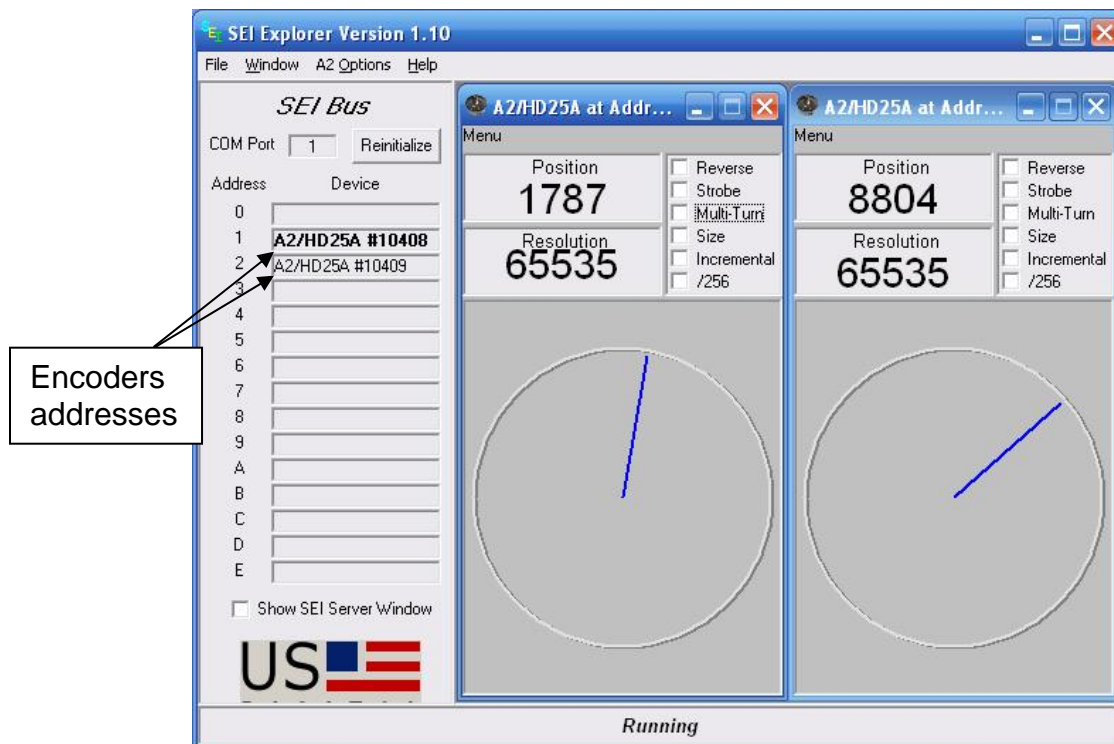
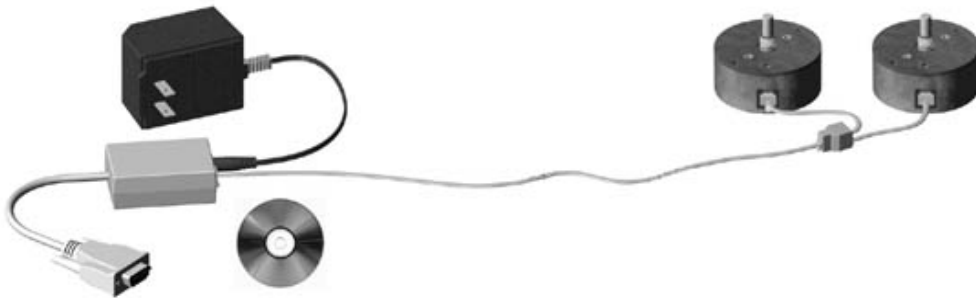


US DIGITAL ENCODERS USING

1. ENCODERS

The A2 type encoders supply absolute position information to the interface board. These encoders are more expensive but they never need to be periodically calibrated. The encoders are supplied with free setup software. The encoders must be set to the maximal resolution (65535) and mode 0 (any option checked). Show the following example:



The A2 encoders type have to be used for Azimuth or Elevation. But it is possible to use the A2T (or A2I) for Elevation (Inclinometer).

So, with the SEI setup software you must set the addresses of both encoders.

Address = 1 for Azimuth

Address = 2 for Elevation

You can also specify these values when ordering.

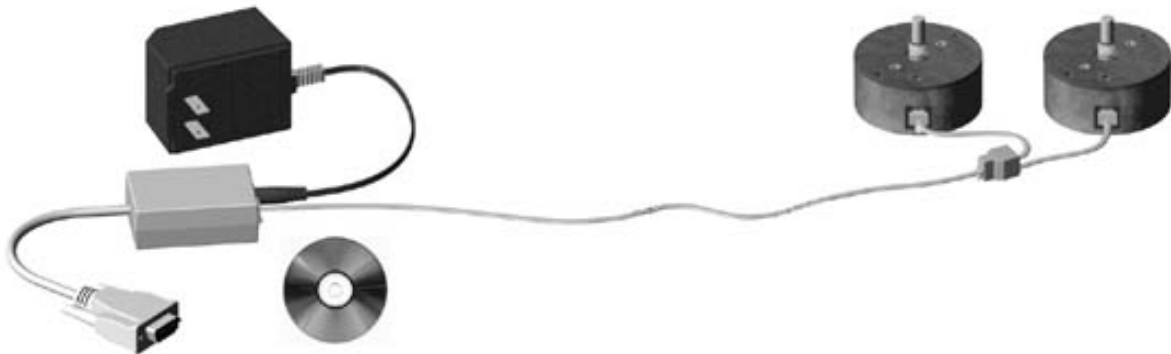
2. ORDERING INFORMATION

Your antenna design can be done with different configuration, like 2 * A2 encoders for Azimuth and Elevation or 1 * A2 encoder for Azimuth and 1 * A2T for Elevation. You will need also cables and connectors. Find below a list of the components I have used for the development and tests of the new MK-EHN interface:

- 2 encoders A2 (Ref A2-S-S) or A2I (1st generation) or A2T (2d generation). There are some options available when ordering :
 - 1st S for SEI Bus (compulsory)
 - 2^d S for Sleeve bushing
 - You can add HS for Sealed housing (help to prevent the moisture)
- 1 connector 3 ways – 6 pins (Ref CON-MD6-3J).
- 1 adaptor SEI bus / RS 232 (Ref AD2-B-NP) to program or test your encoders.
- 3 cables (28 AWG) 6 pins + connectors (Ref CA-8-xx FT or CA-1769-xx FT) where xx is the length in feet. Shielded cables are recommended. See also the paper “USD_advices.pdf” for more information.

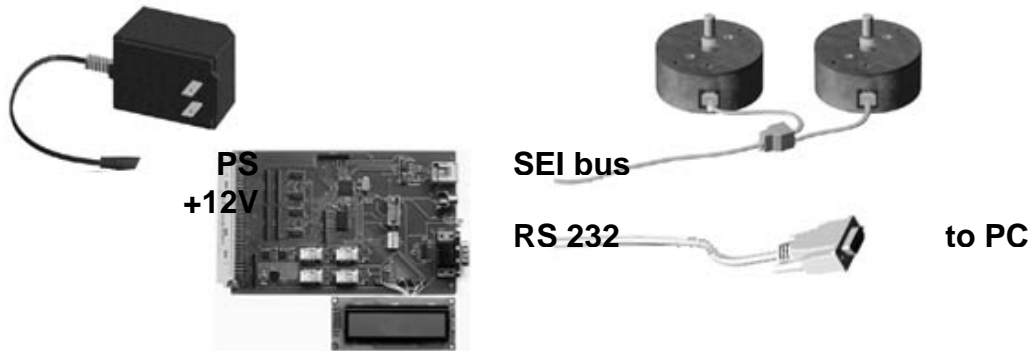
You will find more information on the US Digital web site:

- US Digital : <http://usdigital.com>
- The encoder datasheet is here : <http://www.usdigital.com/products/a2/>



3. Connecting to the MK/EHN interface

The following schematic shows the connecting of the US Digital encoders to the interface :



Example of using:



About the interface and EME System freeware: <http://www.f1ehn.org>