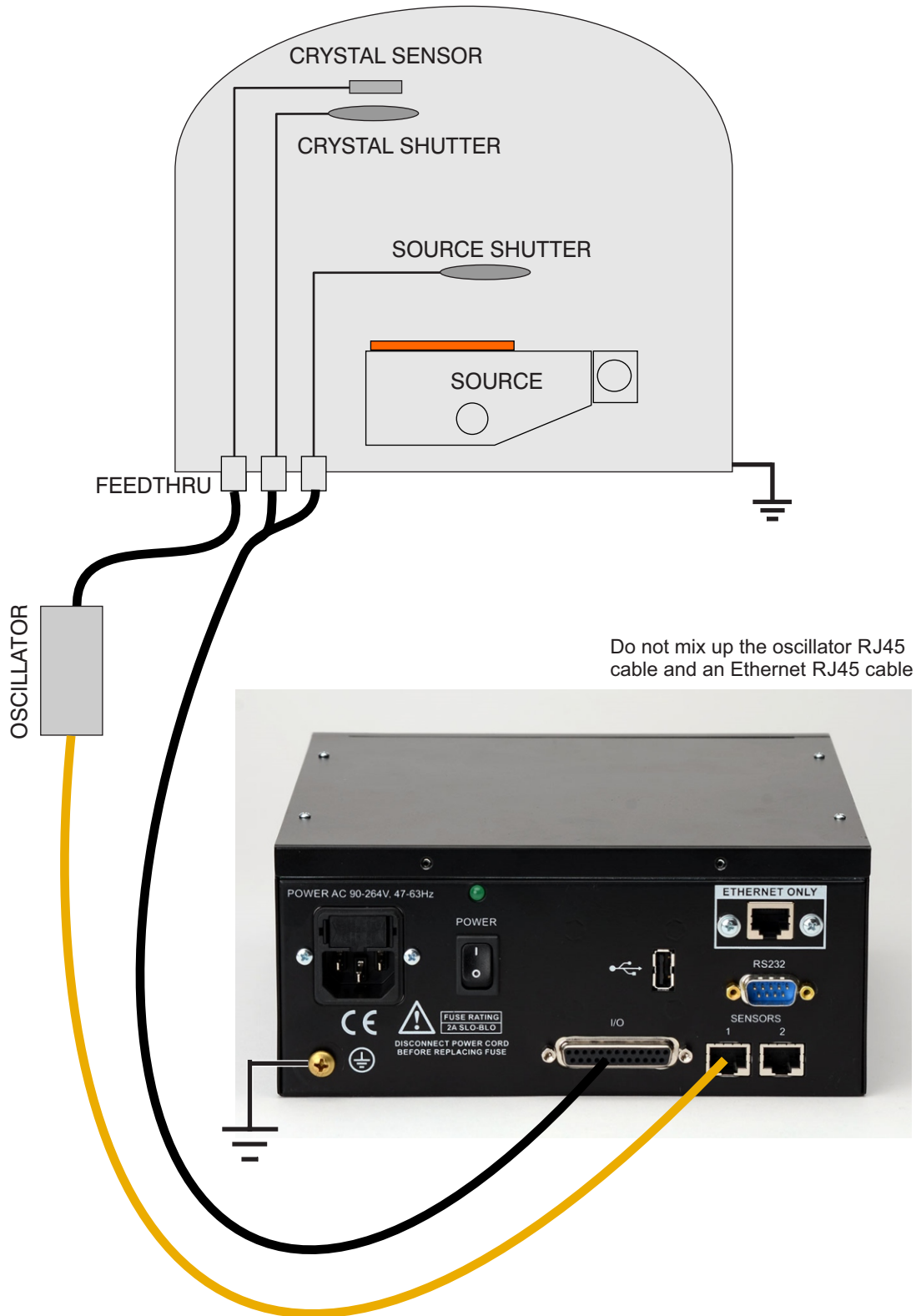


# ***TELEMARK*** Model 851 Quick Setup

## TYPICAL SYSTEM CONFIGURATION



# ***TELEMARK*** **Model 851 Quick Setup**

## Notes:

- The full manual is found on the included USB drive in pdf form.
- The 851 boots up to the splash screen 30 seconds, and the configuration screen in under 2 minutes.
- The 851 is shipped with crystal simulation turned off, if crystal sensor one is not connected then the crystal error will sound when the 851 is turned on.
- The 851 is shipped with the 6MHz setting and screen saver set to 15 minutes.

1

## **INSTALL DEPOSITION CONTROLLER**

The 851 is designed to be installed in a half 19 inch rack or on a table top. Ears for 19 inch rack installation are provided. Feet are provided for tilt the unit up on a desk top.

Required power: 90-264 VAC, 47-63 Hz

The 851 should be properly grounded, see manual for more details.

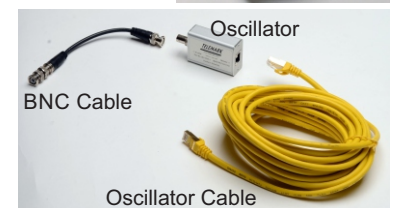
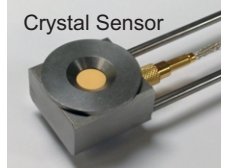


2

## **INSTALL CRYSTAL SENSOR AND OSCILLATOR**

The 851 is designed to be used with:

- 5 or 6 MHz crystals
- Internal vacuum coaxial cable, 30 inches long (from crystal sensor to feed through)
- External BNC cable, 6 inches long (from feed through to oscillator)
- Telemark oscillator (other oscillators will not work)
- Shielded RJ45 cable, to 25 feet long (from oscillator to 851)



**3****CONFIGURING THE 851 SYSTEM**, see the 851 manual for more details

1. **Setup – Display:** Parameters affecting the display
2. **Setup – Utility:** Miscellaneous parameters such as, crystal frequency, sound volumes, date and time
3. **Setup – Shutter:** shutter type
4. **Setup – Inputs/Outputs:** The monitor has four inputs and four outputs that are pre-defined. The only user changeable settings are to set inputs True to either High or Low and the input to be Active or Passive operation.
  - Passive input is TTL level inputs activated by a short across input pins.
  - Active input is activated by 12 to 24 volts DC across the input pins.

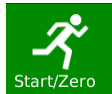
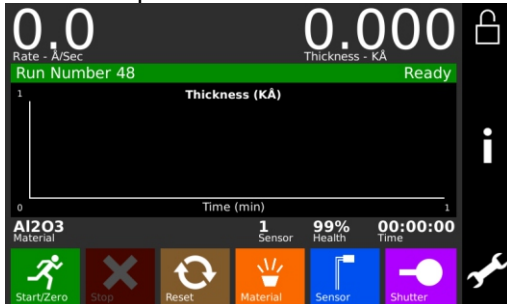
**4****DEFINE MATERIALS**, see the 851 manual for more details

Parameters affecting the deposition of each material: density, impedance, sensor#, etc.

5

### OPERATING THE 851 SYSTEM,

see chapter 6 of the 851 manual for



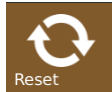
#### START/ZERO BUTTON

The Start button zeros the thickness, starts a material and starts the timer. **When the button is surrounded by a white box it indicates the monitor is running.**



#### STOP BUTTON

The Stop button puts the 851 in Run Complete mode.



#### RESET BUTTON

The Reset button is used to clear the monitor from "crystal fail" mode and put it into the Ready mode.



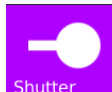
#### MATERIAL BUTTON

The Material button brings up the material selection list.



#### SENSOR BUTTON

This button switches the sensor input between 1 and 2. It also switches the sensor output relay if a dual sensor is configured.



#### SHUTTER BUTTON

This button is used to manually open and close the source shutter. **A white outline around this button indicates that the active source shutter relay is closed** (If any shutter is configured). When the monitor is in the Ready mode, this button may be selected to open or close the shutter.



#### STATUS BUTTON

This button is used to cycle through the different status screens. The display settings allow the six different status screens to be active or not. Refer to chapter 6 for a detailed description of these status screens.



#### PROGRAM BUTTON

Pressing the programming button will bring up the main programming screen.

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### ADDITIONAL NOTES:

The USB drive supplied with the 851 is for backing up and restoring materials and all the system files. It is also useful for data logging. It also includes a 851 pdf manual and VNC software and other Telemark information.

The 851 can be viewed and controlled remotely via Ethernet and a VNC client (Remote Desktop), see chapter 4. The network needs to have a DHCP server to automatically supply the 851 with an IP address.

See chapter 8 for details about control of an 861 from computer/PLC using the RS-232 serial interface. The interface is set at 9600 Baud, 8 Bit data, No Parity, 1 Stop bit