

# WT-7001 & WR-7001 Wiegand Field Test Procedure

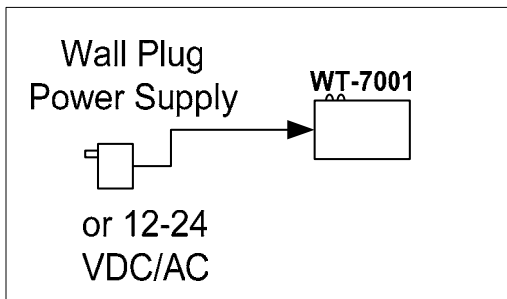
## Rev B

This test will require;

- WT-7001 Wiegand transmitter
- WR-7001 Wiegand receiver
- short fiber optic jumper
- two wire jumpers
- 12 to 24 volt power



### Check power on Transmitter (WT-7001)



1. Connect operating power (+12 to +24 VDC) to the WT-7001 to be tested to the 3-pin power terminal block. Connect the positive (+) power lead to the **Pwr** connector terminal position 2 and the negative (-) power lead to terminal position 3. Do not make any connection to terminal position 1. Disconnect any wires to the data (5-pin) terminal block. Verify;

\_\_\_\_\_ **Pwr** indicator is On

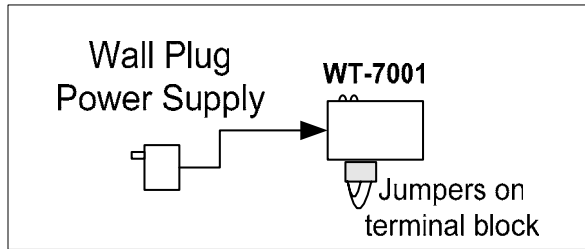
\_\_\_\_\_ **Lnk** indicator is On

\_\_\_\_\_ **D0** indicator is Off

\_\_\_\_\_ **D1** indicator is Off

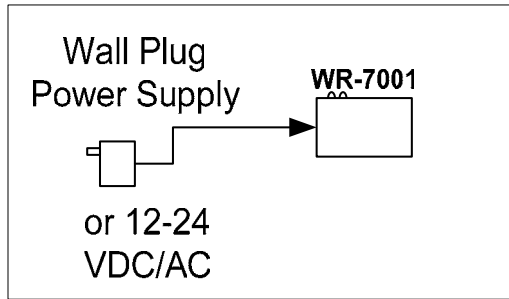
If the power indicator does not illuminate, use a digital voltmeter to check for correct voltage and polarity.

**Check link and signal lights on Transmitter (WT-7001)**



2. On the WT-7001 Wiegand transmitter to be tested connect a short wire jumper from the signal terminal block position 5 to terminal block position 1. Connect a second jumper from terminal block position 5 to terminal block position 2. Note that terminal block position 5 will have two wires connected to it.
  
3. Remove the jumper from the signal terminal block position 1. Verify;  
\_\_\_\_\_ **D1** indicator is on  
Replace the jumper.
  
4. Remove the jumper from the signal terminal block position 2. Verify;  
\_\_\_\_\_ **D0** indicator is on  
Replace the jumper.

### Check power on Receiver (WR-7001)



5. Connect operating power (+12 to +24 VDC) to the WR-7001 to be tested to the 3-pin power terminal block. Connect the positive (+) power lead to the **Pwr** connector terminal position 2 and the negative (-) power lead to terminal position 3. Do not make any connection to terminal position 1. Disconnect any wires to the data (5-pin) terminal block. Verify;

\_\_\_\_\_ **Pwr** indicator is On

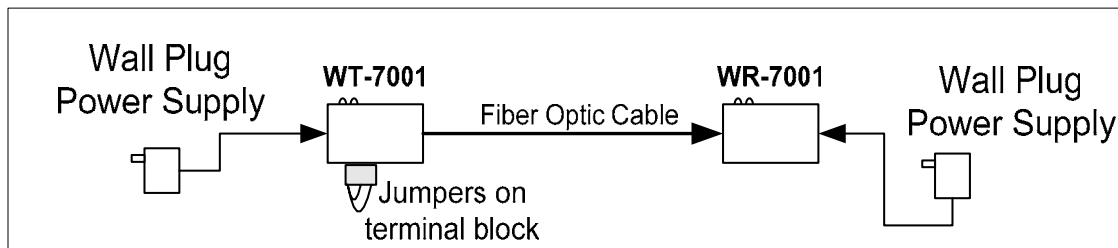
\_\_\_\_\_ **Lnk** indicator is On

\_\_\_\_\_ **D0** indicator is Off

\_\_\_\_\_ **D1** indicator is Off

If the power indicator does not illuminate, use a digital voltmeter to check for correct voltage and polarity directly on the power connector.

### Connect Fiber link



6. Connect the WT-7001 transmitter to a WR-7001 receiver with a short length of fiber optic cable. On the WR-7001 verify

\_\_\_\_\_ **Lnk** indicator is On

If not, check for a bad fiber or fiber connection.

### ***Check link and signal lights on Receiver (WR-7001)***

7. Remove the jumper from the signal terminal block position 1 on the WT-7001 transmitter.  
Verify;

\_\_\_\_\_ D1 indicator illuminates on the WT-7001 transmitter

\_\_\_\_\_ D1 indicator illuminates on the WR-7001 receiver

Replace the jumper.

8. Remove the jumper from the signal terminal block position 2 on the WT-7001 transmitter.

\_\_\_\_\_ D0 indicator illuminates on the WT-7001 transmitter

\_\_\_\_\_ D0 indicator illuminates on the WR-7001 receiver

Replace the jumper.

If all of the above tests are completed as indicated the WT-7001 and WR-7001 Wiegand system being tested appears to be operating correctly.

### ***Common issues;***

When connecting the WT-7001 and WR-7001 into a Wiegand system Data 0 and Data 1 signals must be connected **as well as a signal return path via terminal block position 3** of the 5-pin terminal block. This signal return path must truly be common. Do not assume that the shield of any connecting cable is common. Take time to locate the true common if it is not obvious.