

## 3 I/O CONNECTIONS

### 3.1 CABLES AND SCREW TERMINAL BOARDS

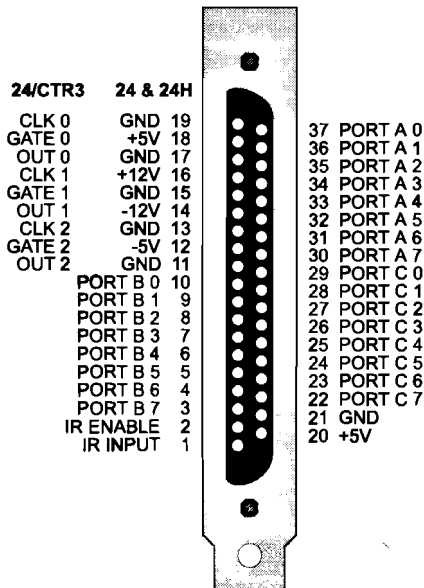
The CIO-DIO24 connector is accessible through the computer's expansion bracket. The connector is a standard 37-pin male connector. The I/O connections can be brought out to easy to use screw terminals by purchasing a C37FF-series cable and a CIO-MINI37 screw terminal accessory board. For custom cabling, a mating female connector can be purchased from Measurement Computing Corp. (part # DFCON-37) or an electronic supply outlet.

### 3.2 CONNECTOR DIAGRAMS

The CIO-DIO24 I/O connector is a 37-pin, D-type connector, accessible from the rear of the PC through the expansion backplate. The signals available are direct connections to the 82C55 digital I/O chip as well as the PC's internal power supplies.

The CIO-DIO24/CTR3 adds signals for an 82C54 counter chip in place of the PC power connections. The connector accepts female, 37-pin, D-type connectors such as those on the C37FF-2, a 2-foot cable with connectors available from Measurement Computing Corp.

If frequent changes to signal connections or signal conditioning is required, refer to the information on the CIO-MINI37 or CIO-SPADE50 screw terminal boards.



*36 > response button input*

Figure 3-1. I/O Connector

### 3.3 SIGNAL CONNECTION CONSIDERATIONS

All the digital outputs and inputs on the CIO-DIO24 and CIO-DIO24/CTR3 connector are CMOS TTL. The CIO-DIO24H signals are buffered (high output drive) TTL.

TTL is an electronics industry term, short for Transistor Transistor Logic, which describes a standard for digital signals which are either at 0V or 5V (nominal).