

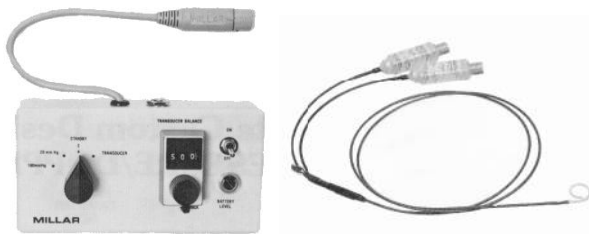
## Application Note 184 Interfacing Millar Mikro-Tip® Catheters with MP Research Systems

Millar® Instruments, Inc. manufactures a line of solid-state Mikro-Tip Catheters that are used in the analysis of pressure variances. Signals from these transducer catheters (as shown below) are suitable for high fidelity pressure monitoring with high frequency response data acquisition systems such as the MP Research System (using MP150 or MP100 unit), and are therefore suitable for online computer analysis.

Millar Pressure Control Units interface with MP Research System as follows:

- [TCB-600](#) via UIM100C Universal Interface Module
- [TCB-510](#) via DA100C General Purpose Amplifier & TCI Interface

### TCB-600 Control Unit via UIM100C



The TCB-600 is an essential interface between the Mikro-Tip Catheter and the MP Research System with the UIM100C (included with the MP system).

The TCB-600 is specifically for use with computerized data acquisition systems. It provides internal capability for balance (zero) and calibration of 20 and 100 mmHg. A switch may be used to select a differential output of 0.5 Vdc/100 mmHg or 1.0 Vdc/100 mmHg. There is a panel-mounted meter to provide the user with a visual identification of battery power. The TCB-600 has an analog DC output that will connect directly into the UIM100C. The [CBL105](#) cable, 3.5mm phone plug to 1/4" phono plug, will interface the two devices.

### TCB-510 Control Unit via DA100C



The TCB-510 is an essential interface between the Mikro-Tip Catheter and the MP Research System with a DA100C amplifier.

The TCB-510 is designed as a passive interface to strain gauge pressure amplifiers, which supply bridge excitation voltage and have balance controls for full bridge pressure transducers. The TC-510 allows selection of standby to verify zero and calibration, or recalibration if required, while recording pressures.

The TCB-510 interfaces with the DA100C Amplifier via a TCI series Transducer Connector Interface. The TCI connects directly to the DA100C (as shown at right).

When purchasing the TC-510, you must specify what type of amplifier you will be using and then order the appropriate TCI:

- Millar cable 850-3028 uses [TCI100](#)
- Millar cable 850-3298 uses [TCI110](#)

