



CDVI

Security to Access



STAR1M

**Mullion 2 in 1 Mifare® Card Reader,
Stand-Alone or Wiegand output**



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Thank you for buying our products and for the confidence you placed in our company

1] PRODUCT PRESENTATION

- 2-in-1 Mifare® Reader (13.56MHz):

1-Door Stand-Alone access control system or Wiegand output reader mode.

- **Stand-Alone options:** Shadow option: Up to 150 cards or Standard option: Up to 300 cards
- Read Mifare® classic, ultralight C (26, 30 or 44 bits)
- Resin-coated electronics
- Audible and visual feedback
- 3 meter cable (10 wire cable - AWG28)
- 1 Relay output (1A 12V dc)
- 1 Request to exit input
- Dimensions:
5.1 x 1.6 x 1.1 in. (130 x 41 x 28 mm)
- Input voltage : 12Vdc
- Consumption : 120 mA



RoHS

IP54

-25°C à +70°C

IK09

2] REMINDERS AND RECOMMENDATIONS

Installation recommendations

To protect the device from back-emf, do not forget to install the varistor across the lock terminals, in parallel.

Recommended cable

10 wire cable (AWG28)

Recommended power supplies

ADC335 and BS60 (in case the reader is powered neither by the controller nor by the reader controller [INTBUSW]). The power supply must be designed to be a limited power supply as defined in EN 60950-1.

Environment

When in a humid area or close to the

sea, we recommend applying varnish to the terminals to avoid oxidation.








This product is shipped with a varistor.

The varistor must be connected directly to the locking system terminals (electric strikes, electromagnet, or lock) operated by the device. If the device functions with several locking systems, each one must be fitted with a varistor. The varistor limits overload produced by the strike coil, known as self-effect or back-emf. If you are using a "Shear Lock", electromagnet or other type of electric lock, we recommend the use of dedicated power supply for the lock.

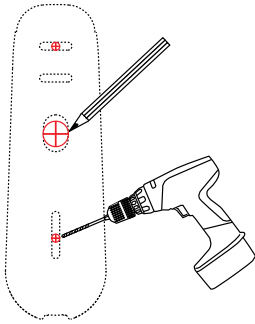


For optimum lighting, be careful to not fold the cable inside the product.

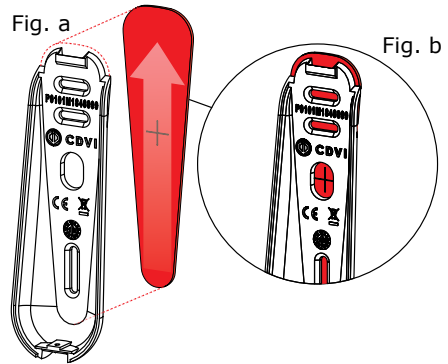
3] MOUNTING KIT

						
Leaktight seal	TF 3x30 Screws	S5 Plastic anchor	TORX® Screwdriver tip	TORX® 3x8 Screws	Varistor	METALR tag
STAR1M	1	2	1	1	1	1

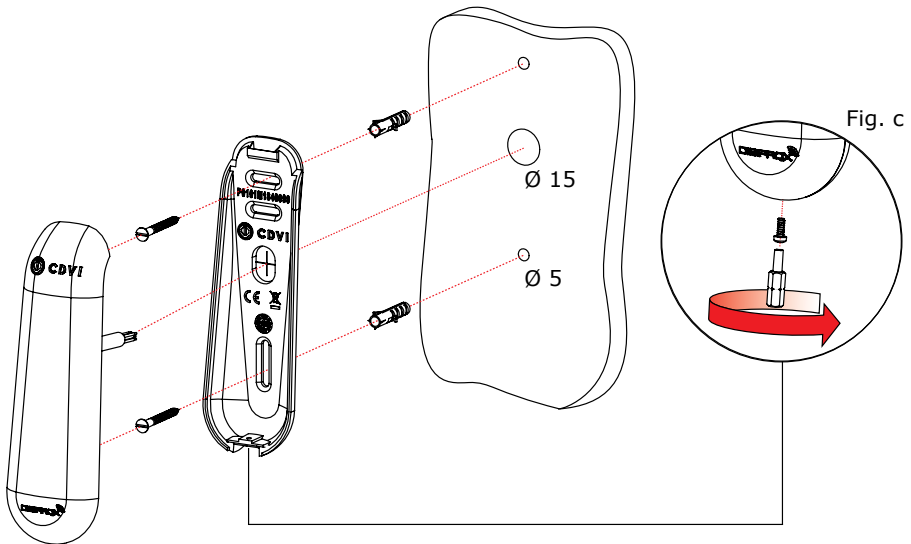
4] MOUNTING



1 Trace the markings to fix the product using the back casing. Drill the fixing support using the markings (recommended diameters: Ø5 mm and Ø15 mm). Using the wiring diagram, plan for the cable exits hidden under the surface or outside (trunking).



2 Fit the seal on the back plate starting from the bottom. (fig. a). The seal must overlap the back part of the reader by about 2 mm (fig. b).



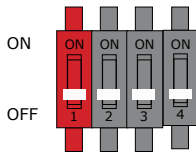
3 Fit the anchors in the holes, pass the cable and connect it (see wiring diagram on page 14), then fix the reader using the TORX® screw using the TORX® tool (fig. c). Remember to fit the varistor at the locking system level (see "Reminders and recommendations" on page 12).

5] READER OPERATING MODE

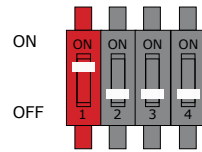
You have two operation modes with the STAR1M. In Stand-Alone mode the STAR1M acts as a 1 door access control system or in Wiegand output mode allows you to connect it to an access control system with a Wiegand input. Here's how to configure it:

On power OFF, select the operating mode (Wiegand output or Stand-Alone mode). Then power ON the STAR1M to activate the chosen mode. Repeat the process for each mode change.

Stand-Alone mode (Default) (DIP1 OFF)



Wiegand output mode (DIP1 ON)



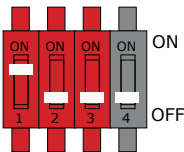
LED flashes yellow & green

(Waiting for the Master card to be programmed)

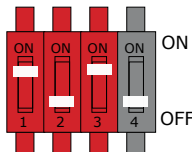
6] WIEGAND OUTPUT MODE

6.1 Wiegand Output Reading Bit Format Settings

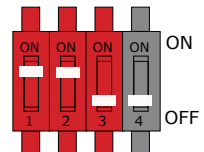
26 bits Wiegand Output



30 bits Wiegand Output

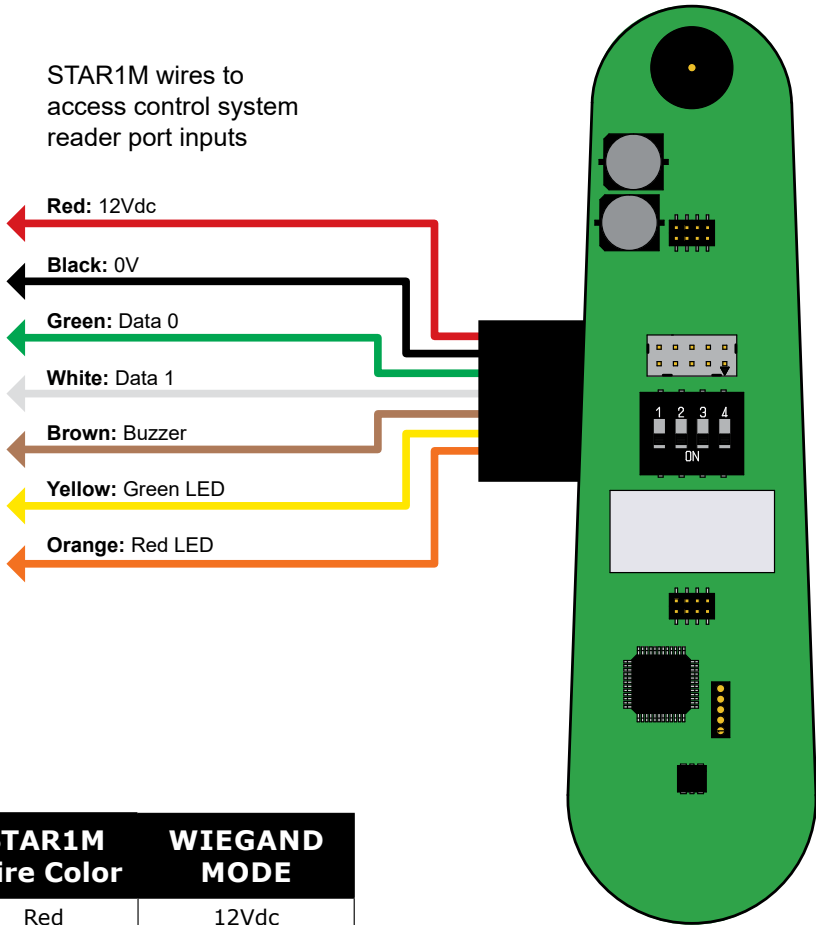


44 bits Wiegand Output



**After your selection,
power OFF, then
power ON the
STAR1M to activate
the chosen mode.**

6.2 Wiegand Output Wiring Diagram



STAR1M Wire Color	WIEGAND MODE
Red	12Vdc
Black	0 V
Green	Data 0
White	Data 1
Blue	N/A
Grey	N/A
Purple	N/A
Brown	Buzzer input
Yellow	Green LED input
Orange	Red LED input

LEDs lighting in normal operation mode:

- Standby: Steady Blue
- Access granted: Green (3sec.)
- Access denied: Flashes Red (x 5)

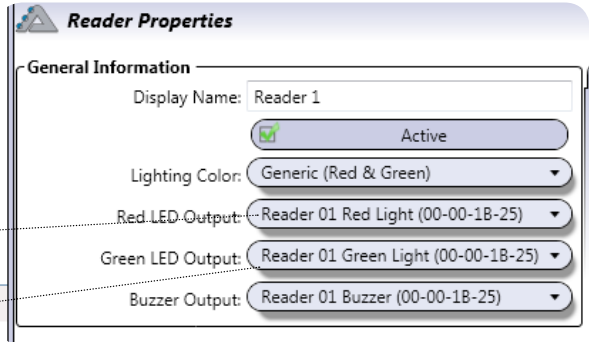
6.3 LEDs management on the ATRIUM system

LED STATUS

GREEN ACCESS GRANTED
RED ACCESS DENIED
BLUE STANDBY

RED LED CONFIGURATION

GREEN LED CONFIGURATION



6.4 LEDs management on the CENTAUR system

LED STATUS

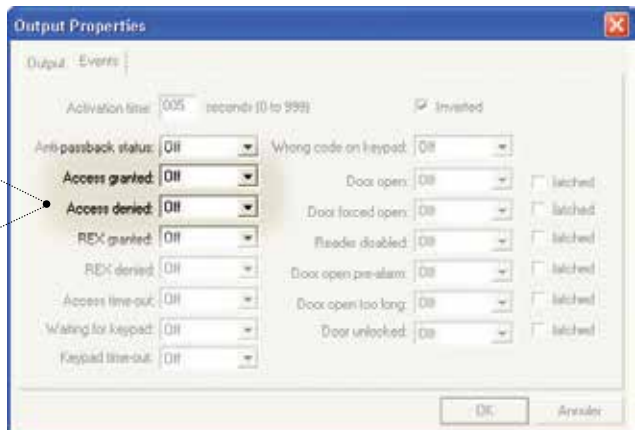
GREEN ACCESS GRANTED
RED ACCESS DENIED
BLUE STANDBY

RED LED CONFIGURATION

Access granted: On
Access denied: Off

Access granted: Off
Access denied: On

GREEN LED CONFIGURATION



7] STAND-ALONE MODE

7.1 Stand-Alone Option Settings

You have two options in Stand-Alone mode, "Standard" or "Shadow".

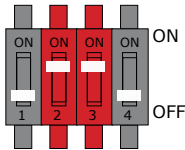
Standard option (Up to 300 cards):

Only one user badge is programmed for each user. To delete a user from the STAR1M, enter the programming mode and present the user badge.

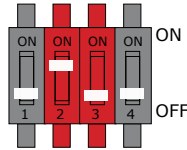
Shadow option (Up to 150 cards):

Two different badges are programmed for the same user. The user gets one of the two badges and the second badge is stored in secure place by the supervisor as a shadow badge. These 2 badges can both grant access. In case the user badge is lost or stolen, the shadow badge can be used to delete the user from the STAR1M.

Standard Option Dipswitch Setting



Shadow Option Dipswitch Setting



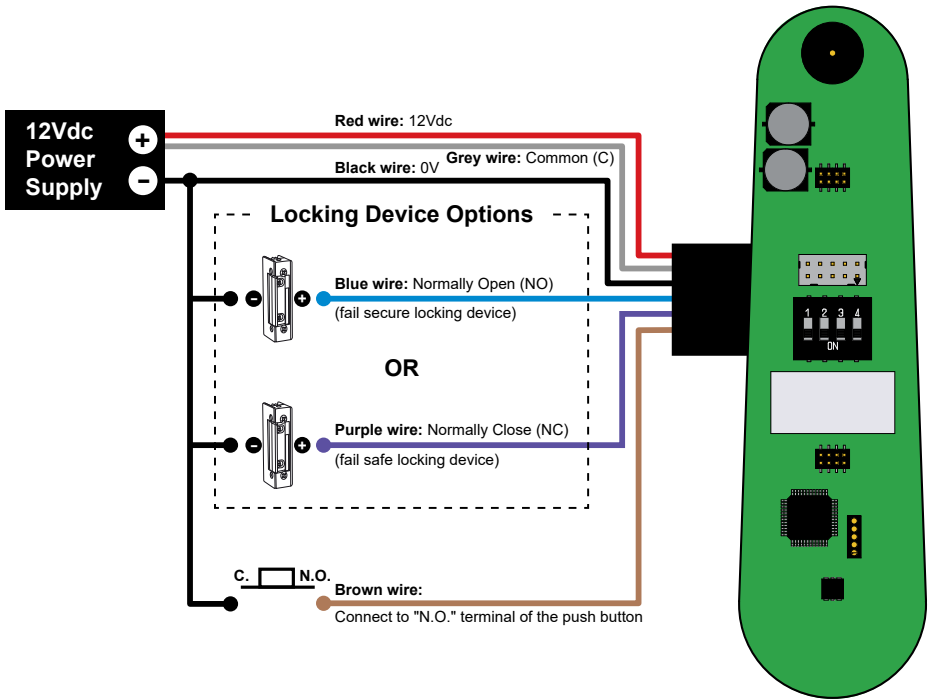
After your selection, power OFF, then power ON the STAR1M to activate the chosen mode.



Switching from "Shadow" to "Standard" mode:
All cards are saved and become independant.

Switching from "Standard" to "Shadow" mode:
All cards will be erased.

7.2 Stand-Alone Wiring Diagram



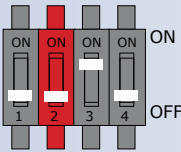
STAR1M Wire Color	STAND-ALONE MODE
Red	12Vdc
Black	0 V
Green	/
White	/
Blue	Normally open
Grey	Common
Purple	Normally closed
Brown	Request-to-exit input
Yellow	/
Orange	/

LEDs lighting in normal operation mode:

- Standby: Steady Blue
- Access granted: Green (3sec.)
- Access denied: Flashes Red (x 5)

7.3 Stand-Alone Mode: Standard Option Programming

Program or replace the Master badge:



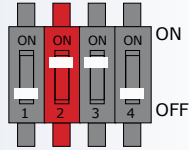
1: Set DIP2 to OFF

(STAR1M beep once & LED turn yellow)



2: Present the provided red badge

(STAR1M beep once & LED turn OFF)



3: Set back DIP2 to ON

(STAR1M beep once & LED turn Blue)

Add user cards (max. 300) :



1: Present the master badge to start programming mode

(STAR1M beep once & LED turn yellow)



2: Present new user card one at a time

(STAR1M beep once & LED turn green then yellow at each new card. If a card is already registered, the reader will beep once and yellow LED turn off then back on.)



3: Present the master badge to exit programming mode

(STAR1M beep once & LED turn blue)
STAR1M will automatically exit after 10 seconds of no activity

Delete user cards:



1: Present the master badge to start programming mode

(STAR1M beep once & LED turn yellow)



Swipe Twice

2: Present an existing user card twice to delete

(First swipe, STAR1M beep once & Yellow LED turn off and on. Second swipe, LED turn red then yellow. Repeat for each card)

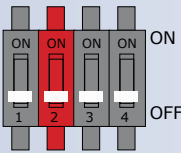


3: Present the master badge to exit programming mode

(STAR1M beep once & LED turn blue)
STAR1M will automatically exit after 10 seconds of no activity

7.4 Stand-Alone Mode: Shadow Option Programming

Program or replace the Master badge:



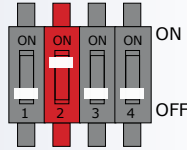
1: Set DIP2 to OFF

STAR1M beep once & LED turn yellow



2: Present the provided red badge

STAR1M beep once & LED turn OFF



3: Set back DIP2 to ON

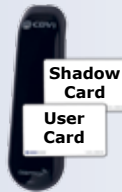
STAR1M beep once & LED turn Blue

Add user cards (max. 150) :



1: Present the master badge to start programming mode

STAR1M beep once & LED turn yellow



2: Present a new user card then is shadow card

Swipe the first card, STAR1M beep once & LED turn green then yellow. Then swipe the second card, STAR1M beep twice & LED flashes green twice. Repeat for each combination of 2 cards.



3: Present the master badge to exit programming mode

STAR1M beep once & LED turn blue
(STAR1M will automatically exit after 10 seconds of no activity)

Delete user cards:



1: Present the master badge to start programming mode

STAR1M beep once & LED turn yellow



2: Present a registered user or shadow card twice to delete

First swipe, STAR1M beep once & Yellow LED turn off and on. Second swipe, LED turn red then yellow. Repeat for each card.



3: Present the master badge to exit programming mode

(STAR1M beep once & LED turn blue)
STAR1M will automatically exit after 10 seconds of no activity

7.5 Common Stand-Alone Programming

Program the unlock time (Stand-Alone mode):

Programmable from 01 to 99 seconds (Default: 5 seconds)



1: Present the master badge to start programming mode

STAR1M beep once & LED turn yellow



2: Press the connected REX button (Each press add 1 second).

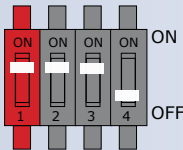
Once your sequence is complete, wait 10 seconds. The STAR1M LED start flashes white & red for each second recorded to confirm your selection.

Ex.: Press 5 times for 5 sec. wait 10 seconds then STAR1M LED flashes white and red 5 times.

(STAR1M will automatically exit programming mode after confirmation)

Reset to factory default values (Delete all cards):

In stand-alone mode the cards and badges are registered in the STAR1M. Follow the steps below to remove all cards and badges and restore the default configuration. In Wiegand output mode cards and badges are NOT registered in the STAR1M but rather in the access control system to which it is connected.



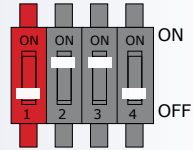
1: Power OFF the STAR1M and set DIP1 to ON



2: Power ON the STAR1M

STAR1M beep once & LED flashes rapidly white/Red followed by a green, red, blue blinks then turn off.

Now the memory is deleted.



3: Power OFF the STAR1M, set DIP1 to OFF then power ON STAR1M

STAR1M LED blink green, red then steady blue and beep once.

Ready to start again from the beginning.

Reference : G0301FR1031V04
Extranet : CDVI_IM STAR1M CMYK A5 FR-EN-04



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