



VB Series

Remote programmers for
fixed mount barcode scanners



The ORBY facilitates the rapid, safe and secure programming of embedded fixed mount barcode scanners and verifiers; without the need for a host PC, multiplexer or PLC Controller

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Pre installation ORBY VB1 with hand held and fixed mount scanner.



ORBY VB1 in action, verifying bar codes on a Mark Andy 8 color label press. The ORBY allows the operators to rapidly, safely, and securely change the bar code to be verified.

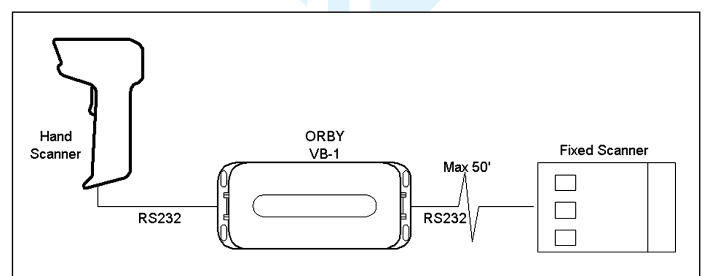
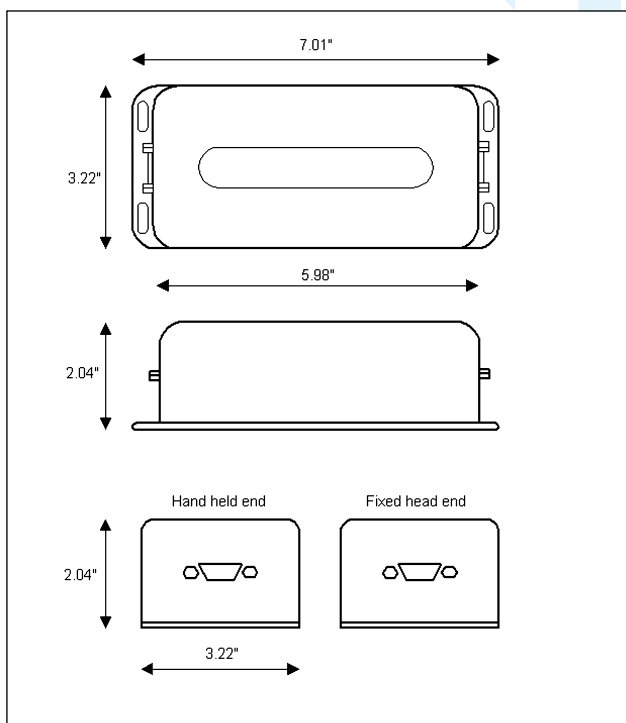
Orby VB-1 General description

The **ORBY VB-1** is an 'off the shelf' remote programming device for fixed mount bar code scanners. Most fixed mount (or embedded) bar code scanners can store a 'match' code in their memory which allows the scanner to compare its last scanned code with the match code. After each scan the fixed scanner can make a decision (stop conveyor, reject product Etc) without the use of an external controller. This feature is used widely in embedded scanner applications, but involves designing a custom PLC/ PC controller or presenting the bar code to be verified to the fixed mount scanner and then pressing a 'teach' button of some kind. Both methods work but to design a custom PLC or PC based solution is expensive and time consuming and the 'teach' button method creates difficulties when the embedded scanner is difficult (and dangerous!) to reach. The other disadvantage of the 'teach' button method is there is no display confirming the data is stored in the embedded scanner or showing the current 'match' code on screen.

The VB-1 has been designed to address these issues, housed in a rugged metal frame enclosure the VB-1 can be mounted up to 50 feet away from the embedded scanner, and is desk or wall mounting. It could be mounted to the outside frame of an OEM machine/conveyer or on a desk near by. Installation could not be more simple, the VB-1 has an LCD on top and a 9 way dtype connector at either end, on one side you plug in your hand held bar code scanner directly (standard rs232 PC cable) with no need for external power as the vpm has a 5Vdc power pin on pin 9. On the other side of the VB-1 is another 9 way connector with the RS232 connection to the embedded scanner. Once set up the operator simply (and safely) scans the match code using the hand held scanner attached to the VB-1, the VB-1's 24 x 2 line LCD will then confirm the embedded scanner has accepted the 'match' barcode and then display this until a new code is entered.

Features

- Out of the box 'plug and play' solution.
- 24 x 2 character LCD to confirm current 'match' code
- 9 way D-type connectors (no cable terminals) for easy install and quick swap-out
- Standard PC cable used for hand held scanner.
- No 5Vdc supply needed for hand held scanner (supplied on Pin 9)
- Very rugged and small (8" x 4") metal enclosure.
- Desktop or Panel mount option as standard.
- LCD display to confirm embedded scanner has accepted bar code.
- Constant LCD display of current 'match' code.
- Error warning if fixed scanner not responding.
- Compatible with a wide range of fixed mount and hand held scanner manufacturers.
- Accepts 10 to 30Vdc.

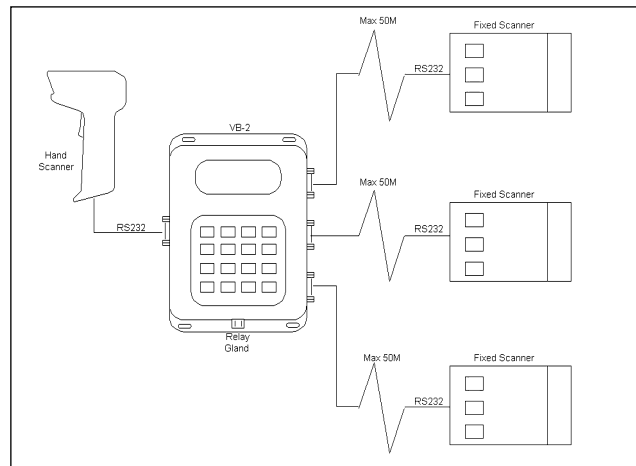
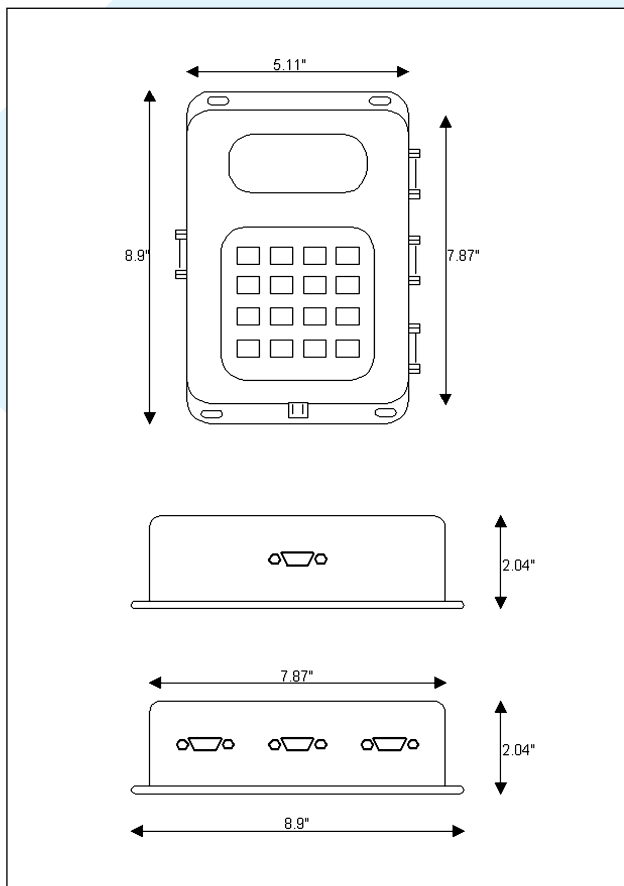




ORBY VB2 in action featuring keyboard entry of the bar code to be verified by the fixed mount scanner. The ORBY eliminates the requirement for an expensive and bulky PC or PLC in the vicinity.

Orby VB-2 General description

The **Orby VB-2** is an 'off the shelf' remote programming device for fixed mount bar code scanners. Most fixed mount (or embedded) bar code scanners can store a "match" code in their memory which allows the scanner to compare its last scanned code with the match code. After each scan the fixed scanner can make a decision (stop conveyor, reject product Etc) without the use of an external controller. This feature is used widely in embedded scanner applications, but involves designing a custom PLC/ PC controller or presenting the bar code to be verified to the fixed mount scanner and then pressing a 'teach' button of some kind. Both methods work but to design a custom PLC or PC based solution is expensive and time consuming and the 'teach' button method creates difficulties when the embedded scanner is difficult



(and dangerous!) to reach. The other disadvantage of the 'teach' button method is there is no display confirming the data is stored in the embedded scanner or showing the current 'match' code on screen.

The VB-2 has been designed to address these issues, housed in a rugged metal frame enclosure the VB-2 connects up to 3 embedded scanners each up to 50 feet away. It is desk or wall mounting so it can be mounted to the outside frame of an OEM machine/conveyor or on a desktop near by. Installation could not be more simple, the VB-2 has an LCD and a keypad on top, a single standard 9 way D-type connector on one side and up to 3 standard 9 way D-type connectors on the other. The single 9 way D-type connects the hand held bar code scanner to the VB-2 and uses a standard PC RS232 cable with 5Vdc power on pin 9 for simple installation. The 3 D-type connectors connect (via RS232) up to 3 fixed mount scanners at once. Each of these scanners can be automatically programmed with the same match code or three different codes.

Once installed the operator simply scans or manually enters (via the keypad) the 'match' code(s) to be verified from the safety of his operating station. The VB-2 then programs each embedded scanner in turn, confirming on the LCD when complete. Once finished the 4 line LCD clearly displays all the current 'match' codes. Once in run mode the VB-2 monitors the embedded scanner and if a 'No Read' or 'Wrong Code' character is received the appropriate PCB relay (standard on VB-2) is triggered for one second. The two PCB relays (Each with N/O and N/C contacts) could be connected across a stop switch or to a PLC Etc.

Features

- Off the shelf 'plug and play' solution.
- Program up to 3 embedded scanners at once.
- Keypad for manual bar code entry.
- 4 line x 20 character LCD to confirm current 'match' code
- 2 x PCB relays for error warning (stop conveyer Etc)
- 9 way D-type connectors (no cable terminals) for easy install
- and quick swap-out
- Standard PC cable used for hand held scanner.
- No 5Vdc supply needed for hand held scanner (supplied on Pin 9)
- Very rugged and small (9" x 5") metal enclosure.
- Desktop or Panel mount option as standard.
- LCD display to confirm embedded scanner has accepted bar code.
- Error warning if fixed scanner(s) not responding.
- Compatible with a wide range of fixed mount and hand held scanner manufacturers.
- Accepts 10 to 30Vdc.

VB-3 Features

- all features of VB-2.
- Storage space for up to 100 product codes and match codes.
- operator simply scrolls to product name and hits 'Enter.'

Orby VB-1

Technical specifications

Electrical Characteristics

Power supply:	10 to 30Vdc
Power Consumption:	52mA @ 24Vdc (125mA with Hand held powered from pin 9)
Connectors:	2 x Standard industrial 9 Way Dtype.
LCD:	24 character x 2 line
RS232:	2 x Standard RS232 ports.

Mechanical

Material:	2mm powder coated mild steel enclosure. Base flange with 4mm slots for easy mounting.
Dimensions:	Height = 2" Length = 8.5" Width = 4"

Environment

Operating Temp:	32 to 104 degrees Fahrenheit
Storage Temp:	0 to 150 degrees Fahrenheit

Orby VB-2

Technical specifications

Electrical Characteristics

Power supply:	10 to 30Vdc
Power Consumption:	58mA @ 24Vdc (130mA with Hand held powered from pin 9)
Connectors:	4 x Standard industrial 9 Way Dtype.
LCD:	20 character x 4 lines
RS232:	4 x Standard RS232 ports.
RS485:	1 x RS485 port
Relay:	2 x PCB mounted relay. Each with N/O and N/C contacts. Rated 250VAC @ 5A

Keypad: 16 button industrial keypad.

Mechanical

Material:	2mm powder coated mild steel enclosure. Base flange with 4mm slots for easy mounting.
Dimensions:	Height = 2" Length = 8.5" Width = 4"

Environment

Operating Temp:	32 to 104 degrees Fahrenheit
Storage Temp:	0 to 150 degrees Fahrenheit

Orby VB-3

Technical specifications

Electrical Characteristics

Power supply:	10 to 30Vdc
Power Consumption:	58mA @ 24Vdc (130mA with Hand held powered from pin 9)
Connectors:	4 x Standard industrial 9 Way Dtype.
LCD:	20 character x 4 lines
RS232:	4 x Standard RS232 ports.
RS485:	1 x RS485 port
Relay:	2 x PCB mounted relay. Each with N/O and N/C contacts. Rated 250VAC @ 5A

Keypad: 16 button industrial keypad.

Mechanical

Material:	2mm powder coated mild steel enclosure. Base flange with 4mm slots for easy mounting.
Dimensions:	Height = 2" Length = 8.5" Width = 4"

Environment

Operating Temp:	32 to 104 degrees Fahrenheit
Storage Temp:	0 to 150 degrees Fahrenheit

Contact

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