Barcode Automation, inc.’s BA-490 improves traffic flow and data accuracy at transfer stations, dump sites, and recycling facilities by automatically collecting data so employees or drivers don’t have to. Each Barcode Decal is created specific to your data requirements which the BA-490 will accurately identify and transmit to your computer system. The digits can then be configured by your IT Specialist to designate anything from driver ID, site location, trailer number, material, or anything else.

A BAi Barcode Decal is applied to the side of trucks or trailers with access to your facility. The Reader is installed next to a checkpoint (weigh station, entry lane, etc.) that the trucks drive past. A dual laser system automatically reads the decal as it passes the reader. This is not a handheld Barcode Reader, nor requires any manpower. Install it next to a checkpoint, and it does the rest! The lasers accurately identify the Decals while they are traveling 25mph or less at a distance of 12ft. Once the Decal is identified the Reader transmits the digits along with date and time via serial RS232 or network to your computer system.
BA-490 DualBeam Barcode Reader for Industrial Applications

Technical Specifications
Corning® Gorilla® Glass window for better damage resistance
Built-in diagnostics
Low voltage power input, 24Vdc @ 1.5A
5 year limited warranty, 10+ year life expectancy
Built-in lightning and power surge protection

Light Source
Visible Laser Diode
Output Wavelength (nominal): 658nM
CDRH Safety: Class II
Output Power: less than 1mW/cm²

Read Zone
Horizontal read area:
- 24” to 144” out from the Reader, measured from the window
Vertical read area:
- Expands at 60° angle from center of window
- At 24” out from window, the vertical read area is ±15” from middle of Reader’s window

Communication Outputs
RS232 Serial Port and USB Port
- Baud Rate: 2400, 4800, 9600, 19200, 38400
- Parameters: 8N1
Optional Network Module

Relay Outputs
Relay1 and Relay2
Contacts: Do not exceed 30Vdc @ 2A continuous

Read Indicator
Audible beep for successful read of decal

Power Input
Voltage input: 24Vdc Only @ 1.5A max
Power: 36 Watts max

Environmental
Operating temperatures:
- -22° to 130° F (-30° to 55° C)
Relative Humidity:
- 10% to 100% (non-condensing)

Mechanical Specifications:
NEMA 4 Enclosure
BA-440i
Guaranteed Read Zone

The zero point is the middle of the Reader’s window, approximately 5.75” above the base of the reader. You must position the Reader at the appropriate height for the payloads you will be identifying.
Barcode Automation Industrial Decals are developed specifically for use with BAi Readers and cannot be read by any other barcode scanners. BAi Decals use a proprietary barcode symbology developed for long range capability in outdoor environments.

Decals come in 4, 6, or 8 digit options giving you the flexibility to order the numbers that make sense for your operation. You specify exactly what number you want to appear when read. This enables you to use some digits for identification and others for classification.

For example:
You could use 5 digits that match a facility’s zipcode and the remaining 3 to give each of your bins a unique ID number.

Decal Specifications:
• Guaranteed to be read from 12’ away
• Available in 30 color combinations.
• 3.75” across by 7” vertical (for 8 digits)
• 2 year warranty, 5+ year life expectancy
• Smaller BAi Decals available (6’ read range)
• No minimum quantity