

Setting up the Intelligent Pump Controller to Run in Speed Control

The Intelligent Pump Controller can be configured for speed control through an analog input. The controlling source can be either an external control device such as a PLC, BMS, (Building Management System) or potentiometer. The output from the external control device can be either a voltage or current output signal. Set the analog input configuration switches based on the type of output signal. For speed control using PLC or BMS with an independently powered signal you will use 53 or 54 as the input signal, and 55 for the common.

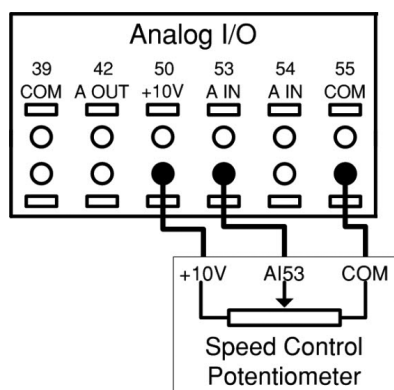


FIGURE 1 Connections for external speed signal

U: 0-10 VDC I: 4-20MA

Switches are located behind the keypad

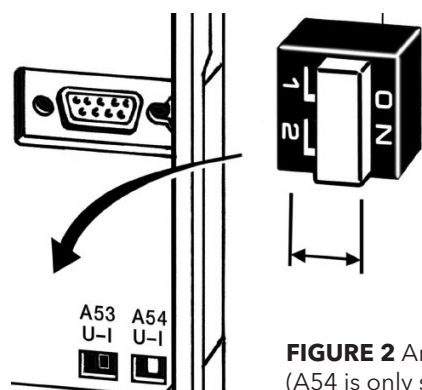


FIGURE 2 Analog Input Dip Switches. (A54 is only selectable)

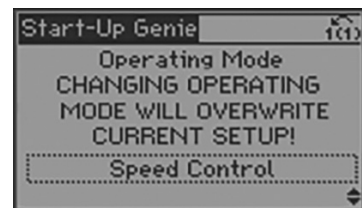
Please determine how you are going to setup and program from one of three different configurations below:

Signal Type	Location	Dip Switch
4-20 mA	Analog Input 53	Dip Switch is in correct position
0-10 VDC	Analog Input 54	Dip Switch is in correct position
Fixed Speed	No AI input used	Digital Input 18 used for start/stop

1. Sending a 4-20 MA input signal to the drive using analog input #53. You will wire your 4-20MA signal into Terminal #53 and common on Terminal #55. Dipswitch is defaulted for 4-20MA on analog input #53
2. Sending a 0-10VDC input signal to the drive using analog input #54. You will wire your 0-10VDC signal into Terminal #54 and common on Terminal #55. Dipswitch is defaulted to 0-10VDC on analog input #54.
3. Running your pump and motor at one fixed speed without sending a signal to the analog inputs. No wiring is required other than the Start/Stop on terminals #12 and #18.

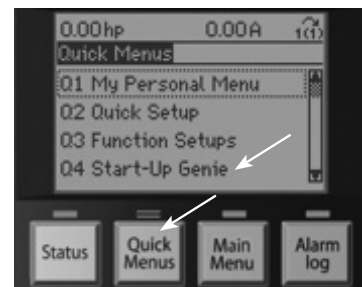
When running your startup Genie for the first time, please enter all of your motor information correctly.

- When you come to the Operation Mode selection, please select Speed Control.



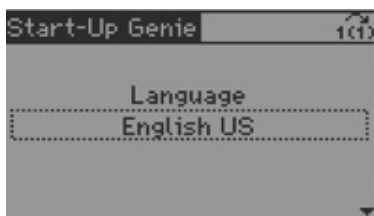
You can also get to this section from the main screen by selecting:

- Quick Menu and Selecting #4 Startup Genie



AQUAVAR IPC Start-Up Genie

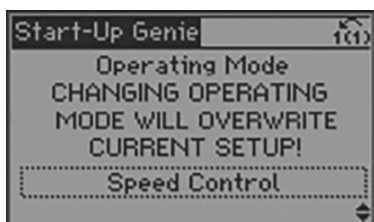
- Selecting English US



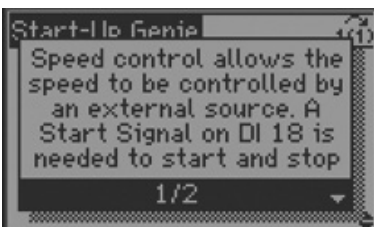
- Change your Setup Selection to **Application**



- Change to Speed Control

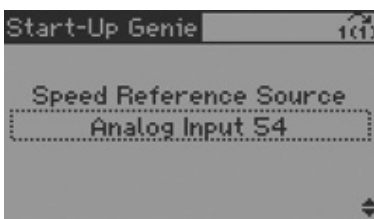
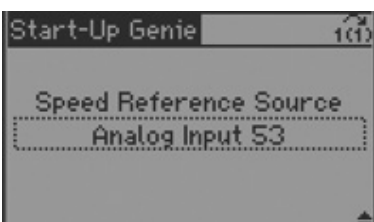


Please acknowledge that the drive will require an external source and that have your jumper wire on DI18 on the next two screens.

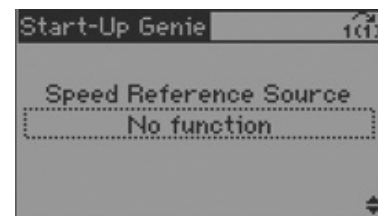


Now select your Speed Reference Source:

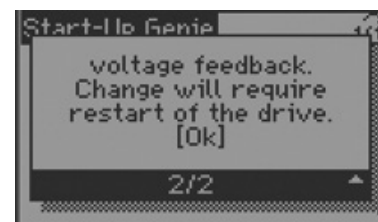
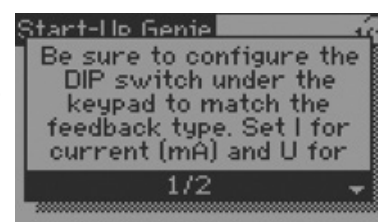
- Analog Input 53 for 4-20 MA Input Application.
- Analog Input 54 for 0-10V DC Input Application.



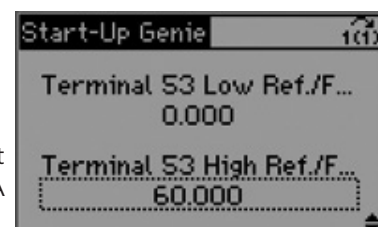
- No function for on Fixed Speed Application.



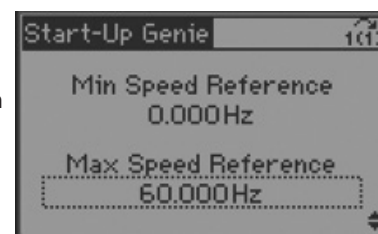
- The next two screens will verify that you have your dip switches setup correctly.



- Input your Motor low reference value (0) and High reference Value (60.0). This is the scaling from your input signal, either a 4-20MA or 0-10VDC.



- For either a 4-20MA or 0-10VDC application please select Minimum speed at 0Hz and Maximum speed to 60Hz.



- For fixed speed application with no input please select the same minimum and maximum speed to have your motor run.



- Press Ok to confirm your Speed configuration is setup correctly.



NOTES

Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're a global team unified in a common purpose: creating advanced technology solutions to the world's water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services settings. Xylem also provides a leading portfolio of smart metering, network technologies and advanced analytics solutions for water, electric and gas utilities. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise with a strong focus on developing comprehensive, sustainable solutions.

For more information on how Xylem can help you, go to www.xylem.com

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