

Quick Installation Guide – LR-2000 Installation Kit

If you are new to the LR-2000 reader, or this is your first long-range installation, and you are having any concerns, we suggest that you call AWID Support at +1-408-825-1100.

The LR-2000 Installation Kit is required for planning and installing the LR-2000 reader and vehicle tags. Keep this Kit together, with this Guide, for quick access in your truck or at your shop. It is your prime tool for building confidence in performance of the LR-2000 reader and its tags. The Kit is a first-time, one-time-only purchase.

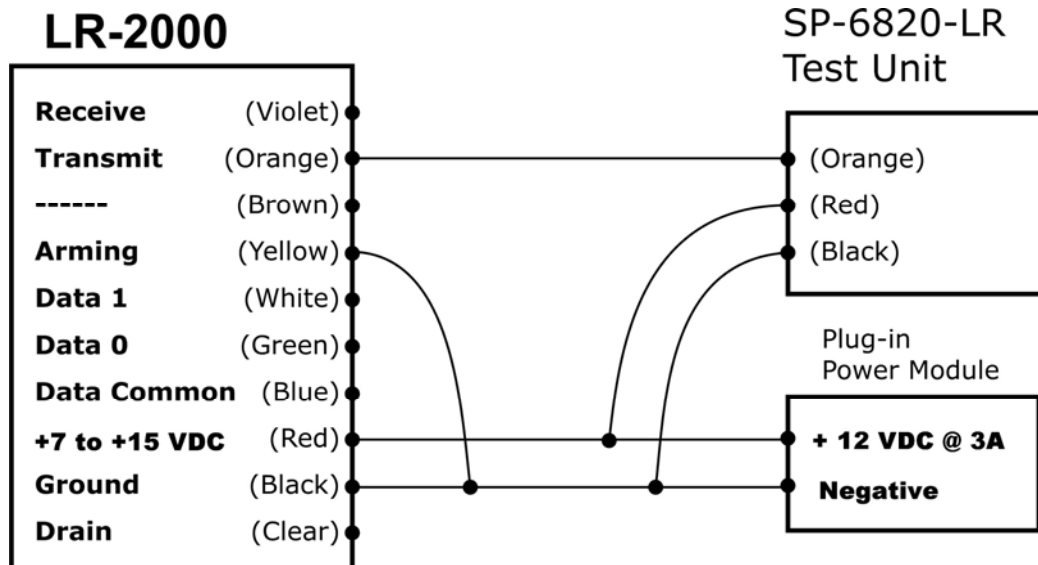
Uses for the LR-2000 Installation Kit

- Demonstrating the LR-2000 to your sales prospects and customers.
- Testing the planned location, to assure uninterrupted operation of the long-range reader at the site.
- Selecting the ideal location for mounting the vehicle tags inside the windshield or outside the vehicle.
- Proving that the vehicle tags operate well after they are mounted in or on the vehicle.
- Substituting for the installed LR-2000 reader in a service call.
- Observing the performance of a regular LR-2000, either in bench-testing or when installed at the site.

Parts of the Kit

- **“EVAL” Reader** – This is the 8 inch by 8 inch reader. It is a permanent part of this Kit. It has no data output. There is no interface to your system. It is for testing only. The “EVAL” reader contains *no* LED or beeper.
- **RF Signal Detector** – You may carry this thumb-sized tester to detect RF from the “EVAL” reader, or to detect and locate interfering RF from other sources. It chirps steadily to indicate when the reader is transmitting RF.
- **Test Unit** – This small unit (about 3 inches by 4-1/2 inches) alerts you to every read of the tag by the reader. It beeps and shows an LED event with every read. It is your ears and eyes in demoing and testing an installation.
- **DC Power Module** – The black “brick” plugs into any 120 volts AC grounded receptacle. It provides 12 volts DC with enough current for testing with this Kit (but not enough for permanent installation of an LR-2000 reader).
- **Credentials** – Included are a Graphic card (UHF GR), a Clam Shell card (UHF CS), a Hang Tag (UHF HT), a Visor Tag (UHF VT), a Windshield Tag (UHF WS) mounted on a piece of windshield glass, a Metal Tag (UHF MT) and a Rearview Mirror Tag (UHF RT).

Connections for Testing with “EVAL” Reader



Use only the parts from this LR-2000 Installation Kit, including the “EVAL” Reader.

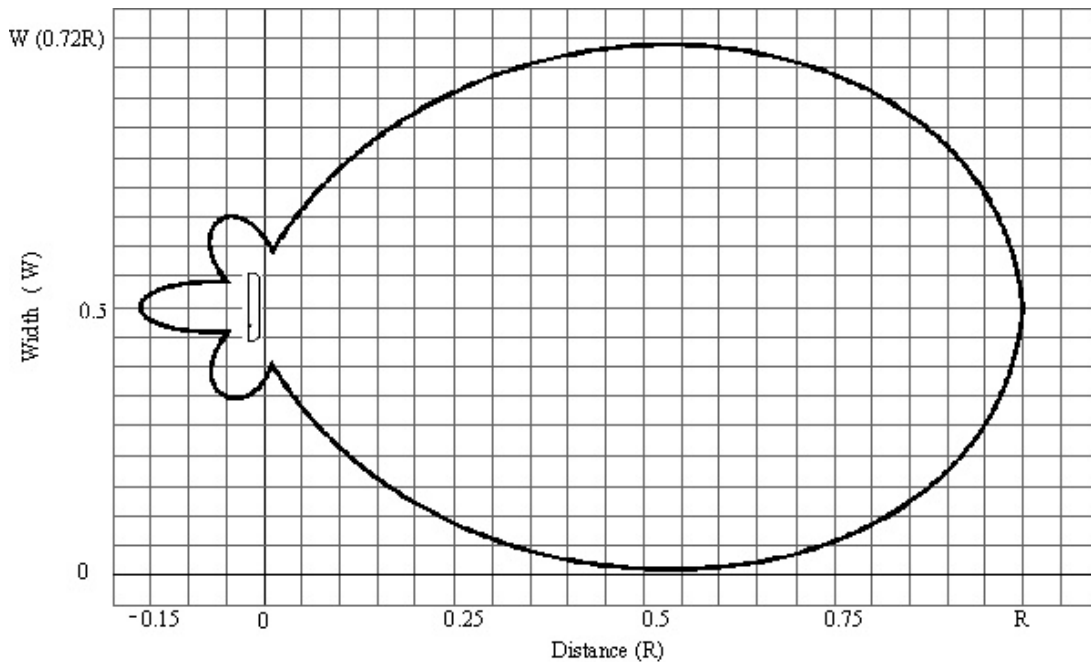
1. Clip the test unit’s black lead, the power module’s black clip, and the reader’s black and yellow wires together.
2. Clip the test unit’s orange lead to the “EVAL” reader’s orange wire.
3. Clip the test unit’s red lead, the power module’s red clip, and the “EVAL” reader’s red wire together.
4. Plug the power module into a 120 volt AC receptacle.

Connections to Test Installed LR-2000 Reader

Use the LR-2000 reader that is installed and interfaced to the access control system, or being bench-tested for installation.

1. Clip the test unit’s black lead, the power module’s black clip, and the reader’s black and yellow wires together.
2. Clip the test unit’s orange lead to the LR-2000 reader’s orange wire.
3. Clip the test unit’s red lead, the power module’s red clip, and the LR-2000 reader’s red wire together.
4. Plug the power module into a 120 volts AC receptacle.

Measuring Performance



Test for these standard performance parameters.

- (Note: Avoid holding the reader by hand. You will measure best read range when the reader and tags are away from your hands and body.)
- Support the “EVAL” reader so that it is in a clear area, at least 4 feet from the floor and walls.
 - Starting close to the “EVAL” reader, move the test tag back along an imaginary line from the front of the reader. Search for the farthest point at which a read is indicated by the test unit – typically 10-15 feet for the HT, and 7-9 feet for the CS tag. This determines the range of the reader.
 - Holding the tag at half of the maximum range, move the tag up and down, and side to side, to determine the height and width of the effective RF field. This is typically 5-6 feet diameter of the field’s circular cross-section.
 - Hold the test tag at 8 feet measured between the reader and tag. Move the tag around to measure the cross-section of the RF field. This is the “sweet spot” at which most vehicle tags will be read by the reader after it is installed.
 - After the tag has been positioned on the rear view mirror or on the visor in the vehicle, hold the “EVAL” reader in front of the tag, with the face of the reader parallel to the tag. Move the reader away from the tag to find the maximum reading distance (the read range).

More Information

Visit AWID’s web site (www.awid.com) for product data and downloads. For technical support questions visit www.awid.com/support or call **+1-800-369-5533** (in the U.S.) or **+1-408-825-1100** from 8:00 a.m. to 5:00 p.m. Pacific Time.