

idChamp® NF4x Wireless RFID-NFC Reader Writer



The idChamp® NF4x wireless RFID-NFC reader/writer is used to wirelessly connect to host device allowing reading RFID-NFC tags, and writing tags when tags are so enabled.

NF4x is available in physical variants:

- Battery powered (rechargeable)
- Kiosk (powered by cable)

Each of the physical variants is also available in two modes:

- Smart Mode (required for writing NFC tags)
- Direct Mode (required to use in HID Keyboard mode)

To use the NF4x in Smart Mode requires app that supports NF4x.

Apps that support NF4x are available here <https://www.serialio.com/downloads>

Some 3rd party apps also support the NF4x.

To use the NF4x in Direct Mode no app is required, since the NF4x simulates Bluetooth keyboard.

Battery powered NF4x has 1800mAh battery that has charge time from empty, of about 4 hours using a USB cable.

Kiosk variant is powered by standard USB-A to micro USB cable.

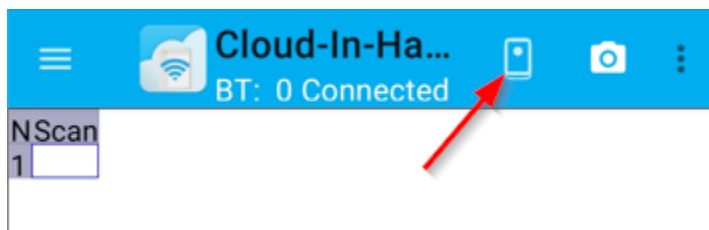
The following shows how to use the Mobile Grid Android app to connect to NF4x.

Power on the NF4 and the wireless Connection LED will blink

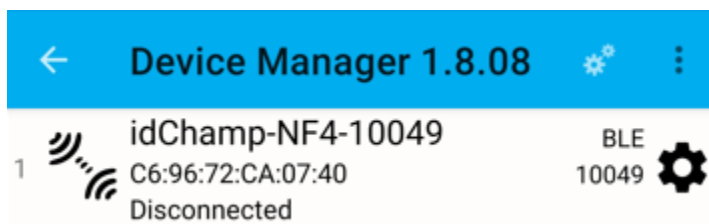


Picture 1

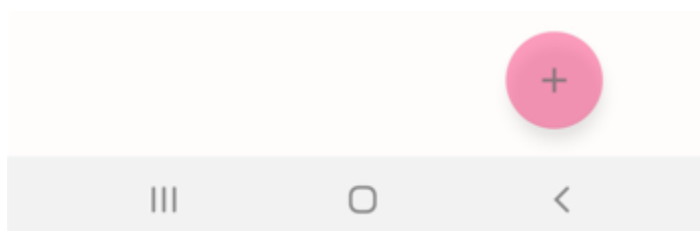
Launch Mobile Grid app and tap the Serial Device Manager (SDM) icon



Tap the device connect icon to connect



If NF4 device is not In the list, tap the add device icon (+) then tap on the NF4 device when found



Once the device is connected to the host the data transfer LED (to left of connection LED) will blink indicating polling.



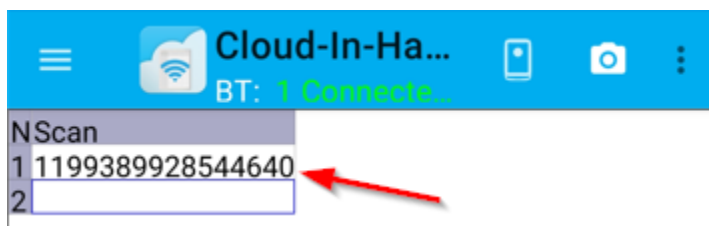
Picture 2

To read the RFID-NFC tag put it on top of the NF4 reader



Picture 3

RFID-NFC tag value(s) will be read according to the SDM settings for the device. Following shows reading the CSN Chip Serial Number (aka UID – Unit ID).



To write RFID-NFC tag, open SDM for the connected NF4, this example will use “WRITE NDEF DATA” option.

←

Device Settings

TYPE

idChamp-NF4-10049 [Connected]

Disabled

DATA STREAM MONITOR

Reconnect timeout:
disabled

Heartbeat tag:

PACKET FLAGS

Start Flag:
NONE

Action Byte
CR

ADDITIONAL TAG SETTINGS

WRITE EPC

WRITE NDEF DATA

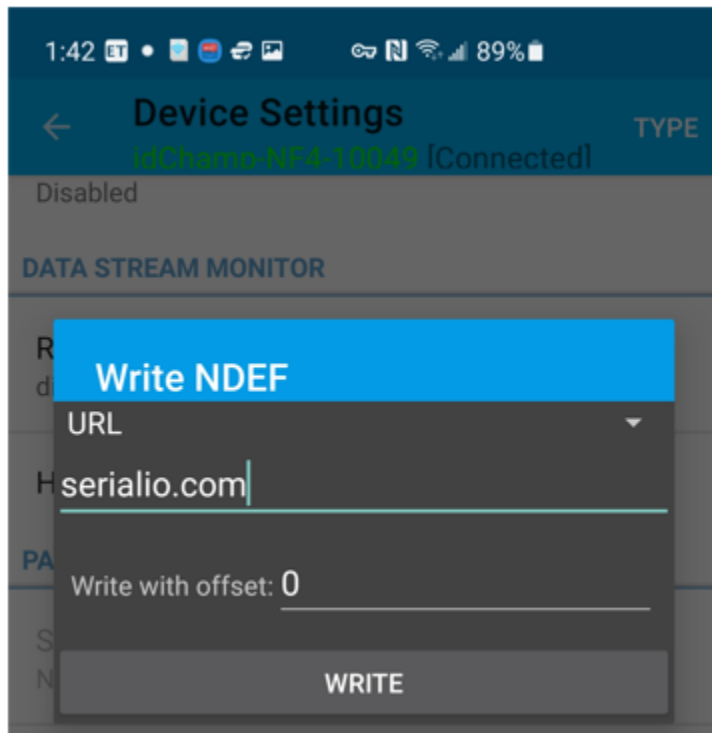
WRITE USER DATA

CLONE TAG ID TO NDEF TEXT

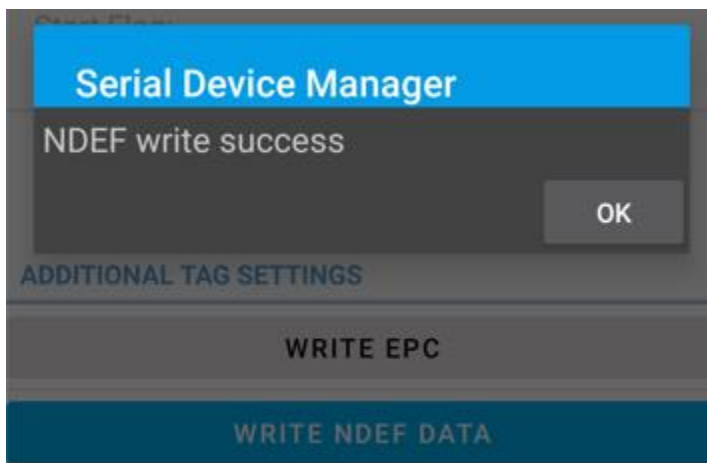
LOCK TAG

WRITE AFI

Select the type of NDEF data to write, this example uses type URL.



Put the NFC tag to the top of the NF4 (see Picture 3), and tap WRITE.



After write success, then read back can be done by setting the SDM to read NDEF data.

Enable Facility Code posting
Facility Code will be added to PAC data
☐

User Data post:
OFF

Pick User Data post type to show NDEF data.

User Data post:

☐ OFF
☐ HEX
☐ ASCII
☐ DEC
☒ NDEF
☐ RFID Journal 2013

CANCEL

To read the RFID-NFC tag put it on top of the NF4 reader (Picture 3) then the NDEF data will be posted

Cloud-In-Ha...
BT: 1 Connecte...

NScan
1 1199389928544640
2 serialio.com
3

For support contact Serialio.com <https://www.serialio.com/support>

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RF Exposure Information

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.