



Maximum RFID

# LR-TEK™ LR Reader Tech Kit



AWID's LR-TEK UHF Test/Demo Kit is the tool that –

- helps to sell a new UHF long-range reader,
- tests a new reader before you leave for the installation site,
- shows correct performance of the reader during installation,
- identifies the source of problem during a service call, and
- provides visible and audible feedback as the reader reads tags.

The LR-TEK is provided in a small, sturdy carton with fitted padding. It works with AWID's uAccess UHF reader models as well as long-range readers. The LR-TEK is a low-cost way to observe the performance of a reader without interface to the controller of an access control system, and to change the UHF long-range reader's repetition rate and RF power level. The Kit turns much of the work into a *one-man job*.

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The LR-TEK does 10 valuable things that can quickly pay for the Kit.

### **Demonstrate your UHF long-range or uAccess reader and tags**

- The LR-Sounder clips to the reader and the power supply's terminals.

### **Test the proposed reader location**

- Survey the area for spurious RF that might interfere with the reader.
- Show the reader reading at the rated distance for the tags or cards.

### **Bench-test the products at your shop before going to the site**

- Be confident of products' good performance before leaving your shop.

### **Test the reader before interfacing it to your system**

- See the reader reading tags, held in fingers and mounted in vehicles.
- Connect the reader to a PC to observe codes, and to change reader's read rate or RF field strength (with AWID's free "LRRS" program).

### **Test the completed installation**

- Prove that reader mounting, power, cable, wiring and tags are good.
- Test everything up to the system's wiring and programming.

### **Trouble-shoot an installed system**

- Save time by isolating reader and tagged vehicles, substituting the DC power source, or the cable, or the reader, or the tags for test.

### **Save the LR-TEK Kit for use by others when needed**

- Store the Kit in a handy place for demos, scans, tests and repairs.

## FEATURES

- Self-contained Kit ...  
*All components in a small fitted carton*
- Easy to use ...  
*Simple instructions are included*
- Quick set-up ...  
*Items connect by clip leads and plugs*
- Variety of uses ...  
*Kit contains all necessary items*
- For effective presentations ...  
*Your reader gives real reads fast*
- Build confidence at your office ...  
*See actual operation on your bench*
- Answers questions at installation ...  
*Kit shows isolated reader & tags working*
- Trouble-shooting in a service call ...  
*Isolates components of the system*
- Shows where repair is needed ...  
*Substitutes for parts of the installation*
- A valuable investment by you ...  
*Payback from time saved and confidence*

[Instructions are on page 2.](#)



## COMPONENTS OF THE LR-TEK KIT

**LR-Sounder Test Unit** Contains a beeper and an LED to indicate every tag read, and a cable with clip leads for DC power and RS-232 Transmit Data. Clips to the power supply and to the reader being tested.

**DC Power Supply** AWID's PS-123.3A plug-in module – nominal 12 volts output; load up to 3.3 amperes.

**USB-to-DB9 Adapter** Cable (black, 22 inches) with USB plug and DB9 male connector. Download the USB driver: [www.awid.com](http://www.awid.com) --> ACCESS CONTROL tab --> (External Links) --> LR-TEK USB Driver.

**DB9-to-Clips Adapter** Cable (gray, 16 inches) with DB9 female connector and 3 clips for the reader's RS-232 interface wires.

**Test Tags** AWID's WS-UHF windshield tag (on windshield glass) and CS-UHF clamshell card, for hand tests.

**Carton** A sturdy container with fitted foam padding to support and protect the components between uses.

## INSTRUCTIONS

- Start here . . .**
1. Connect your LR reader's yellow wire to the reader's black wire. This arms the reader.
  2. Clip the LR-Sounder's black and red wires to the same color wires on the reader. (Keep yellow connected.)
  3. Clip the power module's black and red wires to other wires with same colors. Plug in the power module.

**Then select a task . . .**

### **A. To test or demonstrate an AWID UHF long-range or uAccess reader**

- A1. Clip the LR-Sounder's orange wire to the orange wire on your reader.
- A2. Present 1 test tag or card to the reader. The LR-Sounder beeps and the LED changes color for every read.

### **B. To interface an LR reader to a PC's port (running a suitable driver and program on the PC)**

- B1. On the adapter with gray cable, clip the orange, blue and violet wires to the reader's same-color wires.
- B2. If the PC has no 9-pin serial port, add the adapter with black cable, mating the two DB9 connectors.
- B3. Plug the cable adapter's USB connector or DB9 connector into the matching port on your PC.
- B4. Present a single card or tag to the reader. Observe tag reads on the PC's screen.

### **C. To display the tag's code on a PC (using Windows HyperTerminal or AWID's LRRS program)**

- C1. For HyperTerminal (if available): Start > Programs > Accessories > Communications > HyperTerminal.
- C2. For AWID's "LRReaderSettings" program: Download from AWID's Web site > Support > Downloads.
- C3. Present a single card or tag to the reader. Observe reads as a line of 18 ANSI characters for each read.

### **D. To program the long-range reader for "Read Rep Rate" and "RF Power Atten."**

- D1. Start AWID's "LRReaderSettings" program (downloaded from AWID's Web site > Support > Downloads).
- D2. Make the desired change in Read Rep Rate or in RF Power Attenuation. Read the program's Instructions.
- D3. After you "Apply" or "Set" the change, check the change immediately by holding a tag or card at the reader and watching the list of Tag Read data.

