

SYSTEM CONTROLS AND INDICATORS

FUNCTIONAL DESCRIPTIONS

4.5 CONTROLS

A simple method of linking the appropriate Transducer Module (example; Arterial blood pressure transducer) to the appropriate Monitor Module (example: Monitors' Arterial blood pressure channel) must occur before the TruWave transducer can be zeroed and physiologic data is displayed on the bedside monitor.

LINK (On/Off) Button – Pressing the LINK button for 1/2 second, initiates the pairing process between the Transducer Module and the Monitor Module by activating the RFID reader system. The linking process can be initiated from either the Transducer or Monitor module.

The LINK button also serves to terminate an existing communication link. Pressing and holding the LINK button for two seconds, while already linked, will terminate the link. Pressing the Link button again will initiate a new link process. If no RFID user card is presented, the Module will time out (approximately 10 seconds) and turn off.

TEST Button – Pressing the TEST button sends a **test signal** (approximately 100 mmHg) from the Module to the monitor display for purposes of testing and verifying proper module and link performance. The test signal is sent as long as the TEST button is held. If the Monitor Module TEST button is used, the test pulse is generated from the Monitor Module and the function and connection of the Monitor Module is verified. If the Transducer Module TEST button is used, the test pulse is generated from the Transducer Module and the link performance is verified.

Pressing the TEST button on the Transducer Module will also indicate the **battery level**.

Pressing the TEST button on the Monitor Module will only indicate battery level if the Monitor Module is battery powered. It does not indicate the battery level of the Transducer Module that it is linked to.

Note: The battery in the Transducer Module should always be replaced with a new one when setting up a new pressure transducer line. A new AA Alkaline battery will typically provide 72 hours of continuous operation.

Color Channel Knob – A rotating selector knob provides 5 color channels. The channel colors (also with #'s) are Red (1), Blue (2), Yellow (3), Green (4) and White (5). The color channel selection is viewed through the window on the control panel.

The color channel selector is used to aide the operator in organizing pressure signals on how they appear on the patient monitor. These color settings also provide channel information between Transducer and Monitor Modules. The color RED is typically selected for an arterial pressure. The Monitor Module plugged into the monitor where arterial pressure is displayed would be set to RED on the color knob. The Transducer Module connected to the patient's arterial line would then also be set to RED. (**Blue:** CVP/RAP, **Yellow:** Pulmonary Artery Pressures, **Green/White:** Misc. physiologic pressures)

Another benefit of the color channel is ease of patient set up. Using different colors for different pressure signals on the same patient allows the operator to simultaneously LINK all Transducer Modules to their respective Monitor Modules. See LINK instructions.

RFID Reader (Inside housing) – The StreamLink system for pressure monitoring has a RFID (Radio Frequency Identification) reader incorporated into each Transducer and Monitor Module. The StreamLink passkeys provided with the system are each encoded with a unique identification number so that none are the same. The StreamLink passkey provides the unique ID code that will be read by each Transducer Module and Monitor Module and will be used by the modules to uniquely identify each other.

4.6 INDICATORS

System Indicator LED's – Green LED indicates linking status. Red LED indicates system fault conditions.

Battery Level LED's – Green indicates full battery level. Yellow indicates medium power level. Red LED indicates low power and replacement required. The Red LED will automatically begin blinking when there is approximately 4 hours or less of battery power remaining. This indicator does not require immediate operator intervention. The battery should be changed at the next convenient moment.

Audible beeper (not shown)

Low Battery Indicator - The Transducer Module will automatically begin emitting an audible signal (approximately once every 5 seconds) when there is approximately 4 hours or less of battery power remaining. This indicator does not require immediate operator intervention. The battery should be changed at the next convenient moment.

Link Indicator - The beeper will confirm a proper RFID read input by each module. The Transducer Module single tone also signals a successful link.

Failed Link – The system Red LED will blink in the event of a failed link. The system will send a non physiologic pressure signal (approximately minus 100 mmHg) to the monitor. This pressure signal will cause the monitor to alarm for out of limit condition.

In the event that the system experiences significant interference, it is possible to see several seconds of flat pressure display while the system readjusts. If the system cannot readjust, it will go to Failed Link mode as described above.