**IMOTICON DRIVES**

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| Document number | Imoticon-ID700-007 |
|---|---|
| Revision | 0.0 |
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| Product | Imoticon ID700 |

| Title | Implementing a bi-polar speed using a single potentiometer |
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| Summary | This document gives information on how to set up the ID700 for a bi-polar speed reference (-50Hz to +50Hz) using a 0 to 10V supply and a speed potentiometer without having to use a reverse switch. |
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**NOTE:** Please read this document in conjunction with the Imoticon ID700 Easy Start Guide and Imoticon ID700 Advanced User Manual.

**Terminal connections**
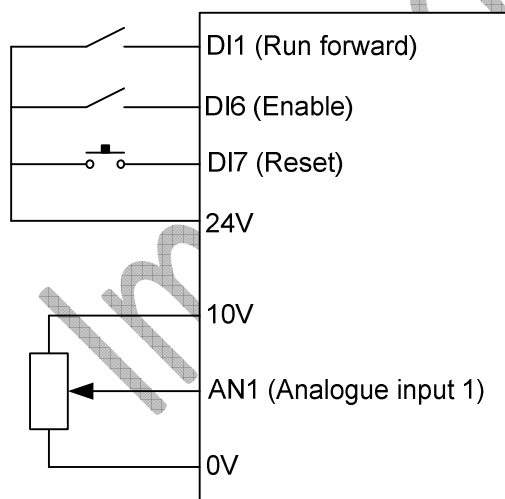
**Parameter set up (from factory default settings)**
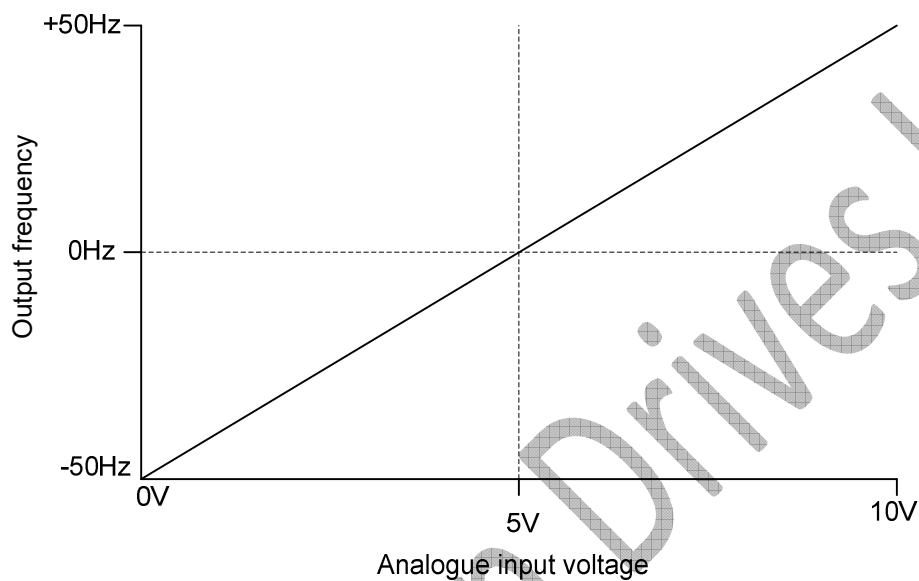
P00.04 = 1 : Control mode – terminal mode
P00.05 = 3 : Reference select – analogue input 1 (AI1)
P00.23 = 1 : Extended group access
P08.04 = -50.0 : Analogue input offset
P08.05 = 2.000 : analogue input scaling

**Analogue input vs output frequency characteristic**



It can be seen from the above characteristic, when the potentiometer wiper is at 0V, the output frequency is -50Hz.  At 5V the output frequency is 0Hz and at 10V, the output frequency is 50Hz.