



## Acre Multi-tech Reader with ACT365 – Wiegand Protocol

This document describes the process for connecting the acre multi-tech reader to ACT365, based upon the Wiegand protocol.

The readers are configured to read ACT encoded Mifare and DESFire credentials.



## 1. Reader Detail

The acre multi-tech reader has a built-in auto-detect function, meaning depending on how you wire the reader, it will configure itself accordingly (OSDP / Wiegand)  
This guide will show how to setup the reader using Wiegand protocol.

The reader will report the mode it's in upon power up:

Beep Code	Description
1x Beep, 1x Red LED flash	Wiegand Only
2x Beep, 2x Green LED flash	OSDP Only
4x Beep, 4x Green LED flash	Auto Detect

**Note** – If a reader has been connected as OSDP, then it will lock itself to this format, and a config token will be required to revert to Auto-detect mode.  
See chapter 3.2 for further detail on this.

**Note** – acre multi-tech readers are 12vdc



## 2. Wiring a Reader - Wiegand

The reader is wired in the following way:

### Entry Reader:

Reader	ACT365 ACU
Red	+12v
Black	0v
Green (D0)	Data / D0
White (D1)	Clock / D1
Blue	Green
Orange	Red

### Exit Reader:

Reader	ACT365 ACU
Red	+12v
Black	0v
Green (D0)	Sense
White (D1)	Clock / D1
Blue	Green
Orange	Red

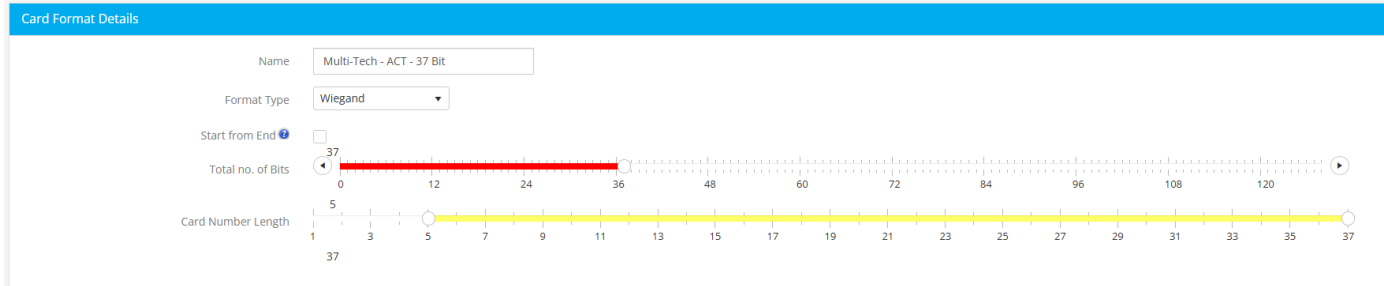
**Note – acre multi-tech readers are 12vdc**



### 3. Defining Wiegand Card Format

For the number printed on ACT encoded credentials to be read correctly by the software, the relevant card format must be defined and applied to the controller:

ACT365 > Settings > Card Formats:



**Overall Length:**  
37 Bits

**Card Number:**  
Starting Bit - 5  
Length - 32



## 4. Re-enable OSDP Auto-detect

If the reader has previously been connected as an OSDP reader, it will be fixed to OSDP mode, and needs to be “reset” before being usable as a Wiegand reader:

To re-enable Wiegand functionality (OSDP Auto-detect mode), you will need to enter the token via the Configure Mobile App:

Within the Configure App, navigate to:

- Profiles & Cards → Connect to reader → Download  
use Token: **c-ejsQmSnJ**

- Apply to reader

***Apps are available here:***

Android:

[https://play.google.com/store/apps/details?id=com.wavelynx.configure&pcampaignid=web\\_share](https://play.google.com/store/apps/details?id=com.wavelynx.configure&pcampaignid=web_share)

Apple: <https://apps.apple.com/gb/app/configure/id6645735994>

### **Acre security**

Vanderbilt International (UK) Limited  
Unit 31 Springboard Business Innovation Centre  
Llantarnam Industrial Park  
Cwmbran  
NP44 3AW

+44 0203 6301652

[acresecurity.com](https://www.acresecurity.com)

[@acre\\_og](https://twitter.com/acre_og)

[acrellc](https://www.linkedin.com/company/acrellc)

Directors:  
John Skowronski  
Brad Wolfe  
Mark Carton

Registered in United Kingdom  
Company Number: 9299461  
VAT GB 206 5829 06



**5. Compatible Credentials:**

The following acre supplied credentials have been compatibility tested with the acre multi-tech readers and ACTpro:

Credential Part Number	Description
MF10C1	MIFARE Classic 1K Cards with number encoded in the memory.
MF10T1	MIFARE Classic 1K Fob with number encoded in the memory.
EV10C1	DESFire EV1 ISO Card with number encoded in the memory.
EV10C3	DESFire EV3 ISO Card with number encoded in the memory



If you have any questions, please contact our Global Technical Services team.  
Contact details can be found on our website <https://www.acresecurity.com/>