

## **Technical Reference**

### **Cards and Tags**

#### **Explanation, Preparation and Use**

*These items apply to all of AWID's hand-held credentials – encoded cards, tags and wafers – for all frequency ranges.*

##### **A. The Story of AWID's Credentials**

- A “credential” (encoded card, tag or wafer) is a small digital electronic device (“transducer”) that contains a code that identifies the cardholder to the system with which it is used. The purpose of the system may be physical access to a door, computer data security, time-and-attendance (a “digital time-clock”), motion tracking of the user, etc.
- AWID's credentials work in partnership with AWID “readers”. A reader provides the energy to make the credential work; it tests the credential's internal code to make sure that it is authorized to “talk” to the reader (by radio transmission of digital pulses); and it transmits the identifying code for the cardholder to the electronic system to which the reader is wired.
- The real value of the credential – the card, the tag, or the wafer that you are using – is its ability to open doors for you, or to assure correct work-time calculation, or to open a gate for your vehicle . . . whatever the system's application is.
- The credentials made by AWID are designed for faithful performance and long life. They read reliably and promptly when they are presented to AWID's readers, and they transmit their true code accurately.
- The credentials do this job for a long time – *forever*, as long as the readers and the system are intact and functional. There is no battery inside the credential to run down or to require recharging. The credentials are always ready to operate.
- To assure that the foregoing statement is accurate, the users of the credentials must use reasonable care to assure that the credentials are always in good condition and able to work.

##### **B. Some DOs and DON'Ts**

###### Do . . .

- Treat your card or tag like a valuable instrument – like a watch or a piece of jewelry.
- Carry the card or tag in a pocket or, if properly equipped, on a chain or strap or ring.
- Use a flexible chain or strap to secure a card that has a slot.

###### Do Not . . .

- Don't bend, twist or fold the card.
- Don't use the card or tag as a tool for prying, twisting or scraping.
- Don't use a key ring with any card. Key rings are for the keytags only.
- Don't let the card, if fastened by a retracting cord to your belt, get bent when sitting.
- Don't leave the card or tag on your car's dashboard on a hot, sunny day.
- Don't leave the card or tag in a pocket when washing and drying clothing.
- Don't let your dog mistake the card or tag for a dog biscuit.

**C. Suggestions**

- Cards may be carried in a wallet or handbag. To read *UHF* cards, they must be held in the fingers, facing the reader.
- Cards may be used as photo ID badges by applying printed overlays, or by printing directly on the ISO graphics-ready cards (one or both sides).
- Follow manufacturer's instructions carefully when adjusting printers and laminators. Set the proper thickness for card plus overlay (if used). Adjust for lowest settings consistent with good results. Test a sample card for correct reading.
- When punching slots in cards for straps or chains, follow AWID's instructions and use the Punch Guide card. Printed instructions and a Punch Guide accompany every shipment of punchable cards. Test a sample card for correct reading.
- Remember that all proximity credentials contain precision electronic components.
- Do not be concerned about magnets, electric fields, RF fields, radiation or X-ray. They will not affect AWID's credentials.
- Reasonable care will give your AWID card or tag or wafer reliable performance and long life.