



## Built In SmartMark™ Sensor

Last Update: April 21, 2006

Effective with i-TECH serial number I0604849, DFS serial number D0604849 Allen Datagraph started shipping a new model of Smartmark™ sensor. The new sensor auto trains the sensitivity and intensity and does not have a separate user interface.



The new sensor has slightly different color scanning characteristics than the previous sensor. The table below shows the Smartmark™ sensors response to various colors. **If you are making a target the background and foreground colors of the target must be in opposite columns.** E.G. A yellow background with a red target will not work well whereas a blue background will work well with a red target. The numbers next to the colors are the RGB color intensities. Colors are listed in increasing order of response from the sensor vertically in the table.

### Dark Colors

- Mirrored materials
- 0,0,255 blue
- 0,255,200 green-blue
- 0,0,0 black
- 50,50,50 dark dark gray
- 0,150,255 blue blue green
- 0,230,255 blue-green
- 170,0,255 blue-blue-red
- 0,255,0 green
- 100,255,0 green-green-yellow
- 100,100,100 dark grey
- 220,0,255 blue-red

### Bright Colors

- 200,255,0 green-yellow
- 150,150,150 grey
- 255,235,0 yellow-green
- 255,0,255 red-blue
- 255,0,0 red
- 255,0,200 red-red-blue
- 255,0,100 red-red-red-blue
- 255,255,0 yellow
- 255,100,0 red orange
- 255,200,0 orange
- 200,200,200 light grey
- 240,240,240 off white
- 255,255,255 white

**Difference between the old sensor and the new sensor:**

Mirrored materials appear as white on the old sensor. On the new sensor mirrored materials appear black. As such if you have been printing black targets on mirrored materials without a background this combination will no longer work. You should either print a background for the target scan area or change the color of the target to a bright color as shown in the table above.