# DM422 两相数字式步进驱动器

DM422 TWO-PHASE DIGITAL STEPPER MOTOR DRIVER

ZZMOTOR




## 概述

DM422是两相数字式步进驱动器，采用类伺服的控制原理，将矢量控制技术、内置微细分技术、自适应滤波技术融为一体，极大地优化了步进电机的性能，低中高速运行都很平稳，噪音小。精确、平滑的纯正弦电流矢量控制技术有效的减少了电机发热。其性价比极高，能够满足绝大多数场合的应用需要。DM422驱动器的正常驱动电压范围在DC20~40V，适配峰值电流在2.2A以下，外径42mm的两相混合式步进电机。

## 特点

- ●全新32位DSP技术
- ●可驱动4、6、8线两相步进电机
- ●内置微细分
- ●精密电流控制使电机发热大为降低
- ●静止时电流自动减半
- ●便于安装
- ●光隔离差分信号输入
- ●脉冲响应频率最高可达200kHz（更高可改）
- ●低振动低噪声
- ●具有过压、欠压、缺相等保护功能

## 电气、机械和环境指标

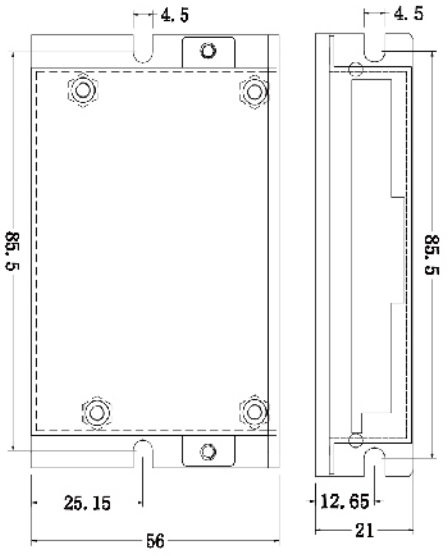
### 电气指标

| 说明 | DM422 | | | |
|---|---|---|---|---|
| | 最小值 | 典型值 | 最大值 | 单位 |
| 输出电流 | 0.3 | - | 2.2 | A |
| 输入电源电压 | 20 | 24 | 40 | VDC |
| 控制信号输入电流 | 7 | 10 | 16 | mA |
| 步进脉冲频率 | 0 | - | 200 | kHz |
| 绝缘电阻 | 50 | | | MΩ |

### 使用环境及参数

| 冷却方式 | | 自然冷却、风扇散热 |
|---|---|---|
| 使用环境 | 场合 | 不能放在其他发热的设备旁，要避免粉尘、油雾、腐蚀性气体，湿度太大及强振动场所，禁止有可燃气体和导电灰尘 |
| | 温度 | 0~50°C |
| | 湿度 | 40~90%RH |
| | 振动 | 10~55Hz/0.15mm |
| 保存温度 | | -20°C~65°C |

### 机械安装图



# DM422 两相数字式步进驱动器

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## 驱动器接口和接线

### 控制信号接口

| 名称 | 功能 |
| --- | --- |
| PUL+<br>PUL- | 脉冲控制信号：+5V-+24V均可驱动，上升沿有效，每当脉冲由高变低时，电机走一微步。<br>为了可靠响应脉冲信号，脉冲宽度应大于2μs。 |
| DIR+<br>DIR- | 方向控制信号：+5V-+24V均可驱动，高/低电平信号。为保证电机可靠换向，方向信号应先于脉冲信号至少5μs建立。<br>电机的初始运行方向与电机接线有关，互换任一相绕组（如A+、A-交换）可以改变电机初始运行方向。 |
| MF+<br>MF- | 使能控制信号：+5V-+24V均可驱动，高/低电平信号。用于使能或禁止电机的运行。当MF+接+5V，MF-接低电平时，<br>驱动器将切断电机各相的电流使电机处于自由状态，此时步进脉冲不被响应。当不需用此功能时，使能信号端悬空即可。 |

### 强电接口

| 名称 | 功能 |
| --- | --- |
| V- | 直流电源地 |
| V+ | 电源正极，范围：DC20~40V，推荐+24V |
| A+<br>A- | 电机A相线圈 |
| B+<br>B- | 电机B相线圈 |

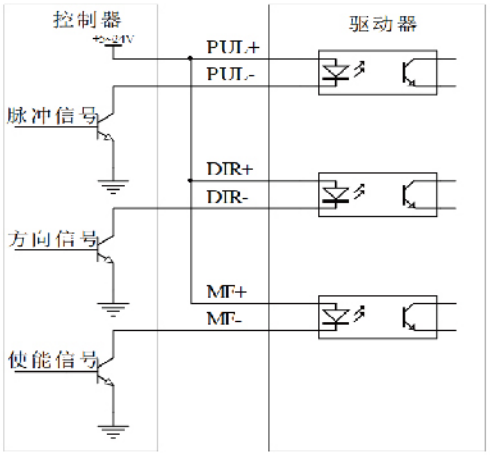
### 状态指示

绿色LED为电源指示灯，当驱动器接通电源时，该LED常亮；当驱动器切断电源时，该LED熄灭。

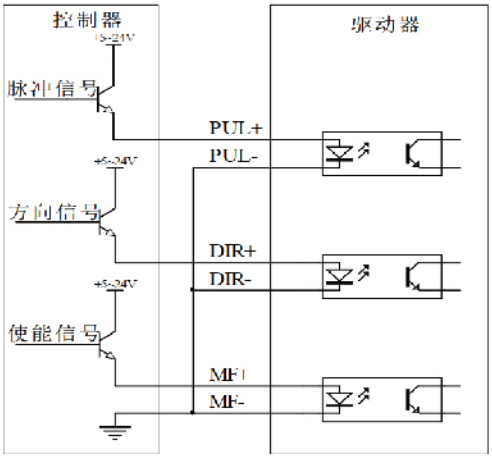
红色LED为故障指示灯，当出现故障时，该指示灯以3秒为周期循环闪烁；当故障被用户消除时，红色LED常灭。红色LED在3秒内闪烁次数代表不同的故障信息，具体关系如下表所示：

| 序号 | 闪烁次数 | 红色LED闪烁波形 | 故障说明 |
| --- | --- | --- | --- |
| 1 | 2 |  | 过压故障（电压>DC40V） |
| 2 | 3 |  | 欠压故障（电压<DC20V） |
| 3 | 5 |  | 电机开路（缺相） |

### 控制信号接口电路




共阳极接法

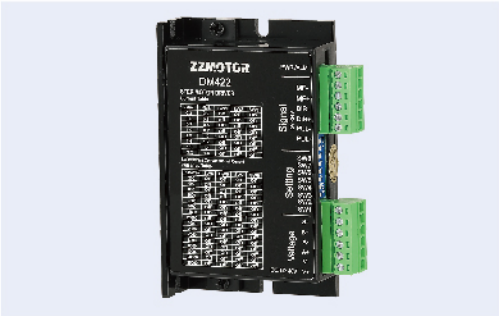



共阴极接法

# DM422 两相数字式步进驱动器

## DM422 TWO-PHASE DIGITAL STEPPER MOTOR DRIVER

ZZMOTOR




## OVERVIEW

DM422 is a two-phase digital stepper driver. It adopts a servo-like control principle, integrates vector control technology, built-in micro-segmentation technology, and adaptive filtering technology, greatly optimizing the performance of the stepper motor. It runs smoothly at low, medium and high speeds with low noise. The precise and smooth pure sinusoidal current vector control technology effectively reduces the heating of the motor. It has a very high cost-effectiveness and can meet the application needs of most occasions. The normal driving voltage range of the DM422 driver is DC20~40V, and it is suitable for two-phase hybrid stepper motors with a peak current below 2.2A and an outer diameter of 42mm.

## FEATURES

- New 32-bit DSP technology
- Can drive 4, 6, 8-wire two-phase stepper motor
- Built-in micro-segmentation
- Precise current control greatly reduces motor heating
- The current automatically reduces to half when stationary
- Easy to install
- Optically isolated differential signal input
- Pulse response frequency up to 200kHz (higher frequency can be adjusted)
- Low vibration and low noise
- With overvoltage, undervoltage, phase loss and other protection functions

## ELECTRICAL, MECHANICAL AND ENVIRONMENTAL INDICATORS

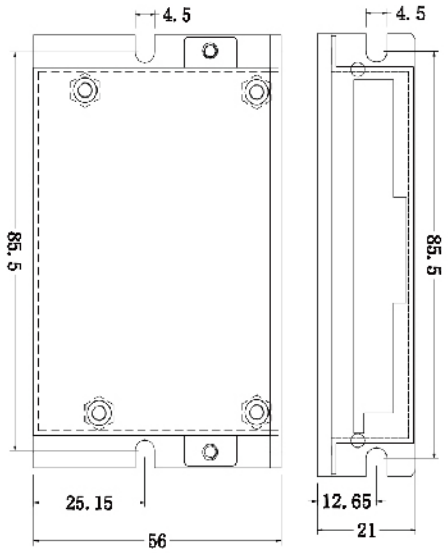
### ELECTRICAL SPECIFICATIONS

| Illustrate | DM422 | | | |
|---|---|---|---|---|
| | Minimum | Typical Value | Maximum | Unit |
| Output Current | 0.3 | - | 2.2 | A |
| Input power voltage | 20 | 24 | 40 | VDC |
| Control signal input current | 7 | 10 | 16 | mA |
| Step pulse frequency | 0 | - | 200 | kHz |
| Insulation resistance | 50 | | | MΩ |

### USE ENVIRONMENT AND PARAMETERS

| Cooling method | | Natural cooling, fan cooling |
|---|---|---|
| Usage Environment | occasion | Do not place it near other heating equipment. Avoid dust, oil mist, corrosive gas, high humidity and strong vibration. Flammable gas and conductive dust are prohibited. |
| | temperature | 0~50°C |
| | humidity | 40~90%RH |
| | vibration | 10~55Hz/0.15mm |
| Storage temperature | | -20°C~65°C |

### MECHANICAL INSTALLATION DRAWING



# DM422 两相数字式步进驱动器

DM422 TWO-PHASE DIGITAL STEPPER MOTOR DRIVER

ZZMOTOR

## Driver interface and wiring

### Control signal interface

| Name | Function |
|---|---|
| PUL+<br>PUL- | Pulse control signal: +5V-+24V can be driven, rising edge is effective, every time the pulse changes from high to low, the motor takes a microstep. In order to reliably respond to the pulse signal, the pulse width should be greater than 2μs. |
| DIR+<br>DIR- | Direction control signal: can be driven by +5V-+24V, high/low level signal. To ensure reliable commutation of the motor, the direction signal should be established at least 5μs before the pulse signal. The initial running direction of the motor is related to the motor wiring. Interchanging any phase winding (such as A+ and A-) can change the initial running direction of the motor. |
| MF+<br>MF- | Enable control signal: +5V-+24V can be driven, high/low level signal. Used to enable or disable the operation of the motor. When MF+ is connected to +5V and MF- is connected to a low level, the driver will cut off the current of each phase of the motor to put the motor in a free state, and the step pulse will not be responded to at this time. When this function is not needed, the enable signal terminal can be left floating. |

### Strong power interface

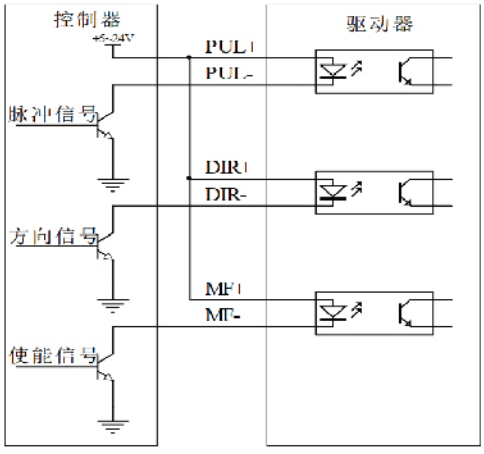
| Name | Function |
|---|---|
| V- | DC power ground |
| V+ | Positive power supply, range: DC20~40V, recommended +24V |
| A+<br>A- | Motor A phase coil |
| B+<br>B- | Motor B phase coil |

### Status Indicator

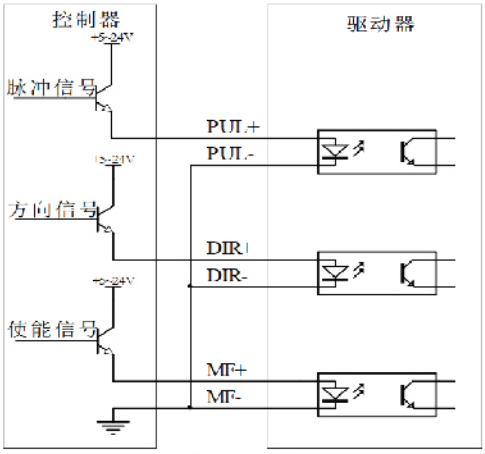
The green LED is the power indicator light. When the driver is powered on, the LED is always on; when the driver is powered off, the LED is off. The red LED is a fault indicator. When a fault occurs, the indicator flashes in a cycle of 3 seconds. When the fault is eliminated by the user, the red LED goes out. The number of times the red LED flashes in 3 seconds represents different fault information. The specific relationship is shown in the following table:

| Serial number | Number of flashes | Red LED flashing waveform | Fault Description |
|---|---|---|---|
| 1 | 2 |  | Overvoltage fault (voltage>DC40V) |
| 2 | 3 |  | Undervoltage fault (voltage<DC20V) |
| 3 | 5 |  | Motor open circuit (Phase missing) |

### Control signal interface circuit




共阳极接法




共阴极接法

# DM556 两相数字式步进驱动器

DM556 TWO-PHASE DIGITAL STEPPER MOTOR DRIVER

ZZMOTOR




## 概述

DM556是两相数字式步进驱动器，采用类伺服的控制原理，将矢量控制技术、内置微细分技术、自适应滤波技术融为一体，极大地优化了步进电机的性能，低中高速运行都很平稳，噪音小。精确、平滑的纯正弦电流矢量控制技术有效的减少了电机发热。其性价比极高，能够满足绝大多数场合的应用需要。DM556驱动器的正常驱动电压范围在DC24~50V，适配峰值电流在5.6A以下，外径42~86mm的两相混合式步进电机。

## 特点

- ●全新32位DSP技术
- ●可驱动4、6、8线两相步进电机
- ●内置微细分
- ●精密电流控制使电机发热大为降低
- ●静止时电流自动减半
- ●便于安装
- ●光隔离差分信号输入
- ●脉冲响应频率最高可达200kHz（更高可改）
- ●低振动低噪声
- ●具有过压、欠压、缺相等保护功能

## 电气、机械和环境指标

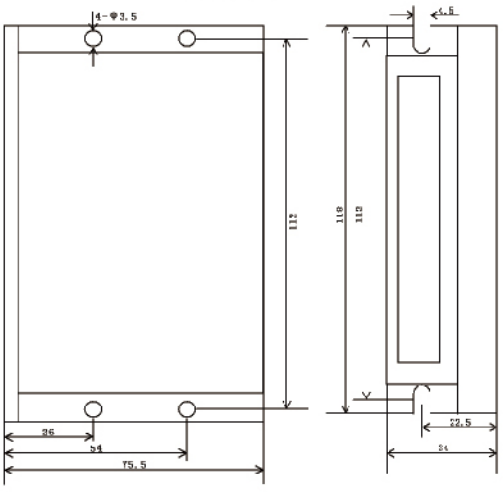
### 电气指标

| 说明 | DM556 | | | |
|---|---|---|---|---|
| | 最小值 | 典型值 | 最大值 | 单位 |
| 输出电流 | 1.4 | - | 5.6 | A |
| 输入电源电压 | 24 | 36 | 48 | VDC |
| 控制信号输入电流 | 7 | 10 | 16 | mA |
| 步进脉冲频率 | 0 | - | 200 | kHz |
| 绝缘电阻 | 50 | | | MΩ |

### 使用环境及参数

| 冷却方式 | | 自然冷却、风扇散热 |
|---|---|---|
| 使用环境 | 场合 | 不能放在其他发热的设备旁，要避免粉尘、油雾、腐蚀性气体，湿度太大及强振动场所，禁止有可燃气体和导电灰尘 |
| | 温度 | 0~50°C |
| | 湿度 | 40~90%RH |
| | 振动 | 10~55Hz/0.15mm |
| 保存温度 | | -20°C~65°C |

### 机械安装图



# DM556 两相数字式步进驱动器

DM556 TWO-PHASE DIGITAL STEPPER MOTOR DRIVER

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## 驱动器接口和接线

### 控制信号接口

| 名称 | 功能 |
| --- | --- |
| PUL+<br>PUL- | 脉冲控制信号：+5V-+24V均可驱动，上升沿有效，每当脉冲由高变低时，电机走一微步。<br>为了可靠响应脉冲信号，脉冲宽度应大于2μs。 |
| DIR+<br>DIR- | 方向控制信号：+5V-+24V均可驱动，高/低电平信号。为保证电机可靠换向，方向信号应先于脉冲信号至少5μs建立。<br>电机的初始运行方向与电机接线有关，互换任一相绕组（如A+、A-交换）可以改变电机初始运行方向。 |
| ENA+<br>ENA- | 使能控制信号：+5V-+24V均可驱动，高/低电平信号。用于使能或禁止电机的运行。当ENA+接+5V，ENA-接低电平时，<br>驱动器将切断电机各相的电流使电机处于自由状态，此时步进脉冲不被响应。当不需用此功能时，使能信号端悬空即可。 |

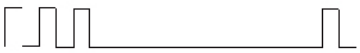
### 强电接口

| 名称 | 功能 |
| --- | --- |
| GND | 直流电源地 |
| +VDC | 电源正极，范围：DC24~50V，推荐+36V |
| A+<br>A- | 电机A相线圈 |
| B+<br>B- | 电机B相线圈 |

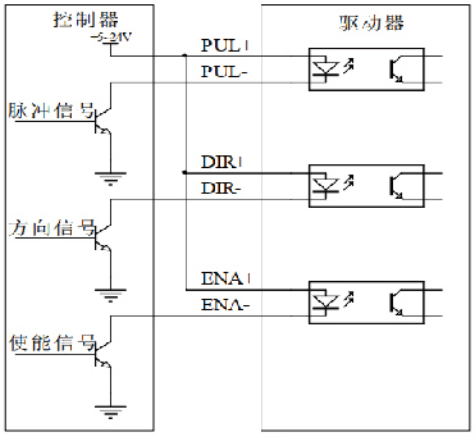
### 状态指示

绿色LED为电源指示灯，当驱动器接通电源时，该LED常亮；当驱动器切断电源时，该LED熄灭。

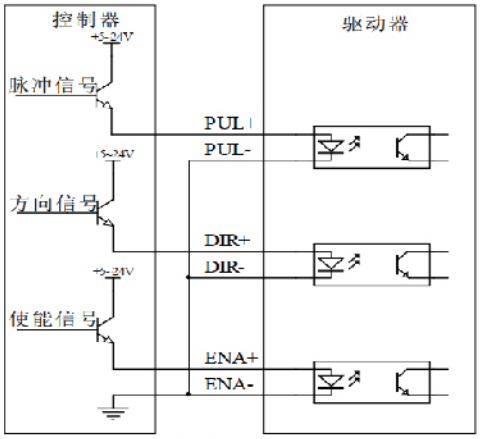
红色LED为故障指示灯，当出现故障时，该指示灯以3秒为周期循环闪烁；当故障被用户消除时，红色LED常灭。红色LED在3秒内闪烁次数代表不同的故障信息，具体关系如下表所示：

| 序号 | 闪烁次数 | 红色LED闪烁波形 | 故障说明 |
| --- | --- | --- | --- |
| 1 | 2 |  | 过压故障（电压>DC50V） |
| 2 | 3 |  | 欠压故障（电压<DC20V） |
| 3 | 5 |  | 电机开路（缺相） |

### 控制信号接口电路




共阳极接法




共阴极接法

# DM556 两相数字式步进驱动器

## DM556 TWO-PHASE DIGITAL STEPPER MOTOR DRIVER

ZZMOTOR




## OVERVIEW

DM556 is a two-phase digital stepper driver. It adopts a servo-like control principle, integrates vector control technology, built-in micro-segmentation technology, and adaptive filtering technology, greatly optimizing the performance of the stepper motor. It runs smoothly at low, medium and high speeds with low noise. The precise and smooth pure sine current vector control technology effectively reduces the heating of the motor. It has a very high cost-effectiveness and can meet the application needs of most occasions. The normal driving voltage range of the DM556 driver is DC24~50V, and it is suitable for two-phase hybrid stepper motors with a peak current below 5.6A and an outer diameter of 42~86mm.

## FEATURES

- New 32-bit DSP technology
- Can drive 4, 6, 8-wire two-phase stepper motor
- Built-in micro-segmentation
- Precise current control greatly reduces motor heating
- The current automatically reduces to half when stationary
- Easy to install
- Optically isolated differential signal input
- Pulse response frequency up to 200kHz (higher frequency can be adjusted)
- Low vibration and low noise
- With overvoltage, undervoltage, phase loss and other protection functions

## ELECTRICAL, MECHANICAL AND ENVIRONMENTAL INDICATORS

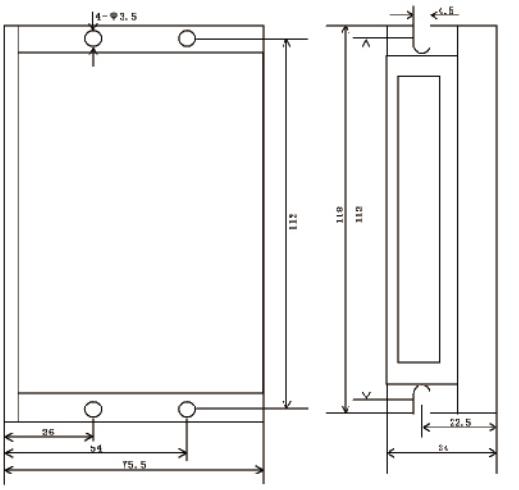
### ELECTRICAL SPECIFICATIONS

| Illustrate | DM556 | | | |
|---|---|---|---|---|
| | Minimum | Typical Value | Maximum | Unit |
| Output Current | 1.4 | - | 5.6 | A |
| Input power voltage | 24 | 36 | 48 | VDC |
| Control signal input current | 7 | 10 | 16 | mA |
| Step pulse frequency | 0 | - | 200 | kHz |
| Insulation resistance | 50 | | | MΩ |

### USE ENVIRONMENT AND PARAMETERS

| Cooling method | | Natural cooling, fan cooling |
|---|---|---|
| Usage Environment | occasion | Do not place it near other heating equipment. Avoid dust, oil mist, corrosive gas, high humidity and strong vibration. Flammable gas and conductive dust are prohibited. |
| | temperature | 0~50°C |
| | humidity | 40~90%RH |
| | vibration | 10~55Hz/0.15mm |
| Storage temperature | | -20°C~65°C |

### MECHANICAL INSTALLATION DRAWING



# DM556 两相数字式步进驱动器

## DM556 TWO-PHASE DIGITAL STEPPER MOTOR DRIVER

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## Driver interface and wiring

### Control signal interface

| Name | Function |
|---|---|
| PUL+<br>PUL- | Pulse control signal: +5V-+24V can be driven, rising edge is effective, every time the pulse changes from high to low, the motor takes a microstep. In order to reliably respond to the pulse signal, the pulse width should be greater than 2μs. |
| DIR+<br>DIR- | Direction control signal: can be driven by +5V-+24V, high/low level signal. To ensure reliable commutation of the motor, the direction signal should be established at least 5μs before the pulse signal. The initial running direction of the motor is related to the motor wiring. Interchanging any phase winding (such as A+ and A-) can change the initial running direction of the motor. |
| ENA+<br>ENA- | Enable control signal: +5V-+24V can be driven, high/low level signal. Used to enable or disable the operation of the motor. When ENA+ is connected to +5V and ENA- is connected to a low level, the driver will cut off the current of each phase of the motor to put the motor in a free state, and the step pulse will not be responded to at this time. When this function is not needed, the enable signal terminal can be left floating. |

### Strong power interface

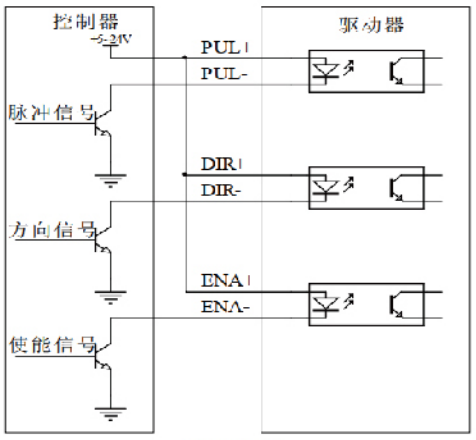
| Name | Function |
|---|---|
| GND | DC power ground |
| +VDC | Power positive pole, range: DC24~50V, recommended +36V |
| A+<br>A- | Motor A phase coil |
| B+<br>B- | Motor B phase coil |

### Status Indicator

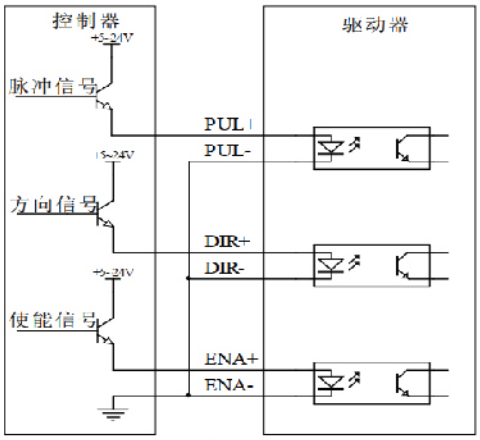
The green LED is the power indicator light. When the driver is powered on, the LED is always on; when the driver is powered off, the LED is off. The red LED is a fault indicator. When a fault occurs, the indicator flashes in a cycle of 3 seconds. When the fault is eliminated by the user, the red LED goes out. The number of times the red LED flashes within 3 seconds represents different fault information. The specific relationship is shown in the following table:

| Serial number | Number of flashes | Red LED flashing waveform | Fault Description |
|---|---|---|---|
| 1 | 2 |  | Overvoltage fault (voltage>DC50V) |
| 2 | 3 |  | Undervoltage fault (voltage<DC20V) |
| 3 | 5 |  | Motor open circuit (Phase missing) |

### Control signal interface circuit




共阳极接法




共阴极接法

# DM860H 两相数字式步进驱动器

## DM860H TWO-PHASE DIGITAL STEPPER MOTOR DRIVER

ZZMOTOR




### 概述

DM860H是带串口调试功能的两相数字式步进驱动器，采用最新32位DSP控制技术，集成了MODBUS-RTU标准协议规范，用户可通过上位机调试软件设置200-40000内的任意细分以及工作模式等多个参数，极大地丰富了产品的实用功能，能够满足大多数场合的应用需要。DM860H驱动器采用类伺服的控制原理，将矢量控制技术、内置微细分技术、自适应滤波技术融为一体，极大地优化了步进电机的性能，低中高速运行都很平稳，噪音小。精确、平滑的纯正弦电流矢量控制技术有效的减少了电机发热。DM860H驱动器的驱动电压范围在AC20V~80V，适配峰值电流在7.2A以下，外径57~110mm的两相混合式步进电机。

### 特点

- ●带串口调试功能
- ●体积小，便于安装
- ●光隔离差分信号输入
- ●细分设定范围200-40000
- ●电流可任意设置
- ●具有过压、欠压、过流等保护功能
- ●全新32位DSP技术
- ●可驱动4、6、8线两相步进电机
- ●内置微细分
- ●脉冲响应频率最高可达200kHz（更高可改）
- ●精密电流控制使电机发热大为降低
- ●静止时电流自动减半

### 电气、机械和环境指标

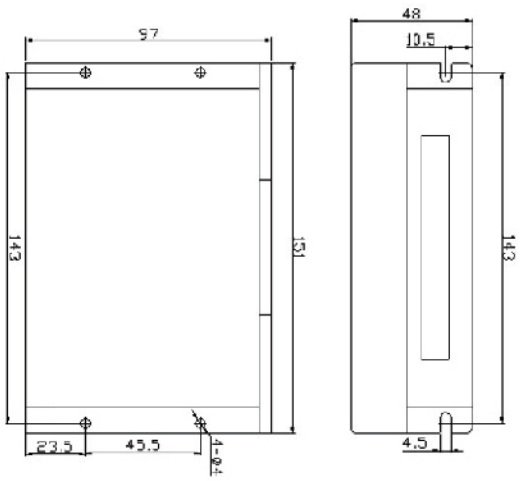
**电气指标**

| 说明 | DM860H | | | |
|---|---|---|---|---|
| | 最小值 | 典型值 | 最大值 | 单位 |
| 输出电流 | 2.4 | - | 7.2 | A |
| 输入电源电压 | 20 | 60 | 80 | VAC |
| 控制信号输入电流 | 7 | 10 | 16 | mA |
| 步进脉冲频率 | 0 | - | 200 | kHz |
| 绝缘电阻 | 50 | | | MΩ |

**使用环境及参数**

| 冷却方式 | | 自然冷却、风扇散热 |
|---|---|---|
| 使用环境 | 场合 | 不能放在其他发热的设备旁，要避免粉尘、油雾、腐蚀性气体，湿度太大及强振动场所，禁止有可燃气体和导电灰尘 |
| | 温度 | 0~50°C |
| | 湿度 | 40~90%RH |
| | 振动 | 10~55Hz/0.15mm |
| 保存温度 | | -20°C~65°C |

**机械安装图**



# DM860H 两相数字式步进驱动器

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## 驱动器接口和接线

### 控制信号接口

| 名称 | 功能 |
| --- | --- |
| PLS+<br>PLS- | 脉冲控制信号：+5V-+24V均可驱动，上升沿有效，每当脉冲由高变低时，电机走一微步。<br>为了可靠响应脉冲信号，脉冲宽度应大于2μs。 |
| DIR+<br>DIR- | 方向控制信号：+5V-+24V均可驱动，高/低电平信号。为保证电机可靠换向，方向信号应先于脉冲信号至少5μs建立。<br>电机的初始运行方向与电机接线有关，互换任一相绕组（如A+、A-交换）可以改变电机初始运行方向。 |
| ENA+<br>ENA- | 使能控制信号：+5V-+24V均可驱动，高/低电平信号。用于使能或禁止电机的运行。当ENA+接+5V，ENA-接低电平时，<br>驱动器将切断电机各相的电流使电机处于自由状态，此时步进脉冲不被响应。当不需用此功能时，使能信号端悬空即可。 |

### 强电接口

| 名称 | 功能 |
| --- | --- |
| AC1<br>AC2 | 交流输入电源，AC20V-80V(DC24V-110V) |
| A+<br>A- | 电机A相线圈 |
| B+<br>B- | 电机B相线圈 |

### 232通讯接口

DM860H驱动的串口通讯接口采用PH2.0-7P的白色端子，可以通过专用串口电缆线经USB转TTL串口转换工具连接至PC机，禁止带电插拔！通过在PC端，客户可以设置所需要的参数，如电流、细分、工作模式等，具体可看上位机软件界面。

| 端子号 | 符号 | 名称 | 说明 |
| --- | --- | --- | --- |
| 1 | NC | - | 内部使用 |
| 2 | NC | - | 内部使用 |
| 3 | GND | RS232通讯地 | 0V |
| 4 | NC | - | 内部使用 |
| 5 | NC | - | 内部使用 |
| 6 | TXD | RS232发送端 | |
| 7 | RXD | RS232接收端 | |

# DM860H 两相数字式步进驱动器

## DM860H TWO-PHASE DIGITAL STEPPER MOTOR DRIVER

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## OVERVIEW

DM860H is a two-phase digital stepper driver with serial port debugging function. It adopts the latest 32-bit DSP control technology and integrates MODBUS-RTU standard protocol specifications. Users can set any subdivision within 200-40000 and multiple parameters such as working mode through the host computer debugging software, which greatly enriches the practical functions of the product and can meet the application needs of most occasions. The DM860H driver adopts a servo-like control principle, integrating vector control technology, built-in micro-segmentation technology, and adaptive filtering technology, which greatly optimizes the performance of the stepper motor. It runs smoothly at low, medium and high speeds with low noise. The precise and smooth pure sine current vector control technology effectively reduces the heating of the motor. The driving voltage range of the DM860H driver is AC20V~80V, and it is suitable for two-phase hybrid stepper motors with a peak current below 7.2A and an outer diameter of 57~110mm.

## FEATURES

- With serial port debugging function
- Small size, easy to install
- Optically isolated differential signal input
- Subdivision setting range 200-40000
- Current can be set arbitrarily
- With overvoltage, undervoltage, overcurrent and other protection functions
- New 32-bit DSP technology
- Can drive 4, 6, 8-wire two-phase stepper motor
- Built-in micro-segmentation
- Pulse response frequency up to 200kHz (higher can be modified)
- Precise current control greatly reduces motor heating
- The current is automatically halved when stationary

## ELECTRICAL, MECHANICAL AND ENVIRONMENTAL INDICATORS

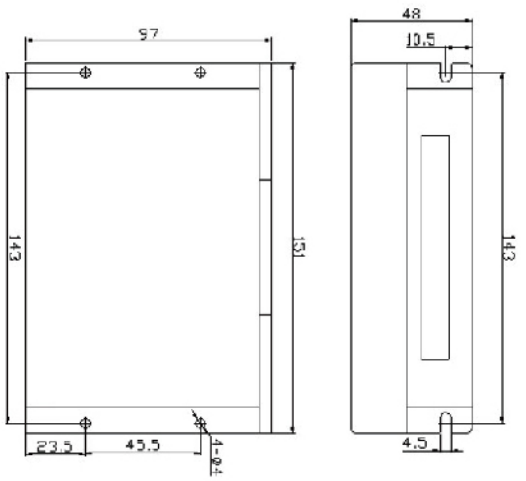
### ELECTRICAL SPECIFICATIONS

| Illustrate | DM860H | | | |
|---|---|---|---|---|
| | Minimum | Typical Value | Maximum | Unit |
| Output Current | 2.4 | - | 7.2 | A |
| Input power voltage | 20 | 60 | 80 | VAC |
| Control signal input current | 7 | 10 | 16 | mA |
| Step pulse frequency | 0 | - | 200 | kHz |
| Insulation resistance | 50 | | | MΩ |

### USE ENVIRONMENT AND PARAMETERS

| Cooling method | | Natural cooling, fan cooling |
|---|---|---|
| Usage Environment | occasion | Do not place it near other heating equipment. Avoid dust, oil mist, corrosive gas, high humidity and strong vibration. Flammable gas and conductive dust are prohibited. |
| | temperature | 0~50°C |
| | humidity | 40~90%RH |
| | vibration | 10~55Hz/0.15mm |
| Storage temperature | | -20°C~65°C |

### MECHANICAL INSTALLATION DRAWING



# DM860H 两相数字式步进驱动器

DM860H TWO-PHASE DIGITAL STEPPER MOTOR DRIVER

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## Driver interface and wiring

### Control signal interface

| Name | Function |
|---|---|
| PUL+<br>PUL | Pulse control signal: +5V-+24V can be driven, rising edge is effective, every time the pulse changes from high to low, the motor takes a microstep. In order to reliably respond to the pulse signal, the pulse width should be greater than 2μs. |
| DIR+<br>DIR- | Direction control signal: can be driven by +5V-+24V, high/low level signal. To ensure reliable commutation of the motor, the direction signal should be established at least 5μs before the pulse signal. The initial running direction of the motor is related to the motor wiring. Interchanging any phase winding (such as A+ and A-) can change the initial running direction of the motor. |
| ENA+<br>ENA- | Enable control signal: +5V-+24V can be driven, high/low level signal. Used to enable or disable the operation of the motor. When ENA+ is connected to +5V and ENA- is connected to a low level, the driver will cut off the current of each phase of the motor to put the motor in a free state, and the step pulse will not be responded to at this time. When this function is not needed, the enable signal terminal can be left floating. |

### Strong power interface

| Name | Function |
|---|---|
| AC1<br>AC2 | AC input power, AC20V-80V (DC30V-110V) |
| A+<br>A- | Motor A phase coil |
| B+<br>B- | Motor B phase coil |

### 232 COMMUNICATION INTERFACE

The serial communication interface of the HS86 driver uses a PH2.0-7P terminal, which can be connected to the PC through a dedicated serial cable and a USB to TTL serial conversion tool. Do not plug or unplug the power supply! On the PC side, customers can set the required parameters, such as current, subdivision, working mode, etc. For details, please refer to the upper computer software interface.

| Terminal No. | Symbol | Name | Illustrate |
|---|---|---|---|
| 1 | NC | - | Internal Use |
| 2 | NC | - | Internal Use |
| 3 | GND | RS232 communication ground | 0V |
| 4 | NC | - | Internal Use |
| 5 | NC | - | Internal Use |
| 6 | TXD | RS232 transmitter | |
| 7 | RXD | RS232 Receiver | |