

## Barcode Reading Guidelines

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» There are four user-controlled factors that influence scanning performance.



Image 1

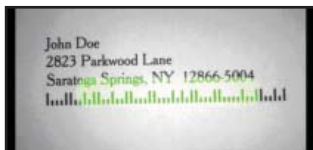


Image 2



Image 3



Image 4



Image 5

### 1. Aiming

When you activate the scanner, an aiming beam is emitted. For wide linear barcodes, the aiming beam should cover approximately 3/4 of the code, centered on the code. The aiming beam should not cover the entire code, nor should it span beyond the ends of the code. *Refer to Images 1 and 2.*

For compact codes like a Data Matrix code and short linear codes, the aimer may extend beyond the edge of the code. *Refer to Images 3 and 4.*

The imager reads barcodes even when the code is not pointed in the same direction as the aiming beam (*Refer to Image 5*). This is called omni-directional reading.

In bright sunlight, the aiming beam may not be visible. Because the imager captures a digital picture of the code, its reading performance will not be diminished when the aiming beam is overpowered by sunlight.

### 2. Distance

The imager is capable of reading codes from 2 to 12 inches; however, typical codes fall into the 5 to 12 inch range. The optimal point of focus is 7 inches. Actual reading distances may vary depending on the dimensions of the barcode.

### 3. Motion

The imager is similar to a digital camera in that it takes digital pictures of a barcode and uses advanced software to find and decode the barcode in the captured image. Like a digital camera, the imager should be held as still as possible when you are reading a barcode.

### 4. Angle

The angle of the code in relation to the imager is a factor in reading performance. The device is designed to read typical barcodes over a range of angles from about  $-45^{\circ}$  to  $+45^{\circ}$ . Reading straight on, however, is not recommended since the reflected light can interfere with reading.