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Transit+ has been designed to manage 2 doors and 5000 keys or remote controls. The keys and remote controls are based on Mifare Plus standard and are secured through a 128 bit AES encryption key.

All the compatible products are the same as the Easy Door or IPassan solutions: readers, receivers, keys and remote controls.

The settings and management of the users require a free App available on the Android store.

1 Overview

This controller manages 5000 credentials which can be proximity keys or remote controls. The access is given 24/7, there is no time profile or validity period on this controller.

1.1 Features

- 2 doors
- 5000 credentials
- Encrypted 2 wire bus communications
- BLE (Bluetooth Low Energy) communication with the app
- Transfer from both sides (App to controller or controller to app)
- Upgradable firmware of the controller

1.2 Hardware

1.2.1 Controllers

The controller manages 2 doors.

Specifications

- Power Supply 12V DC (up to 0.8A with 1 reader)
- DC output 80mA per reader
- USB Factory use only
- Door relay 24V 2A
- REX input NO, protected by optocoupler
- Dimensions 183mm X 234mm
- Operating temperature -10° + 60°C
- Humidity 0%-85%
- Storage -10°- 85°C

1.3 Transit + manager

The app needs to be downloaded from the Play store and the minimal configuration of the smartphone is Android 6.

NB: Android mobile phones manage a NFC reader which can read FDI Mifare + keys. This feature is not available on Apple.

2 Installation

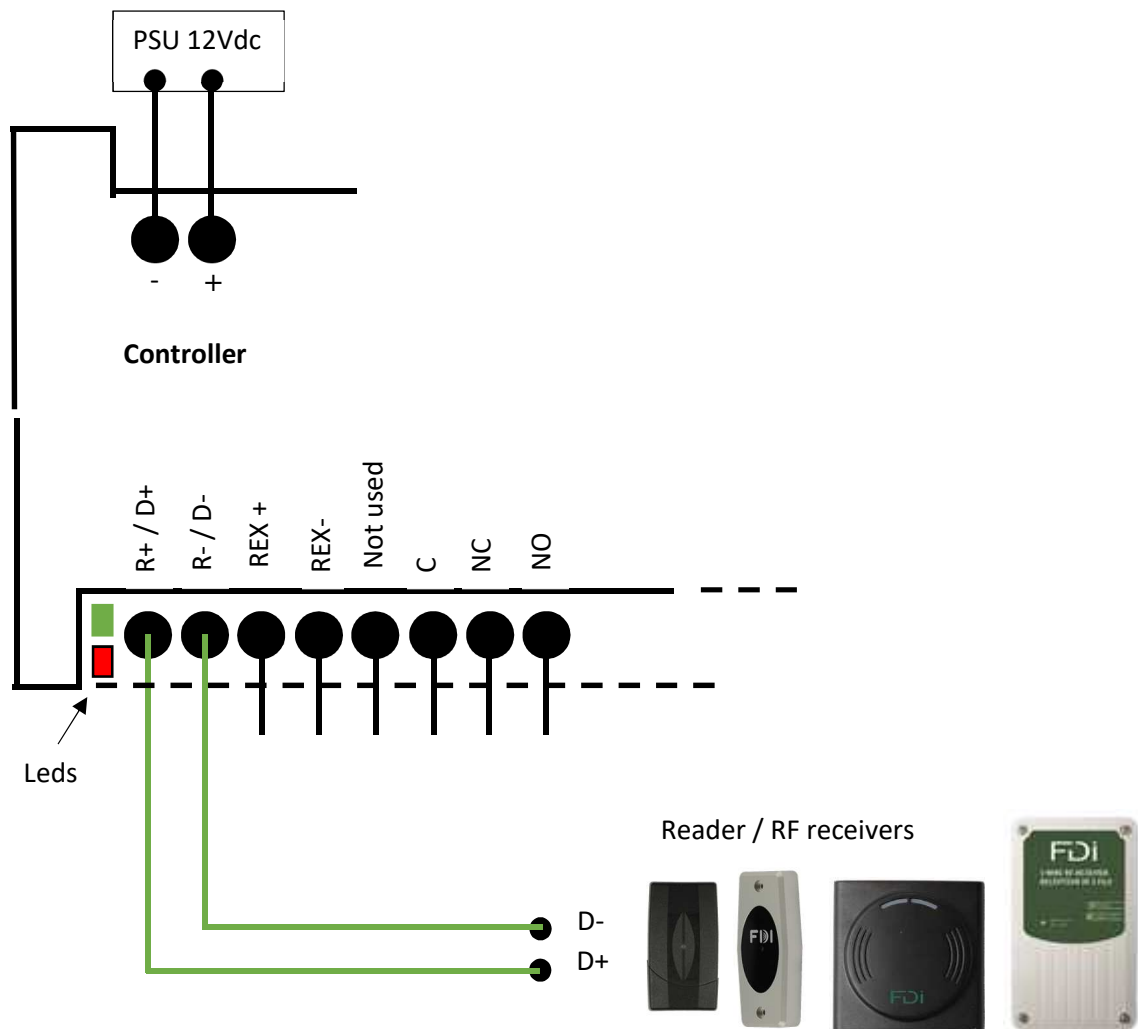
Controllers are designed to be wall mounted through 4 screws but can also be DIN rail mounted.

A cover is supplied.

2.1 Wiring diagram

The controllers communicate through BLE with the mobile phone. The USB plug is only used by the factory.

2.1.1 PSU and readers



NB: the green led is ON while the relay is activated. The red led flashes once every 3 secs when the reader is working fine and is flashing 3 times/sec if the reader is not connected or not answering to the controller.

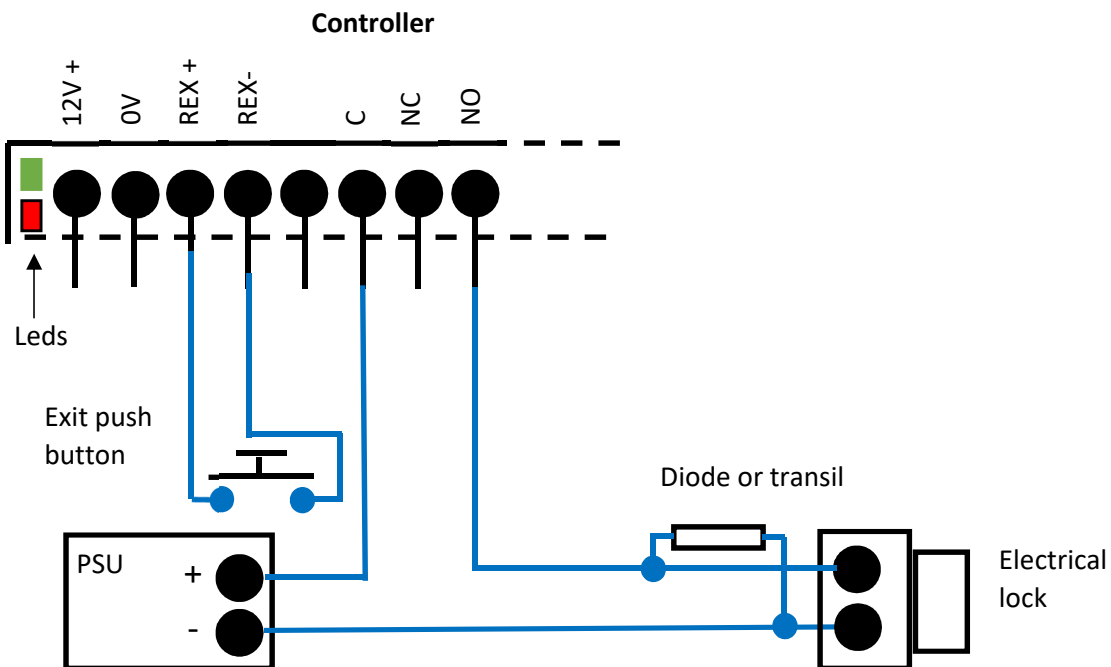
2.1.2 Lock

When a fail-safe lock is used, a second security must be used to prevent an issue between the REX push button and the controller.

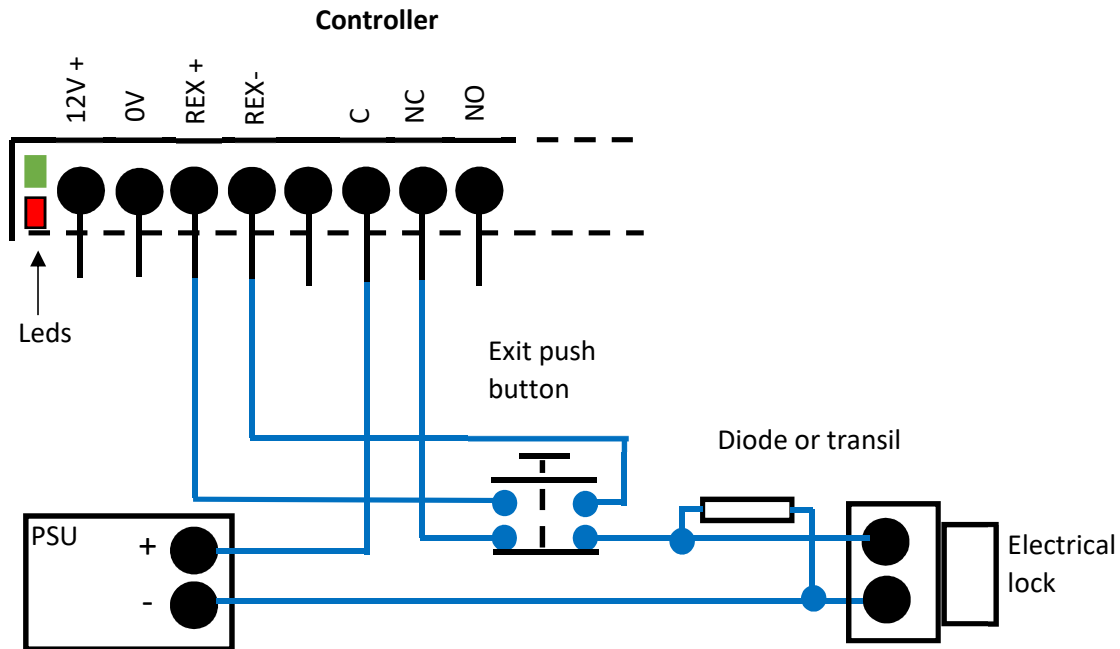
Basically, a break glass is connected in serial with the lock psu or the push button manages two dry contacts : 1 NO contact for the controller REX input + 1 NC contact in serial with the lock or maglock psu. (see wiring diagram above)

When a fail secure lock is used, the REX push button is NO as shown below.

Fail-secure lock





Fail-safe lock / Maglocks



2.1.3 Maintenance mode

A maintenance mode is designed to easily test the system.

In the following position of the jumper , the behavior of the controller is standard. Only authorized keys can open the door or activate floors.

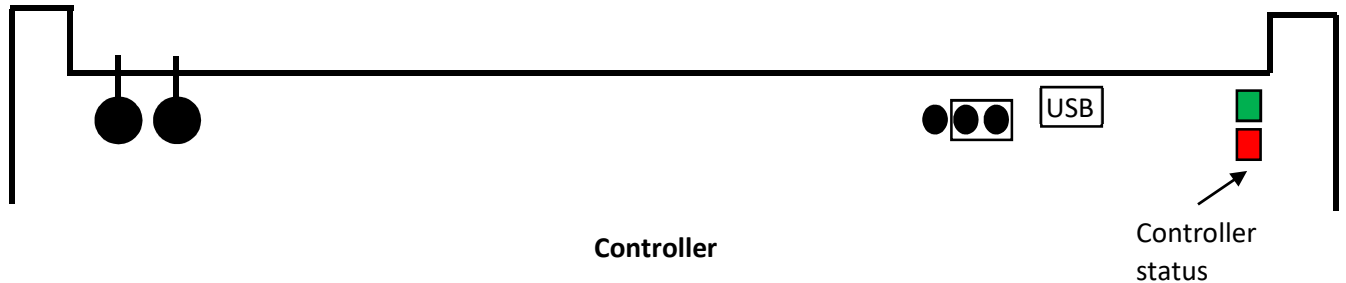
In the following position , any FDI key opens any door (reader 1 => door 1, reader 2 => door 2, etc).

3 Led indication

Different leds on the controller provide a status of the communication, psu, etc

- Status of the door relay (green)
- Status of the reader (red)
- Status of the controller (red/green) see below

Overview

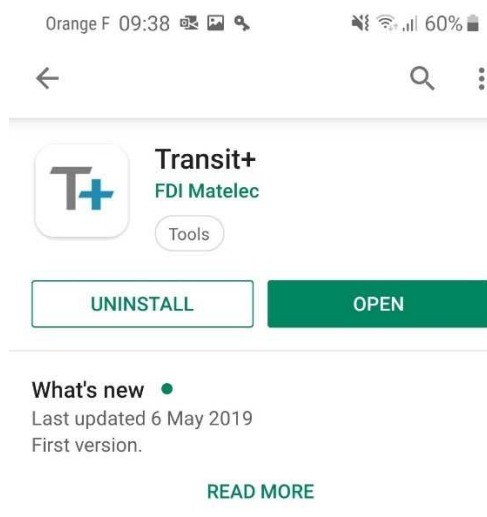


Detail

<p>Door status For each door, the green led is ON when the relay is activated. The red led of a 2-Smart controller flashes once every 3secs when the reader communication is ok and flashes 3 times per sec in case of faulty communication (reader not connected)</p>	<p style="text-align: center;">Door</p> <p style="text-align: center;">Leds</p>
<p>Controller status Two leds show the right voltage of the processing unit (green led) and the right performance of the operating mode. The green led must be on. If it is off, check the psu. The red led flashes once per sec, if it is off or always on, restart the controller. If, after a re boot, the led is always on or off, the controller has to be replaced.</p>	<p style="text-align: center;">Leds</p>

4 How to start programming?

Prerequisite: Download and install the Transit+ App if required.



The app manages two different menus: setup of the controller and management of the keys.

The setting tab offers possibility to

- Change the name of the controller.
By default, it is the ID but it can be changed to make the detection easier later
- Set the door release time of each relay
- Change the password of the controller. By default, it is 0000.
- Load a new firmware
- Make a factory reset

The app manages groups of keys. It is possible to manage several groups for one controller or one group per controller.

For example, when the controller is already in use and you want to download the data for backup or to add/ delete keys, you need to create a group then download the data from the controller to this group.

If you only need to add some keys in the controller, it is possible to create a group with these keys and upload to the controller. The controller will add these keys to its white list.

In this second option, the mobile is not aware of the existing keys on the controller, it only adds the new one.

Note, when the Android mobile embeds a NFC reader, keys and remotes can be added in the app by presenting them on the back of the mobile phone. The csn (card serial number) is automatically displayed and enrolled.

5 Compatible products

All FDI Mifare Plus keys

GB-010-200	Mifare Plus black key
GB-010-228	Mifare Plus blue key
GB-010-229	Mifare Plus red key
GB-010-230	Mifare Plus green key
GB-010-278	Mifare Plus yellow key
FD-010-203	868 MHz Mifare Plus remote control 4 buttons
FD-010-204	433 MHz Mifare Plus remote control 4 buttons

All FDI 2 wire readers

FD-020-016	2SMART 40mm reader with stainless steel plate
FD-020-086 (for keys exclusively)	2SMART vandal resistant reader
FD-020-007	2SMART 40mm panel mount reader
FD-020-166	2SMART OEM reader for Elekta call module
FD-020-210	2SMART OEM reader for Elekta Glass call module
FD-020-175	2SMART mushroom reader
FD-020-208	2SMART Mullion reader
FD-020-209	2SMART P60 reader
FD-020-190	2SMART RF receiver 433Mhz
FD-020-191	2SMART RF receiver 868Mhz
FD-500-025	Optional antenna 433 MHz
FD-500-036	Optional antenna 868 MHz

6 Information on Union Harmonisation Legislation

FDI MATELEC, as a manufacturer, declares under its sole responsibility that the product Transit+ complies with the relevant Union harmonisation legislation:

RED 2014/53/EU – CEM 2014/30/EU – ROHS 2011/65/EU

This declaration is fully available on request at sales@fdimatelec.com or on our web site www.fdimatelec.com under this product part number.

7 Product end of life management

Do not throw this product away with household waste. Please use your local recycling collection points to make sure this product is properly recycled.