

Agilent IDP-35 and IDP-45 Dry Scroll Pumps



Startup and operation mode selection

This guide provides information on the startup and selection of operation modes for Agilent IDP-35 and IDP-45 dry scroll pumps.

The IDP-35 and IDP-45 pumps have two operating modes:

- **Standard mode:** The pump starts when the switch is turned to "on" and can be controlled through the side panel
- **Configurable mode:** The pump is operated through the analog or serial interface

Note: The factory setting for the pumps is standard mode.

How to start the pump in standard mode

1. Plug in the power cord.



2. Turn on the pump using the main power switch. The display will show the word "Start".



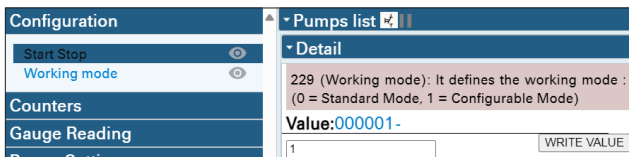
3. Adjust the speed using the Up and Down buttons (default rotational frequency: 60 Hz).



How to switch from standard to configurable mode

To switch to configurable (analog/serial control) mode:

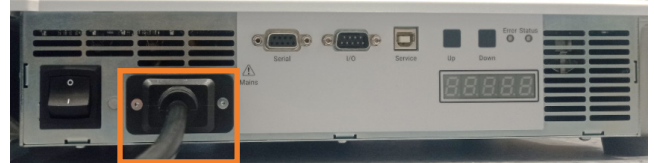
1. Turn on the pump.
2. Connect the pump to a PC with a **USB-RS232 cable (part number X3835-68002)**.
3. Launch the Agilent **A-PLUS** software.
4. Set WIN 229 (Working mode) = 1.



5. Power the pump off using the main power switch and wait for the display to turn off completely.
6. Power the pump on again using the main power switch. The pump will remain on but in stop condition.

How to start the pump in configurable mode, analog control

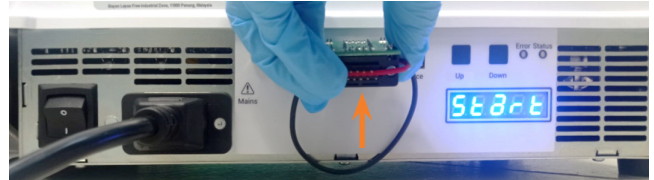
1. Plug in the power cord.



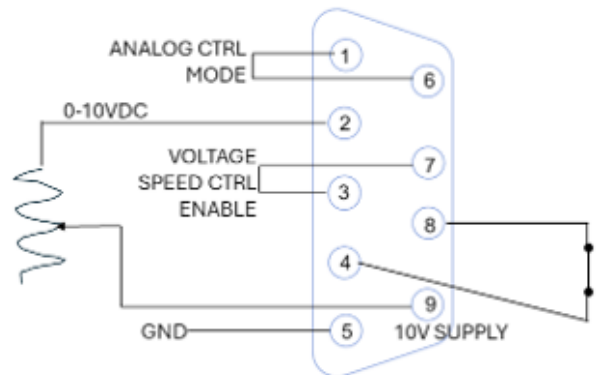
2. Turn on the pump using the main power switch. The display will show the hour meter.



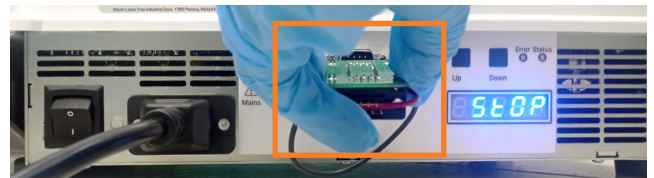
3. Connect pins 1 and 6 (analog enable) and 4 and 8 (start).



4. The pump should start (the display will read "Start").
5. Connect pins 3 and 7 (speed adjust enable). Apply a voltage between 0 and 10 V to pins 2 and 5 (speed adjust) to regulate the pump rotational speed.



6. The pump stops when pins 4 and 8 (start) are NOT connected. The display will read "Stop".

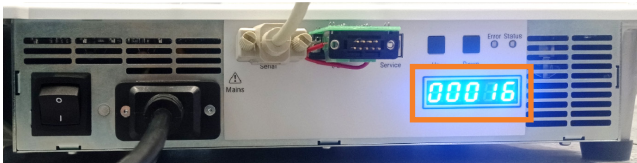


How to start the pump in configurable mode, serial control

1. Plug in the power cord.



2. Turn on the pump using the main power switch. The display will show the "total working hours" while the pump is stopped.



3. Connect the pump to a PC by using a serial cable, then launch the Agilent **A-PLUS software**.



4. Connect pins 4 and 8 (start), but do NOT connect pins 1 and 6 (analog enable signal).



5. WIN 504 (serial type):

504 (Serial Type): It switches from RS232 and RS485 serial protocol communication.

Value:RS232

= 0 (RS232)

= 1 (RS485) in this case, set WIN 503 for serial address

6. WIN 000 = 1 starts the pump.

000 (Start Stop): Start Stop Commands

Value:Start

7. WIN 120 = speed setting (any value between 40 and 66 to set the rotational frequency in the range between 40 and 66 Hz).

120 (Target Frequency): It defines the target excitation frequency in Hz

Value:000040Hz

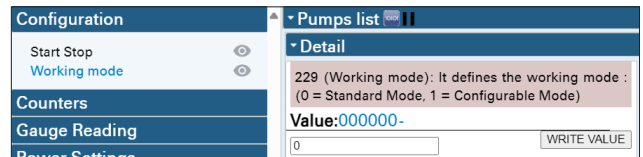
8. WIN 000 = 0 stops the pump.

000 (Start Stop): Start Stop Commands

Value:Stop

How to switch from configurable to standard mode

1. Turn on the pump.
2. Connect the pump to a PC with a **USB-RS232 cable (part number X3835-68002)**.
3. Launch the Agilent **A-PLUS software**.
4. Set WIN 229 (Operating mode) = 0.



5. Power the pump off using the main power switch. Wait for the display to be completely turned off.
6. Power the pump on using the main power switch again. The pump will start immediately.

Contact information

Americas

Toll free: +1 800 882 7426

vpl-customer care@agilent.com

Europe, Middle East, and Africa

Tel: +39 011 9979 369

Toll free: Tel: 00 800 234 234 00

vpt-customer care@agilent.com

Asia Pacific

inquiry_lsca@agilent.com

China

Landline phone: 800 06 778

Mobile phone: 400 06 778

contacts.vacuum@agilent.com

Other countries

vpt-customer care@agilent.com

For more information, please contact your

Agilent representative or visit:

www.agilent.com/en/product/vacuum-technologies

to chat live with a vacuum expert.

www.agilent.com

DE-005628

This information is subject to change without notice.

© Agilent Technologies, Inc. 2025

Printed in the USA, April 11, 2025

5994-8156EN