#### TECHNICAL SPECIFICATIONS

Supply Voltage	12-24Vdc Nominal (8-32VDC)
Standby Current	<50 mA
Communication BUS	J1939
Connector	Deutsch DT04-4P
Switch Life	3 million operations
Mounting Studs	#10-32 Steel
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 +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 ASTMB117
Chemical Resistance	Deet, Engine Cleaner, Isopropyl Alcohol, Suntan Lotion, Multi-Purpose Cleaner, Orange Citrus Cleaner, Muriatic Acid
Ingress protection Rating	IP67/IP69K
Weight	150 grams (inserts excluded)

#### PART NUMBERS

#### **Small Button Switchbanks**

Description	IC Part Number
4 Button 15mm Insert Switchbank	3050934-01-XX
6 Button 15mm Insert Switchbank	3050934-02-XX
8 Button 15mm Insert Switchbank	3050934-03-XX
10 Button 15mm Insert Switchbank	3050934-04-XX
12 Button 15mm Insert Switchbank	3050934-05-XX

#### Large Button Switchbanks

Description	IC Part Number
4 Button 24mm Insert Switchbank	3050934-06-XX
5 Button 24mm Insert Switchbank	3050934-07-XX
8 Button 24mm Insert Switchbank	3050934-08-XX

XX = Part number suffix provided after button customization



#### STANDARD FEATURES

- Custom printed icons and/or text
- LED backlit icons and/or text
- Reconfigurable keys
- Relegendable buttons
- Multicolor indicator rings
- LED state & status configurable
- ON/OFF, momentary, toggle & scroll
- Vertical or horizontal mount
- Flush or front mount



# **CAN BUS Pushbutton Control Switches**





#### SOFTWARE FEATURES

CAN and RS485 Keypad Addresses: Assign any valid CAN and RS485 address to the keypad. Communicate on either BUS simultaneously.

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.

DOC 7500031 12/2002

## WATERPROOF **MULTIPLEXING** CONTROLS WITH CUSTOMIZABLE NSFRTS

Innovative Controls CAN BUS Pushbutton Control Switches are keypads that utilize CAN J1939 protocol. These water and dust resistant controls feature keys with customizable 15mm or 24mm graphic and/or verbiage inserts and can be installed in both interior and exterior applications. RGB LED lighting behind and surrounding each key can be programmed to enhance functional user feedback.

### 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.

**Customizable Inserts:** Innovative Controls prints the graphic and/or verbiage button inserts in-house. We can customize keypads quickly.

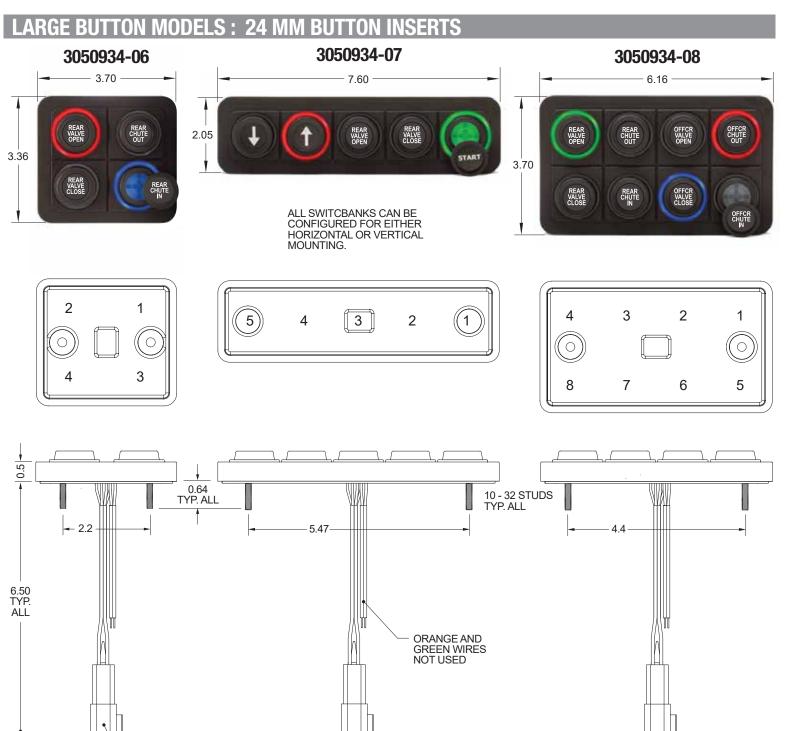
Membrane Compensation Valve: This valve self-compensates the internal pressure within the keypad, alleviating mechanical stresses that can be produced by shifts in external temperatures.

Symmetrical Design: Spacing between keys makes it easier to install multiple keypads alongside one another, in any orientation.

Molded Rubber Enclosure: The keypad is molded 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.

#### **SMALL BUTTON MODELS : 15 MM BUTTON INSERTS**

#### 3050934-07 3050934-04 3050934-06 3050934-02 3050934-01 3050934-03 - 3.70 - 2.56 3.72 4.86 6.00 7.60 REAR VALVE OPEN REAR OFFCR CHUTE OUT REAR VALVE OPEN REAR CHUTE OUT OFFCR VALVE OPEN OFFCR CHUTE OUT REAR VALVE OPEN OFFCR VALVE OPEN OFFCR CHUTE OUT REAR CHUTE OUT OFFCR VALVE OPEN 3 REAR VALVE OPEN REAR CHUTE OUT REAR VALVE OPEN REAR VALVE OPEN 2.05 2.75 3.36 REAR VALVE CLOSE REAR CHUTE IN OFFCR VALVE CLOSE REAR VALVE CLOSE REAR CHUTE IN OFFCR VALVE CLOSE REAR VALVE CLOSE REAR OFFCR VALVE CLOSE STOP REAR VALVE CLOSE REAR CHUTE OFFCR ALL SWITCBANKS CAN BE CONFIGURED FOR EITHER HORIZONTAL OR VERTICAL 2 3 2 3 5 3 2 2 1 1 4 1 4 1 MOUNTING. Ó 0 $\circ$ Ο Ó $\bigcirc$ 0 3 5 6 8 7 6 5 10 4 4 9 8 6 7 2 5) 3 4 С 0.64 3 0.64 4 10 - 32 STUDS TYP. ALL TYP. ALL -1.93 -3.07 -1.13 4.21 S 6.50 TYP. ALL o. 0.64 TYP. ALL - 2.2 5.47 6.50 TYP. ALL 3050934-05 ALL SWITCBANKS CAN BE 10 - 32 STUDS CONFIGURED FOR EITHER HORIZONTAL OR VERTICAL TYP. ALL OFFCR CHUTE OUT OFFCE 7 Ó MOUNTING. ORANGE AND **GREEN WIRES** NOT USED OFFCR VALVE OPEN OFFCR VALVE CLOSE 2 8 5.36 ALL PIN ASSIGNMENTS REAR CHUTE IN 3 REAR CHUTE OUT 9 ARE THE SAME FOR ALL SWITCHBANKS 7.14 4 Pin Amphenol AT04-4P or Deutsch 4 10 REAR VALVE OPEN REAR VALVE CLOSE 04 10 Terminal Wire Color O**3 2**O Blue 1 5 DRVR CHUTE IN 11 2 White DRVR CHUTE OUT 3 Black 4 Red $\bigcirc$ 6 12 DRVR VALVE OPEN DRVR VALVE CLOSE 0.64 Mating connectors AT06-4S or DT06-4S **-** 2.75 - **-**



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h DT04-4P Connector		
	Description	
	CAN Low	
	CAN High	
	Ground	
	+12VDC Power	