

AKRX64-W26 Receiver Instructions

Description

The AKRX64-W26 is a self-contained 433.92MHz rolling key receiver designed to be directly interfaced with industry standard wiegand access controllers.

Self-learning and self-synchronizing receiver technology fully implements independent rolling key encryption for all 65536 possible card numbers within any one site code.

The site / facility code selection by simple rotary switches ensures non-matching site code transmitter transactions are not passed to the access control system. This prevents spurious transactions from being processed by the access control system originating from off site Airkeys. 4 pairs of wiegand outputs provide separate card reads for each of the Airkey's four buttons. Backwards compatibility allows two button Airkey transmitters to be used by themselves or along with four button transmitters.

Site / Facility Code Programming

Prior to use, the Airkey receiver needs to have the required Site / Facility code correctly configured. This is done by using the first four digits of the serial number of one of the wiegand Airkeys. For example, if the serial number is “#:08123456” or “#:W08123456” then the required number is 0812. If the serial number is “#:08ABCDEF” or “#:W08ABCDEF” then the required number is 08AB. Once the four numbers (or letters) are determined, they should be set by turning the rotary dials labelled dig1 – dig4, with dig1 set to the first number and dig4 set to the fourth number.

Wiegand Outputs

Each of the Airkey's four buttons corresponds to four pairs of data outputs on the Airkey receiver. Buttons 1,2,3 and 4 are mapped to outputs a,b,c and d respectively. In the case of a 2 channel Airkey, the left hand and right hand buttons are mapped to outputs a and b respectively. Each wiegand pair comprises a Data 0 output (labelled D0) and a Data 1 output (labelled D1). Each required pair of outputs must be connected to the equivalent input of the access controller. If, for example, any or all of the outputs need to be combined together so that any button press would trigger a single card read, simply bridge together all or some of the D0 outputs and D1 outputs respectively.

The Common (0VDC) for the data outputs is also supply common, and must be connected to the ground of the access controller.

6 Channel transmitter use

Where the 6 channel AK2TX6-W26 transmitters are used, the AKRX64-W26 can be configured to accept buttons 3, 4, 5 and 6 instead of 1, 2, 3 and 4. This is enabled by fitting a link across pins 3 & 4 of the pin header labelled J3. Buttons 3, 4, 5 and 6 will then be directed to outputs 1, 2, 3 and 4 respectively.

Wiegand Voltage Configuration

Each of the wiegand data output line have factory preset 10KOhm pull-up resistors connected to 12VDC. If required by the access control equipment, the pull-up jumper can be set to 5VDC or removed altogether.