Akuvox ACR-CID12 Tool Administrator Guide

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AKUVOX ACR-CID12 TOOL

Administrator Guide

This manual guides you in using the Akuvox desktop card reader ACR-CID12 with its software tool. It is based on the software version V1.02. The ACR-CID12 allows you to acquire UHF card or tag data conveniently.

Product Overview



Akuvox's ACR-CID12 is a contactless ultra-high frequency desktop card reader with a USB plug-and-play design. It offers high integration, strong anti-interference, compact size, and stable performance, allowing quick access to information on ultra-high frequency cards when connected to a computer.

Before You Start

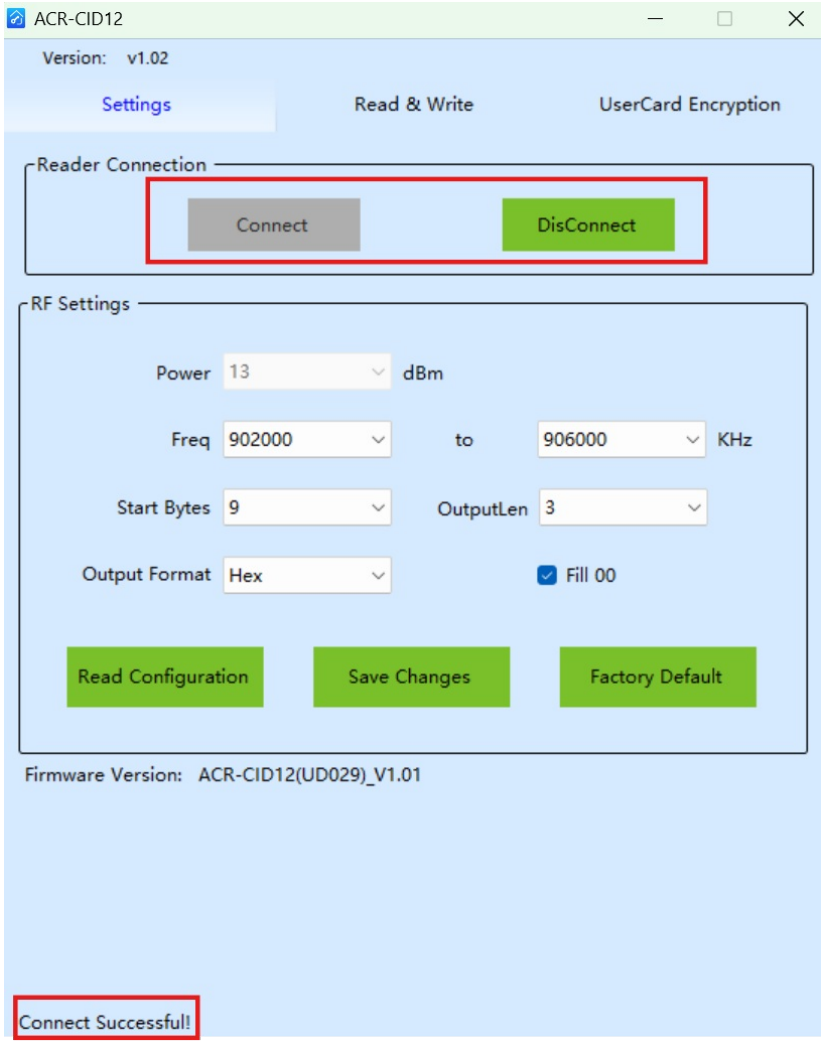
Make sure:

- you have acquired the latest version of the ACR-CID12 Tool from Akuvox tech support.
- ACR-CID12 is connected to your computer through USB. It will beep once and the blue light stays on, indicating a successful initiation.

Device Connection

Run the ACR-CID12 tool and click **Connect**. When your computer detects and connects to ACR-CID12, “Connect Successful” will display in the lower left corner.

You can click **Disconnect** to cut off the connection.



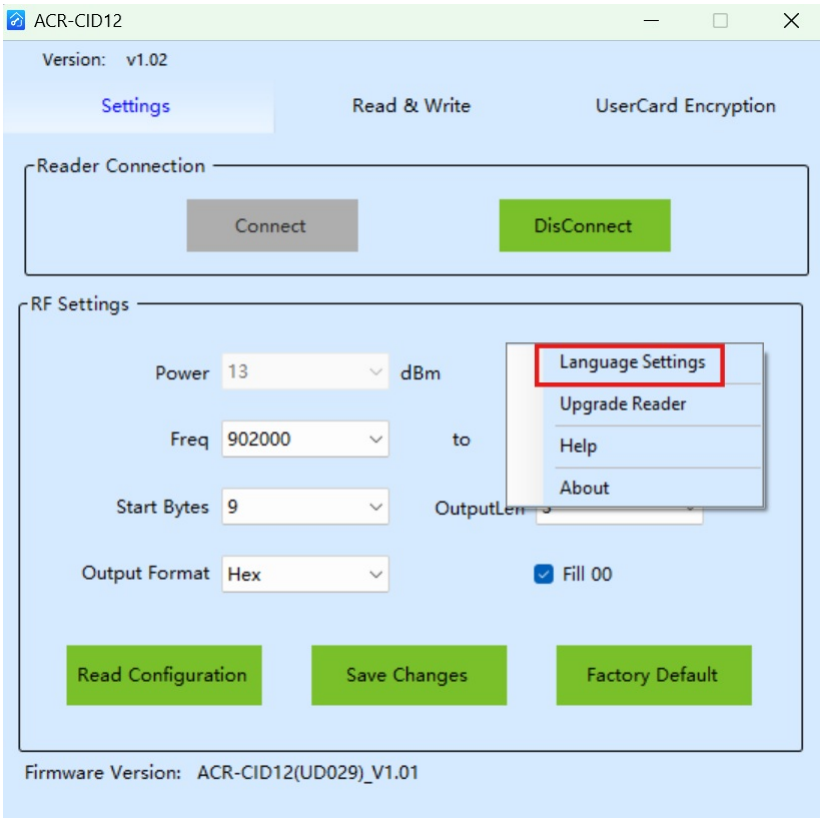
Basic Setup

You can change the software language, upgrade it to the latest version, and obtain the device's current configuration.

Select Language

You can select the software language.

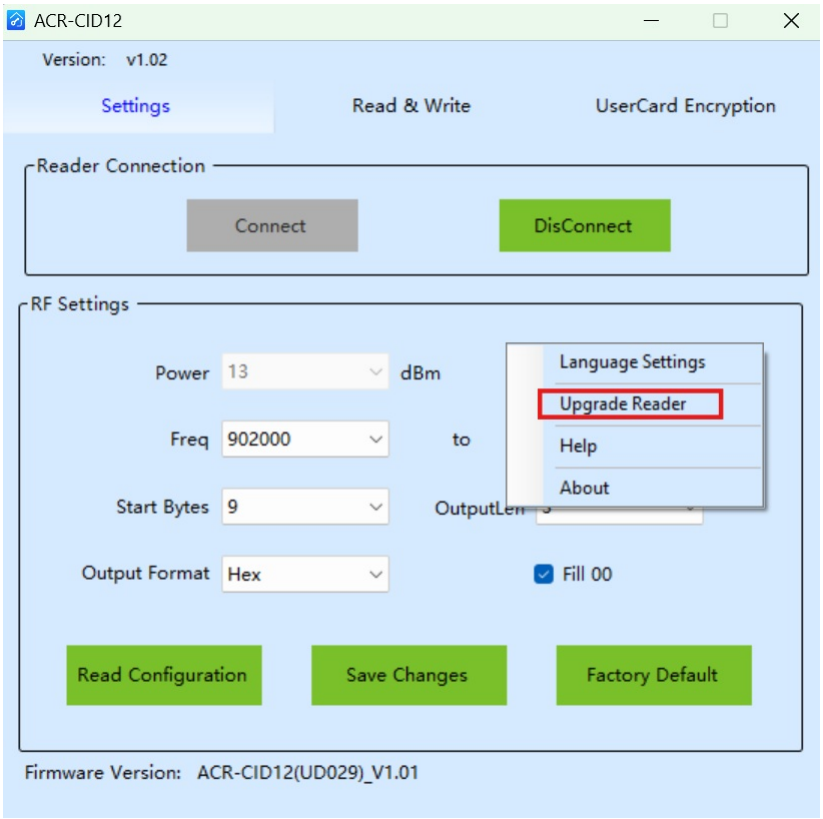
1. Right-click on any interface and click **Language Settings**.
2. Select the language between English and Simplified Chinese. You will be prompted to restart the software for the change to be effective and connect the device again.



Upgrade the Device

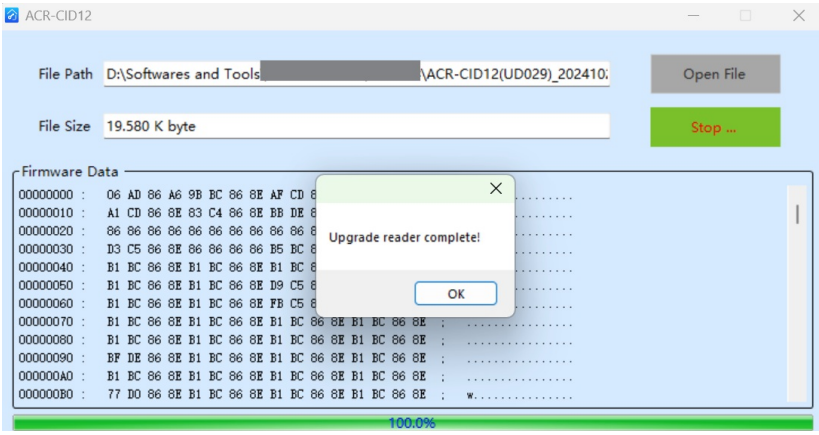
You can upgrade the device to the latest version.

1. Right-click on any interface and click **Upgrade Reader**.



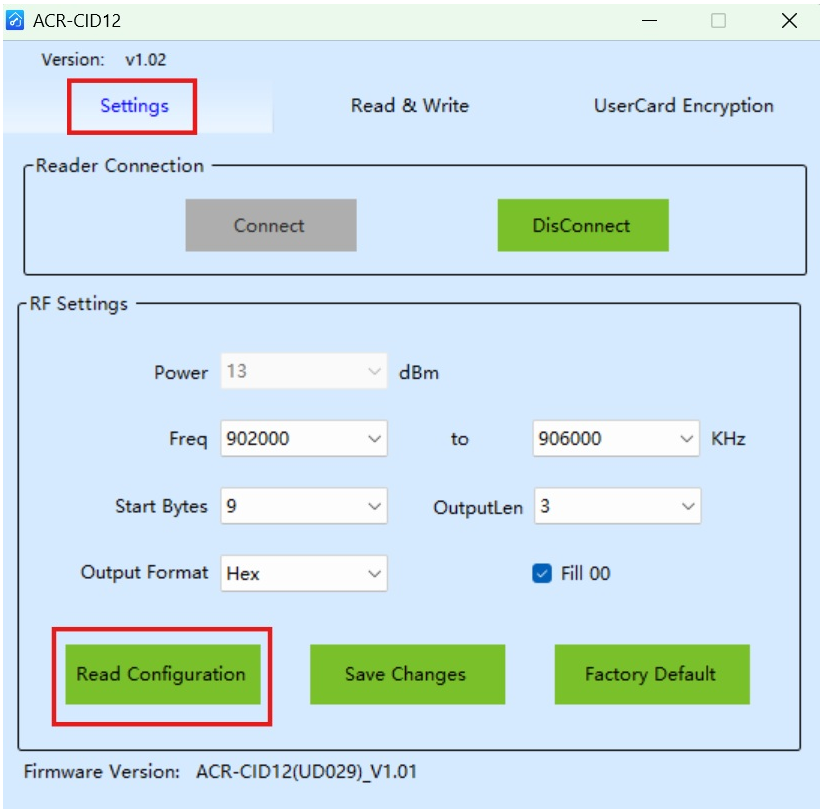
2. Click **Open File** and select the file from your driver.
3. Click **Start** to upgrade. Please do not close the upgrade window until the progress bar reaches 100%.





Read Configuration

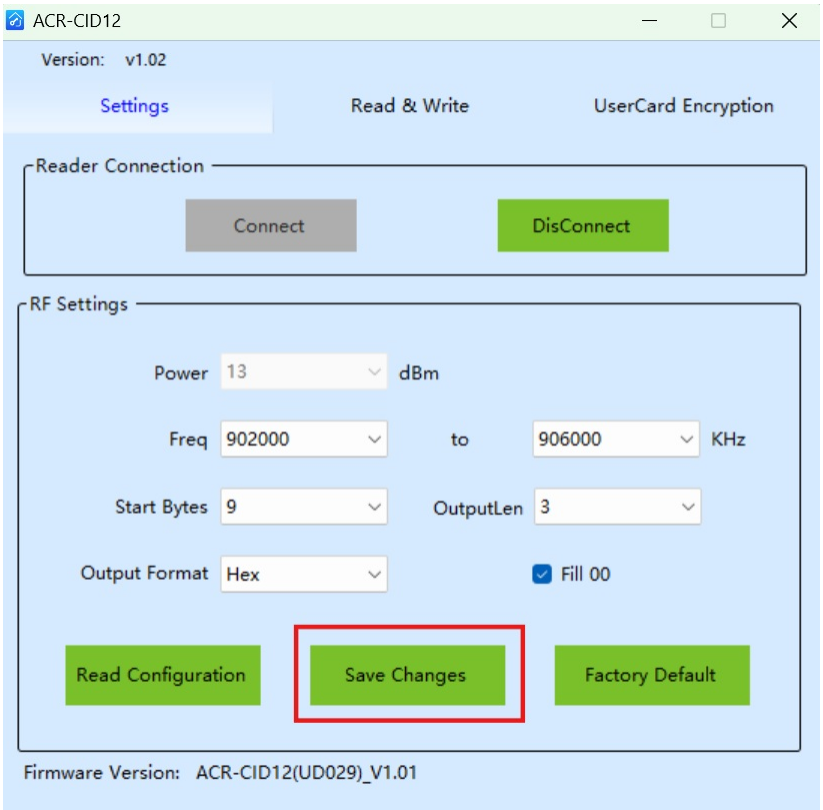
You can acquire the device's current configuration by clicking **Read Configuration** on the **Settings** interface.



Save Changes

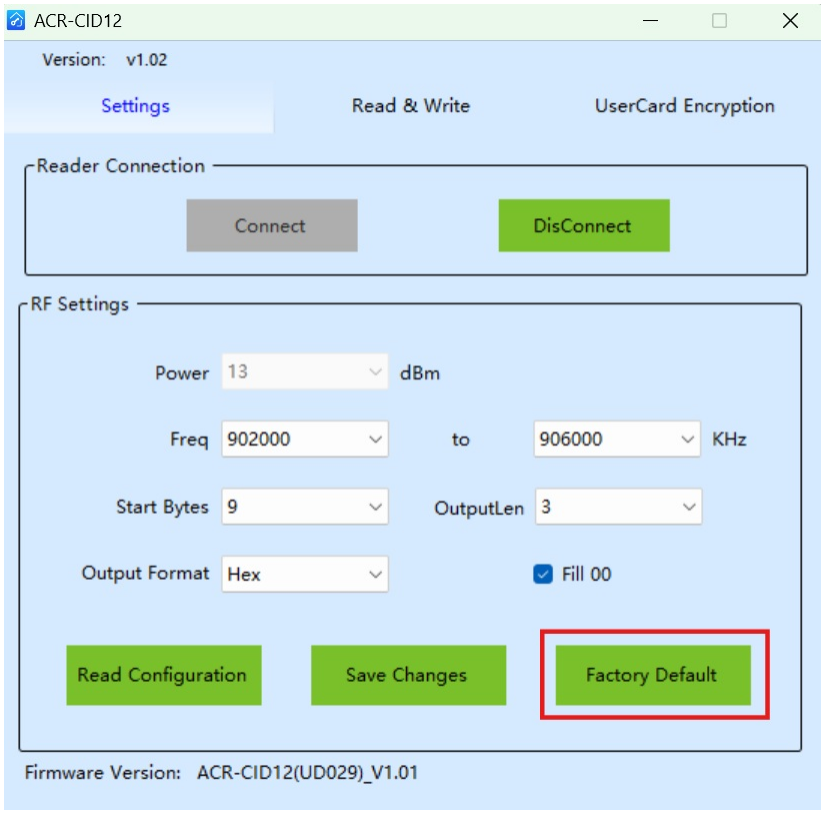
You need to click **Save Changes** to confirm the configuration after changes.

This tab works for the **Settings** interface.



Reset the Device to Factory Settings

You can reset the **RF Settings** to the factory default by clicking **Factory Default** on the **Settings** interface.



RF Settings

You can configure such settings as the card data output length and format before using the device to output the card code. After configuration, click **Save Changes** to confirm the settings.



- **Power**: It is **13dBm** by default.
- **Freq**: Define the frequency range for accurate UHF card reading, which covers 8 spans at most. For example, you can set the frequency from 902000 to 906000KHz but not 902000 to 906500KHz.

Concepts

- Different types of cards operate at specific frequencies. The frequency settings directly impact the compatibility and performance of the card reader.
- The desktop card reader ACR-CID12 works for Ultra High Frequency(UHF) cards operating at 860-960MHz.
- 1MHz = 1,000kHz.

- **Start Bytes**: Define the start bytes for outputting the card data. It is 9 by default.
- **Output Length**: Define the length of output data based on the Start Bytes. It is 3 by default.
- **Output Format**: It is **Hex** by default, which allows the card code to be identified by Akuvox devices.
- **Fill 00**: Check this option when you set Start Bytes to 9 and Output Length to 3. This allows the Akuvox door phones to identify and match the card code. It is enabled by default.

The Wiegand Format set in the Akuvox door phones and ACR-CRP12 affects the RF settings of the ACR-CID12. Please refer to the chart for settings:

Door Phones	ACR-CRP12	ACR-CID12			
Wiegand Card Reader Mode	Wiegand Format	Start Bytes	Output Length	Output Format	Fill 00
Wiegand 26	Wiegand 26	9	3	Hex	✔
Wiegand 34	Wiegand 34	0	4	Hex	X
Wiegand 58	Wiegand 58	0	7	Hex	X

Read and Write

Concepts

- Electronic Product Code(EPC): a unique identifier used to identify and track individual products, typically consisting of a string of numbers and letters that provide information about the product, such as the manufacturer, product type, and serial number.
- User Area: a customizable data storage section within the RFID card.
- Transaction Identifier(TID): a unique identifier for the RFID tag itself, typically written into the tag during manufacturing and cannot be changed. It is used to identify the tag, ensuring that each tag is unique for authentication and tracking purposes.

With the ACR-CID12 tool, you can write and read specific sections of the UHF card.

Access Password

To access and change the card data, you need to enter the Input Password which is **00000000** by default. Currently, the password cannot be changed.

Read and Write EPC



- **Input Password**: Enter the access password before reading and writing its EPC area.
- **Start Bytes**: Define the start bytes for reading and writing the EPC.
- **Length**: Select the length based on the start bytes selected.
- **Read EPC Data**: Click **Read EPC** and the data will be displayed here.
- **Write EPC Data**: Enter the data to be written and click **Write EPC**.

Read and Write User Area



- **Input Password**: Enter the access password before reading and writing its user area.
- **Start Bytes**: Define the start bytes for reading and writing the user area.
- **Length**: Select the length based on the start bytes selected.
- **Read User Data**: Click **Read User** and the data will be displayed here.
- **Write User Data**: Enter the data to be written and click **Write User**.

Read TID

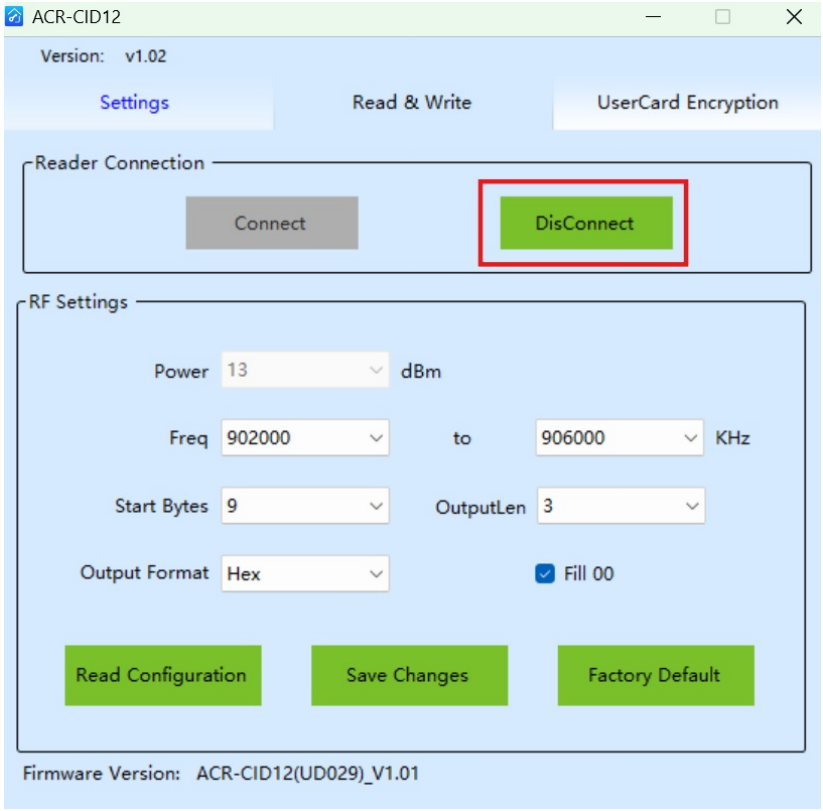


- **Input Password**: Enter the access password before reading the TID.
- **TID Data**: Click **Read** and the data will be displayed here.

Obtain Card Code

After configuration, you can use the ACR-CID12 to quickly obtain the card code.

1. Click **Disconnect** to cut off the connection between your computer and the device but still power it on through USB.



2. Move your mouse cursor to where the card code is to be displayed.
3. Place the card near the device and it will beep once and flash green light once.
   The code will be automatically entered.

