Programming the EWN-R pump for ANALOG input proportional control: ANA-R option:

This is the pump default option. One of four pre-set programs correlating to 0-100% speed can be chosen: 4-20mA, 20-4mA, 0-20mA and 20-0mA. Default is 4-20mA = 0-100% speed. (% speed is used for example purposes. This may also be a flowrate setting if those units were selected)
1.   Make sure the pump is in the WAIT condition. You can do this by pressing the START/STOP key until the pump starts pumping, then pressing it one more time.
2.   Press the EXT key to get into the EXTERNAL Operation Mode.
3.   Press and Hold the EXT key for about 3 seconds to get to the External Selection Menu.
4.   Using the UP/DOWN arrow keys, scroll until "ANA-R" is displayed.
5.   Press the EXT key again to select the desired pre-set program.
6.   Use the UP/DOWN arrow keys to scroll through the four choices.
7.   Once on the desired program, Press the EXT key to return back to the External Selection Menu. ("ANA-R" displayed)
8.   Press the STOP/START key to back out and return to the External Operation Mode. The display should now show "ANA.R" along the top of the display and the running average % (or flowrate) in the main display.
9.   The pump is now operating in External Operation Analog mode. As soon as an analog signal within the range is put into the pump, the pump will begin operating at the corresponding speed. For example, if 4-20mA=0-100% was chosen and 12mA is provided, the pump will operate at 50% speed.

Programming the EWN-R pump for ANALOG input proportional control: ANA-V option:

Two set points and the characteristics of the line can be programmed with a speed from 0-100% and a mA setting of 0-20mA. Default set points are programmed for 4-20mA=0-100% speed. (% speed is used for example purposes. This may also be a flowrate setting if those units were selected)

First, the default "ANA-R" option in the EXT menu has to be changed to "ANA-V":
1.   Make sure the pump is in the WAIT condition. You can do this by pressing the START/STOP key until the pump starts pumping, then pressing it one more time.
2.   Press the EXT key to get into the EXTERNAL Operation Mode.
3.   Press and Hold the EXT key for about 3 seconds to get to the External Selection Menu.
4.   Using the UP/DOWN arrow keys, scroll until "ANA.R" is displayed.
5.   Press the EXT key to return back to the External Selection Menu.
6.   Press the STOP/START key to back out and return to the External Operation Mode.
7.   Press the STOP/START key again to back out and return to the WAIT mode.
8.   Press and hold the EXT key for 3-4 seconds. "STOP" should appear on the display.
9.   Use the UP/DOWN arrow keys to scroll until "ANA" is shown in the display.
10. Press the EXT key and "ANA-R" should now be displayed.
11. Use the UP/DOWN arrow keys to change the display from "ANA-R" to "ANA-V".
12. Press the EXT to back out to "ANA".
13. Press the START/STOP key again to return to the WAIT condition.

Selecting "ANA-V" in the EXT menu and Programming the set points:

1. Press the EXT key to get into the EXTERNAL Operation Mode.
2. Press and Hold the EXT key for about 3 seconds to get to the External Selection Menu.
3. The display will now show "ANA-V" (notice, "ANA-R" is no longer available)
4. Press the EXT key and "4.0 mA" with a small "P1" will be displayed.
5. Use the DISP key to cycle through the four set points: "P1 4.0mA" → "P1 0%" → "P2 20.0mA" → "P2 100%" → back to "P1 4.0mA" (Remember, "%" is used for example purposes, this could be a flowrate unit)
6. To change any of the settings, with the appropriate Set Point mA or speed value to be changed showing, use the UP/DOWN keys to change the values displayed. For example:
   a. With "P1 4.0mA" displayed, press the DOWN key to change to "P1 0.0mA" (any value between 0 and 20mA).
   b. With "P1 0%" displayed, press the UP key to change to "P1 10 %" (any value between 0-100%. Default is 0%.
   c. This has now changed set point 1 to 10% speed at 0mA. Set point 2 can be changed in the same manner.
7. Once all four variables of the two set points are programmed as desired, press the EXT key to back out to the External Selection Menu ("ANA-V" showing).
8. Press the STOP/START key again to back out and return to the External Operation Mode. The display should now show "ANA.V" along the top of the display and the running average %, (or flowrate) in the main display.
9. The pump is now operating in External Operation Analog mode. As soon as an analog signal within the range is put into the pump, the pump will begin operating at the corresponding speed. For example, if 4-20mA=0-50% speed was programmed and 12mA is provided, the pump will operate at 25% speed.

   NOTES:
   1. % Speed was used for these instructions as it is the default, however, substitute "%" with whatever flowrate or units were chosen, if different. This does not change the menu structure.
   2. Set Point 2 settings (speed or mA) cannot be the same as Set Point 1. This will cause an "ERR 1" error and not accept the setting.