



步进电机驱动控制器 intelli-INCH

通用规格

电源输入：9V 到 30V 1A 或2A。

尺寸：25.4mm X 25.4mm。

步进分辨率：16细分步。

操作模式：脱机独立工作。

电机兼容：可驱动控制法兰尺寸小于或等于60mm的2相步进电机，包括双极或单极绕线电机。最佳性能是在电机额定电压约为1/4电源电压的时候。

电机驱动电流：运行电流可达1A，静态电流=0.25X运行电流。

配套连接器：HIROSE DF11 系列。推荐工具：E-MotionSupply H9924-ND。

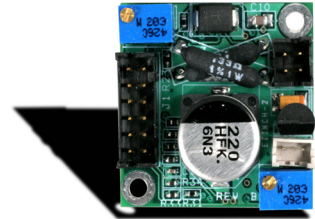
I / O接口：

-JY：2个机械开关或2个TTL信号输入用于限位控制；可接收0-5V手摇杆模拟量输入，可选速度倍率；提供一路TTL信号接口用于停机后自动降低输出电流。

-LR：四个机械开关或TTL级限位输入；0-5V模拟输入用于速度设定；一个数字TTL级输入低电流待机选项。信号电平：低于0.8V为低电平；高于2V为高电平。

工作温度：-20℃ - 85℃ PCB覆铜温度。

相对湿度：10%-90%非凝结状态(操作和存储)。



Model Intelli-INCH actual size

模型

Intelli-INCH-JY Joystick-controlled stepper motor controller/driver. Accepts 1K Ω to 10K Ω linear taper potentiometer joystick. 1A drive

Intelli-INCH-LR..... Switch-controlled, Go Left, Go Right stepper motor controller/driver, 1A drive

Intelli-INCH-JY-2A... Joystick-controlled with 2A drive

Intelli-INCH-LR-2A .. Switch-controlled with 2A drive

I/O 连接器, INTELLI-INCH-JY

配套连接器:HIROSE DF11 系列 12 针, 24 GA, 部件号 DF11-12DS-2C E-MotionSupply 部件号 H2024-ND

Pin	Function	Notes
1	V+ (external supply) 9V-30V	External power input
2	Power Ground	External power return
3	Right Limit Input	TTL-level or switch closure to signal ground. Normally closed (0V).
4	Right Limit Signal Ground	
5	Joystick +5V Input	Supply to joystick from board
6	NC	No connection
7	Joystick and Optional Speed Multiplier Input	0-5V analog voltage from potentiometer or external variable voltage source. 2.5V = zero velocity, with deadband from 2.42V to 2.58V. (special version with no deadband available). Speed varies linearly with joystick motion, up to a maximum set by the speed multiplier potentiometer. Joystick potentiometer 1K to 10K. Long cables may require 0.1uF decoupling capacitor to ground at the board.
8	Joystick Signal Ground	
9	Left Limit Input	TTL-level or switch closure to signal ground. Normally closed (0V).
10	Left Limit Signal Ground	
11	Speed Multiplier Input	0-5V signal sets maximum speed if Speed Multiplier Set potentiometer is removed.
12	Optional Low-Current Standby (SLEEP_BAR)	When grounded, reduces current consumption to 2mA for battery-powered applications.

I/O 连接器, INTELLI-INCH-LR

配套连接器:HIROSE DF11 系列 12 针, 24 GA, 部件号 DF11-12DS-2C E-MotionSupply 部件号 H2024-ND

Pin	Function	Notes
1	V+ (external supply) 9V-30V	External power input
2	Power Ground	External power return
3	Right Limit Input	TTL-level or switch closure to signal ground. Normally closed (0V).
4	Right Limit Signal Ground	
5	Go Right Input	TTL-level or switch closure to signal ground. Normally open.
6	Go Right Signal Ground	
7	Go Left Input	TTL-level or switch closure to signal ground. Normally open.
8	Go Left Signal Ground	
9	Left Limit Input	TTL-level or switch closure to signal ground. Normally closed (0V).
10	Left Limit Signal Ground	
11	Speed Set Voltage Input	0-5V signal controls speed if Speed Set pot is removed.
12	Optional Low-Current Standby (SLEEP_BAR)	When grounded, reduces current consumption to 2mA for battery-powered applications.

电机连接器

配套连接器: HIROSE DF11 4 针, 24 GA, 部件号 DF11-4DS-2C E-MotionSupply 部件号 H2019

Pin	Function	Notes
1,2	Stepper winding B	1A or 2A bipolar chopper
3,4	Stepper winding A	1A or 2A bipolar chopper

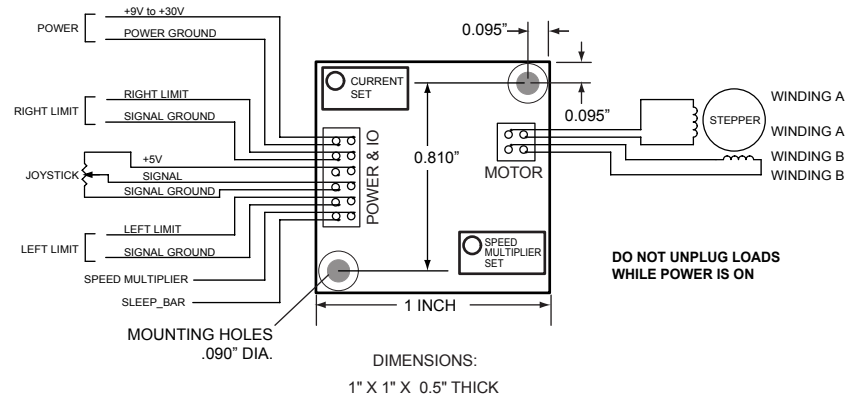
微型运动控制解决方案, 无需编程

主要特点

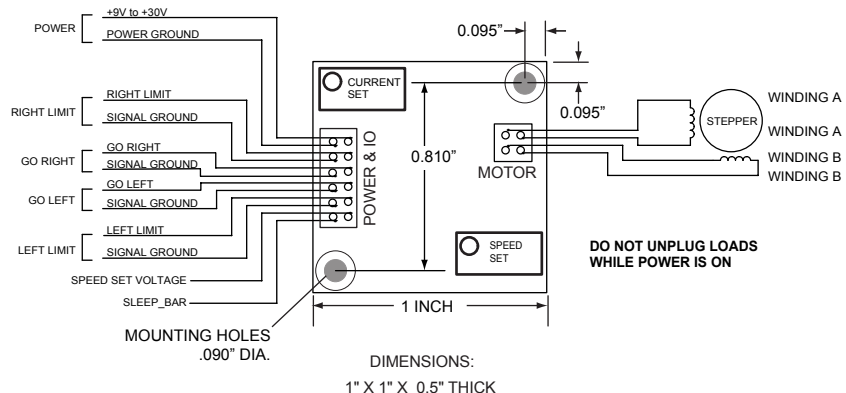
- (左右模式)可输入4种功能：向左，向右，左极限，右极限；
- (操纵杆模式)可输入3种功能：手杆输入，左极限，右极限；
- 按照开关/操纵杆指令执行往复运动；
- 可通过电位器设定运行电流和速度；
- 可通过固定电阻设置加速度；
- 限位开关输入后自动停止运行；
- 1A或2A斩波(PWM) 步进驱动器；
- 操作电压从9V到30V；
- 尺寸25.4mm X 25.4mm X12.7mm；
- 分辨率在1/16微步时可流畅运行；
- 在静态时电流自动减少到移动电流的25%；
- 可接受TTL-level电平输入，而不需要额外5V电源。

接口分布

手杆模型 -JY

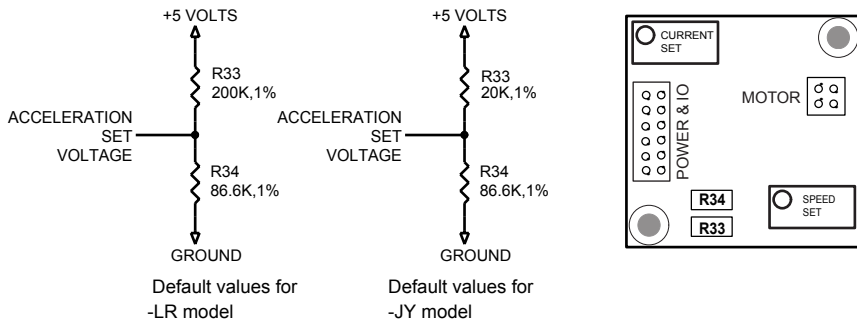


向左/向右模型 -LR



加速更正

加速度与R33和R34交界处的电压成线性比例。较高的电压会增加加速度；
对于最大电压，短跨R33。



订货信息

名称	型号
Joystick Intelli-INCH 1A output	Intelli-INCH-JY
Go Left/Go Right Intelli-INCH 1A output	Intelli-INCH-LR
Joystick Intelli-INCH 2A output	Intelli-INCH-JY-2A
Go Left/Go Right Intelli-INCH 2A output	Intelli-INCH-LR-2A