

## Installation Instructions

### WS-UHF Windshield Tag

## **PLEASE READ BEFORE ATTACHING TAGS**

*The WS-UHF Windshield Tag is for vehicle identification in access systems that use AWID's UHF long-range readers LR-2000, LR-2200, LR-3000, and their "HiLo" variations. The tag is attached securely inside a glass windshield. The installing dealer must give instructions to the customer. End-users need assistance for correct use of this tag.*

### READER LOCATION

The UHF long-range reader is usually installed so that it faces a clear, open space shaped like a balloon about 30 feet long and 16 feet diameter. An adjustable-head bracket lets the installer aim the reader toward the location of tags on vehicles. The reader may be mounted at the side of the travel lane, or above the lane. For all sizes of **passenger cars**, typical mounting height is 8 feet if the reader is at the side of the lane, or 9 feet for clearance if the reader is above the lane.

### TAG LOCATION

- The WS-UHF tag must be installed inside the reader's effective RF field, usually 20-25 feet in front of the reader.
- The tag reads best if it is in line with the reader, face-to-face, with clear line of sight between the tag and the reader.
- If the reader is at the **side** of the travel lane, attach the tag on the same side of the windshield, inside the glass.
- If the reader is **above** the travel lane, attach the tag inside the windshield at its top-center, facing the reader.

The WS-UHF tag has only **one application** – permanent attachment inside the windshield glass, using the tag's single-use self-adhesive. When reading, this tag may not be held in the fingers, or carried, or taped, or inserted into a card pouch.

### VEHICLE CHARACTERISTICS

Most vehicles read a windshield tag very well. A few vehicles may have **metallic coating** on the windshield, or **wires embedded** in the glass, which shorten the read range. If so, we may need to use a different tag location or tag type. A successful location may be at **top-center** of the windshield, where most recent cars have an uncoated area.

### TEST FOR RELIABLE TAG READING

1. Move the vehicle so that the windshield is in the planned reading space. Press the plastic-sheet side of the WS-UHF tag flat inside the windshield. Use a hand-sized block of flexible plastic foam, about 4 inches thick, to press the tag. Tag reads are indicated by AWID's LR-Sounder clipped to the reader's wires, or by the reader's LED, or by gate opening. (Do not use adhesive to hold the test tag against the glass. The same test tag may be used repeatedly.)
2. To identify the ideal tag location inside the windshield, move the test tag to different locations – high and low. Try both "portrait" and "landscape" orientations. Stay several inches from edge of windshield to avoid tag "shading".

### ATTACHING THE TAG

1. Prepare the windshield – clean it with glass cleaner spray and a paper towel.
2. Keep the tag flat while you peel the plastic sheet gently from the tag's adhesive.
3. Hold the tag up to the glass inside the windshield at the selected location.
4. Press the tag firmly so that it is flat and smooth on the glass – no bubbles.
5. The tag's adhesive bonds in 24 hours. It continues curing to assure single use.

This is a *destructible* tag for *one-time* application. After the adhesive cures, the tag will be destroyed if it is ripped off the glass. The tag has slits that give evidence of tampering.

### ALTERNATIVES

- This tag can be installed on a *side window* (a) if the reader is at the side, facing the tag, and (b) if the window is unmovable so that the tag is always visible to the reader.
- AWID has other tag types for installation inside and outside vehicles. Please see AWID's Credentials product sheets, or talk with the Sales or Technical staff.

**FOR END USERS** Prepare written instructions for the customer. Train the customer's technician in this installation procedure. The end users may not be able to install tags well.

