Direct Wire with CIA Modem

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Hardware and Software Needed

1. Watelco cable (cable is grey with flying leads on it. Colors are red, black, green and yellow) comes with the CIA modem
2. Current release of compass
3. Cia modem
4. Usb to serial adapter if comport is not available on the computer.

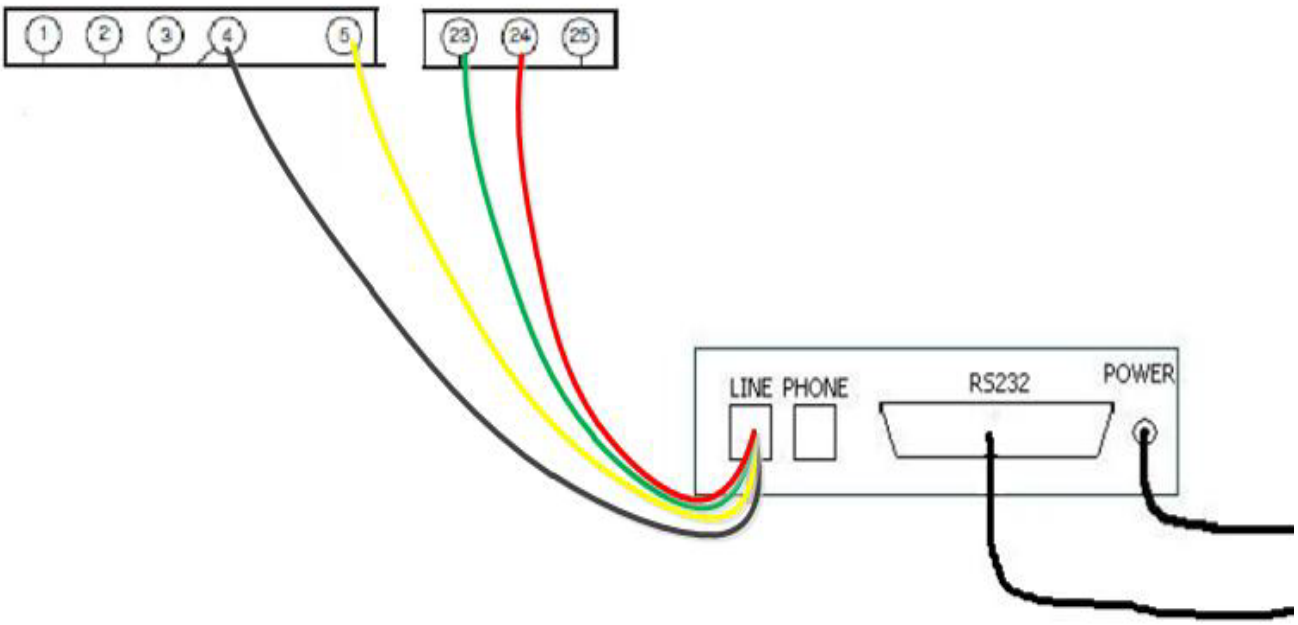
Make sure that all phone lines are disconnected from the panel before following these steps

Connecting the 15p/20p and family equivalents

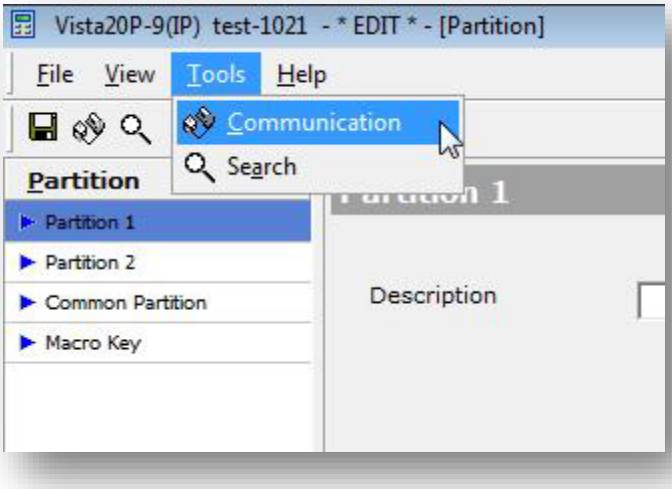
1. Connect the Watelco cable to the panel as follows:

    - Red to tip
    - Green to ring
    - Black to Aux Negative or to an alternate power source
    - Yellow to Aux Positive or to an alternate power source

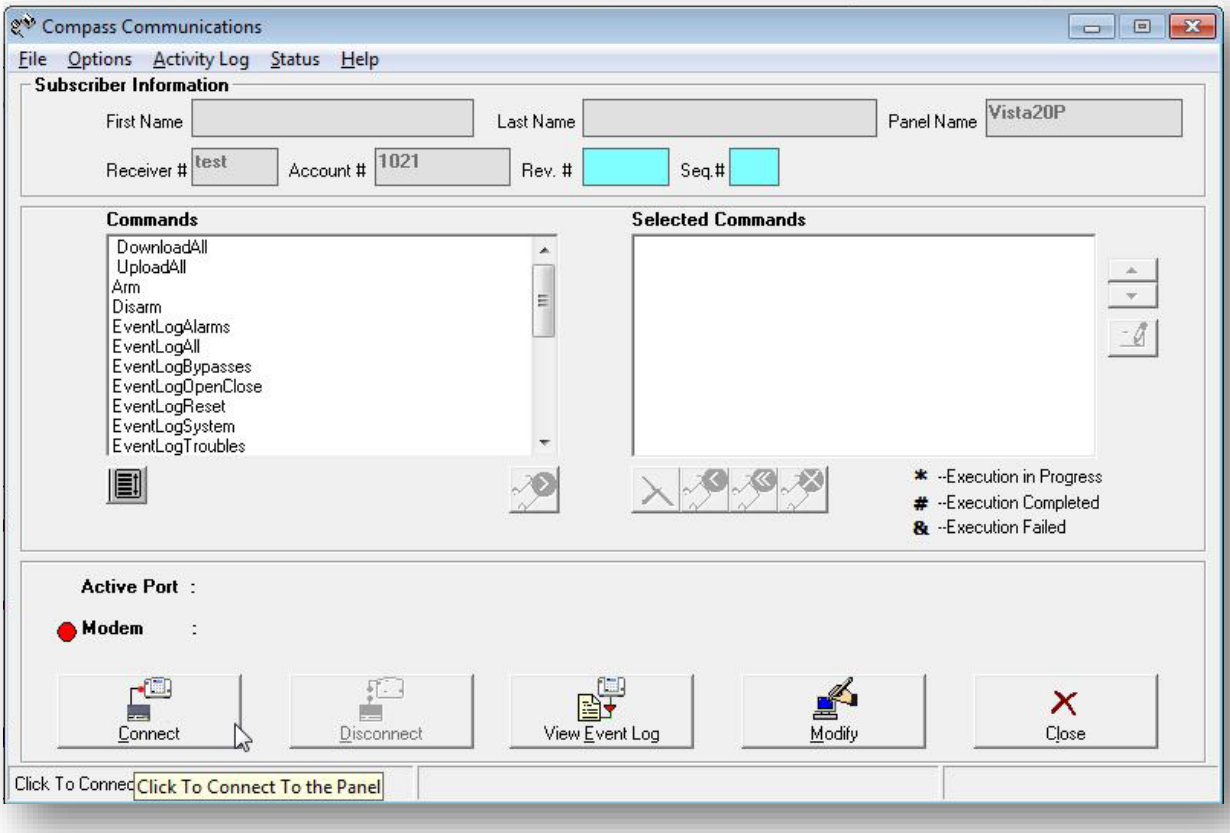
    Yellow and Black can be ran to an alternate power source that gives an output of 13.5vdc.
    Make sure that the Watelco cable is connected into the **'LINE'** section of the modem



2. Open compass and select the appropriate customer. Once in the account go to ***'tools'***, *then* ***select 'communication'***.



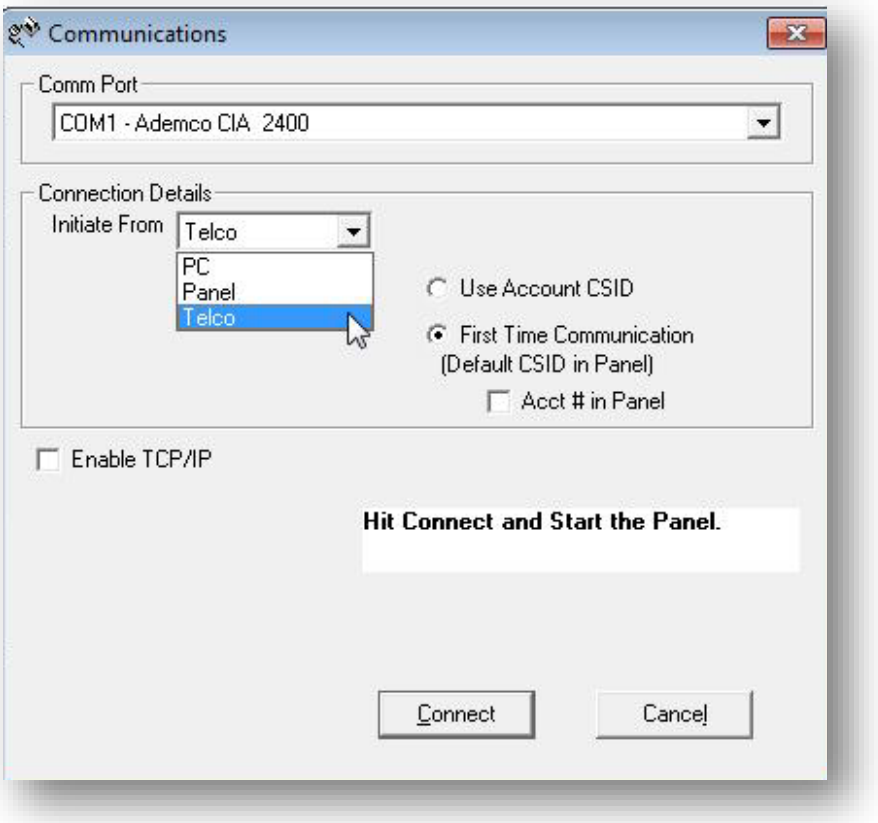
3. The ***'compass communications'*** screen will be displayed. Click on ***'connect'*** at the bottom left of the screen.



4. When the ***'communications'*** screen is displayed choose ***'initiate from Telco'***. Choose the appropriate connection method:

   - ***'Use Account CSID'*** if it's been connected to before
   - ***'First Time Communication'*** if this is the first time or the panel is default.

   The ***'Account # In Panel'*** option is used when the account number in compass **<u>matches</u>** the account number in the panel.



5. Click ***'Connect'***

6. At the keypad start the panel by pressing the '***Installer code # 1***'.

   - After you enter this syntax "Modem Com" or "CC" will come up on the keypad and you will then hear the panel go off hook.
   - The modem will give the hand shake tone and you will then hear the panel send its hand shake. Once connected those tones will stop if you have the ***'Off after connect'*** selected in the modem setup.

7. If the connection does not work try to change the programming in the panel:

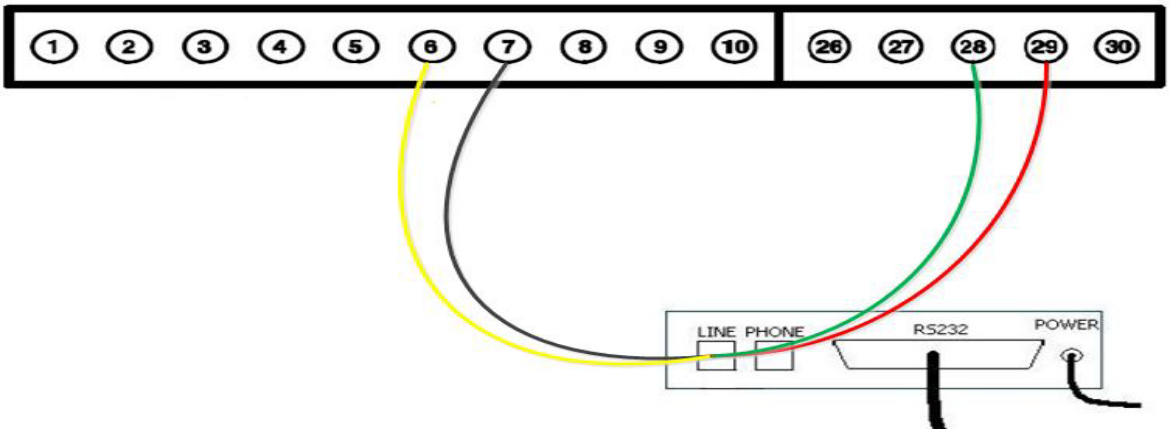
   - *96- defaults the CSID and the Account number
   - *43- enter in the account number
   - *48-needs to be a 7 for 4 digit CID
   - Try connection again

Connecting to the 40/50p/128bp/250bp and family equivalents

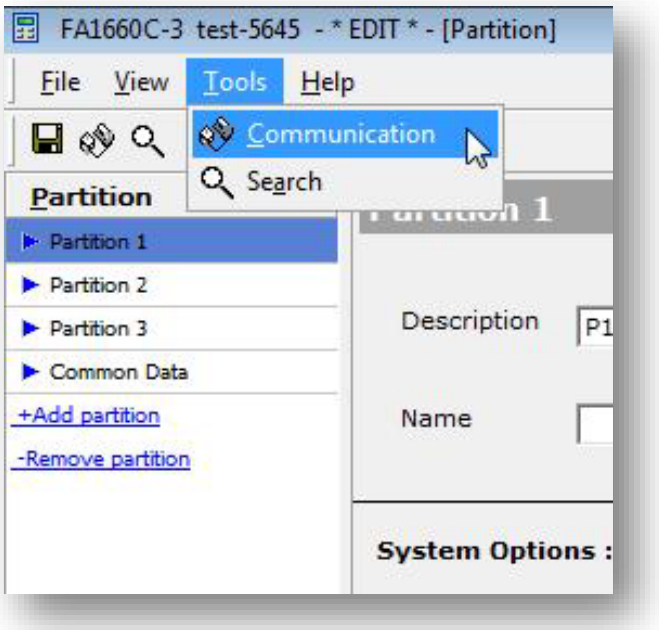
1. Connect the Watelco cable to the panel as follows:

   - Red to tip
   - Green to ring
   - Black to Aux Negative or to an alternate power source
   - Yellow to Aux Positive or to an alternate power source

   Yellow and Black can be ran to an alternate power source that gives an output of 13.5vdc.
   Make sure that the Watelco cable is connected into the **'LINE'** section of the modem



2. Now open compass and open the appropriate customer. In the account go to ***'tools'*** then select ***'communication'***.



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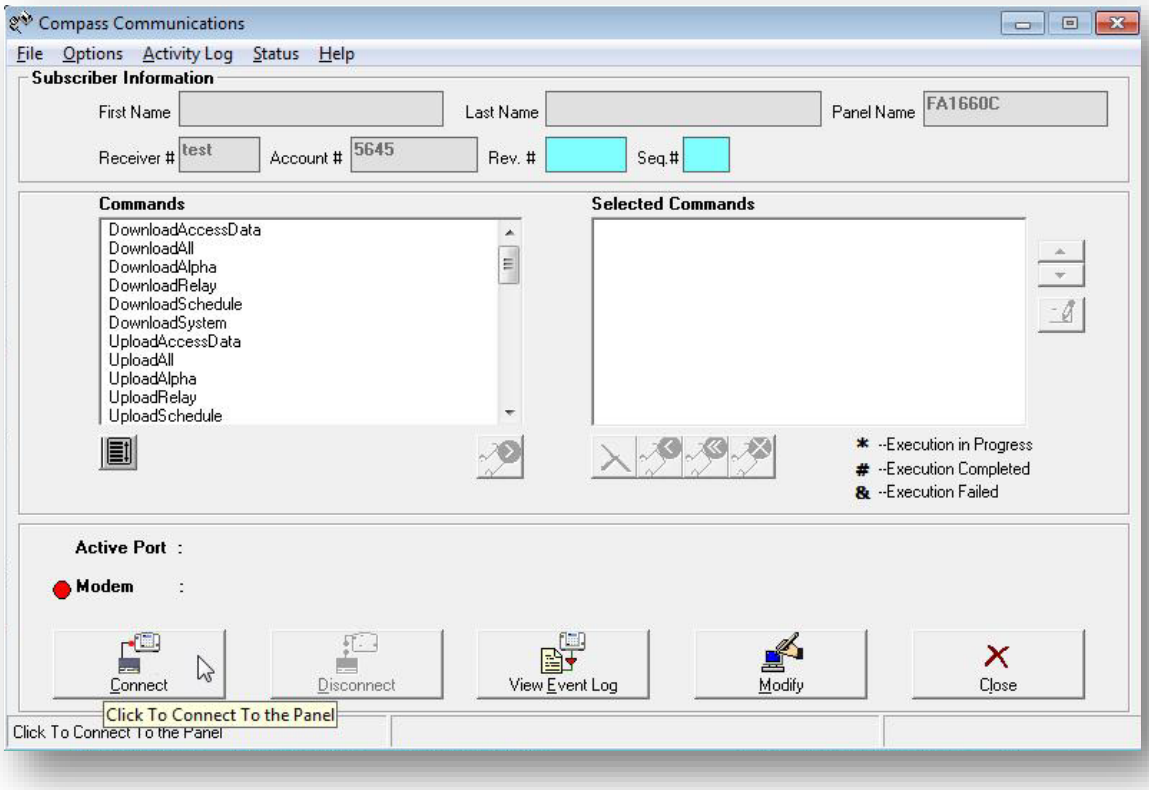
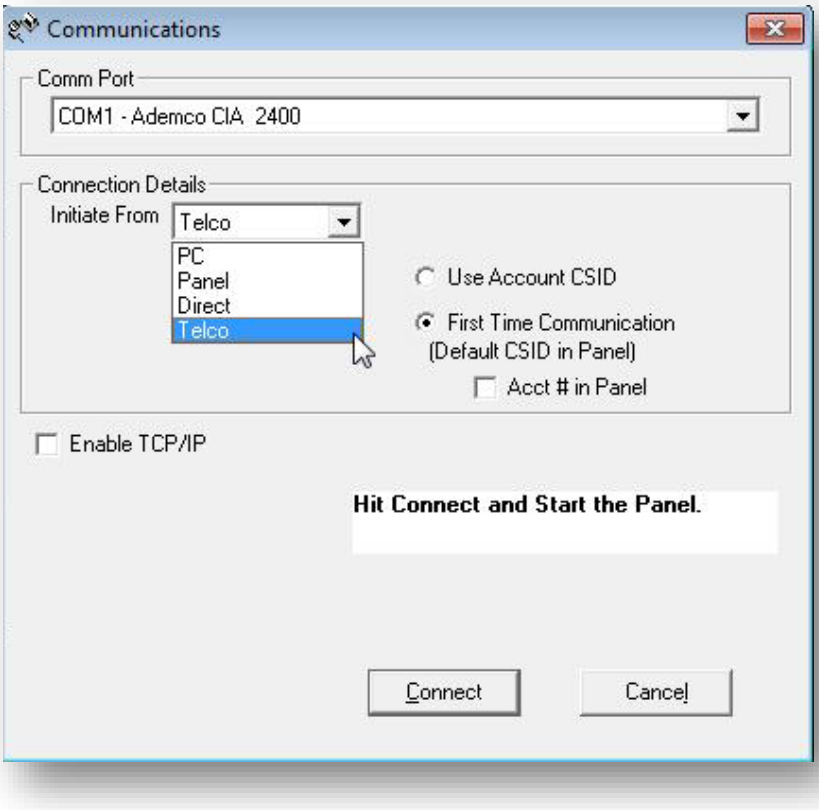


4. When the ***'communications'*** screen is displayed choose ***'initiate from Telco'***. Choose the appropriate connection method:

   - ***'Use Account CSID'*** if it's been connected to before
   - ***'First Time Communication'*** if this is the first time or the panel is default.

   The ***'Account # In Panel'*** option is used when the account number in compass **matches** the account number in the panel.



5. Click ***'Connect'***

6. At the keypad start the panel by pressing the '***Installer code # 1***'.

   - After you enter this syntax "Modem Com" or "CC" will come up on the keypad and you will then hear the panel go off hook.
   - The modem will give the hand shake tone and you will then hear the panel send its hand shake. Once connected those tones will stop if you have the ***'Off after connect'*** selected in the modem setup.

7. If the connection does not work try making changes in the programming:

   - *36-default the CSID to do so enter the number 15 eight times, you will then hear the confirmation beep
   - *32- enter the account number
   - *45- need to be a 1 for 4 digit CID
   - Try the connection again

Troubleshooting Direct Connect with the Modem

Metering the voltages on the cable

- Black to Yellow = 13.5vdc this will be the same voltage you will have on the aux power or alternate power source
- Red to Green= 13.5vdc
- If you are not reading the 13.5vdc on red and green, try disconnecting them from the panel and meter again. Should the voltage not be there but you do read the 13.5vdc on black and yellow then replace the cable.

Timing

- Watch the timing when pressing connect in compass. Typically, you have 10-15 seconds between pressing connect in compass and pressing the "Installer Code #1" on the panels keypad.
- If the panel and compass do not connect, you will hear a long solid tone come from the modem letting you know the connection failed.
- If you are not seeing "Modem Com" or "CC" on the keypad make sure that the dialer is not active. The panel will not go into modem com if it's trying to dial out. Also make sure that you are using the correct installer code.

Modem

If you are getting the **'Unable To Initialize Modem!'** error

- Check the cable going from the computer to the modem
- Check to make sure the modem has proper power
- Check usb adapter for power and proper setup
- Add the modem to windows and try and communicate with it that way(If the query fails when adding the modem to windows try a new rs232 cable or a new modem)
- Lights on the front of the modem will not come on until a command is sent to set up communication.

USB Adapters

- Verify the serial adapter driver is installed properly
- Check what com port the adapter is emulating and then verify that it's the same one added in compass
- Check buffer settings for that port. Make sure that the FIFO buffers are set to low. Some ports will let you go to 1 and other will go as low as 8. Make sure its set to the lowest setting other than 0.
- Use an approved usb to serial adapter.
- Try changing the adapter to emulate a different com port
- Some usb adapters will come with a set up assistant that you can change the com port settings.

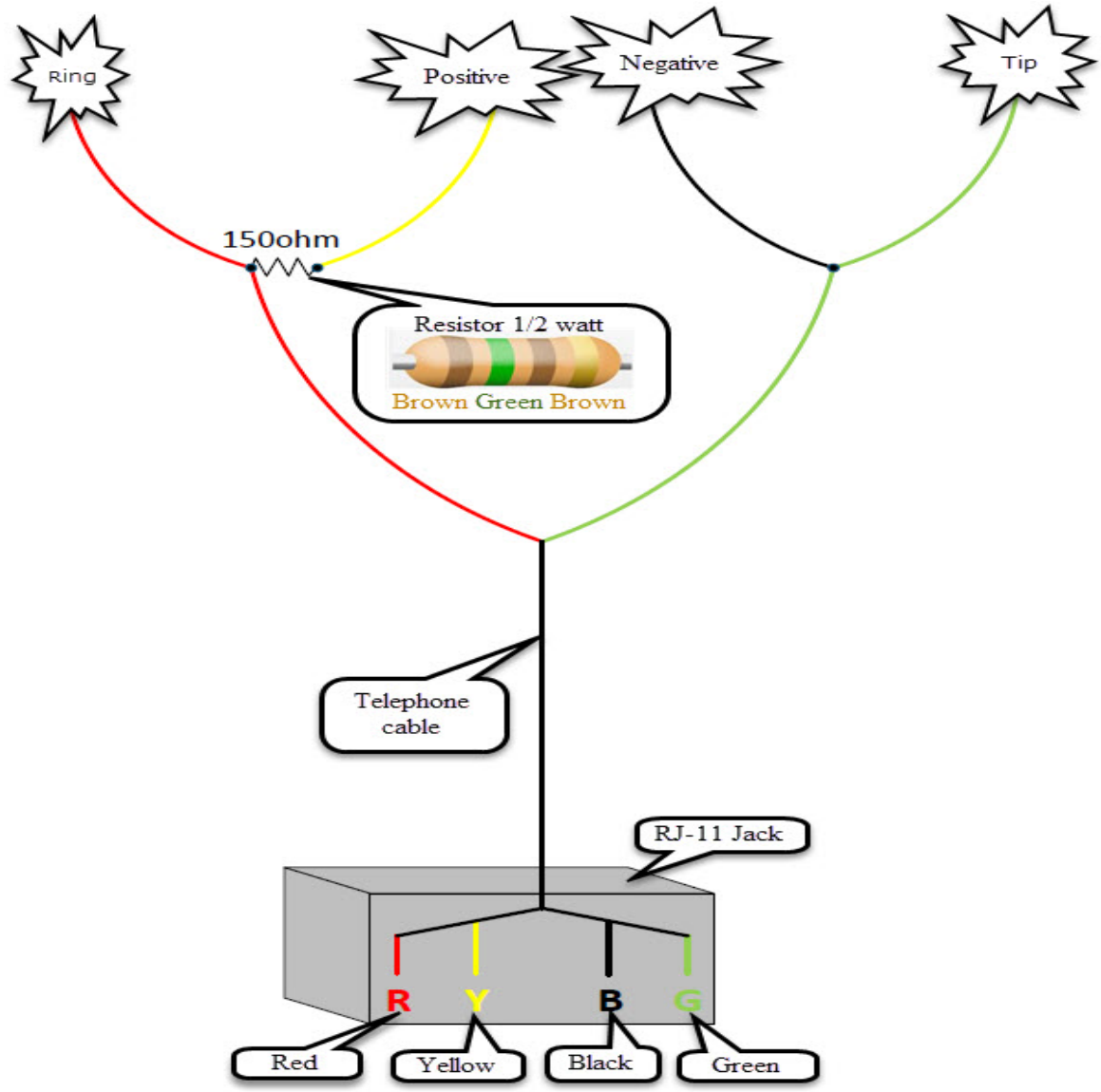
Below is Honeywell's official statement concerning the use of USB TO SERIAL adapters with Compass downloader:

"The Universal Serial Bus connection may be used in conjunction with 3rd party, USB to serial conversion products. Honeywell only indirectly supports these applications, and has had success with the following:

1. Keyspan (tripplite): High Speed USB Serial Adapter for windows Part number USA-19HS, this unit has been tested, and is approved for direct connect, via the 4100SM, and the CIA modem, when emulating COM 1 - COM 4.

Making your own WATELCO Cable

If you do not have the Watelco cable you can make your own following the diagram below:



1. Take a standard telephone cable with the RJ-11 jacks on it, cut one end off
2. Cut off the black and the yellow cable so you only have the Red and Green left
3. On the red cable splice in the yellow wire along with a 150 Ohm ½ watt resistor between the Red and Yellow cable
4. Then Take the Black cable and splice it in with the Green cable
5. Now you can connect the cable to the panel following the steps at the beginning of the document.