

EMT 16OP IF Card Documentation

Ah-ha auxiliary inputs Terminal block 5

The Ahha inputs are all 5 volts switched to ground. Our board operates these inputs through a reed relay isolating the machine electrics which are all 24 volt DC. Our inputs are all operated by +24VDC. Therefore to operate an input connect the 24 Volt power supply ground (24 Volt Return) to 24VRET T5-1 terminal and connect the +24V of the power supply via a suitable switch to the input you wish to operate. Note that if you are using AUXIN 11 & AUXIN 12 jumpers JR1 and JR2 must be fitted so that they bridge the pin marked AUX to the centre pin. (This is the default position)

Ah-ha outputs Terminal block 1

The Ahha outputs are all low current 5 volt signals. Our board uses these inputs to operate a solid state relay switching 24 volts again isolating the machine electrics. Therefore to operate an output connect +24VDC to T1-10 terminal .The maximum loading is 130Ma and outputs should be used to drive a relay if you are operating any devices on the machine. A suitable relay is the one fitted on the EMT main IF card to operate the Emergency Stop and spindle circuits. It is capable of switching 1 Amp up to a maximum of 100V ac/dc.

Analogue Connections Terminal block 3

The analogue connections on T2 are connected straight through to the analogue connections from the Ah-ha board in the PC. They do however pass through very low current fuses as a measure of protection when connecting to older spindle drives

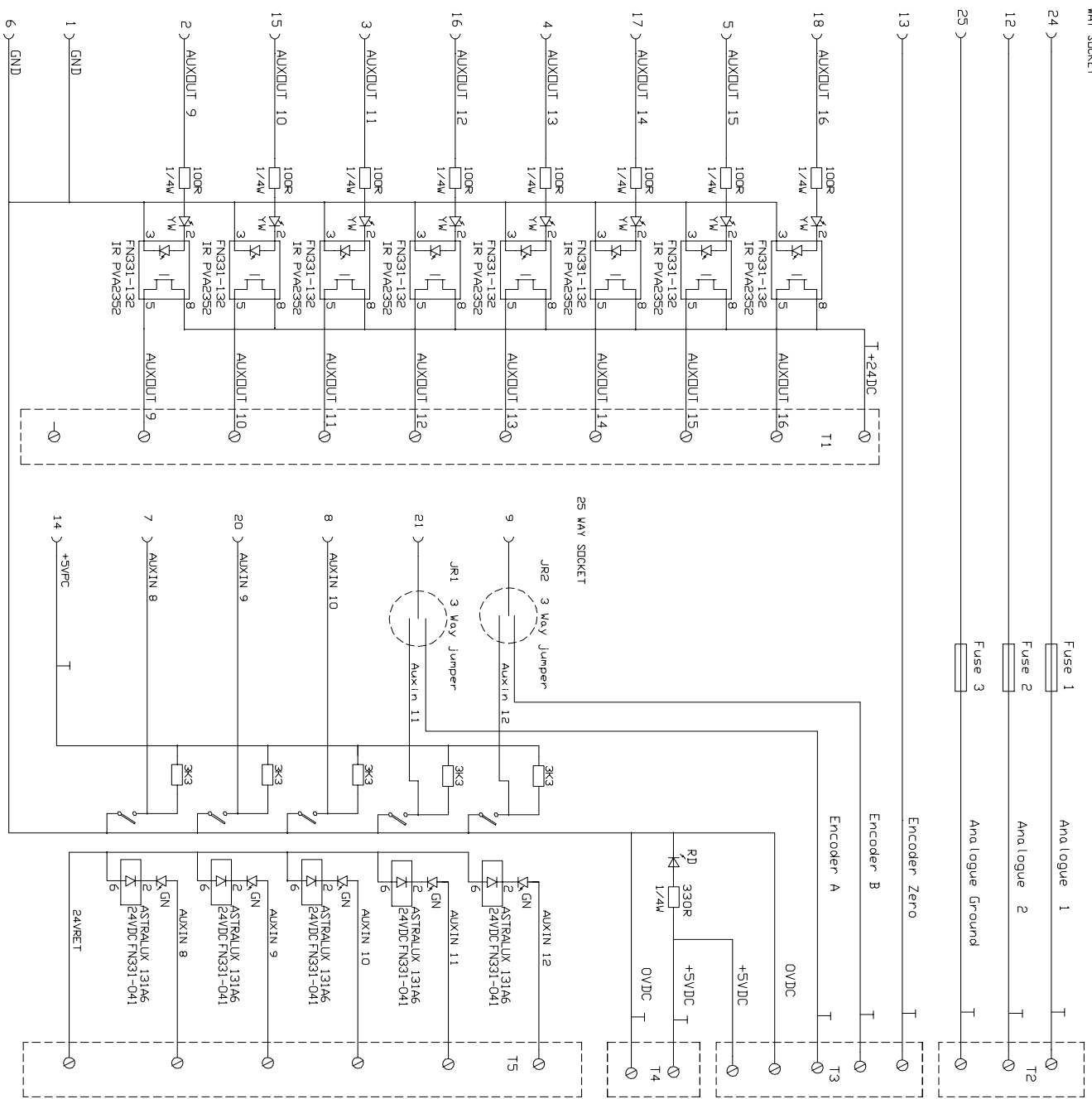
Encoder Connections Terminal block 3

This is for a spindle encoder when used in lathe applications. The encoder signal connections pass straight through to the connections from the Ah-ha board in the PC and the power connections pass to terminal block 4 as described below. If you are using an encoder jumpers JR1 and JR2 must be moved so that they bridge the pin marked ENC to the centre pin.

5V Connections Terminal block 4

This is provided as a convenient place to connect a +5VDC supply so that the encoder connections are all on a single plug

25 WAY SOCKET



ALL LEADS T13 4/5mm SIEMENS LX5360-K
 SOCKET 25-Way D Type PCB Mount

BCD allocation

- Auxout 9 = BCD 1
- Auxout 10 = BCD 2
- Auxout 11 = BCD 4
- Auxout 12 = BCD 8
- Auxout 13 = BCD 10
- Auxout 14 = BCD 20
- Auxout 15 = BCD 40
- Auxout 16 = BCD 80
- Auxout 6 = M Strobe
- Auxout 7 = S Strobe
- Auxout 8 = T Strobe
- Auxin 8 = BCD Finish

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 Title Circuit for EMT/Ahha 16DP IF Board

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