



ADVANCED TECHNICAL MATERIALS, INC.

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General Instructions Motorized Phase Shifter P1507-SM24

What's inside:

Along with your attenuator/phase shifter, there will be the following items inside the box which has been shipped to you:

1. Stepper motor controller ATM P/N: **MCM-MFI1PRD17N4**
2. RS-422-485 to USB convertor
3. +24 dc power supply
4. USB drive with motion control software
5. USB to Micro USB cable, Cable A
6. RS-422-485 ribbon cable, Cable B
7. Power cable, power jack, to wire crimp connector, Cable C
8. Controller to stepper motor cable, D-sub 9 pin connector to IDC header connector, Cable D

Software Installation

Insert the USB drive into one of your PC's open USB ports, and then follow the following instructions:

1. Go to MY COMPUTER.
2. Double click on the Removable disk icon.
3. Double click on the setup icon.
4. This will prompt you to download IMS TERMINAL.
5. Follow the procedure until the download has finished.
6. Go back to the Removable disk icon in MY COMPUTER, and double click on it again.
7. Depending on what type of system you are using, 32-bit or 64-bit OS, click on the appropriate folder to install the cable drivers.
8. Follow the download until it has finished.
9. You have successfully installed the motion control software onto your PC.

Connecting your motor driven product

In order to complete the setup, follow the connection diagram supplied.

Test Program

Once the setup is complete, you will then use IMS Terminal to test the functionality of the stepper motor driven device. Complete the following steps to test the device:

1. Make sure all connections are secure and correct according to the connection diagram supplied
2. Open IMS Terminal
3. Three windows will be open in IMS Terminal, focus on the window labeled Terminal 1.
4. There is a connection block at the bottom of this window that says the USB port number along with the Baud Rate (ex. 4:9600). Click on this, and select the correct port number in which your USB cable is connected. (To determine which Port you are using, go to Control Panel, Hardware and Sound, Device Manager. In Device Manager, you will see Ports (COM & LPT). Click the drop down arrow, and you will see the IMS USB to RS422 Converter Cable (COM#). The COM # is the port number that you will use in the IMS Terminal connection block.
5. Close out device manager, and restore IMS Terminal. You will then double click on the connection block in the Terminal 1 window, and enter the correct COM port number.
6. If the block that says disconnected, which is right next to the connection block, still says disconnected, then double click on it. This will then change the connection state to “connected”.
7. Double click your cursor in the text area of Terminal 1. When you see your cursor blinking, press Ctrl C. This will activate the controller, and allow you to start programming.
8. Go back to My Computer, and double click on the removable disk once more. Open the text file labeled “ATM test program”. Copy the entire program by pressing Ctrl A, followed by Ctrl C.
9. Open the IMS Terminal window, and paste the entire program into terminal 1 by pressing Ctrl V.
10. Press enter, and type ex m1, and then enter once more. This will start the program.
11. Once you have verified that the unit is working correctly, you can press Esc to stop the program.
12. Now you may start writing your own programs, or commands in Terminal 1. Refer to the “Command Instructions” sheet provided to start writing your own programs.