KINCOM™ RESEARCH OPTION KIT

DEVICE DESCRIPTION

The Research Option Kit provides an external link for the KIN-COM system signals including the loadcell, tachometer, and potentiometer. This manual will provide instructions on the proper methods to be used in hooking up the signals without causing degradation of the machine's performance. Precautions must be used in order to not degrade the signals because they are used by the main CPU to control the machine itself. Any deviations, or improper hook-up can result in nuisance errors in machine operation.

SIGNAL PARAMETERS

The signals are picked off prior to the A/D Converter's multiplexer so it will be necessary to match, as close as possible, the input impedance of the measurement system. This system input impedance is approximately 10 GΩ so the auxiliary measurement device must also present a high impedance in order to not degrade the control signals. It is recommended that the user's measuring device use instrumentation amplifiers as their inputs that have a minimum of 10 GΩ impedance. Signals can range between ±10V DC.

CONNECTOR LOCATION

The research option connector is located on the back of the computer in slot location no. "5" as shown by the accompanying diagram. The ten pin connector is attached to the Multifunction A/D circuit board located in Slot "1" of the I/O. Attach this connector to the 10 pin receptacle designated as "P3".

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The connection diagram below indicates the pinouts for the connector located in slot number "1" at the rear of the computer.

**Figure 1**

**LOADCELL**

The basic loadcell circuitry is shown below as an aid in determining the proper interface circuitry for the auxiliary measurement equipment.
**POTENTIOMETER**

The basic potentiometer circuitry is shown below as an aid in determining the proper interface circuitry for the auxiliary measurement equipment.

**TACHOMETER**

The tachometer circuitry is shown below as an aid in determining the proper interface circuitry for the auxiliary measurement equipment.
ASSY: 57614 REV A
A/D MULTIFUNCTION
DID 602/7/92

SWITCH SETTINGS:
PORT B: COM3 ON
IRQ4 ON
PORT A: COM2 ON
IRQ3 ON
PRINTER: LPT278 ON
ADDRESS: A5,A6,A7 ON