

MULTI-BEAM 2-wire Scanner Blocks

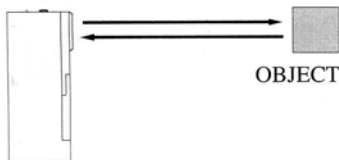
Sensing Mode

Models

Excess Gain

Beam Pattern

DIFFUSE Mode



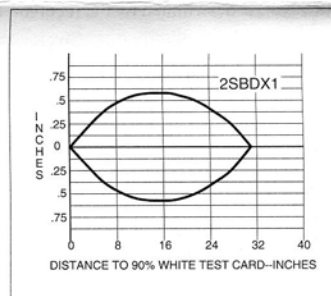
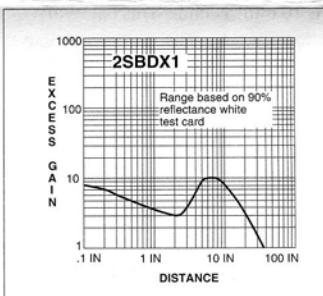
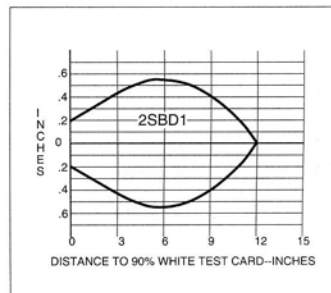
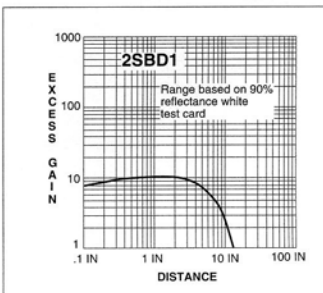
2SBD1

Range: 12 inches (30cm)
Response: 10ms on/off
Repeatability: 2.5ms
Beam: infrared, 880nm

Models 2SBD1 and 2SBDX1 diffuse (proximity) mode scanner blocks are identical except for their lenses. Model 2SBD1 uses upper cover model UC-D, and the 2SBDX1 uses UC-L. While the UC-L lens extends the range to over 30 inches, it creates a "dip" in the excess gain at closer ranges. As a result, the 2SBDX1 may sense a dark colored object at 10 inches, but it may not see it at all at 2 inches. If the application is not completely defined, either scanner block may be ordered, along with the complementary upper cover as an accessory.

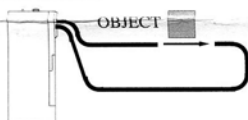
2SBDX1

Range: 30 inches (76cm)
Response: 10ms on/off
Repeatability: 2.5ms
Beam: infrared, 880nm

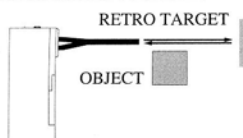


FIBER OPTIC Mode (glass fibers)

OPPOSED MODE



RETROREFLECTIVE MODE



DIFFUSE MODE



2SBF1

Range: see E.G. curves
Response: 10ms on/off
Repeatability: 2.5ms
Beam: infrared, 880nm

Scanner block 2SBF1 combines the simplicity of 2-wire hookup with the sophistication and versatility of optical fibers. The infrared source of this model will work with any Banner glass fiber optic assembly, except bifurcated assemblies with bundle diameters less than 1/16". Since fibers are frequently used for sensing small parts, fast response time is often a consideration. If the application requires response near the 10 millisecond specification of the 2SBF1, consider the faster 3- & 4-wire model SBF1.

For complete information on glass fiber optic assemblies, see the Banner product catalog.

The following fiber optic cables and lenses are commonly used with the model 2SBF1 scanner block:

IT13S: individual assembly, .06 inch (1.5 mm) diameter fiber bundle

IT23S: individual assembly, .12 inch (3 mm) diameter fiber bundle

BT13S: bifurcated assembly, .06 inch (1.5 mm) diameter fiber bundles

BT23S: bifurcated assembly, .12 inch (3 mm) diameter fiber bundles

L9: 0.5 inch (12 mm) diameter lens

L16F: 1.0 inch (25 mm) diameter lens

