



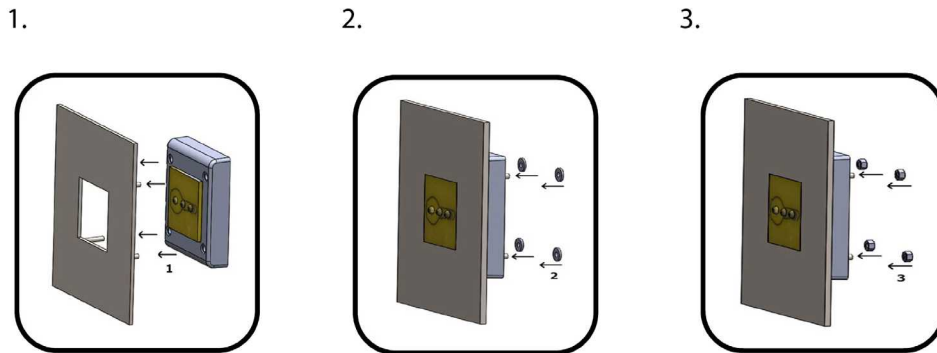
# INSTALLER'S MANUAL

## SPECIFICATIONS

Technology	RFID 13.5 MHz
Interface	WS4 Interface
Supported Credentials	HID iClass CSN, NTAG, Mifare (Classic, Desfire, Plus, Ultralight), ISO 15693
Power supply	9 - 15 V DC
Maximum current consumption at 12 V DC	30 mA
Sound indicator	Internal buzzer
LED indicators	1 Red LED, 1 Green LED, 1 Orange LED
Micro USB connector	Built-in Micro USB connector for configuration and firmware update
Read range	Up to 4cm (depends on credential type, form factor and encryption )
Operating temperature	-15 to +50
Operating humidity	0% - 95% relative humidity, non-condensing
Mounting	Panel mount
Panel Connection	Terminal
Environmental rating	Outdoor, IP65

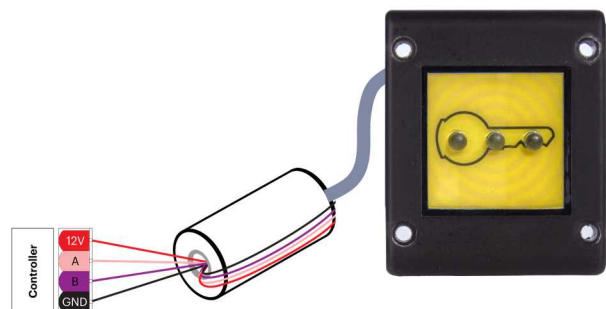
## INSTALLATION

### Mounting Instructions

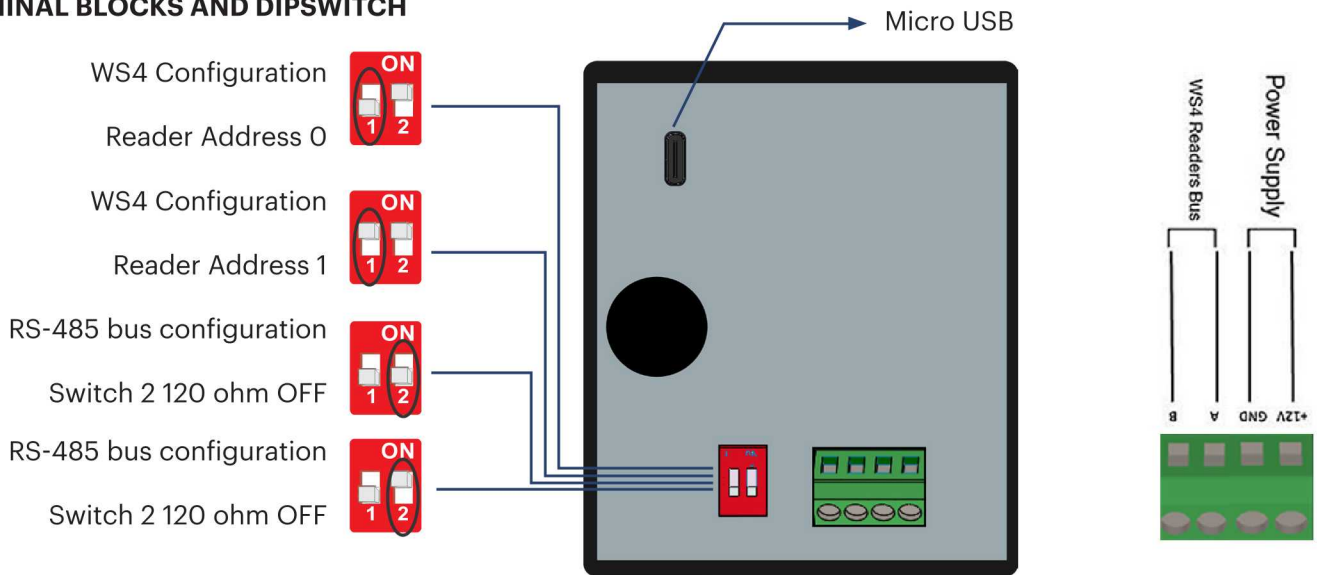


### FERRITE CORE MOUNTING

- Wrap the wires around the ferrite core (1 turn).
- The ferrite core is provided with the kit, and it is used to reduce the EMI.



## TERMINAL BLOCKS AND DIPSWITCH



## TERMINALS

TERMINALS	DESCRIPTION	WS4 CONFIGURATION
A	RS-485 line	RS-485 A (+)
B	RS-485 line	RS-485 B (-)
+12V	Power Supply	✓
GND	Ground	✓

## DIPSWITCH

DIPSWITCH	DESCRIPTION	WS4 CONFIGURATION
SW 1	Setup	The readers for Doors 1.0 and 2.0 must be at address 0, and those for Doors 1.1 and 2.1 at address 1. For doors equipped with 2 readers, one must be at address 0 and the other at address 1
SW 2	RS-485 120 OHM termination	✓

## CABLING

CABLING	DESCRIPTION	WS4 CONFIGURATION
Max. Length	Cable Length	80 m
Cable	Recommended cable type	Multiconductor cable 2 twisted pairs with shielding

## SIGNALISATION

SIGNALISATION	DESCRIPTION	WS4 CONFIGURATION
Reader On-Line	Reader is in communication with controller	Managed by controller
Reader Off-Line	Reader lost communication with controller	Red LED Blinks fast

## SOFTWARE SETTINGS

XPR Toolbox is software for setting and firmware updating the reader.

To setup the reader or update the firmware, run the XPR Toolbox and select "Xsmart readers."

Then select "XPROX-MO" and click on the "Open" tab.

Follow the instructions in the software to set up or update the firmware. Power the reader with 12V and connect to PC using reader micro-USB connector.