OTB
Optical Touch Buttons

Banner's OTB and LTB are the industry standard for ergonomic touch buttons and are ideal as replacements for mechanical push buttons. These touch buttons have LED indicators to signal "power on" and "output active" conditions.

- Optimized for easy mounting with 30 mm threaded base
- Ergonomic design eliminates hand, wrist and arm stress
- Momentary and alternate action models available
- Available in a wide variety of voltage ranges and output types to suit any application
- Field covers (black) included to prevent inadvertent activation from loose clothing, debris, etc.
- Cordsets and brackets see page 620

OTB Model Key, 12-30 V DC Example Model Number **OTBVP6QD**

Family: **OTB**
- **OTB** = Momentary Action

Output: **VP6**
- **VP6** = Complementary PNP (1 NO & 1 NC)
- **VN6** = Complementary NPN (1 NO & 1 NC)
- **VR81** = 20-30 V ac or dc SPDT electromechanical relay
- **A5** = 120 V ac SPDT electromechanical relay
- **B5** = 220/240 V ac SPDT electromechanical relay

Upper Housing Material: (blank)
- **Blank** = Polysulfone
- **L** = Polycarbonate

Connection: **QD**
- **Blank** = 2 m Integral Cable
- **QD** = Mini Integral QD
- **QDH** = Euro Integral QD*

Connection Option: A model with a QD requires a mating cordset (see page 620).

For 9 m cable, add suffix **W/30** to the 2 m model number (example, **OTBVN6 W/30**).

* Only available for OTBVP6 or OTBVN6 models

LTB
Optical Touch Buttons

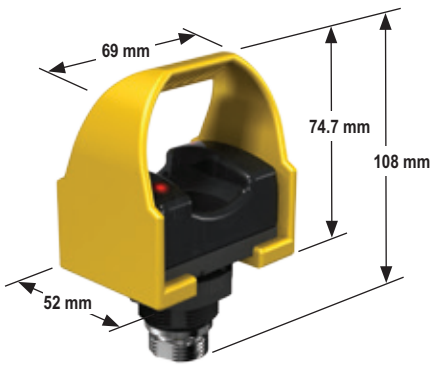
Banner's LTB and OTB are the industry standard for ergonomic touch buttons and are ideal as replacements for mechanical push buttons. These touch buttons have LED indicators to signal "power on" and "output active" conditions.

- Optimized for easy mounting with 30 mm threaded base
- Ergonomic design eliminates hand, wrist and arm stress
- Momentary and alternate action models available
- Available in a wide variety of voltage ranges and output types to suit any application
- Field covers (black) included to prevent inadvertent activation from loose clothing, debris, etc.
- Cordsets and brackets see page 620

LTB Model Key, 12-30 V DC Example Model Number **LTBA5QD**

Family	Output	Upper Housing Material	Connection
LTB	A5		QD
LTB = Alternate Action	**A5** = 120 V ac SPDT electromechanical relay **B5** = 220/240 V ac SPDT electromechanical relay	**Blank** = Polysulfone **L** = Polycarbonate	**Blank** = 2 m Integral Cable **QD** = Mini Integral QD

OTB and LTB Models



OTB and LTB Models with cover

Connection Option: A model with a QD requires a mating cordset (see page 620).

For 9 m cable, add suffix **W/30** to the 2 m model number (example, **LTBVR81 W/30**).

Cordsets

Euro QD (for Q5 models)

See page 908

Length	Threaded 4-Pin Straight		Threaded 4-Pin Right-Angle	
1.83 m	MQDC-406		MQDC-406RA	
4.57 m	MQDC-415		MQDC-415RA	
9.14 m	MQDC-430		MQDC-430RA	

Additional cordset information available. See page 904.

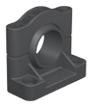
Mini QD

See page 928

Length	Straight 4-Pin	Straight 5-Pin
1.83 m	MBCC-406	MBCC-506
3.66 m	MBCC-412	MBCC-512
9.14 m	MBCC-430	MBCC-530

Brackets

OTB & LTB

See page 869	See page 869	See page 870
SMB30A	SMB30MM	SMB30SC
		

Additional bracket information available. See page 846.

Field Covers

OTB/LTB

Black	OTC-1-BK		OTCL-1-BK
Green	OTC-1-GN		OTCL-1-GN
Red	OTC-1-RD		OTCL-1-RD
Yellow	OTC-1-YW		OTCL-1-YW

OTB/LTB Specifications

Supply Voltage and Current	**OTBVR81 models:** 20 to 30 V ac/dc **OTBA5 & LTBA5 models:** 105 to 130 V ac, 50-60 Hz **OTBB5 & LTBB5 models:** 210 to 250 V ac, 50-60 Hz **OTBVN6/VP6 models:** 10 to 30 V dc All models require less than 25 mA (exclusive of load)
Supply Protection Circuitry	Protected against reverse polarity and transient voltages
Output Configuration	**OTBVR81, OTBA5, OTBB5 and all LTB models:** SPDT electromechanical relay **OTBVN6 models:** Complementary NPN (sinking) open-collector transistor; 1 normally open (NO) and 1 normally closed (NC) **OTBVP6 models:** Complementary PNP (sourcing) open-collector transistors; 1 normally open (NO) and 1 normally closed (NC)
Output Rating	**Electromechanical relay models:** **Max. switching current:** 7 amps (resistive load), 1 HP max. **Min. load:** 0.05 watts (dc), 0.05 VA (ac) **Mechanical life of relay:** 50,000,000 operations (min.) **Electrical life of relay:** 100,000 operations (min.) at full resistive load Transient suppression is recommended when switching inductive loads **Solid-state output models:** 150 mA max. load (each output) **ON-state saturation voltage:** less than 1 volt at signal levels; less than 1.5 volts at full load **OFF-state leakage current:** less than 1 µA
Response Time	100 milliseconds ON/OFF
Output Protection	All models protected against false pulse on power-up Models with solid-state outputs have overload and short circuit protection
Indicators	**Two Red indicator LEDs:** one lights whenever power is applied; the other lights whenever the switch is activated making the normally-open (NO) output conduct
Construction	Totally encapsulated, non-metallic enclosure. Black polysulfone or red polycarbonate upper housing (see Application Notes below); fiber-reinforced thermoplastic polyester base. Electronics fully epoxy-encapsulated. Supplied with a field cover of polypropylene (TP).
Environmental Rating	Meets NEMA standards 1, 3, 4, 4X, 12 and 13; IEC IP66
Connections	PVC-jacketed 2 m or 9 m cables, or Mini-style quick-disconnect (QD) fitting. QD cordsets are ordered separately. See page 620.
Ambient Light Immunity	120,000 lux (direct sunlight)
EMI/RFI Immunity	Immune to both single and mixed EMI and RFI noise sources
Operating Conditions	**Temperature:** -20° to +50° C **Relative humidity:** 90% at 50° C (non-condensing)
Application Notes	**Environmental considerations for models with polysulfone upper housings:** The polysulfone upper housing will become embrittled with prolonged exposure to outdoor sunlight. Window glass effectively filters longer wavelength ultraviolet light and provides excellent protection from sunlight. **Environmental considerations for models with polycarbonate upper housings:** Avoid prolonged exposure to hot water and moist high-temperature environments above 66° C. Avoid contact with aromatic hydrocarbons (such as xylene and toluene), halogenated hydrocarbons and strong alkalis. Clean periodically using mild soap solution and a soft cloth. Avoid strong alkaline materials.
Certifications	CE, CSA®, UL LISTED
Hookup Diagrams	**DC Models:** **DC03** (pg. 974) **AC/DC Models:** **OTBVR81 Models:** UN01 (pg. 984) **AC Models:** **OTBA5 & LTB Models:** AC08 (pg. 982) **OTBB5 Models:** AC08 (pg. 982)