



Acre Secure-Touch Readers with aac – OSDP Protocol

This document describes the process for connecting the Acre Secure-Touch readers to an ASC1400 controller in Acre Access Control (aac), based upon the OSDP protocol.

The readers will be configured to read ACT encoded Mifare and DESFire cards.

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1. Reader Detail

The Acre Secure-Touch readers are available in either OSDP or Wiegand versions, however this guide will focus on using the OSDP protocol with aac and an ASC1400 Controller.

2. Wiring a Reader - OSDP

The reader is wired in the following way:

Reader	ASC1400 RS485 Port 1,2, 3 or 4
A+	A
B-	B
V+	+V
V-	0V

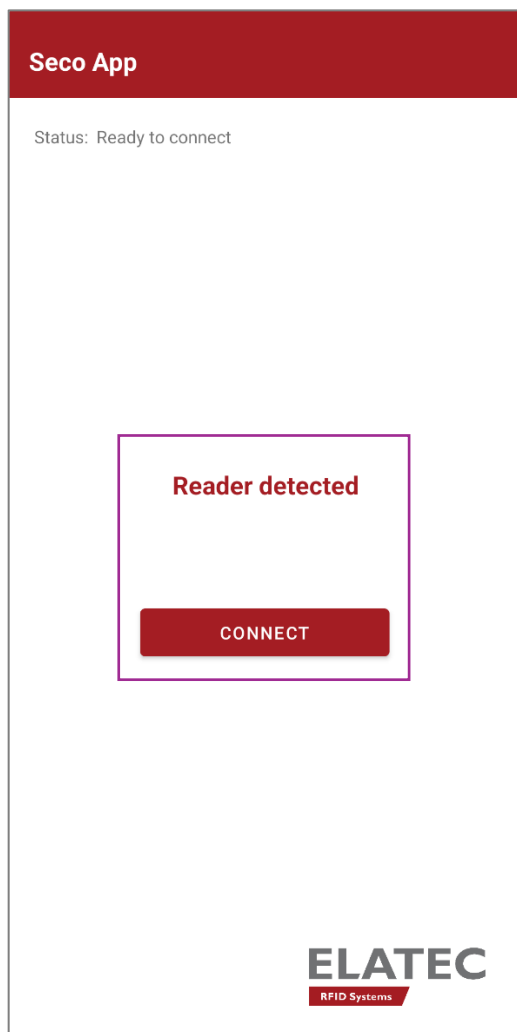
3. OSDP Addressing

If the host system does not support Auto-discovery and addressing, or you wish to use more than 1 reader on an OSDP bus, you need to assign the OSDP addresses manually.

This process can be done easily via the free “Seco App”, available for Android here:

https://play.google.com/store/apps/details?id=com.elatec.seco&pcampaignid=web_share

Bring the mobile device close to the reader, until the app confirms it has found a reader. Tap “Connect” to connect to the reader:





Read the current reader settings:

Once you are connected to the reader, tap “Read” to see the current reader settings.

Seco App

Status: Connected to Reader (Timeout in 120s)

Parameters	Current	New
Address	0	1
Baudrate	9600	9600
RS-485 Termination	Off	Off ☐
RS-485 Bias	Off	Off ☐
Beeper Volume	50	50

READ

WRITE

DISCONNECT

ELATEC

RFID Systems



Define the required OSDP address and Beeper Volume* ONLY:
(Settings for Baud Rate, RS-485 Termination and RS-485 Bias unchanged.)

Seco App

Status: Connected to Reader (Timeout in 120s)

Parameters	Current	New
Address	0	1
Baudrate	9600	9600
RS-485 Termination	Off	Off
RS-485 Bias	Off	Off
Beeper Volume	50	50

READ

WRITE

DISCONNECT

ELATEC

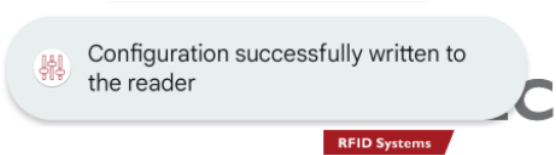
RFID Systems

* Beeper Volume must be defined, even if you are not changing to a different value.

Tap “Write” to send the relevant configuration to the reader.



You should see the following message at the bottom of the screen confirming the settings have been applied:



4. Selecting Reader Output

The readers have 5 operating modes, as shown below.

For use with ACT encoded credentials ACTPro File Mode 37Bit (Green) should be selected

Operating Mode	Colour
Serial Mode 37Bit	Amber 
Reverse Serial Mode 37Bit	Red 
ACTpro File Mode 37 Bit	Green 
Full Serial Mode 56 Bit	Purple 
Full Rev. Serial Mode 56 Bit	Blue 

Enable Readers “Learning Mode”:

To enable learning mode the reader must be powered on with the tamper activated. Present a card to the reader within 30 seconds, then present again within a further 5 seconds.

To confirm the reader is in “learning mode” the Right LED will flash twice, and the Left LED will show a colour representing the current operating mode.

If no card is detected for 5 seconds, the learning mode will “timeout” and the reader will return to normal operation. (To enable learning mode at any time - repeat above steps)



	Learning Mode Active
	Current Operating Mode

Change Operating Mode:

With the reader in learning mode, simply present a card to the reader to cycle through the available options.

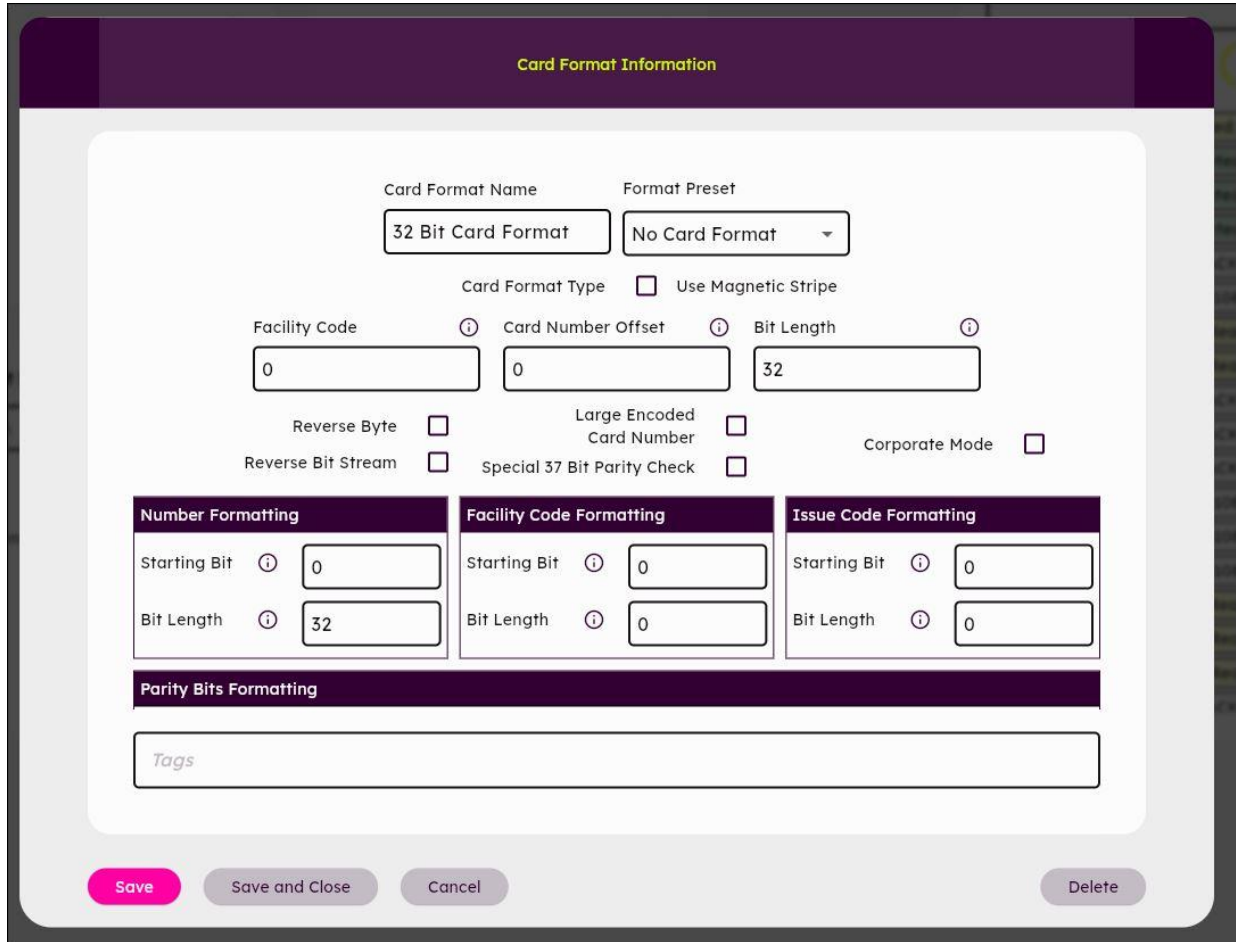
When the reader changes to the next operating mode the colour will change, and you will hear a double beep. The Right LED will flash twice.

When the left LED shows the required colour wait 5 seconds for the learning mode to “timeout” and the reader will return to normal operation.

5. Configuring the Reader Technology in aac.

To read the content of an ACT encoded Mifare or DESFire card, when used in conjunction with an Acre Secure-Touch reader, a 32bit Card Format needs to be created and assigned to the connected controller.

Defining the card format:



Card Format Information

Card Format Name: Format Preset:

Card Format Type: ☐ Use Magnetic Stripe

Facility Code: Card Number Offset: Bit Length:

Reverse Byte: ☐ Large Encoded Card Number: ☐ Corporate Mode: ☐

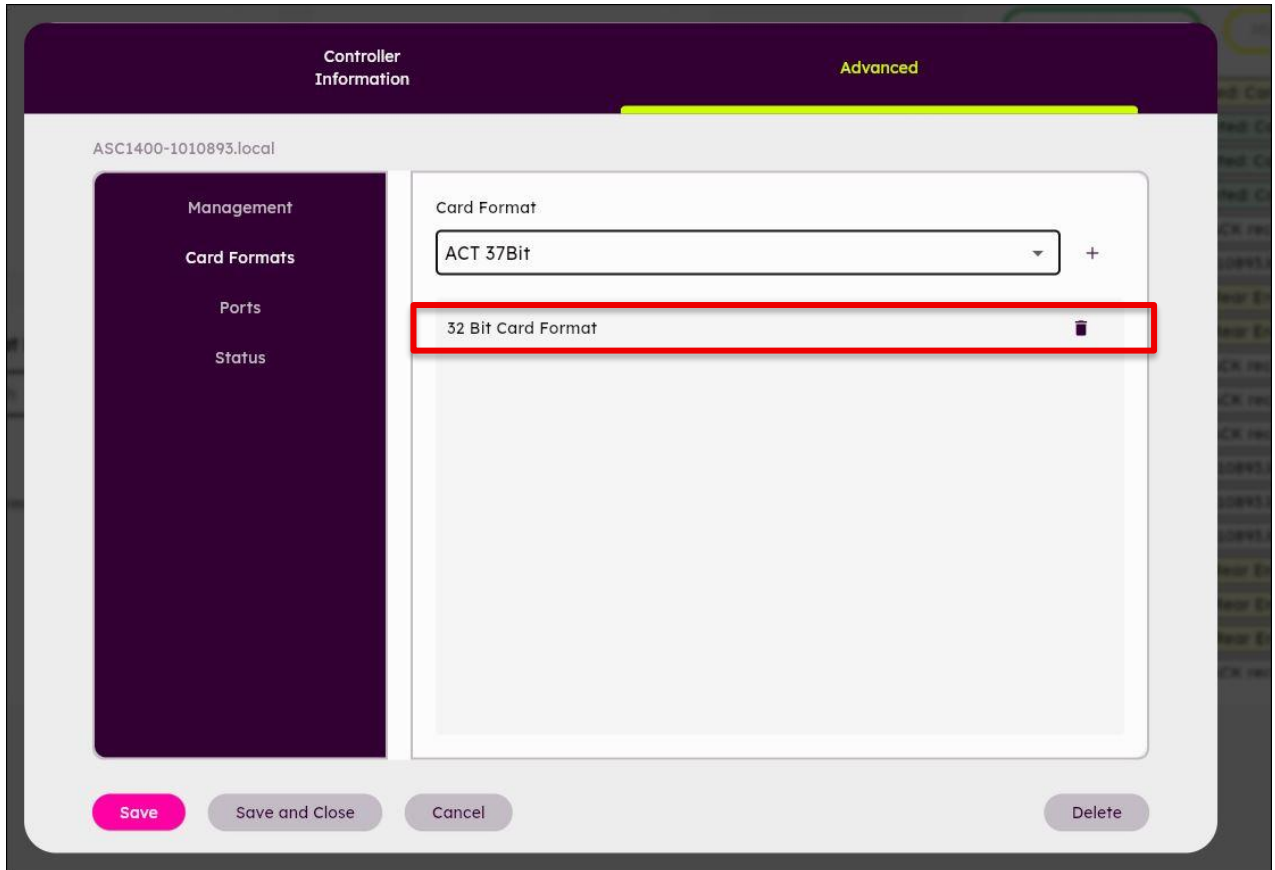
Reverse Bit Stream: ☐ Special 37 Bit Parity Check: ☐

Number Formatting		Facility Code Formatting		Issue Code Formatting	
Starting Bit	0	Starting Bit	0	Starting Bit	0
Bit Length	32	Bit Length	0	Bit Length	0

Parity Bits Formatting

Buttons: Save, Save and Close, Cancel, Delete

Assigning the format to the controller



The screenshot displays the 'Controller Information' window with the 'Advanced' tab selected. The window title is 'ASC1400-1010893.local'. On the left, a sidebar contains 'Management', 'Card Formats', 'Ports', and 'Status'. The main area shows a 'Card Format' dropdown menu currently set to 'ACT 37Bit'. Below this, a list of available formats is shown, with '32 Bit Card Format' highlighted by a red rectangle. At the bottom, there are four buttons: 'Save' (pink), 'Save and Close' (grey), 'Cancel' (grey), and 'Delete' (grey).

Card Format
ACT 37Bit
32 Bit Card Format

If you have any questions, please contact our Global Technical Services team.
Contact details can be found on our website.