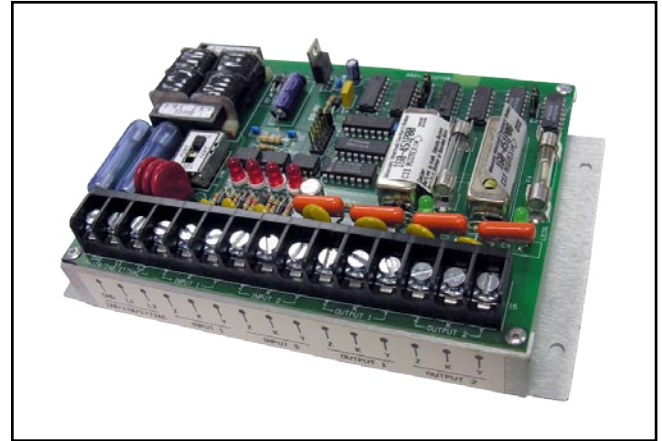




Totalizer

The Sentry 210 Totalizer accepts two inputs: two form A, two form C, or one of each form. It provides two isolated, totalized outputs, both form C. Therefore, pulses from two originating devices (e.g., pulse initiators) can be totalized and output to two separate end devices. Output pulse width is jumper-selectable from 133 to 800 milliseconds on 60 Hz or from 160 to 960 milliseconds on 50 Hz. The ratio of input pulses to output pulses (output ratio) is jumper-selectable to a one-to-one or a two-to-one ratio. The form of the inputs is individually number-selectable to Form A (2-wire) or Form C (3-wire).



Sentry 210

Installation

1. The Sentry 210 must be mounted within 30 degrees of vertical and must remain that way for at least one minute prior to operation.

2. **AC Input Fuses:** Check to confirm that fuses are in place at F1 and F2 and that the fuses are in working order. Both AC input fuses are .25 amps slow-blow.

3. **Input Voltage Selection Switch:** Set this switch to the appropriate position, 120 (down), 240 (middle), or 277 (up) to match the value of the AC source that will be connected to the power input. The voltage selector switch is connected in such a way that it will bypass fuse F2 in the neutral leg when the unit is switched for 120 VAC operation. Therefore, in this case, fuse F2 can be used as a spare for fuse F1.

4. **Output Pulse Width-** At location E1, install a jumper plug at one of the 6 positions A thru F. This jumper is for selecting an output pulse width, in milliseconds, for either 50 or 60 Hz as shown in the table below. When the Sentry 210 output is used to supply pulses to a magnetic tape recorder, the output pulse width should be set for 667 or 800 msec. for 60 Hz operation and to 640, 800, or 960 msec. for 50 Hz operation.

	60Hz	50Hz
A	133	160 milliseconds
B	267	320 milliseconds
C	400	480 milliseconds
D	533	640 milliseconds
E	667	800 milliseconds
F	800	960 milliseconds

5. **2/3 Wire Input Selection:** At jumper locations E3 and E4 install jumpers to select either two or three wire operation for each of the two inputs. E3 controls Input 1 and E4 controls Input 2. Placing the jumper in the upper position (pins 1 and 2) specifies a 3-wire input. Placing the jumper in the lower position (pins 2 and 3) specifies a 2-wire input.

6. **Output Ration Selection:** At jumper location E2 install a jumper in one of two positions to select the ratio of the Input pulses to the Output pulses. Placing the jumper in the upper position (pins 1 and 2) specifies a 2:1 ratio. Placing the jumper in the lower position (pins 2 and 3) specifies a 1:1 ratio.

7. **Output Fuses:** Select and install fuses in F3 and F4 for the relay outputs that are suitable for the load that will be connected to each of these output circuits.

8. **Relay Outputs 1 and 2:** On terminal strip TS1, connect the positions labeled "Output 1, K, Y, and Z" to the K, Y, Z input of the device intended to receive this totalized pulse output. Then connect the positions labeled "Output 2, K, Y, Z" to the desired second K, Y, Z input.

9. **Pulse Inputs 1 and 2:** Connect K, Y, and Z from the first pulse output to be totalized to the positions on TS1 labeled "Input 1, K, Y, and Z". In a like manner, connect K, Y, and Z from the second pulse output to the positions on TS1 labeled "Input 2, K, Y, Z." If it is necessary to connect either or both of the inputs to a Form A (2-wire)

output device, first make sure that the 2/3 wire jumper is in the right position (lower position) for selecting the two-wire type input. Then connect the 2 wires from the pulse output device to the terminals labeled K and Y for the desired input channel. This will leave the “Z” terminal unused. *Note: Before connecting the AC power input terminals, make sure that the voltage source is turned off and no voltage present on the power input cable.*

10. **Safety Ground Connection:** Connect the green wire (Safety Ground wire) from the input power cable to the leftmost position on terminal strip TS1 of the Sentry 210. This position is labeled “G.”

11. **AC Power Connections:** Connect the other two wires from the AC Power source to the positions on TS1 labeled “L1 and L2.” These same two positions are used for all three of the allowable input voltages; 120, 240 or 277 VAC. For a 120 VAC installation connect the “Hot” lead to the position labeled “L1” and connect the “Neutral” wire to the position labeled “L2.” In this way the “Hot” lead connection will be fused on the Sentry 210 board and the neutral leg will not be fused. For 240 and 277 VAC connections and associated switch setting, both the L1 and L2 leg are fused.

This Unit's Output fuse current rating may not be appropriate for the load current rating of your device. Austin International accepts no responsibility for equipment damage or improper system operation caused by the use of output or input fuses that are of inappropriate size

