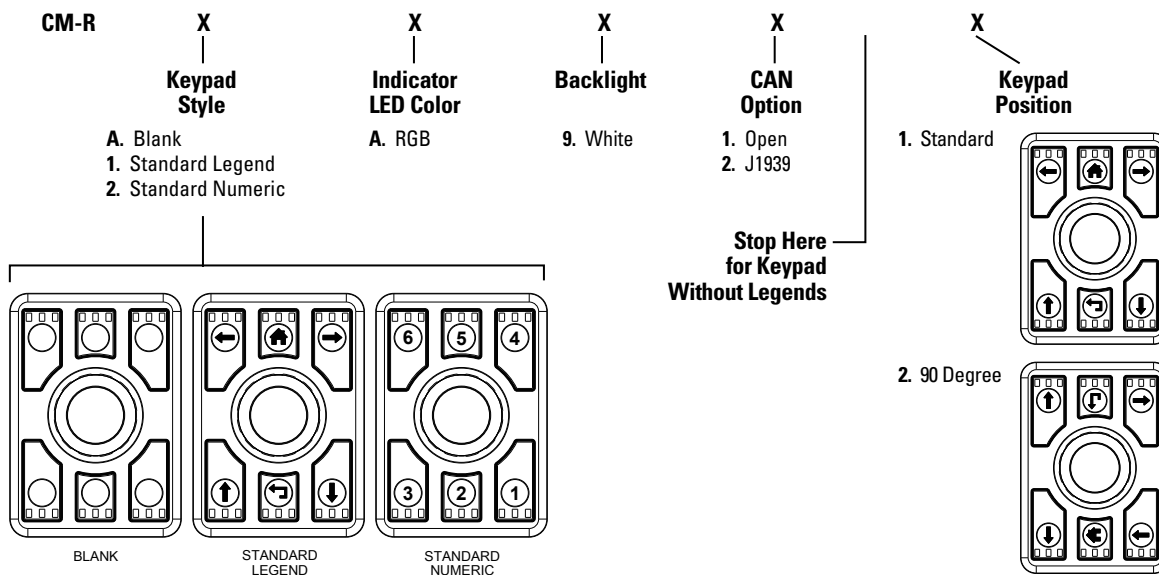


# CAN MODULE ROTARY KEYPAD

CM-R  
CAN KEYPAD

CANBUS ENABLED, WATERTIGHT OPERATOR CONTROL MODULE FOR HEAVY EQUIPMENT

## CM-R PART NUMBER CODE



The standard CAN Keypad ships with a default configuration with pre-specified communications parameters unless indicated otherwise. These are the summarized CANopen parameters for the default configuration spelled out in the User Manual (OTTO P/N: 804486-1):

Node ID = 127

Baud rate = 250Kb

Keypad module Receive PDO for LEDs

- COB-ID = 0x27F
- Data: See Table 7-7 KEYPAD MODULE LED WRITE DATA OBJECT 0x2000

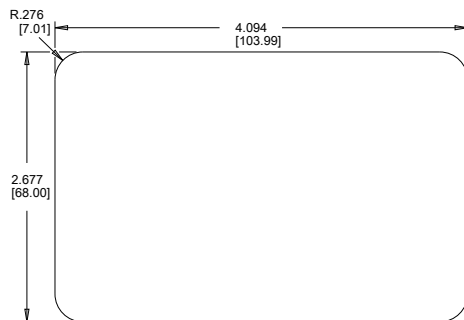
Keypad module Transmit PDO switch contact data:

- COB-ID = 0x1FF (event only)
- Data: See Table 7-2 KEYPAD SWITCH CONTACT STATUS BYTES
  - Byte 1: Base module STATUS0
  - Byte 2: Base module STATUS1
  - Byte 3: Base module STATUS2 Keypad module

Transmit PDO encoder data:

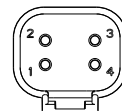
- COB-ID = 0x2FF (event only)
- Data:
  - Byte 1 & 2 = Encoder value (0000 to 0xFFFF). Expansion modules are disabled.
- Error messages will be transmitted if expansion modules are enabled but are not connected

**Custom order:** The CAN Keypad module may be ordered pre-configured to customer parameters to drop into a customer CAN network. In these cases, OTTO will establish a customer-specific part number tailored for every instance of a CAN Keypad module used. Consult with an OTTO salesperson for more information. Refer to User Manual (OTTO P/N: 804486-1).



RECOMMENDED PANEL OPENING  
(PANEL THICKNESS: .098 ± .039)

### CONNECTOR PIN-OUT



PIN #	CAN / EXP
1	POWER
2	GROUND
3	CAN HIGH
4	CAN LOW