



# **SED-900**

## **Remote & Master**

### **Wireless Weigand System**

**WARNING: PLEASE READ  
INSTALLATION INSTRUCTIONS  
FIRST**

#### **PRODUCT WARRANTY**

This product is covered by a 12 month, **back to base warranty** from date of purchase, and proof of purchase should be supplied. The warranty does not cover damage that has resulted in the improper installation or improper use of this product. The warranty does not cover lightning damage, product misuse, electrical surges or acts of God.

#### **LIMITATION OF LIABILITY**

Sec Eng Systems Pty Ltd does not accept any liability for the loss or damage to property or persons in relation to goods supplied. This disclaimer is only limited to the warranty of the goods supplied and the intended use.

**NOTE: THIS MANUAL IS SUBJECT TO COPYRIGHT**

## READ THIS PLEASE



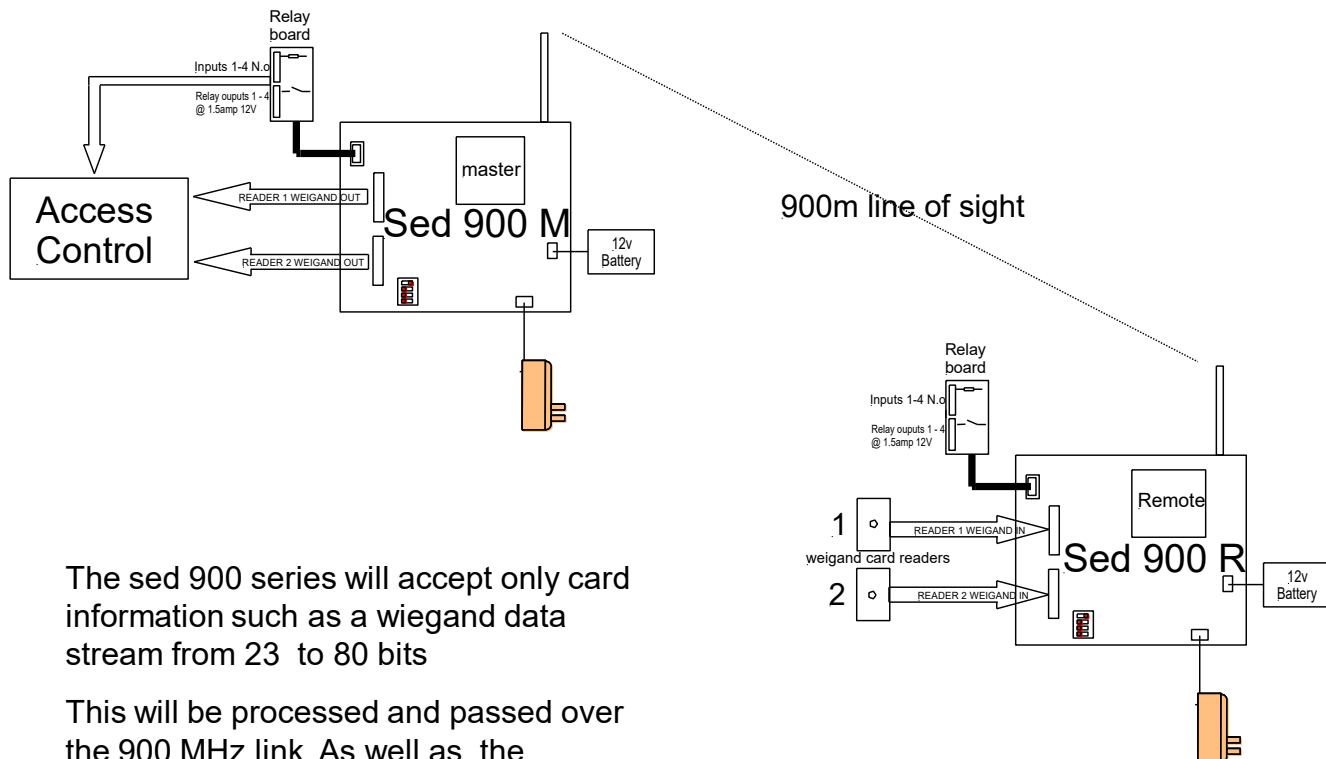
**The do's and don'ts of installing our wireless equipment**

- 1/ always install the antenna's that we supply Outside**
  
- 2/ Always install our antennas a minimum 3 metre away from each other or any other antenna's**
  
- 3/ If you are installing multiple Sed 900's systems in one location, call us so we can assist you with the best possible Installation process**

**If you fail to do this , you may void your warranty**

## INTRODUCTION

The sed 900 wireless wiegand system is a combination of 2 devices  
 1 A master and 1 a remote Which allow wiegand card and control information  
 To pass over a 900 MHz low power link



The sed 900 series will accept only card information such as a wiegand data stream from 23 to 80 bits

This will be processed and passed over the 900 MHz link. As well as the transposition of the 4 x normally open inputs crossed over to the 4 x dry relay contacts on the remote . And visa versa

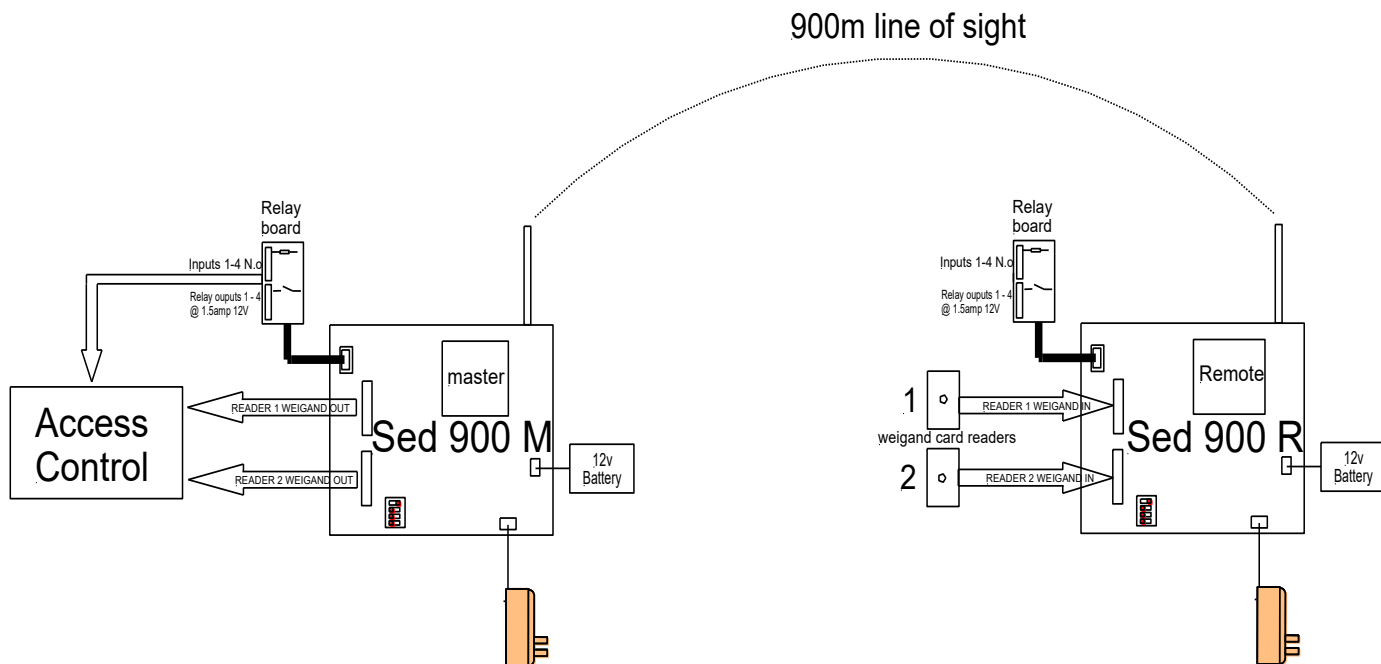
This can be used for separate control of devices , and works as , input to follow Output.

**NOTE: YOU MUST ALWAYS WIRE ALL CABLES SHOWN FROM THE SED 900 TO THE ACCESS CONTROL SYSTEM IF YOU DON'T THE WIRLESS UNIT WILL NOT WORK CORRECTLY**

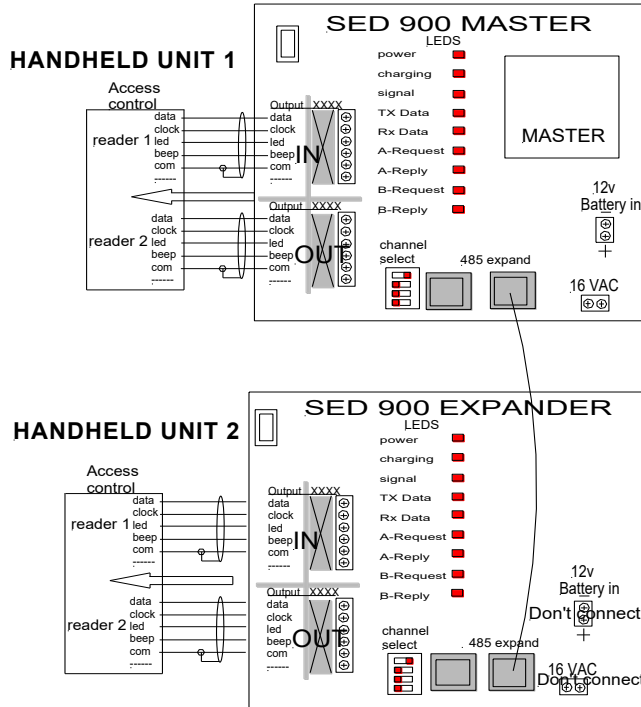
# NOTE : READ THIS GUIDE ALL THE WAY THRU BEFORE INSTALLING

Each unit has been factory programmed and tested. On each radio module it will have a sticker indicating what the unit is EG. Master or Remote

- A master unit is always located at the access control end
- A Remote is always located at the card reader end



EXPANDER GUIDE FOR SED900



**NOTE: YOU MUST ALWAYS WIRE ALL CABLES SHOWN FROM THE SED 900 TO THE ACCESS CONTROL SYSTEM IN THE CONNECTION GUIDE FOR SEC-ENG SYSTEMS DEC 2009. THE WIRELESS UNIT WILL NOT WORK CORRECTLY**

**CONNECTIONS**

**LED INDICATORS**

- AC = 16v ac plug Pac supplied
- 12v battery in ( back up battery ) not supplied
- 485 expander + expander boards
- I/O for input output board

**Outputs channel A to access control system**

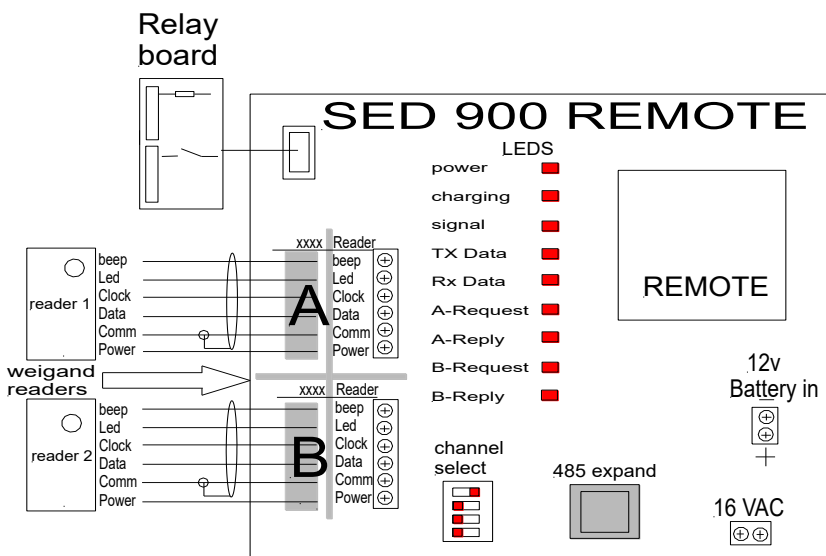
- Data to access control DATA / D1 GREEN
- Clock to access control CLOCK D0 WHITE
- Led to access control LED BROWN
- Beep or access control BUZZ or BEEP YELLOW
- Com to access control GND or COMMON BLACK

**Outputs channel B to access control system**

- Data to access control DATA / D1 GREEN
- Clock to access control CLOCK D0 WHITE
- Led to access control LED BROWN
- Beep or access control BUZZ or BEEP YELLOW
- Com to access control GND or COMMON BLACK

- POWER = Power ok to board
- CHARGING = Battery charging
- SIGNAL = ON , Transmitting out
- Tx Data= radio sending data out
- Rx Data= radio receiving data in
- A request = reader on A sending data
- A Reply = reader on A receiving data
- B request = reader on B sending data
- B Reply = reader on B receiving data

# CONNECTION GUIDE FOR REMOTE SED 900



**NOTE: YOU MUST ALWAYS WIRE ALL CABLES SHOWN FROM THE SED 900 TO THE ACCESS CONTROL SYSTEM IF YOU DON'T THE WIRELESS UNIT WILL NOT WORK CORRECTLY**

## CONNECTIONS

- AC = 16v ac plug pac supplied
- 12v battery in ( back up battery ) not supplied
- 485 expander + expander boards
- I/O for input output board

### Wiegand card inputs reader A

- Beep to BUZZ card reader YELLOW
- Led to card reader LED BROWN
- Clock to card reader CLOCK / D0 WHITE
- Data to card reader DATA / D1 GREEN
- Com to card reader GND or COMMON BLACK
- 12v dc power for card reader RED

### Wiegand card inputs reader B

- Beep to BUZZ card reader YELLOW
- Led to card reader LED BROWN
- Clock to card reader CLOCK / D0 WHITE
- Data to card reader DATA / D1 GREEN
- Com to card reader GND or COMMON BLACK
- 12v dc power for card reader RED

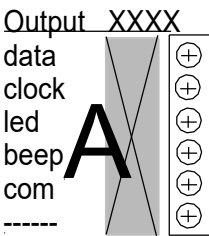
## LED INDICATORS

- POWER = Power ok to board
- CHARGING = Battery charging
- SIGNAL = master within range  
( FLASHING = signal low )
- Tx Data= radio sending data out
- Rx Data= radio receiving data in
- A request = reader on A sending data
- A Reply = reader on A receiving data
- B request = reader on B sending data
- B Reply = reader on B receiving data

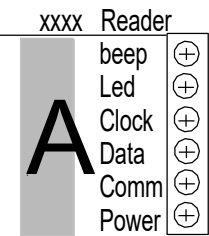
**1** Before connecting any card readers to the sed 900 ensure they currently work on or have been Operating on the Access Control System first  
( do a test on the current access control port first with a known reader )

**2** Set the SED 900 Remote and the SED 900 Master up side by side EG min of 4m apart and Connect the plug pack and stubby test antennas  
Connect either battery or plug Pac to power  
On the Sed 900 master the signal light should be on  
On the Sed 900 Remote the signal light should be on  
This means that the link is established and working  
Test a alarm input on the Sed 900 master relay board , This should trigger a relay on The SED 900 remote

### **3** Wiring the Sed 900 MASTER

Please note : The Wiring on the Sed 900 master requires you wire  
According to  to the legend ,marked **OUTPUT**  
and wire according to this connection guide

### **4** Wiring the Sed 900 REMOTE

Please note : The Wiring on the Sed 900 REMOTE requires you wire  
According to  to the legend ,marked **READER**  
and wire according to this connection guide

**5** Connect a reader to the remote and wire the reader output from the master to a Access Control input  
Simply badge a known working card and the reader should work as if it Had been hard wired to the access control unit

**6** If all tests worked ok, now install into out door environment

**Note: both the 900 Mhz radio units require line of site signal, they will work thru Buildings but this may effect signal coverage.**

**move the remote to the location where you require to install it and do a field test ensure you have a steady signal light**

**7** If all tests worked ok, now install into out door environment  
ensure you install the high gain antennas supplied , this will ensure constant cover

## **TECHICAL SUPPORT**

### **02-9524-9952**