

### www.motorcontrolwarehouse.co.uk

Document number	Imoticon-ID700-005	
Revision	0.0	
Author	Gareth Lloyd	XV
Product	Imoticon ID700	

Title	Imoticon ID700 Basic Set up Information		
		-	

Summary	This document gives information on the basic set up of the	
	Imoticon ID700 for keypad and terminal control	

NOTE: Please read this document in conjunction with the Imoticon ID700 Easy Start Guide.

AS default from the factory, the Imoticon ID700 is set up in keypad control.

The following diagram gives information on the function of each button of the display.



## **Keypad control – running the drive**

- Apply power to the drive
- Enter the motor details into the drive taken from the motor nameplate:

**P00.01** – Motor rated voltage

P00.02 - Motor rated current

**P00.03** – Motor rated frequency

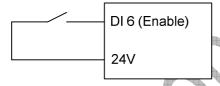
If so desired, change the acceleration and deceleration times to suit the application.

**P00.08** – Acceleration time

P00.09 - Deceleration time

- Either hardwire or connect a switch between the 24V terminal and the enable terminal – DI 6.

**Note:** The connection between 24V and DI 6 must be closed for the drive to run in keypad control.



- Press the RUN button. The drive will enable and the RUN LED will illuminate.
- Press the UP button and the output frequency of the drive/motor will increase.
- Press the DOWN button and the output frequency of the drive/motor will decrease.
- Press the STOP button and the drive/motor will ramp to a stop.
- While running, if the enable terminal is opened, the drive/motor will coast to a stop.

# Terminal control – running the drive

# Basic parameter set up

**Note:** This basic set up applies to each of the following terminal control examples

- Apply power to the drive
- Enter the motor details into the drive taken from the motor nameplate:

**P00.01** – Motor rated voltage

**P00.02** – Motor rated current

**P00.03** – Motor rated frequency

Enter the following parameters to change the drive from keypad to terminal control

**P00.04 = 1**: Control mode to terminal mode

**P00.05 = 3**: Reference source selector to Analogue input 1 control

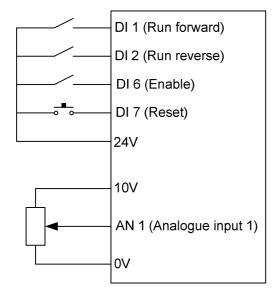
If so desired, change the acceleration and deceleration times to suit the application.

P00.08 – Acceleration time

P00.09 - Deceleration time

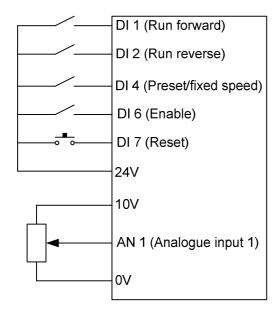
## Terminal set up 1 – Potentiometer control

The following set up shows how to connect the drives control terminals if the speed is to be controlled by a potentiometer.



- Close the enable switch on terminal DI 6.
- Close the run forward (terminal DI 1) or run reverse (terminal DI 2) switch. The drive will enable/run (Run LED on display illuminates).
- Turn the potentiometer and the speed of the motor will increase and decrease as the potentiometer is turned clockwise anti-clockwise.
- If the drive trips, close the normally open reset push button connected to DI 7.
- To stop the drive/motor, open the run forward or run reverse switch. The drive/motor will ramp to a stop at the time set in the deceleration ramp.
- While running, if the enable terminal is opened, the drive/motor will coast to a stop.

## Terminal set up 2 – Potentiometer control with a Preset/fixed speed

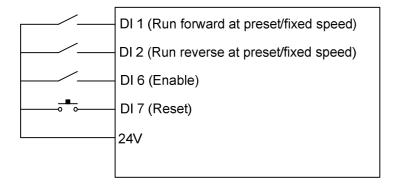


- Close the enable switch on terminal DI 6.
- Close the run forward (terminal DI 1) or run reverse (terminal DI 2) switch. The drive will enable/run (Run LED on display illuminates).
- Turn the potentiometer and the speed of the motor will increase and decrease as the potentiometer is turned clockwise or anti-clockwise.
- If the drive trips, close the normally open reset push button connected to DI 7.
- Close the preset/fixed speed switch (terminal DI 4) for the drive/motor to run at the frequency set in **P00.16** rather than the speed controlled by the potentiometer.
- To stop the drive/motor, open the run forward or run reverse switch. The drive/motor will ramp to a stop at the time set in the deceleration ramp.
- While running, if the enable terminal is opened, the drive/motor will coast to a stop.

# Terminal set up 3 – Preset/fixed speed control

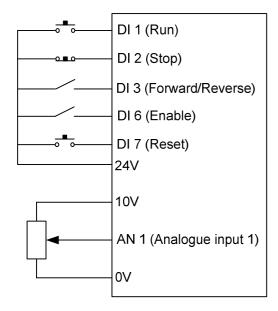
Change the reference source selector:

**P00.05** - Reference source selector to 2 (Preset/fixed speed) Set the required frequency/speed in **P00.16** 



- Close the enable switch on terminal DI 6.
- Close the run forward (terminal DI 1) or run reverse (terminal DI 2) switch. The drive will enable and the motor will run up to the frequency/speed set in **P00.16** (Run LED on display illuminates).
- To stop the drive/motor, open the run forward or run reverse switch. The drive/motor will ramp to a stop at the time set in the deceleration ramp.
- While running, if the enable terminal is opened, the drive/motor will coast to a stop.

## Terminal set up 4 – Momentary control with potentiometer speed control



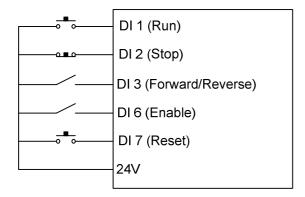
Change the reference source selector:

P00.05 - Reference source selector to 3 (Analogue input 1 control)

**P00.14** – Digital input select to 2 (Momentary control)

- Close the enable switch on terminal DI 6.
- Press the Normally open run pushbutton switch (terminal DI 1). The drive will enable/run in the forward direction (Run LED on display illuminates).
- Turn the potentiometer and the speed of the motor will increase and decrease as the potentiometer is turned clockwise anti-clockwise.
- To reverse drive/motor direction, close the forward/reverse switch on DI 3.
- To stop the drive, press the normally closed pushbutton and the drive/motor ramp to a stop under the deceleration ramp time.
- If the drive trips, close the normally open reset push button connected to DI 7.
- While running, if the enable terminal is opened, the drive/motor will coast to a stop.

## Terminal set up 5 - Momentary control with fixed speed control



Change the reference source selector:

P00.05 - Reference source selector to 2 (Preset/fixed speed)

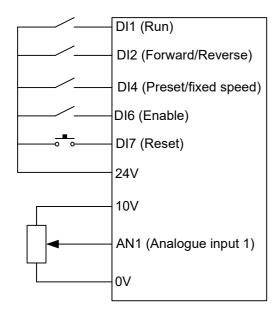
P00.14 - Digital input select to 2 (Momentary control)

Set the required frequency/speed in P00.16

- Close the enable switch on terminal DI 6.
- Press the Normally open run pushbutton switch (terminal DI 1). The drive will enable/run in the forward direction at preset/fixed speed P00.16 (Run LED on display illuminates).
- To reverse drive/motor direction, close the forward/reverse switch on DI 3.
- To stop the drive, press the normally closed pushbutton and the drive/motor ramp to a stop under the deceleration ramp time.
- If the drive trips, close the normally open reset push button connected to DI 7.
- While running, if the enable terminal is opened, the drive/motor will coast to a stop.

## Terminal set up 6 – Potentiometer control with Run and Forward/Reverse terminals

The following set up shows how to connect the drives control terminals if the speed is to be controlled by a potentiometer with a Run terminal and a Forward/Reverse terminal.



Enter the following parameters to change the drive from keypad to terminal control

**P00.04 = 1**: Control mode to terminal mode

**P00.05 = 3**: Reference source selector to Analogue input 1 control

Set the following parameters to give the above set up:

**P00-23 = 1**: Allows advanced parameter access

**P09.02 = 2**: Set terminal DI 1 to Run

**P09.03 = 6**: Sets terminal DI 2 to a Forward/Reverse terminal

- Close the enable switch on terminal DI 6.
- Close the run switch (terminal DI 1). The drive will enable and the motor will run up
  in the forward direction of rotation to the frequency/speed set by the potentiometer
  connected to AI 1 (Run LED on display illuminates).
- Close the Forward/Reverse (terminal DI 2). The motor will change direction of rotation.
- To stop the drive/motor, open the run switch. The drive/motor will ramp to a stop at the time set in the deceleration ramp.

- While running, if the enable terminal is opened, the drive/motor will coast to a stop.
- If the drive trips, close the normally open reset push button connected to DI 7.
- Close the preset/fixed speed switch (terminal DI 4) for the drive/motor to run at the frequency set in **P00.16** rather than the speed controlled by the potentiometer.

