Frequently Asked Questions

Card Credential Questions:

I replaced a different company's reader with Ethos but I am receiving a misread with a previously working credential.
If the credential is a high frequency credential, there may be a key mismatch between one of the readers and the credential.
A card serial number (CSN) is likely being read by one device and a secure credential by the other. Common CSN lengths are 32 bits (Mifare Classic), 56 bits (EV1/EV2/EV3) and 64 bits (iCLASS and ISO15693).

Why is the reader not reacting at all to my credential (not beeping, flashing or sending card data)?
The reader is likely not reading the cards because of compatibility issues. First, check your reader's hardware limitations. To check the credential capabilities, power cycle the reader. The initial part of the startup sequence will indicate what the reader is capable of technology-wise. (Red indicates BLE, Green indicates 13.56MHz high frequency, and Amber indicates 125kHz low frequency)

Next, check your reader's configuration part number (CPN on the reader's back label). If it is CWL1, the reader is a standard configuration that will not have any prox filters, or card types disabled. If it is a custom configuration (LkXXXX, CXXX, UXXX) the reader may have custom settings that don't allow your specific credential to be read for higher security.

Lastly, if using a standard reader that should have the hardware capabilities to read your credential, the Ethos reader is not capable of reading the following cards:

- 48-bit Corp 1000 (proprietary)
- 125kHz Indala PSK cards (non standard 125kHz programming)
    - HID FSK and Casi Rusco/GE Prox ASK read fine.
- Signo credentials (Have proprietary keys and randomizes the card serial number)

Configuration Card Questions:

How do I use a configuration card?

1. Power down the reader
2. Resupply power to the reader
3. Present the configuration card within 1 minute of powering back on
4. Reader should flash amber and beep 3 times, then restart power
5. Reader is now configured

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MyPass Related Questions:

What is the bit format for MyPass mobile credential?
MyPass credentials are programmed to look like MiFare Classic CSN's. They are 32 bit long credentials. The bitstream contains 32 bits of badge ID, no parity bits and no facility code bits.

Why is MyPass performing differently on iPhone vs Android?

Communication differences:

- Android uses NFC technology
- iOS uses Bluetooth

App Use differences:

- Android requires the screen to be turned on (app can be closed)
- iOS requires the app to be open (screen can be turned off)

Performance differences:

- Android
    - Sends credential instantly like an access card
    - Needs to be presented parallel to the reader
    - Has about 1" to 2" read range (range and performance can vary by Android model)
    - Reader will flash green and beep when credential is received
- iOS
    - Takes slightly longer to read a credential
    - Doesn't need to be held parallel to the reader
    - Has 2" to 4" read range
    - Reader will light up amber while connecting via Bluetooth, then flash green and beep when the credential has been received

Frequently Asked Questions

OSDP Questions:

How do you address the Ethos readers for OSDP?
Ethos readers can be addressed by the panel through OSDP commands. By default the reader is Address 0 and 9600 baud rate.
If your panel is not capable of sending OSDP addressing commands, alternatively configuration cards can be used and are available from WaveLynx resellers.

OSDP Multi-Drop
If using Ethos Readers in OSDP Multi-Drop, we recommend using the OSDP Addressing Configuration Card Pack FEA-OSDPA-P1. This card pack comes with 9 configuration cards for addressing readers from Address0 to Address8.

Why can't I connect the reader over OSDP?
The OSDP reader uses the green control line for RS485A and the white control line for RS485B. Some panels will use the same port for both Wiegand and OSDP, but only label it for the Wiegand data lines (D0 and D1). If this is the case, check the installation manual for the panel, OSDP may be wired differently. This is common for Mercury panels.

Mercury panels will also reference RS485+ (or TR+) and RS485- (or TR-) which correlate with RS485A and RS485B respectively. The plus and minus terminology doesn't always translate to all panel manufacturers though, so if issues continue, try swapping the green and white control lines.

NOTE: You can always check if the reader has received an OSDP message by power cycling the reader. If the reader has received an OSDP message, the second half of the startup sequence will only flash green/beep twice. If it hasn't received an OSDP message, it will flash green/beep four times.