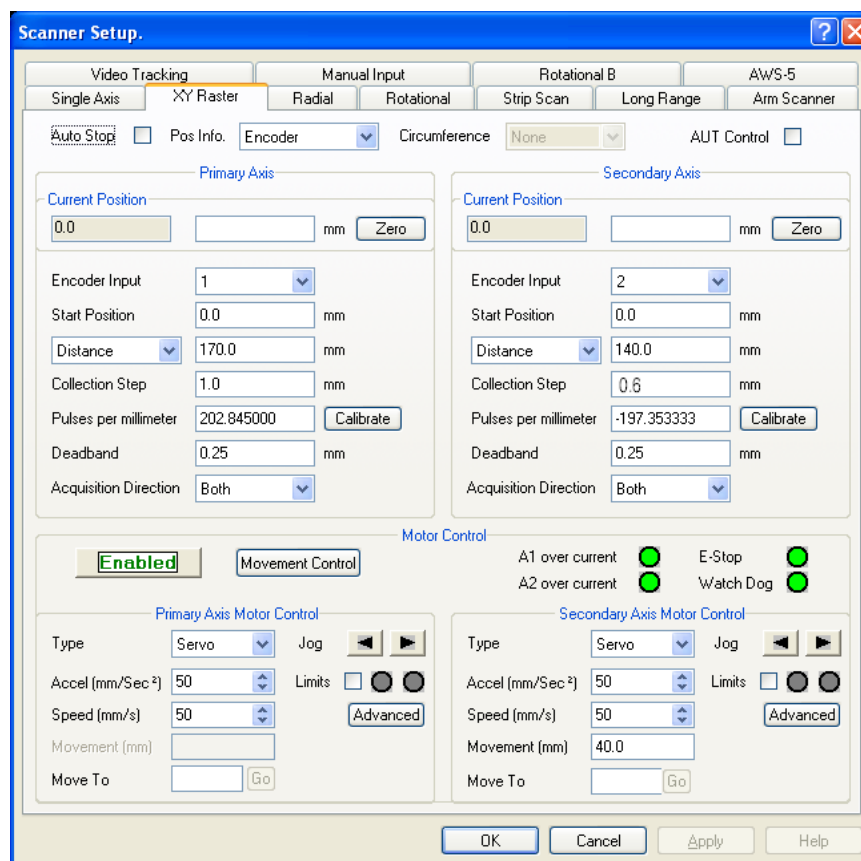
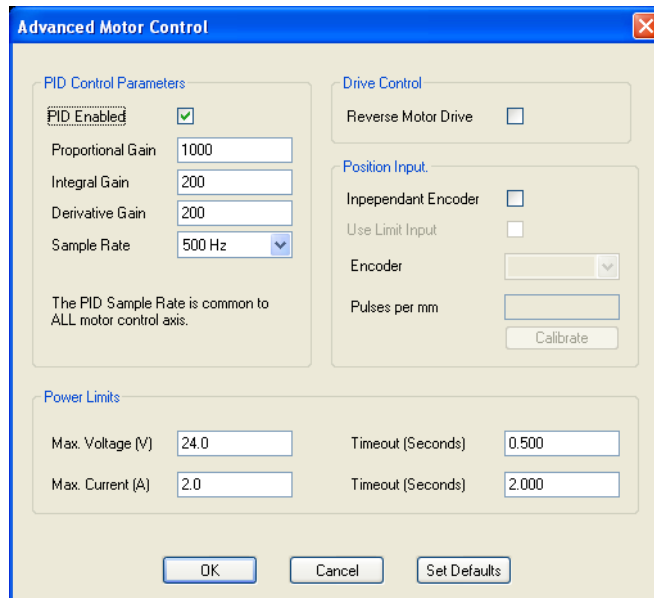


## Setting up a raster scan with the TD Focus-Scan/Phoenix MagScan

1. Connect the MagScan to the TD Focus-Scan using the cable provided. The two Amphinol connectors should be marked **1** and **2** or **Axis1** and **Axis2**. Connect these to the corresponding connectors on the TD Focus-Scan.
2. Open the Scanner control dialogue. **Setup – Scanner – XY Raster**.
3. The setup should look similar to the image below (some adjustment may be necessary). Note – In the index axis (in this setup Secondary Axis), when using a conventional probe, the **Collection Step** and **Movement (mm)** values should be the same. When using a Phased Array electronic scan or an array of conventional probes, the **Collection Step** is set to the element pitch and the **Movement (mm)** is the physical step (e.g. the size of the sum of all steps in the electronic scan).



- Click the **Advanced** button and the **Advanced Motor Control** dialogue appears. The values should be similar to the image below (some adjustment may be necessary):



The image shows a software dialog box titled "Advanced Motor Control". It is divided into several sections:

- PID Control Parameters:** Includes a checked "PID Enabled" checkbox, and input fields for "Proportional Gain" (1000), "Integral Gain" (200), "Derivative Gain" (200), and "Sample Rate" (500 Hz). A note states: "The PID Sample Rate is common to ALL motor control axis."
- Drive Control:** Includes a "Reverse Motor Drive" checkbox.
- Position Input:** Includes "Independent Encoder" and "Use Limit Input" checkboxes, an "Encoder" dropdown menu, a "Pulses per mm" input field, and a "Calibrate" button.
- Power Limits:** Includes input fields for "Max. Voltage (V)" (24.0), "Max. Current (A)" (2.0), and two "Timeout (Seconds)" fields (0.500 and 2.000).

At the bottom of the dialog are three buttons: "OK", "Cancel", and "Set Defaults".

- Test the setup by using the **Move To** controls in small increments. The **Jog** buttons may also be used to move the probes manually.

### Setup for manual XY scanner

