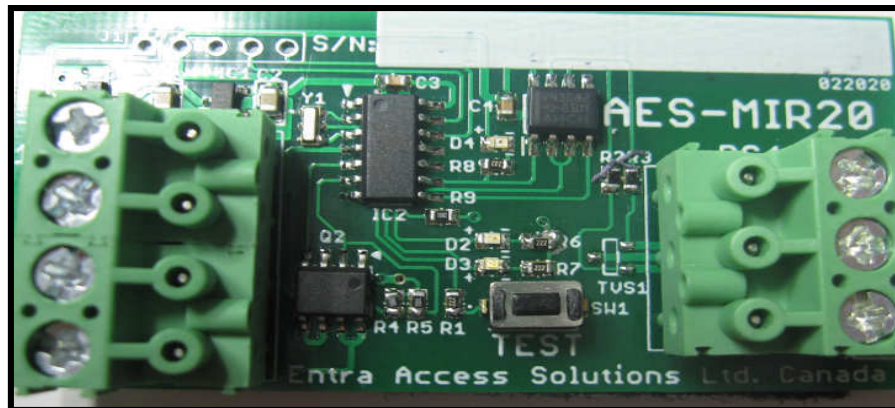


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## AES-MIR20

### TX3 RS485 Serial to Wiegand Converter

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The AES-MIR20 is a Serial to Wiegand Converter designed to interface the Mircom TX3™ Telephone Entry Systems to any Access Control System.

**Description:**

When a resident grants access to a Visitor, the AES-MIR20 captures the data transmitted from the Mircom TX3™ Lobby Panel to the Phantom Elevator Restriction Controllers. This data is then Converted and Output as Wiegand Data.

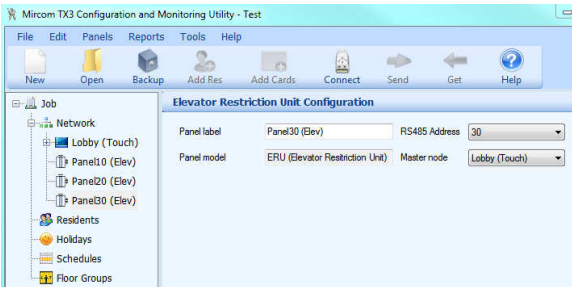
**Wiegand Card Formats presently available are as follows:**

|                                 |                      |
|---------------------------------|----------------------|
| <i>Standard 26Bit (default)</i> | <i>Keyscan 36Bit</i> |
| <i>RBH 50Bit</i>                | <i>ICT34Bit</i>      |
| <i>HID Corporate1000 35Bit</i>  |                      |

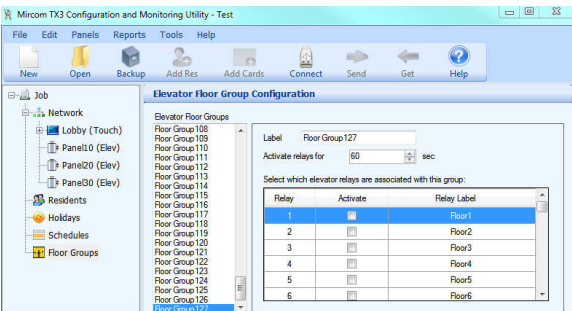
**Mircom TX3™ System Programming Requirements**

For the **AES-MIR20** to work properly, we must program the following items using the Mircom TX3™ Configuration and Monitoring Utility™ Software.

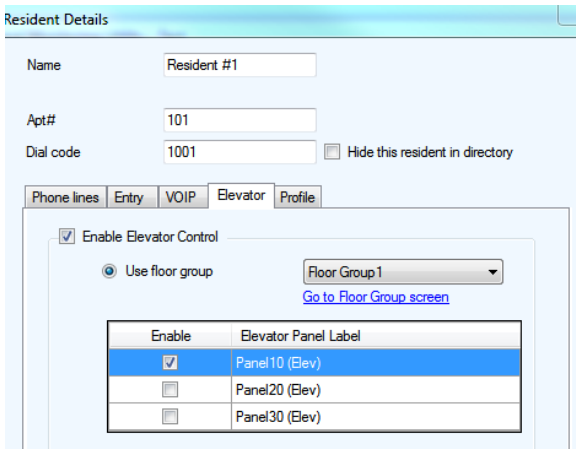
- 1) Add one(1) Elevator Restriction Unit (ERU) Per 128 Residents.  
**The Elevator Restriction Controllers will always be Offline. THIS IS NORMA! As they do not exist.**
  - 2) Add 128 Floor Groups
  - 3) Assign an ERU & Floor group to each resident.
- See Screen Shots Below.



In this screen we have added three(3) ERU's. The addresses we selected are 10, 20 , and 30.



In this screen we have added 128 Floor Groups.



In this screen we have assigned Resident #1 to Use ERU(Panel10) and Floor Group 1.

When Resident #1 grants access to a Visitor,  
 The wiegand output will be: fac = 1(default)  
 Card#:1001.

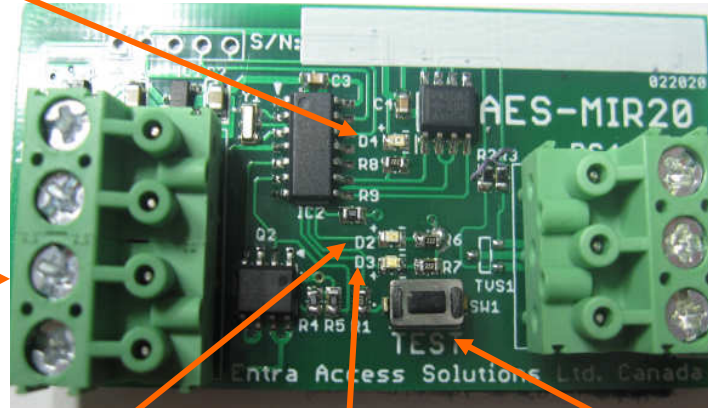
See Below for Card number calculations.

**AES-MIR20 LAYOUT**

Red Led D4

Blinks Received Serial Data Bytes

To  
Access Control  
Reader Port



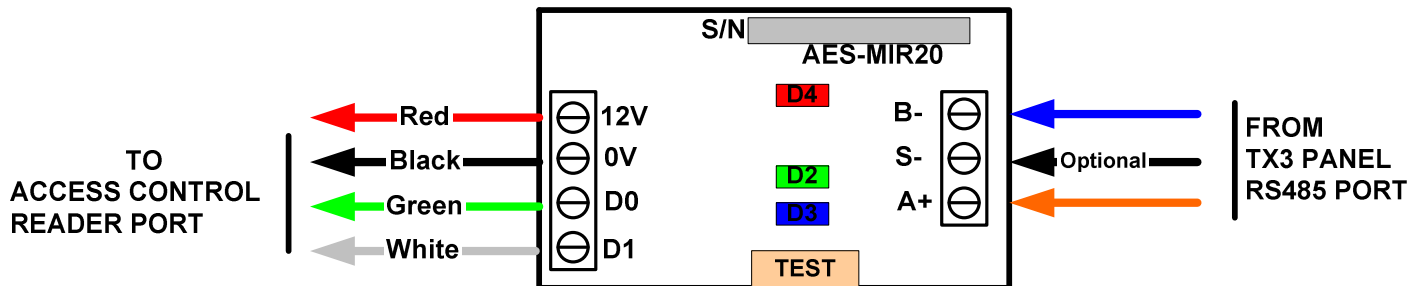
From Mircom TX3™  
RS485 PORT

Green Led D2  
Blinks every Second

Blue Led D3  
Blinks Wiegand Bits sent Out

Test Button  
Card No: 9999 Sent  
When Pressed

**AES-MIR20 Terminations**



| <u>Wiegand Card Formats Available</u> |                  |              |              |                       |                                 |
|---------------------------------------|------------------|--------------|--------------|-----------------------|---------------------------------|
| Standard<br>26Bit                     | Keyscan<br>36Bit | RBH<br>50Bit | ICT<br>34Bit | HID Corp1000<br>35Bit | Other Formats Available<br>Call |

Default Facility/Family Code = One

### Card Number Calculations

The Wiegand Card Number, that the AES-MIR20 generates, is derived from the Elevator Restriction Unit (ERU) Address and the Floor Group assigned to each Resident.

**Card Number = ERU –Address x 100 + Floor Group.**

.....

**Example #1**

Resident #1

ERU-Address = 20 ( You can assign Any address from 2 to 63 to the ERU's)

Floor Group = 27

Card Number = (20 x 100) + 27 = 2000 +27 = 2027.

.....

**Example #2**

Resident #1

ERU-Address = 30 ( You can assign Any address from 2 to 63 to the ERU's)

Floor Group = 105

Card Number = (30 x 100) + 105 = 3000 +105 = 3105.

| <b>AES-MIR20 SPECIFICATIONS</b> |   |
|---------------------------------|---|
| <b>Power Supply</b>             | <b>9 to 14VDC (Linear Supply Recommended)</b>                 |
| <b>Current</b>                  | <b>8mA Average, 10mA Peak</b>                                 |
| <b>Cable Requirements</b>       | <b>Use Access Control &amp; Mircom™ Recommendations</b>       |
| <b>OutPut Format</b>            | <b>Wiegand 26Bit,36Bit, 50Bit, 34Bit, others.</b>             |
| <b>Facility/Family Code</b>     | <b>One(1)</b>   |
| <b>Communication</b>            | <b>RS485</b>  |
| <b>Warranty</b>                 | <b>5 Years against defects in Materials &amp; Workmanship</b> |
|                                 |   |
|                                 |   |