# **Barcode Automation, inc.**



The BA-440 DualBeam Barcode Reader identifies BAi decals traveling up to 25mph using laser technology. This is the most reliable and affordable solution for hands-free access control at gated communities, high rises, employee parking and other controlled access sites.

**BA** DualBeam





## Barcode Automation, inc. Laser Vehicle Identification

The **BA-440 DualBeam Barcode Reader** is an advanced, laser-based automatic vehicle identification system for access control. The BA-440 is installed next to the road leading up to a gate or barrier arm. Each authorized vehicle has a barcode decal placed on its side facing the reader. The barcode is read instantly and automatically as the vehicle passes.

The BA-440 uses advanced laser technology to read only BAi barcode decals. It will not read copies or fake decals.

- Automatically identifies vehicles traveling up to 25mph.
- Compatible with all access control panels, gate operators, and visitor management systems.
- Handles 99,999 unique identification numbers.
- Free from problems with radio, static, and electronic interference.
- Weather sealed body protects against rain, sand, and snow.



### **BAi Barcode Decals**

BAi Decals are your key to automatic vehicle identification. There are no embedded electronics or RF ID trackers in our decals.

Each decal has a unique number so you know exactly which vehicle enters. Our decals are available in 30 unique color combinations. For most applications, our black on black decal (seen above) is ideal. In addition, decals can be sold to vendors or service providers who need regular access, which generates revenue.

- Decals once properly applied cannot be lost, shared or stolen.
- 30 color combinations of decals available.
- You may customize decals with additional text or graphics.
- Larger decals available for campers, buses, and other oversized vehicles. Extends range to 12'.
- Temporary handheld decals available for loaner vehicles.



### Testimonials

"BAi Readers simply work, after the initial install we can forget about them and trust that they will hold up for years to come. So much so that if we ever get a complaint about them not working we know right away that there is user error involved. We can count on the BAi barcode reader equipment as the least likely cause when our gates aren't working."

#### James Armstrong, Assistant Community Manager Access Management

"I would definitely recommend Barcode Automation readers, they are accurate, convenient, and do the job we need done, with very little downtime. Our owners and staff have been very pleased with them and we will continue to use them."

#### Marla Miller, CCAM, PCAM, General Manager Niguel Shores Community Association

"When considering systems, a big concern for us is the high turnover rate. We have approximately 2,000 students living here and 1,600 of those change each year. We needed a system that students wouldn't be able to take with them or retain access of after leaving. Barcode Automation's system provided the solution for this because students can't share the decal and we can deactive them when they leave."

Jack Haag, Service Manager Knights Circle - UCF Affiliated Student Housing



# A solution to radio transponder issues and costs.

Radio based tags, also known as RF ID, RF tags, or radio transponders have a lot of known issues. Radio transponder problems are often caused by windshield treatments, and made worse by many vehicle safety features. Window tints include metal aggregates to block sunlight (UV Protection). These aggregates also block some radio waves, decreasing reliability in radio based access control.

Newer car safety features are being added every year, often involving electronic signals. These include radar detectors, pre-collision detection, lane departure warnings, autonomous cruise control, and more. All of these put out electronic signals that can make it more difficult for transponders to function.

## The advantage to our laser barcode reader is that no electronic interference will affect your access control system.

Barcode Automation's BA-440 doesn't rely on radio signals, which means none of the above mentioned issues affect it. Additionally, our laser technology system is "future proof" in that no matter how advanced vehicle technology gets, there will be no interference issues costing you time and money. You can install our BA-440 DualBeam Barcode Reader today, and trust that it will work reliably for 10 years or more.

#### Reversing the price model to lower your operational costs.

Our decals cost 30-50% less than the least expensive radio transponders. This reverses the price model established by radio transponder companies. Theirs is a relatively inexpensive antenna with expensive tags, we provide a slightly more expensive reader with significantly less expensive decals. For many properties our price structure results in substantial cost reductions.

# **BA-440 Technical Specifications**

#### ETL Listed to UL Standard 294

#### **Communication Outputs**

Wiegand 26bit, 30bit, 31bit Serial RS232 USB port (requires driver) Data rate: 2400, 4800, 9600, 19200, 38400 Baud Configuration: 8N1, 7E1

#### Environmental

Operating temperatures -22° F to 130° F Relative humidity 10% to 100% (non-condensing) NEMA 4 enclosure

#### Power

Voltage input 24Vdc @ 1.5A max

#### Decals

Small decals 3.7" x 2.5" 6' read range 30 color combinations Customizable Large decals 7" x 3.7" 12' read range 24 color combinations

#### Laser Type

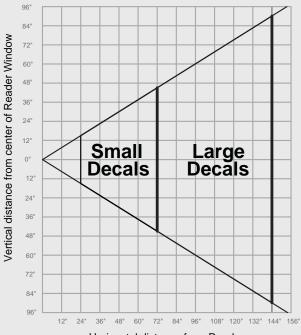
Visible laser diode Output wavelength (nominal): 658nM CDRH safety class II, less than 1mW/cM<sup>2</sup>

#### **Read Area Specifications**

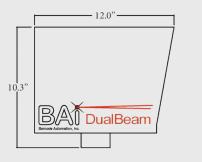
Horizontal operating Distance: 24in to 72in Vertical read area: At 24in out from reader, laser extends from 36in to 65in above ground

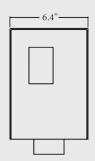
#### **Built-in Functionality**

Power surge and lightning protection Wiegand diagnostics Aux in/out for use with external loop detector Good read relay to control gate operator directly



Horizontal distance from Reader







**BA-440** 

**Read Zone** 





## **Positioning your BA-440 Reader**

The BA-440 DualBeam Reader gets installed on the side of the road leading up to a gate or barrier arm. We recommend positioning the Reader one and a half car lengths before the gate. Most important is ensuring that vehicles have space to pass it entirely before having to stop. The speed and convenience is primarily determined by the type of barrier in use. A slow moving barrier such as a swing gate or roll-up may require vehicles to completely stop; while a high speed barrier arm can allow vehicles to travel through at the full 25 mph.

The BA-440 should be installed roughly 2' from where vehicles will be driving to allow a useful field of view. At 2' the lasers go from 36" above the ground to 65" above the ground. Our small decals are guaranteed to be read 6' away. We also manufacture large decals that are guaranteed to be read 12' away. The large decals are for large commercial trucks and RVs.



Barcode Automation, inc. Readers and Decals are available only through gate installation companies. We have installation providers throughout the US and Canada ready to help you with installation and maintenance on your entire access control system.

To locate a Barcode Automation installation company call us at **1-800-528-9167** or visit **www.Barcode-Automation.com**. If you already have a preferred service provider, ask them to contact us to order BAi equipment.



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