



Congratulations with your ServoStep™ motor!

-we feel sure you will be happy with your purchase

Quick Start

Before using your new motor here are some hints which will help you get started as fast and smooth as possible!

Power Supply – important!

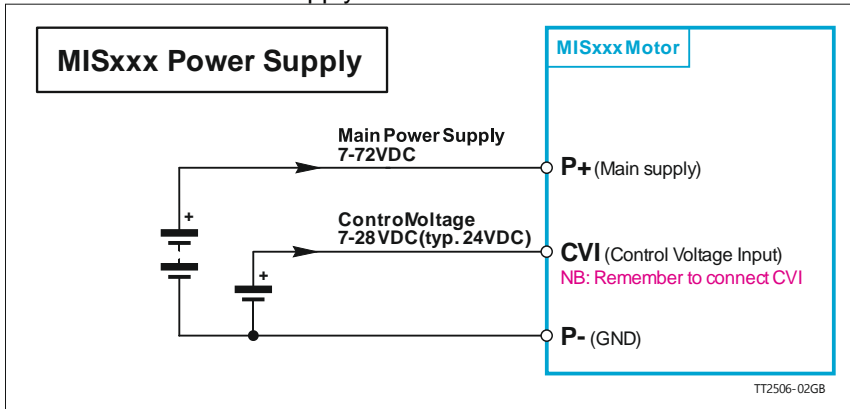
The motor requires both a “power” and a “control voltage” supply. If you use a 24 VDC for both supplies you can use a single power supply. Otherwise you will need two separate supplies.



- Connect: Brown + White → Main Power (P+)
- Connect: Black → Control Voltage In (CVI)
- Connect: Blue + Grey → Main supply Ground (GND)

Use JVL cable Item No.: WI1000-M12F5W05N or WI1000-M12F5T05N.

Schematic overview of supply connections:



Isolate CVO (Control Voltage Out) if you don't use it

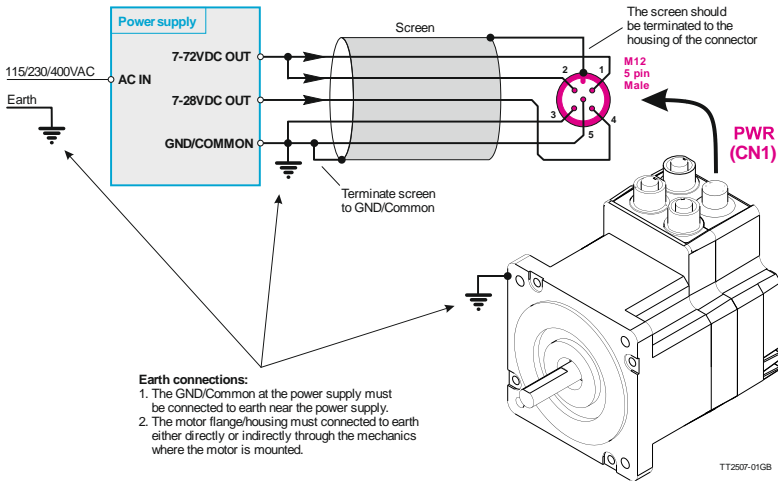
- CN4 connector (M12, 17 pin female): isolate the Red wire!
- CN3 connector (M12, 8 pin female): isolate the Red wire!



If CVO by mistake is connected to the RS485 or RS422 signals, it will cause **permanent damage** and render your motor unusable!

Please also follow the instructions on next page regarding **Earth** and **Ground**.

Please follow these instructions as well!



(See section 2.1 in the User Manual for more information.)

Size and Type of your Power Supply

Use JVL's range of power supplies if you want your motor to be CE compliant — and to avoid problems and be up-and-running easy and quickly.

Modern switch-mode power supplies have two disadvantages when it comes to motor supply: (1) they cannot handle return energy from a braking motor and (2) if you try to withdraw just 1 milliamp more than the rated current the supply will shut down.

JVL therefore offers special switch-mode supplies with built-in capacitors.

MIS171...MIS176: use min. 3A supply, PSU24-075, PSU24-240 or PSU48-240.

MIS231...MIS234: PSU24-240, PSU48-240 or PSU80-1000-10 recommended.

MIS340...MIS343: PSU24-240, PSU48-240 or PSU80-1000-10 recommended.

MIS430...MIS432: PSU24-240, PSU48-240 or PSU80-1000-10 recommended.

JVL Power Supply Overview

PSU24-075 – 24 VDC, 3.2 A, 75 W (no capacitor)

PSU24-240 – 24 VDC, 10 A, 240 W, built-in 4400 µF extra capacitance

PSU48-240 – 48 VDC, 5 A, 240 W, built-in 4400 µF extra capacitance

PSU48-1000-01 – 48 VDC, 21 A, 1000 W, 90-264 VAC

PSU80-1000-10 – 80 VDC, 12 A, 960 W, 3 x 340-550 VAC

PSU00-PD1 – Power Dump unit for 48 VDC with large capacitor and power dump resistor circuit for braking large inertias. Use with PSU48-... or 48 V battery.



Serial Communications

All ServoStep™ motors from MIS171 to MIS432 have built-in RS485 serial communications interface.

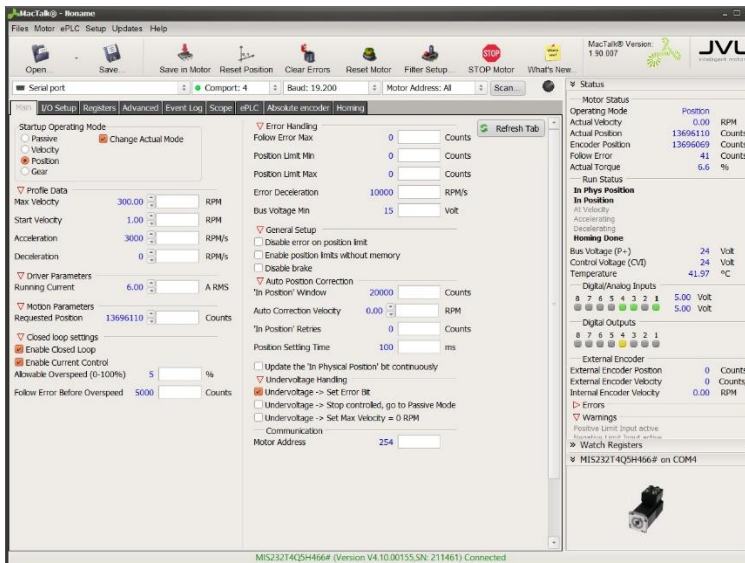
Ethernet equipped motors have the RS485 interface only in their 17-pin M12 connector.

To ensure successful connection from the beginning please use these items:

- RS485-USB-ATC-820 – USB to RS485 converter
- Depending on your actual motor use one of these RS485 cables
 - RS485-M12-1-5-5
 - RS485-M12-1-5-8
 - RS485-M12-1-5-17
- MacTalk® software, request Item No.: MACTALK_USB

(See section 2.8 in the User Manual for more information on how to connect a ServoStep™ motor.)

1. Turn DC power off and double-check power supply connections
2. Connect RS485 serial cables and the RS485-USB-ATC-820 converter
3. Install MacTalk® on your PC and start it
4. Turn DC power ON
5. Wait for MacTalk® to connect to your motor





Ethernet Communications

If you have a ServoStep™ equipped with industrial Ethernet then you can quickly determine the default IP address: **192.168.0.XX**

XX refers to the last 2 digits in the MAC-ID which is printed on the label.

Example: If the MAC-ID has the value 00:50:C2:D0:C9:14, then the default IP address is set to: 192.168.0.**20** (since the 14 is Hexadecimal).

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Link to our home page: www.jvl.dk

Link to Download (or User Manuals or CAD drawings etc):

<https://www.jvl.dk/list/310/downloads>

Link to User Manual:

<https://www.jvl.dk/files/pdf-1/user%20manuals/lb0058gb.pdf>

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Helpful unit if you need to connect Sensors with M8-3pin connectors:



Item No.: WI1302-2AM17T01NMB — Junction Box for ServoStep™ (MIS/SMC)

(Item No.: WI1301-2AM17T01NMB — Junction Box for MAC motor)