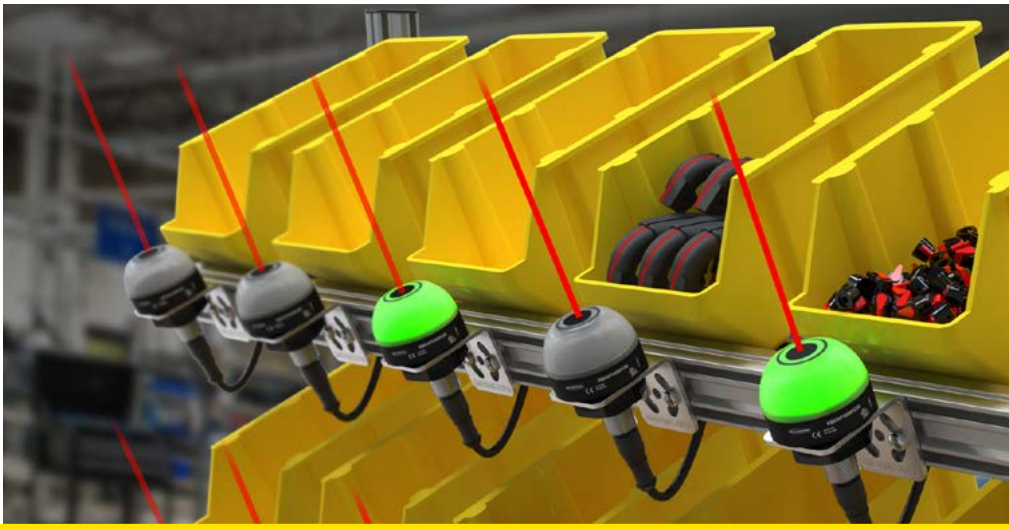
K50 Indicators and Buttons



Rugged, Cost-Efficient Indicators, Touch Buttons, and Touchless Buttons Simplify Inventory and Setup

K50 Indicators bring clarity to every process—delivering combinations of vivid color, striking sound, and interactive touch and touchless buttons that make process cues unmistakable. With domed, flat pack, and compact options, each model is built for high visibility, sealed for rugged environments, standardized for consistent fit, and compatible with any control protocol. Whether using discrete signals, IO-Link, Modbus, or PICK-IQ®, process states become intuitive feedback that guides action, reduces response time, or confirms progress in real time. Where tasks could move faster, awareness could sharpen, or response time could improve—there is a K50 that can make it happen.

BANNER®

K50 Programmable Indicators

Your Go-To K50 for Bright, Reliable Indication

- Save with a cost-efficient, lightweight design that delivers lasting performance in industrial environments with an IP66/IP67/IP69K-rated laser-welded housing
- Communicate status using seven default colors (green, red, yellow, blue, white, cyan, magenta), with seven additional colors and 11 animations configurable using Pro Editor software or controllable via IO-Link and Modbus
- Reduce wiring and I/O count by using the PFM/PWM input on discrete models, giving a single PLC or sensor output dynamic control of up to 16 states configurable via Pro Editor
- Optimize device communication and enhance operator feedback with Modbus models
- Simplify device setup and replacement with Pro ID functionality on discrete models
- Bimodal inputs (PNP/NPN), depending on source wiring

Housing	Color and Input	Connection
K50PSL	**RGB7**	**Q**

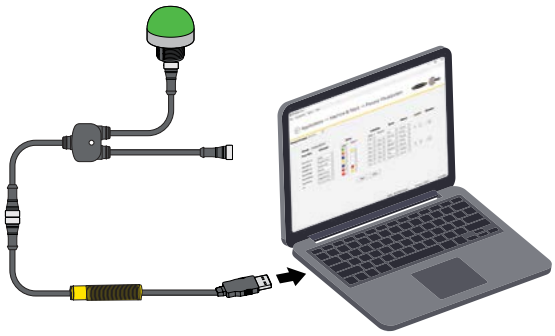
RGB7 = RGB (7 colors, 15 states)
K = IO-Link
S = Modbus

Q = M12 integral QD

PRO EDITOR SOFTWARE

Banner's Pro Editor Software is a free tool that allows users to configure device status, colors, animations, and much more for control via discrete inputs, bringing intuitive indication and interaction to the visual factory. Configurable RGB devices make supply chains more efficient by allowing you to standardize on one model that can be customized as needed. The application-based interface makes it easy to configure a device for a wide range of applications such as displaying machine warm-up time, indicating unique steps in an assembly process, showing distance and position information, and communicating multiple machine states.

PRO-KIT
A single Pro-Kit provides everything required to program the K50 using the free Pro Editor software, and is required only for setup, not daily operation.



Programmable LED indicators offer multiple color choices in a single housing

IO-Link® for Dynamic Control

Reduced Costs and Increased Efficiency

IO-Link models allow for dynamic control—reacting to inputs from other devices—and have additional capabilities that discrete devices do not. IO-Link enables users to change device parameters from the control system as needed, such as during product changeover, which reduces downtime and allows machines to accommodate greater product diversity. These models also offer unique LED color management to provide advanced users with total control.

Advanced Features for Specialized Applications

- **All the capabilities of the Go-To model**
- Protect against moisture, impact, and mechanical stress with fully encapsulated electronics that ensure reliable performance in high-vibration and washdown environments
- Integrate easily into low-profile applications with compact models
- Use in clean, hygienic, or washdown-required environments with FDA-grade models
- Bimodal inputs (PNP/NPN), depending on source wiring

Housing	Material	Color & Input	Audible Alarm*	Connection
K50L2		**RGB7**	**A1**	**Q**
K50L2 = Dome **K50CL2** = Compact**	**Blank** = Standard **F** = FDA grade	**RGB7** = RGB multicolor (7 colors) **RGBK** = RGB multicolor with IO-Link	**Blank** = No audible **A1** = Audible* **AL1** = Loud audible* **ALS** = Sealed audible*	**Blank** = 2 m integral cable **Q** = M12 integral QD** **QP** = M12 pigtail QD QD models require mating cordset

*Audible models not available in FDA grade or compact
**Compact and integral QD models not available in FDA grade

Beacon Models

- Add unmistakable indication to outdoor or high ambient light environments with bright, visibly distinct LEDs
- Protect against moisture, impact, and mechanical stress with fully encapsulated electronics that ensure reliable performance in high-vibration and washdown environments
- Communicate clearly using seven default colors (green, red, yellow, blue, white, cyan, magenta), with animations configurable using Pro Editor software or controllable via IO-Link or Modbus
- Optimize device communication and enhance operator feedback with Modbus models

Housing	Color & Input	Connection
K50PBL	**RGB7**	**Q**
	RGB7 = RGB multicolor (7 colors)	**Blank** = 2 m integral cable **Q** = M12 integral QD **QP** = M12 pigtail QD QD models require mating cordset

IO-Link and Modbus Models

Housing	Control	Connection
K50PBL	**S**	**Q2PS**
	S = Modbus **K** = IO-Link *Not available with IO-Link models	**Q** = M12 integral QD **QP** = M12 pigtail QD **Q2PS** = Dual 240 mm PVC shielded cables with M12 integral QD* QD models require mating cordset

K50 Indicators

Domed Models

- Ready out of the box with three bright, uniform colors
- Protect against moisture, impact, and mechanical stress with fully encapsulated electronics that ensure reliable performance in high-vibration and washdown environments

Housing	Color	Input	Connection
K50L	**GRY**	**P**	**Q**
	GRY = Green, Red, Yellow	**P** = PNP	**Q** = M12 integral QD

QD models require mating cordset

Hazardous Zone Models

- Certified for use in hazardous zones to ATEX, CSA c/us, UKCA, and IECEx standards
- Built for demanding environments with a fully sealed design rated IP67/IP69K (DIN 40050-9)
- Models available with one, two, or three fixed colors; five total colors available

Housing	Style	Color 1	Color 2	Color 3	Input	Connection
K50L	**M**	**G**	**R**	**Y**	**P**	**Q**
	M = Ex mb **N**=Ex nA	**G** = Green **R** = Red **Y** = Yellow	**B** = Blue **W** = White **X** = No color		**P** = PNP	**Blank** = 2 m integral cable **Q** = M12 integral QD*

QD models require mating cordset

*Not available with ex mb models

Flat Pack Models

- Ready out of the box with up to five bright, uniform colors
- Meet space constraints with compact, low-profile models
- Match wiring with bimodal input options (PNP/NPN)

Housing	Color	Input	Connection
K50FL	**G** **R** **Y**	**P**	**Q**
	G = Green **R** = Red **Y** = Yellow **B** = Blue **W** = White **O** = Orange **X** = No color*	**P** = PNP **N** = NPN	**Blank** = 2 m integral cable **Q** = M12 integral QD **QP** = 150 mm PVC cable with M12 QD **QPMA** = 150 mm PUR cable with M12 QD

*LED color designated with X also indicates that the associated input wire is not used

QD models require mating cordset

Beacon Models

- Add unmistakable indication to outdoor or high ambient light environments with bright, visibly distinct LEDs
- Ready out of the box with choice of five colors
- Match wiring with bimodal input options (PNP/NPN)

LED Color(s)	Viewable Area	Input Type	Supply Voltage	Connection	Models
Green	Perimeter view only	PNP	12 to 30 V DC	M12 integral QD	**K50BLXGXPQ**
	Perimeter and top view				**K50BCLXGXPQ**
Red	Perimeter view only				**K50BLXRXPQ**
	Perimeter and top view				**K50BCLXRXPQ**
Yellow	Perimeter view only				**K50BLXYXPQ**
	Perimeter and top view				**K50BCLXYXPQ**
Blue	Perimeter view only				**K50BLXBXPQ**
	Perimeter and top view				**K50BCLXBXPQ**
White	Perimeter view only				**K50BLXWXPQ**
	Perimeter and top view				**K50BCLXWXPQ**
Green, red, yellow	Perimeter view only				**K50BLGRYPQ**
	Perimeter and top view				**K50BCLGRYPQ**

Daylight Visible Models

- Add unmistakable indication to outdoor daylight applications with high-output, visibly distinct LEDs
- Meet tight space requirements with a compact, low-profile housing designed for cost efficiency
- Ready out of the box with one, two, or three fixed colors; five total colors available

LED Color(s)	Input Type	Supply Voltage	Connection	Models
Green	PNP/NPN	15 to 30 V DC	M12 integral QD	**K50LDXGXPQ**
Red				**K50LDXRXPQ**
Yellow				**K50LDXYXPQ**
Blue				**K50LDXBXPQ**
White				**K50LDXWXPQ**
Green, red, yellow	PNP			**K50LDGRYPQ**
	NPN			**K50LDGRYNQ**
Green, red, blue	PNP			**K50LDGRBPQ**
	NPN			**K50LDGRBNQ**

K50 Programmable Touch Buttons

Your Go-To K50 Touch Button

- Advanced touch technology reliably detects both bare and gloved hands with no force required, reducing strain on hands and wrists
- Replace basic on/off buttons with configurable touch response, including momentary or latching operation, normally open or closed states, and adjustable on/off delays—all easily configured on discrete models with Pro Editor software or directly via protocol on IO-Link and Modbus models
- Easily communicate via three default colors (red, green, yellow), with 11 additional colors and eight animations configurable on discrete models using Pro Editor software or directly via protocol on IO-Link and Modbus models

Housing	Color and Input	Connection
K50PST	**GRY3**	**Q**
	GRY3 = RGB (3 colors, 3 states) **K** = IO-Link **S** = Modbus/PICK-IQ **RGB14** = RGB (14 colors, 15 states)	**Q** = M12 integral QD

PICK-IQ® for High Device Density

Faster Response Speed and Simplified Programming

PICK-IQ is a purpose-built serial protocol that maintains high speeds even in networks with a high device count. Devices with PICK-IQ allow full access to color, flashing, rotating, and dimming settings as well as advanced animations such as process statuses and LED control. Devices with PICK-IQ are typically used in pick-and-put walls, light-guided assembly, and other high-density installations with close device proximity.

Optimizing Operator Visibility and Control on Conveyor Lines

Challenge

Mechanical push buttons slow down processes and wear out over time, leading to downtime. Traditional status indicators have limited lateral visibility, making it difficult for workers to see where they are needed at a glance. Solving both issues typically requires multiple devices, adding complexity.

Solution

- K50 Pro Select Touch Buttons provide both highly visible 360° indication and configurable touch detection in one convenient device for clear operator guidance from any angle
- Advanced touch technology is reliable with no moving parts to wear out, minimizing downtime
- Programmable colors and animations give machines a voice, helping operators quickly identify problem types and locations

Advanced Features for Specialized Applications

- Combine proven touch technology and ruggedness with the added versatility of RGB LEDs
- Models available with FDA-grade materials for use in clean, hygienic, or washdown-required environments
- Communicate status using up to 14 colors and 11 animations, configurable with Pro Editor software or controllable via IO-Link or Modbus
- Optimize device communication and enhance operator feedback with PICK-IQ®, Banner's Modbus-based protocol

Housing	Activation Method	Style	Output State	Output Function	Color/ Control	Audible	Connection
K50P	**T**		**A**	**M**	**GRY3**	**A**	**Q**
	T = Touch **TF** = Touch, FDA grade **TV** = Touch, vibration feedback **TFV** = Touch, FDA grade, vibration feedback	**Blank** = Dome **C** = Compact*	**A** = Normally open	**M** = Momentary **L** = Latching	**GRY3** = Programmable multicolor (3 Colors, 5-pin) **RGB7** = Programmable multicolor (7 colors, 8-pin)* **RGB14** = Programmable multicolor (14 colors, 8-pin)	**A** = Audible*	**Blank** = 2 m integral cable **Q** = M12 integral QD** **QP** = M12 pigtail QD** QD models require mating cordset

*Not available in FDA grade or with vibration feedback
**Not available in FDA grade

IO-Link or PICK-IQ Models

Housing	Control	Connection
K50PT	**K**	**Q**
	K = IO-Link **S** = Serial/PICK-IQ	**Q** = M12 integral QD QD models require mating cordset

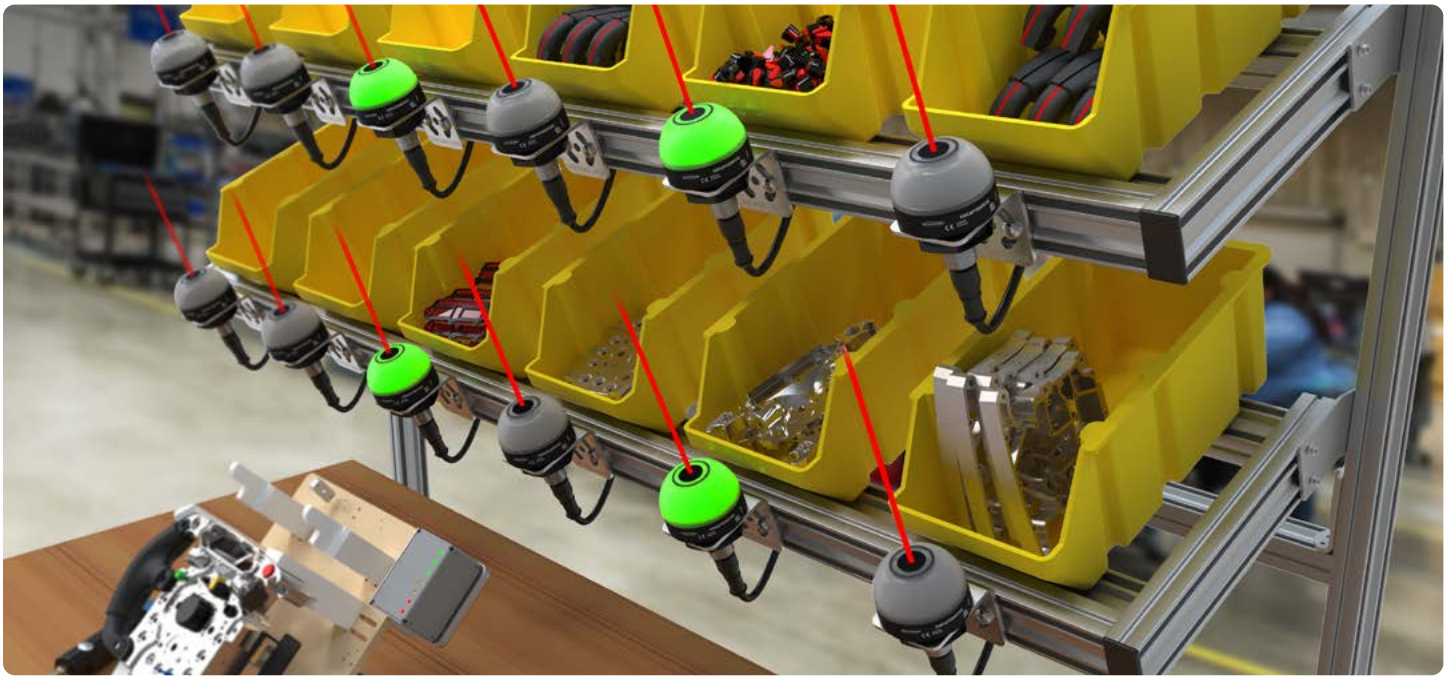
K50 Programmable Touchless Buttons

Your Go-To K50 Touchless Button

- Reliably detect and indicate with one device, with configurable sensing across a 20 to 1000 millimeter range
- Quickly communicate via three default colors (red, green, yellow), with 11 additional colors and eight animations configurable on discrete models using Pro Editor software or directly via protocol on IO-Link and Modbus models
- Easily configure sensing range in the three default operating modes (Object, Background, Window) using the teach function—no PC required. Configure alternate modes and logic on discrete models with Pro Editor software or directly via protocol on IO-Link and Modbus models

Housing	Style	Color and Input	Connection
K50	**PSAF1000**	**GRY3**	**Q**
	PSAF1000 = Adjustable field sensor	**GRY3** = RGB (3 colors, 3 states) **K** = IO-Link **S** = Modbus/PICK-IQ **RGB14** = RGB (14 colors, 15 states)	**Q** = M12 integral QD

Improve Assembly Time and Accuracy with Indication and Optical Sensing



Challenge

Traditional pick-to-light systems require workers to press a button to confirm a pick, a step that slows cycle times. In high-volume operations, even a one-second delay per pick compounds into significant lost productivity, reducing overall throughput and operational speed.

Solution

- The K50 Programmable Touchless Button combines a bright, multicolor indicator with an optical sensor that requires no physical touching of a button
- Optical sensing technology is ideal for pick-to-light applications, reliably detecting both bare and gloved hands in many different environments
- Bright, clear LEDs turn green to indicate pick location, turn yellow to confirm a correct pick, and turn red to show a mispick

K50 Control and Display

Touch with Display

- Four-digit, seven-segment LED display
- Two independent touch areas
- Excellent immunity to false triggering by water spray, oils, and other foreign materials
- Can be actuated with bare hands or gloves

Housing	Activation Method	Display	Control	Connection
K50P	**TC**	**D4**	**K**	**QP**
	TC = Touch	**D4** = 4-Digit LED Display	**K** = IO-Link **S** = PICK-IQ	**Q** = M12 integral QD **QP** = 150 mm (6 in) cable with M12 QD **Q2PS** = Dual 240 mm (9.45 in) PVC shielded cables with M12 integral QDs*

QD models require mating cordset

*Not available with IO-Link models

I/O Touch Control with Display

- Onboard analog, PWM, PFM, and discrete outputs enable control of core applications such as adjusting VFD speed, dimming LED lights, and signaling part-picking details
- Two capacitive touch zones provide reliable input with gloved or bare hands—with no mechanical parts to wear out
- Four-character, 14-segment display improves operator response by showing output values and system messages
- Bright, multicolor LEDs provide operators with at-a-glance equipment status. All colors and animations are easily configured with Banner's free Pro Editor software

Housing	Activation Method	Display	Mode	Connection
K50P	**TC**	**D4**	**PICK**	**Q**
	TC = Touch	**D4** = 4-Digit LED display	**UI4** = 0 to 10 V (4 to 20 mA) (pin 4) **UI5** = 0 to 10 V (4 to 20 mA) (pin 5) **PULS** = PWM/PFM **PICK** = Pick-to-light	**Q** = M12 integral QD **Q2PS** = Dual 240 mm PVC-jacketed cables with M12 integral QD*

QD models require mating cordset

*Only available with UI4 models

Additional Indicators and Touch Buttons

Indicators

S18L/S22L

S22

GS60

K30

K70

K90

K100

S15L

WLF12

WLS15

WLS27

RLS27

WLS28

Touch Button and Pick-to-Light

S22 Touch

K30 Touch

K30 Optical Sensor

K70 Touch

PTL110

Displays

Task Lighting

Tower Lights

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