SUPPORT INFORMATION

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Acre Multi-tech Reader with Acre Access Control and Acre Smart Controller – Wiegand & OSDP Protocol

This document describes the process for connecting the acre multi-tech reader to AAC and Acre Smart Controller, based upon the Wiegand & OSDP protocol.
The readers are configured to read ACT encoded Mifare and DESFire credentials, as well as the acre keyset LEAF 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 and OSDP 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. Wiegand - Wiring a Reader (Acre Smart Controller)

The reader is wired in the following way:

Reader	ASC1400 Reader Port 1 or 2
Red	+V
Black	0V
Green (D0)	D0
White (D1)	D1
Blue	Green
Yellow	Buz

Note – acre multi-tech readers are 12vdc, please ensure the reader voltage selection on the ASC1400 is set appropriately.

2.1. Keypad Configuration

- Power cycle the reader
- Within 2 minutes after boot enter *88889999
- Within 2 seconds enter
  - *4 → 4 bit format
- In AAC select the corresponding “Keypad Type” → HID 4 format

2.2. Parallel operation: Wiring two readers to one terminal

Two readers can be connected to the same terminal. They will work as if they were the same reader. This can be used for e.g. a high and low reader on a barrier.

3. OSDP - Wiring a Reader (Acre Smart Controller)

The reader is wired in the following way:

Reader	ASC1400 RS485 Port 1,2, 3 or 4
Red	+V
Black	0V
Green	A
White	B

Note – acre multi-tech readers are 12vdc, please ensure the reader voltage selection on the ASC1400 is set appropriately.

Note:

- With OSDP communication the keypad is not configurable at the reader and is controlled through the host system.

3.1. Parallel Operation: Wiring two readers to one reader port.

Two readers can be paralleled from one OSDP reader port. This can be used for e.g. a high and low reader on a barrier.

NOTES:

- Ensure termination jumpers (JP3,4,5,6) are removed from the controller PCB
- Readers are addressed individually.
- Following the procedure in AAC for adding a secondary reader.

3.2. Switching from OSDP only mode back to 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 Mobile 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

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

4. Defining Card Formats

The reader is configured to read the encoded data from both ACT encoded credentials, and LEAF credentials supplied by acre.

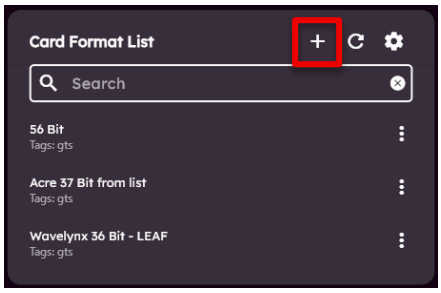
4.1. ACT Encoded Credentials

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

4.1.1 Wiegand Format Definition – ACT Encoded Cards

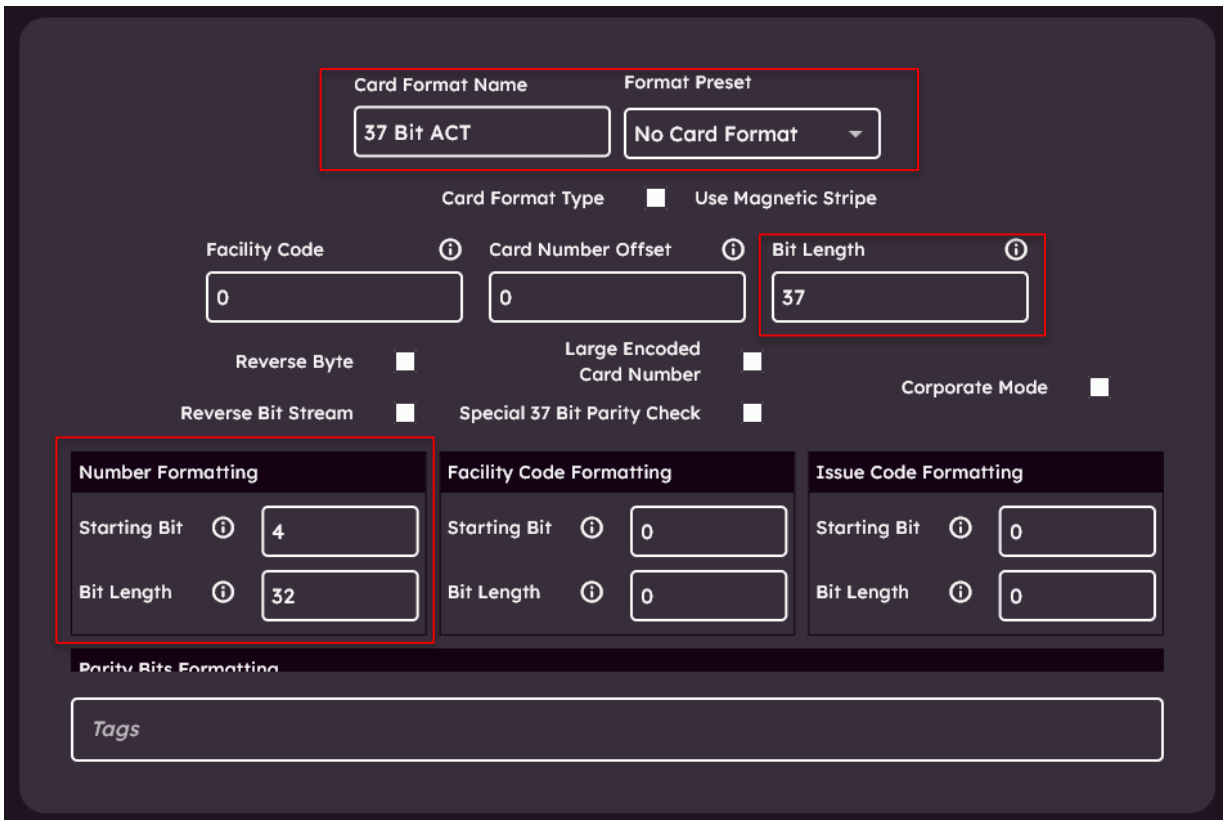
AAC Interface:

Option 1 – Card Format List Widget



Option 2 – Card Format List “Quick Action”

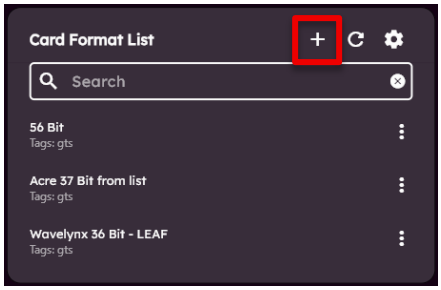
Define the card format as per the below:



4.1.2 OSDP Format Definition – ACT Encoded Cards

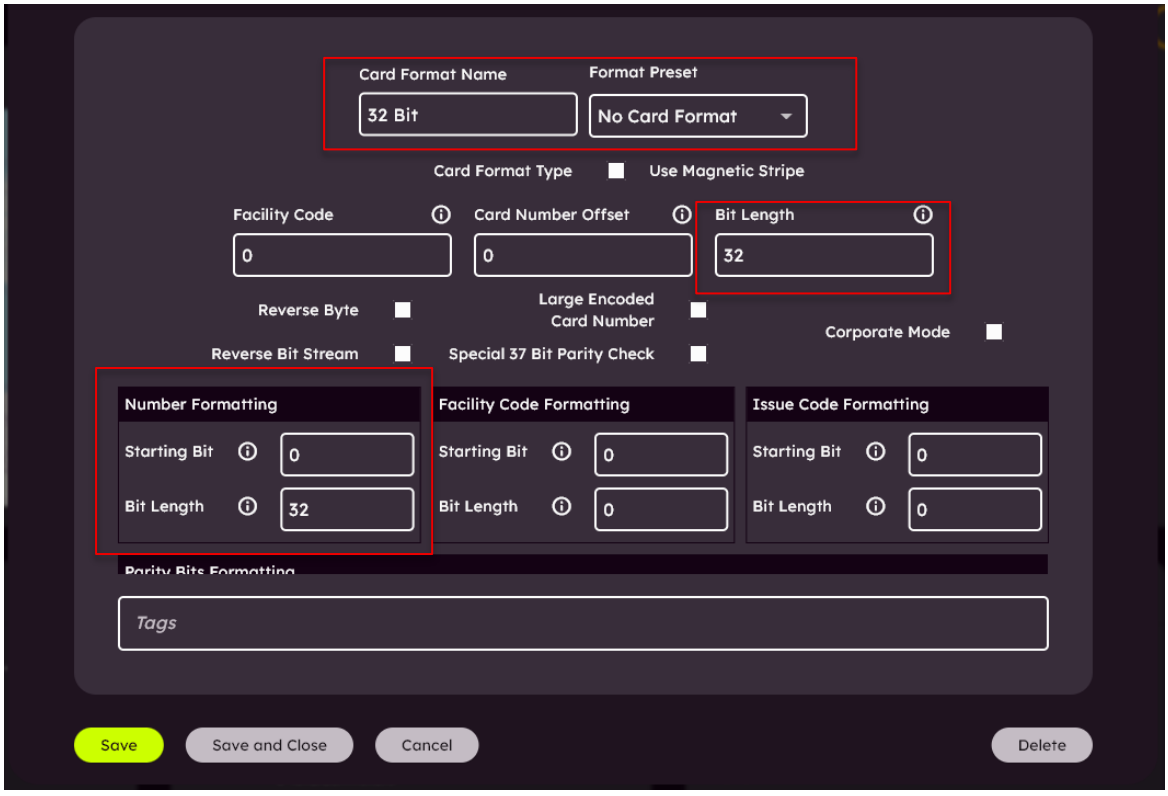
AAC Interface:

Option 1 – Card Format List Widget



Option 2 – Card Format List “Quick Action”

Define the card format as per the below:

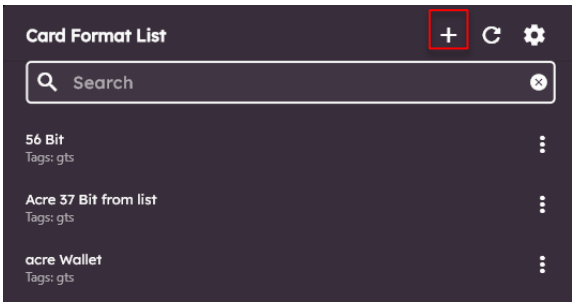


4.2. LEAF Credentials (acre supplied)

For the number printed on the acre keyset LEAF cards to be read correctly by the software, the following card format needs to be defined and added to the controller. This card format applies to both Wiegand and OSDP usage of the reader:

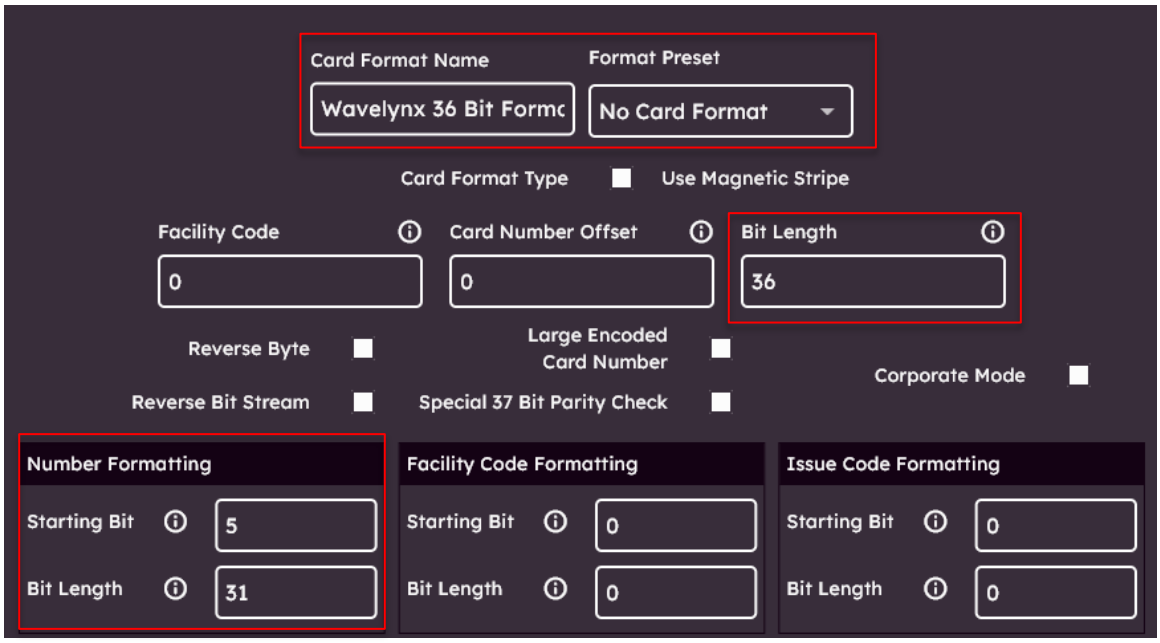
AAC:

Option 1: Card Format List Widget



Option 2 – Card Format List “Quick Action”

Define the card format as per the below:



5. Compatible Credentials:

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

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
50H4-AS	LEAF card, EV2, 4Kb, acre keys
50H8-AS	LEAF card, EV2, 8Kb, acre keys
50L4-AS	LEAF card, EV3, 4Kb, acre keys (1pc)
50L8-AS	LEAF card, EV3, 8Kb, acre keys (1pc)
60L8-AS	LEAF keyfob, EV3, 8Kb, acre keys (1pc)
AAC-MOBILE-WLT-C	acre Wallet Credential (25 MOQ)
AAC-MOBILE-BLE	acre BLE Credential

SUPPORT INFORMATION

If you have any questions, please contact our Global Technical Services team.

Contact details can be found on our website https://www.acresecurity.com/