

Barcode Automation, inc.

LASER

VEHICLE IDENTIFICATION

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.





BAi DualBeam Readers for hands-free 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 most access control panels, gate operators, and visitor management systems.
- Handles up to 99,999 unique identification numbers.
- Weather sealed NEMA IV enclosure protects against rain, sand, and snow.
- ETL certified to UL Standard 294 for outdoor use ensures compliance with strict building codes; and potentially lowers your liability.





BAi Barcode Decals

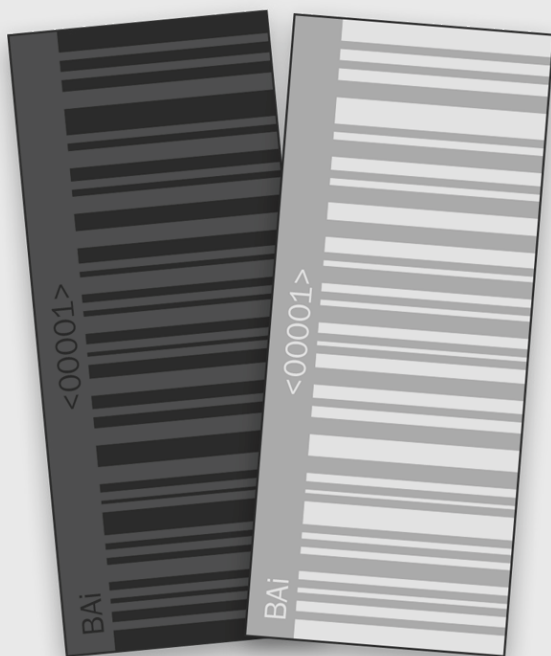
BAi Decals are your key to automatic vehicle identification. They are more secure, more affordable, and more manageable than any other credentials.

BAi Decals measure 1.25" by 3" in size and come standard in a black on black or white on white colorway. The result is a very unobtrusive decal.

More Affordable - BAI Decals are about 40% less than comparable RFID windshield tags, and more than 50% less than RFID headlamp tags.

More Secure - BAI Decals do not receive or transmit any radio signals that can be easily intercepted and cloned.

More Manageable - BAI helps our customers with accurate record keeping of decal sequences produced, so you'll always get the right credentials for your property.



(Actual Size)

"The long term cost savings alone should be the biggest motivator. There's no batteries to go bad, and luxury vehicles won't disrupt the read range. The black on black decal is practically invisible, and its not able to be stolen intact."

Matthew Melton, Access Control Specialist with Western Door & Gate (Las Vegas)



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 deactivate them when they leave."

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





Integration and Security

BAi System Integration

BAi Readers are manufactured to work with any access control and visitor management platform. Communication is available through industry standard Wiegand communication; as well as via Serial RS-232 Port. USB is also included for configuration, diagnostics, and advanced setups.

An additional strength of BAI Readers is **stand-alone mode**. Unique among automatic vehicle identification systems, BAI Readers have the ability to control a gate or barrier arm directly.

BAi System Security

BAi credentials are not processed or transmitted via radio or electronic signals. This prevents common, and increasing, security threats that plague radio and bluetooth systems; such as cloning, man-in-the-middle attacks, and digital emulation.

Additionally, BAI Readers are precision laser devices that will not process imitation decals such as photocopies, copies on glossy paper, and photos on smart phones. Only authentic BAI Decals work.



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

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

Standard decals

1.25" x 3", speeds up to 15mph

2" x 3", speeds up to 25mph

6' read range

Large decals

7" x 3.7", speeds up to 25mph

12' read range

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

Laser Type

Visible laser diode

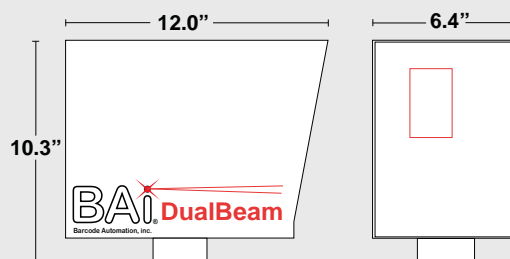
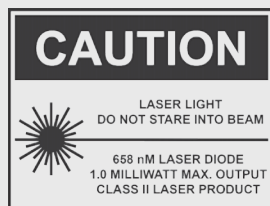
Output wavelength (nominal): 658nm²

CDRH safety class II, less than 1mW/cm²

Read Area Specifications

The lasers expand vertically to cover all size vehicles. Good read area starts at 2ft out from the Reader. At that point the laser will have expanded to cover 36 inches above the ground to 65 inches above the ground (using our standard height post mount).

Conforms to
UL STD 294
Outside Use





Positioning your BA-440 Reader

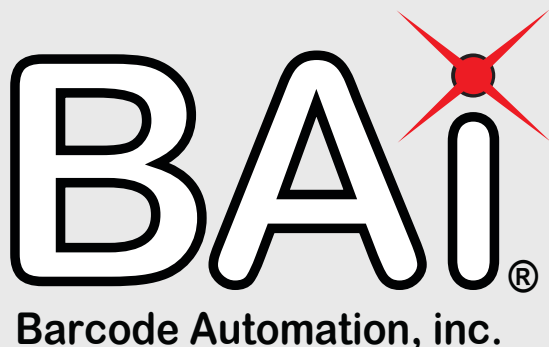
The BA-440 DualBeam Reader should be installed perpendicular to the road where vehicles are to be identified. We recommend positioning the Reader one and a half car lengths before the gate. Most important is ensuring that vehicles have space to pass it entirely before having to stop. The speed and convenience 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 speeds up to 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 standard 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 access control or 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.



Barcode Automation, inc.

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