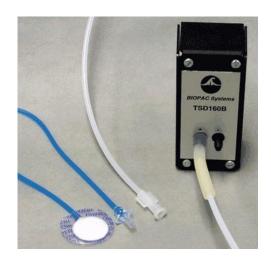


## PRESSURE PAD/RESPIRATION TRANSDUCER & SENSOR

The multipurpose Pressure Pad/Respiration (pneumogram) transducer can be used to measure:

- Pulse when placed close to the heart or on a major pulse point
- Noninvasive respirationô from a small mouse to a human for standard setups, from animal only for MRI.\*
- Small pressing forces (like pinching fingers together) for Parkinsonøs evaluations.
- Human facial expressions (i.e., smiling/frowning with the sensor on the cheekbone).
- Spacing and pressure between teeth coming together.
- Startle blink response



The transducer assembly includes a self-inflating pressure sensing pad connected to tubing terminated in a Luer male connector to interface additional tubing included for connection to the transducer. The pressure pad can be used many times, but may eventually need to be replaced if the sensor is damaged with rough or prolonged use.

- **TSD110**  $\pm 12.5 \text{ cm H}_2\text{O}$  differential pressure transducer (TSD160B) plus pressure sensing pad (RX110) and tubing (AFT30 1.8 m). Requires DA100C to interface to MP160/150 Research System.
  - RX110 This replacement item is the sensor pad only, without additional tubing or transducer. One RX110 sensor is included with each TSD110 Respiration Pad Transducer.
    Pad: 20 mm Dia x 3.18 mm thick Sensor Tubing: 1.6 mm ID, 2.2 mm Dia, 1 m, Luer male
- **TSD110-MRI**  $\pm 12.5 \text{ cm H}_2\text{O}$  differential pressure transducer (TSD160B) plus pressure sensing pad (RX110-MRI) and additional tubing (AFT30-XL x 2 = 11 m). Requires DA100C to interface to MP160/150 Research System.

Place the differential pressure transducer in the MRI Control Room. To control for ambient pressure changes that may occur between the MRI Control Room and the MRI Chamber Room (such as if the control room door is opened), run the second AFT30-XL from the TSD160B through the wave guide into the MRI Chamber Room. The AFT30-XL tubing will add < 50 msec to the sensing of the waveform peak.

\* TSD110-MRI is not recommended for human respiration; see TSD221-MRI instead.

## MRI Use: MR Safe

*TSD110-MRI Transducer Components – MRI Chamber room only:* Tubing: Polyethylene (polymerized urethane), RX110-MRI Sensor: Plastic with Polyethylene foam

**RX110-MRI** This item is the sensor pad only, without additional tubing or transducer. One RX110-MRI sensor is included with the TSD110-MRI Respiration Pad Transducer. The RX110-MRI pressure pad does not contain any metallic parts and can be used inside the MRI bore.

Pad: 20 mm Dia x 3.18 mm thick Sensor Tubing: 1.6 mm ID, 2.2 mm Dia, 1 m, Luer male *MRI Use:* MR Safe

RX110-MRI Components: Plastic with Polyethylene foam