FIXED MOUNT SCANNERS — BF Series

FEATURES:

- Integral Decoder
- Visible Red or Infrared Models
- LED Light Source is Shock Resistant
- Elliptical viewing area enhances performance
- User Configurable
- RS-232 or RS-422 Communications
- Reads most Common Barcodes
- Operates From Single 5 Volt Supply
- Machined Aluminum Housing

DESCRIPTION:

The BF Series of fixed beam barcode scanning products feature integral decoding circuitry and ASCII format output data. Units with either visible red and infrared light sources are available. The viewing area is elliptical rather than circular, with the long axis of the ellipse parallel to the bars, resulting in higher read rates. All major functions are user configurable using barcode menus or a serial data terminal enabling the unit to be customized to a particular application. Configuration information is held in nonvolatile EEPROM so that data is not lost when power is removed. The unit reads and decodes seven standard industrial barcode symbologies and automatically recognizes the type of code being scanned when more than one type is configured. Barcode data is output in serial ASCII format at RS-232 or RS-422 levels. All communication parameters are user configurable. The unit operates from a single five volt power supply and is contained in a machined aluminum housing which provides excellent EMI/RFI shielding.

TYPICAL APPLICATIONS:

These units are designed to read and decode barcode symbols passing the scanner in a known orientation and over a specific distance range. The model with a visible red light source is used in most scanning applications. It can read codes where the bars are printed in black or other colors, except red. Infrared units are used in high visible ambient light conditions, in photographic applications where film may be fogged by visible light or in situations where infrared transparent films are placed over the barcode for security reasons. The output can be connected directly to a host computer serial port without additional circuitry.

SPECIFICATIONS:

Electrical

Power:	+5VDC±5% @ 200mA. max. Noise and Ripple < 50mV P-P

Optical

Viewing Area:	elliptical spot 0.01" X 0.04" (See Dimension Drawing)

On code with 0.01" narrow bar and space:

Operating Range:	0.25" to 0.75" from front surface.
Scan Speed:	6 to 60 inches/second.

Light Sources

Visible Models:	Peak Output at 617nM ±2%
Infrared Models:	Peak Output at 880nM ±2% or Peak Output at 940nM±2%

Indicators

Red LED:	Blinks on for each Good Read.

Communications

Type:	Serial ASCII, RS-232 or RS-422 Levels. Baud Rate, stop bits, parity and character delay are user configurable.

Environmental

Temperature:	Operating:	0° to 50°C
	Storage:	-40° to 50°C

CONFIGURATION:

The following characteristics are configurable by the user using a serial terminal or barcode menu.

Barcodes

Code Types:	Code 39 (normal or extended), Interleaved 2 of 5, UPC/EAN/JAN, Codabar, Code 128, Code 11, MSI Code.
Label Length:	to 32 characters.
Check Character:	For Code 39, Code11 and Interleaved 2 of 5.
Stop/Start Char.:	Code 39, Codabar
UPC Decoding:	Enable UPC only, UPC-E expansion and supplemental codes.

Communications:

Baud Rate:	150 to 19,200 baud
Parity:	Mark, Space, Even or Odd
Stop Bits:	1 or 2
Flow Control:	RTS/CTS Hardware Protocol XON/XOFF Software Protocol
Character Delay:	A delay between the transmission of each character, up to 250 mS., is user configurable
Messages:	Several messages can be transmitted with the barcode data. They are: Header, Trailer, Scanner Address and No-read message

SCANNER WIRING:

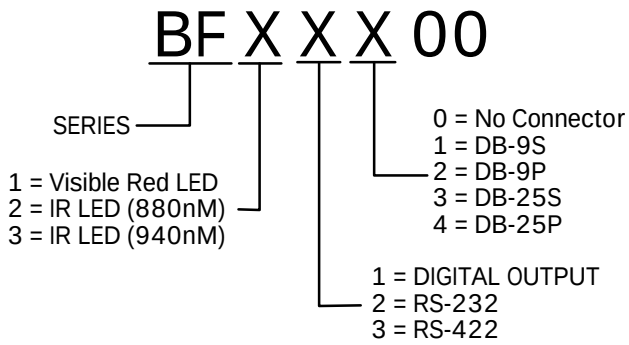
Scanner wiring is shown for the standard DB-9 connector.

PIN	RS-232 Output	RS-422 Output
1	Shield	Shield
2	TxD [WHT]	RxD(+) [BLU]
3	RxD [BLU]	RxD(-) [GRN]
4		TxD(+) [WHT]
5	GND [BLK]	GND [BLK]
6		TxD(-) [BRN]
7	CTS [GRN]	
8	RTS [BRN]	
9	+5VDC [RED]	+5VDC [RED]

Note: Wire colors apply to models without connectors.

PART NUMBERS:

The part number always consists of seven charecters. A specific part number can be constructed from the table below:

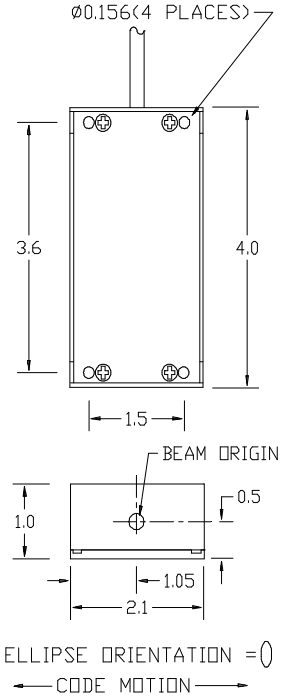


VARIATIONS:

Product variations are available on special order. Common variations include: wire type or length, connector, reverse ellipse orientation and TTL level output.

DIMENSIONS:

(All Dimensions In Inches)



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