Medi Cal Instruments Inc.
Model 220 Function Generator

Product Information:
The Model 220 Function Generator is designed especially for the biomedical and low-level instrumentation field, offering features not found on any other generator in its price range. It provides constant amplitude sine, square, and triangle waveforms, with a variable frequency range of 0.01 Hz to 10kHz. It features a calibrated and continuously variable output from zero to ten volts peak-to-peak, utilizing a vernier control and six switch-selected full scale ranges of 100uV, 1mV, 10mV, 100mV, 1.0V and 10V. Accuracy is +/-2% of full scale on each range and has a constant output impedance of 100ohms. The output mode switch allows selection of differential (balance) or common (single-ended) outputs.

Operation Instructions:

1. Connect to OUTPUT CONNECTORS located on front of Model 220 Function Generator.

2. Turn the function generator ON by pressing ON-OFF switch. LED on front panel will flash when unit is turned ON.

3. FUNCTION (Waveform) is selected by pressing the desired FUNCTION switch.
   - Sine waveform: Press sine switch (switch in) - Depress square switch (switch out).
   - Square waveform: Depress sine switch (switch out) - Press square switch (switch in).
   - Triangle waveform: Press sine switch (switch in) - Press square switch (switch in).

4. DIFFERENTIAL-COMMON MODE SELECT switch determines if function generator output is differential mode or common mode. Press DIFFERENTIAL-COMMON MODE SELECT (switch in) for common mode.
   - Differential mode: Calibrated voltage appears between + and - OUTPUT CONNECTORS.
   - Common mode: Calibrated voltage appears between Common and +/- OUTPUT CONNECTORS.

5. VOLT-MILLIVOLT SELECT switch determines if output amplitude range is in volts or milli-volts. Select milli-volts by pressing (switch in) VOLT-MILLIVOLT SELECT switch.

6. AMPLITUDE RANGE switch determines amplitude range and is indicated on top or bottom of AMPLITUDE RANGE switch. Press AMPLITUDE RANGE switch (switch in) to activate amplitude full-scale range as indicated. (0.1-1.0-10.0)

7. AMPLITUDE ADJUST varies output voltage. Output voltage range is selected by AMPLITUDE RANGE switch.
   Example: AMPLITUDE RANGE is set at 10. VOLT-MILLIVOLT SELECT switch is selecting VOLTS (VOLT-MILLIVOLT SELECT switch is out). AMPLITUDE ADJUST varies output voltage from 1 volt – 10 volts.

8. FREQUENCY RANGE SELECT switch determines if frequency range is indicated on top or bottom of FREQUENCY RANGE switch. Press FREQUENCY RANGE switch (switch in) to activate frequency range below FREQUENCY RANGE switch.

9. Frequency range is selected by pressing the desired FREQUENCY RANGE switch.
10. FREQUENCY ADJUST varies frequency. Frequency range is selected by FREQUENCY RANGE switch.

11. Batteries needs replaced when front panel LED stops flashing.

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