

Technical Reference

LR-2000 Reader – Material List for Installation

These items are components of most installations with AWID's LR-2000 UHF long-range reader. Items 1 to 5 are AWID's standard products. Items 1 through 8 are described in AWID's technical documents. Items 6 through 12 are available from local distributors or online suppliers. FOR OUTDOOR LOCATION EXPOSED TO WEATHER, USE LR-3000 READER.

Qty.	Part Number	Product	Source
1.	___ LR-2000-B-U	Long-Range UHF Reader, 902-928 MHz band, with antenna; limited weather protection.	AWID
2.	___ LR-MB-0-0	Mounting Bracket for LR-2000 reader, 11 inches long, pan-and-tilt adjustable head.	AWID
3.	___ (see product sheet or price list)	Tags and Cards (select): WS-UHF Windshield Tag, RV-UHF Rearview Mirror Tag, SV-UHF Sideview Mirror Tag, VT-UHF Sunvisor Tag, PT-UHF Portable Tag, HT-UHF Hangtag, MT-UHF Metal-Mount Tag, ST-UHF Supertag, KT-UHF Keytag, CS-UHF Clamshell Card, and/or GR-UHF Graphics Card. (Include code information in order: bit format, facility or site code, and starting ID no.)	AWID
4.	1 LR-TEK-0-0	LR Reader Tech Kit with LR-Sounder test unit, PS-123.3A power module, WS-UHF tag on windshield glass, CS-UHF card, dual cable adapter (USB to DB9 to clips), instructions, and fitted carton. (Kit is required first-time order for each installer company.) <u>See Note 1.</u>	AWID
5.	___ PS-123.3A-0-0	DC Power Module for LR-2000 reader (1 power supply dedicated to each reader), plug-in type, ~12 volts, 3.3 amperes maximum load. (DC power specifications for LR-2000 are 12 to 14 volts DC, 2.5 amperes or 3.5 amperes rating, linear, regulated. <u>See Note 2.</u>)	AWID
6.	___ _____	Pole, post, pedestal or arm to locate LR-2000 reader (if required): For passenger vehicles, ~8 feet high, at side of lane. Reader may be mounted above vehicle lane, using a bracket. Mounting for other vehicle types: Call AWID's Technical Support.	<u>See Note 3</u>
7.	___ _____	Cable for DATA: 22 gauge, 3 conductors, overall <u>shielded*</u> , not twisted-pairs, color-coded insulation, plastic jacket. Length = up to 500 feet for Wiegand or 75 feet for RS-232. For data from one reader to the panel's input port. <u>See Note 4.</u>	Distributor
8.	___ _____	Cable for POWER: 18 gauge, 2 conductors, overall <u>shielded*</u> , color-coded insulation, plastic jacket. Length = must be at least 12 feet, up to 500 feet. For DC power between one reader and its dedicated power supply. <u>See Note 4.</u> (* Power cable must be shielded.)	Distributor
9.	___ _____	Vehicle sensors: safety loop (1 required for each gate); reader arming loop (1 for each reader if presence of vehicle arms the reader).	Distributor
10.	___ _____	Gate, Gate Motor and Controller as selected by the installer.	Manufacturer
11.	1 _____	Access Control or A.V.I. System (the "head end") as selected by the user or installer.	Distr. or Mnfr.
12.	___ PCH196	Protective Housing: polycarbonate. For reader outdoors if exposed directly to weather.	<u>See Note 5</u>

Note 1 LR-2000KIT UHF Reader Test Kit is an alternative. It contains also the LR-2000-EVAL reader, and a set of 7 UHF tags and cards, in a carrying case. For stand-alone demo, site evaluation, and reader testing by substitution.

Note 2 Each LR-2000 reader must have one independent, dedicated DC power supply. For permanent installations, AWID recommends Altronix SMP3 or LPS3 if the power cable is up to 300 feet, and Altronix SMP5 or LPS5 if the power cable is between 300 and 500 feet long. Include the required transformer for low voltage AC. Install the power supply 12 feet or **more** (both power-cable length and straight-line distance) from the LR-2000 reader.

Note 3 Sources for mounting hardware (item 6): See www.Tapconet.com or other supplier of parking or traffic control products.

Note 4 Cables in items 7 and 8 may be combined in a single 18 gauge, 5-conductor, overall-shielded cable for each LR-2000 reader.

* Important: All cables, including power, **must** be shielded.

Note 5 Source of the PCH196 Housing is The Housing Company (www.TheHousingCompany.com) or a local distributor.