

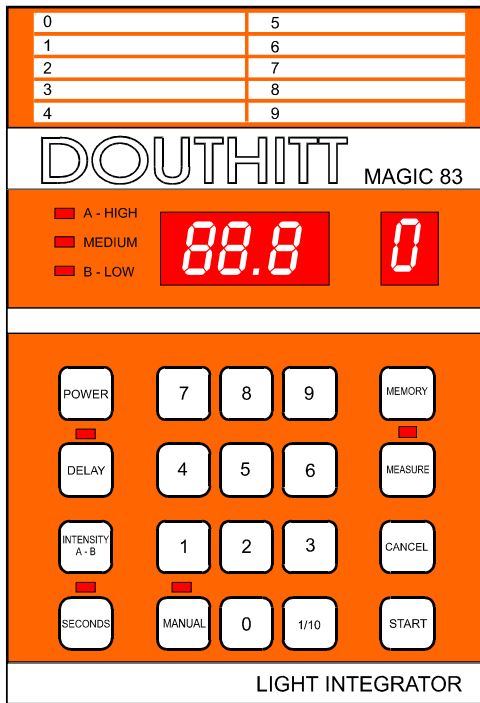
INSTRUCTION MANUAL

DOUTHITT MAGIC 83 LIGHT INTEGRATOR



The Douthitt Corporation

245 Adair St, Detroit, Michigan, 48207-4287 Established
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POWER - Turns integrator on and off; your settings are retained while AC power is present.

DELAY - Used to enter or display the vacuum delay time. Press DELAY (the current delay time will be displayed), enter the required delay time in whole seconds, press DELAY again to store the time and return to normal display. LED light (above the button) shows when active. To clear delay function, press DELAY then press "0", then press DELAY again to return to operating mode.

INTENSITY A - B Switches between High, Medium, and Low intensities on OLEC tri-level lamps, and between A (High) and B (Low) auxiliary outlets for other styles of light sources.

SECONDS - Changes from Integrator to Timer mode. LED above button indicates timer mode.

MEMORY - For entry of the memory location.

MEASURE - Used to calibrate the integrator with photocell.

START - Used to start an Exposure cycle or Vacuum Delay / Exposure sequence.

CANCEL - During exposure pressing the cancel button will stop the exposure before programmed time has expired.

1 Entering an exposure time

- A. Enter desired exposure time by depressing corresponding number on keypad, for example “1, 2, or 3”
- B. Press the “1/10” button to set the decimal point.
- C. Press the “Intensity” button to set high, medium or low intensity.

2 Switching to Timer Mode

- A. Press the “Seconds” button, the LED above will light up indicating the timer mode.

3 Entering a Vacuum Time

- A. Press the “Delay” button. All three decimal points will light: Then enter the desired delay time, such as “25” seconds. Press the “Delay” button again to lock the vacuum time into memory.

4 Programming Memories

- A. To store an exposure in Memory, follow the procedures in “Entering an exposure time”. All information is automatically stored in the displayed memory.
- B. Press the “Memory” button to clear the memory display.
- C. Then press the keyboard number of the memory desired; such as “8”. The integrator will advance to memory 8 and display the exposure time programmed into that memory.

—OR—

- D. Press the “Memory” button twice to go to the next memory and display the exposure time programmed into that memory.

5 Starting an Exposure

- A. Press the “Start” button and the vacuum delay (if entered) time will start counting down in the display then the exposure time will count down.

Photocell Calibration

Note: Photocells should only be calibrated when unit is first installed.

Install the Photocell cable into the socket on the back of the integrator marked PHOTOCELL and into the Lamphood or Frame mounted photocell. Calibration at the photocell can be made by turning the adjustment screws in the direction of the arrow to increase the speed of the count and in the opposite direction of the arrow to decrease the speed of the count.

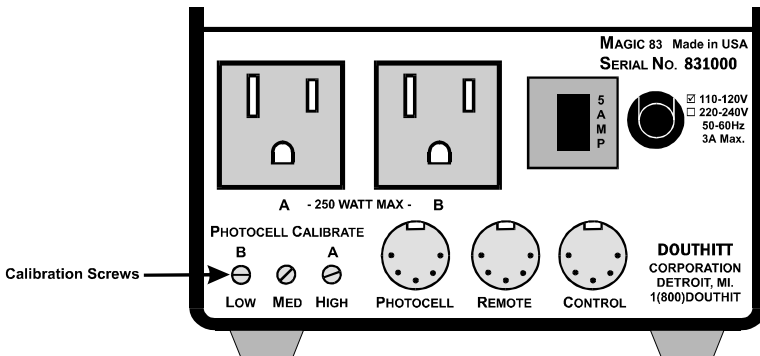
Calibration of light sources that are controlled through the CONTROL socket

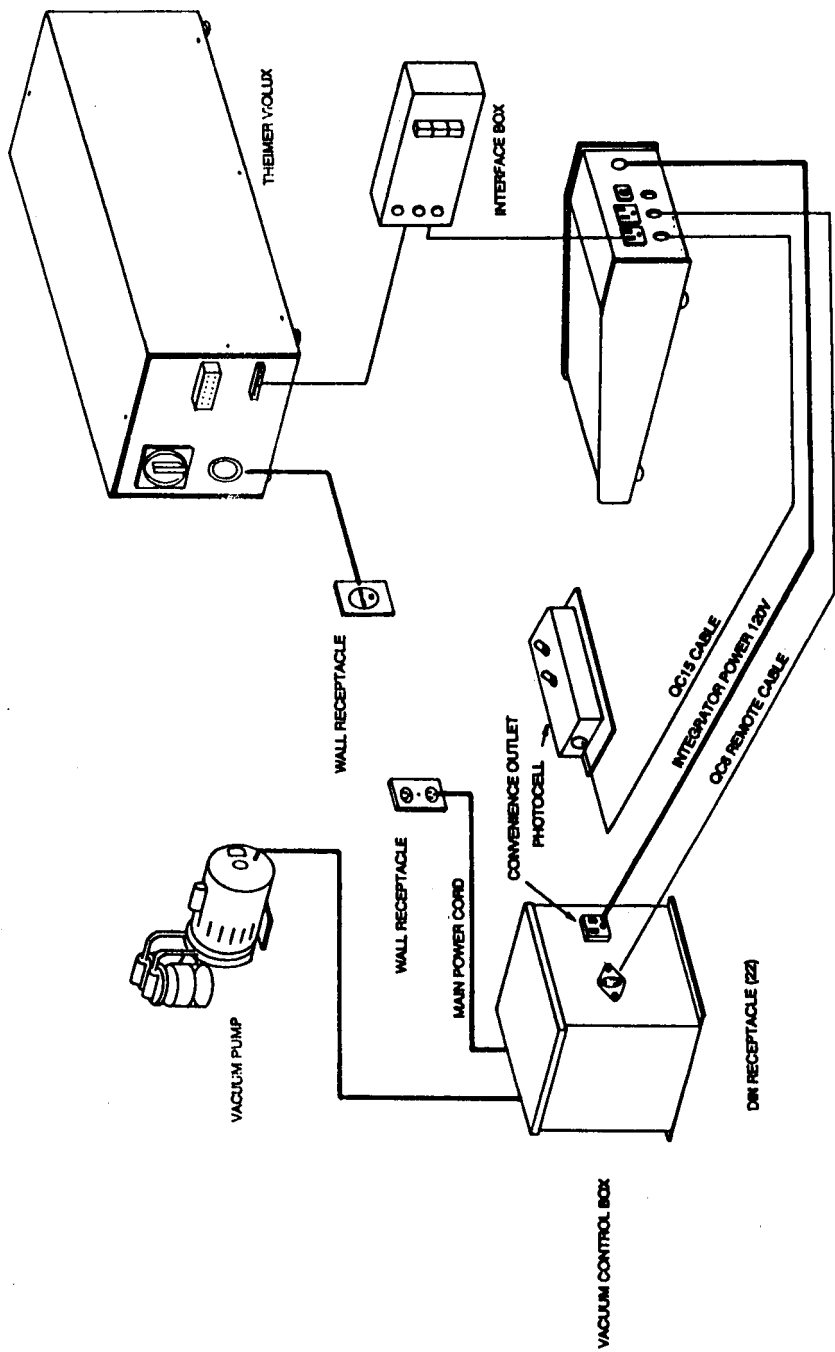
WARNING! When calibrating, you should **NOT** leave the light on when adjusting at photocell. Press CANCEL before adjusting photocell, then press MEASURE again to check calibration number.

- 1) Press the integrator power "ON" button to turn the light on. After warmup, select HIGH intensity. Press the MEASURE button, then slowly adjust the "A" and "B" adjustments on the photocell to read about 300, NOTE: On Dual Photocell units such as the PA85, PA86, PA88 & PA89, both Photocells are active. If too much light is received by the Photocell, the Light Integrator will Overload, displaying a flashing "999", indicating greater than 1000, simply close one (or both) photocells as necessary.
- 2) Press the intensity button to Select "LOW" intensity, wait one minute for the bulb to stabilize, then adjust the LOW calibration screw on the back of the integrator to read 100. If 100 cannot be reached, either Photocell window may have to be opened (or closed) as necessary.
- 3) Press the intensity button to select "MEDIUM" intensity, waiting one minute for the bulb to stabilize, then adjust the MEDIUM calibration screw to read 100, **DO NOT** readjust the photocell at this point as it will effect previous calibrations.
- 4) Press the intensity button to select the HIGH intensity, waiting one minute for the bulb to stabilize. Slowly turn the HIGH adjustment screw on the integrator until the display reads 100.
- 5) Press the CANCEL button to exit the calibration mode.

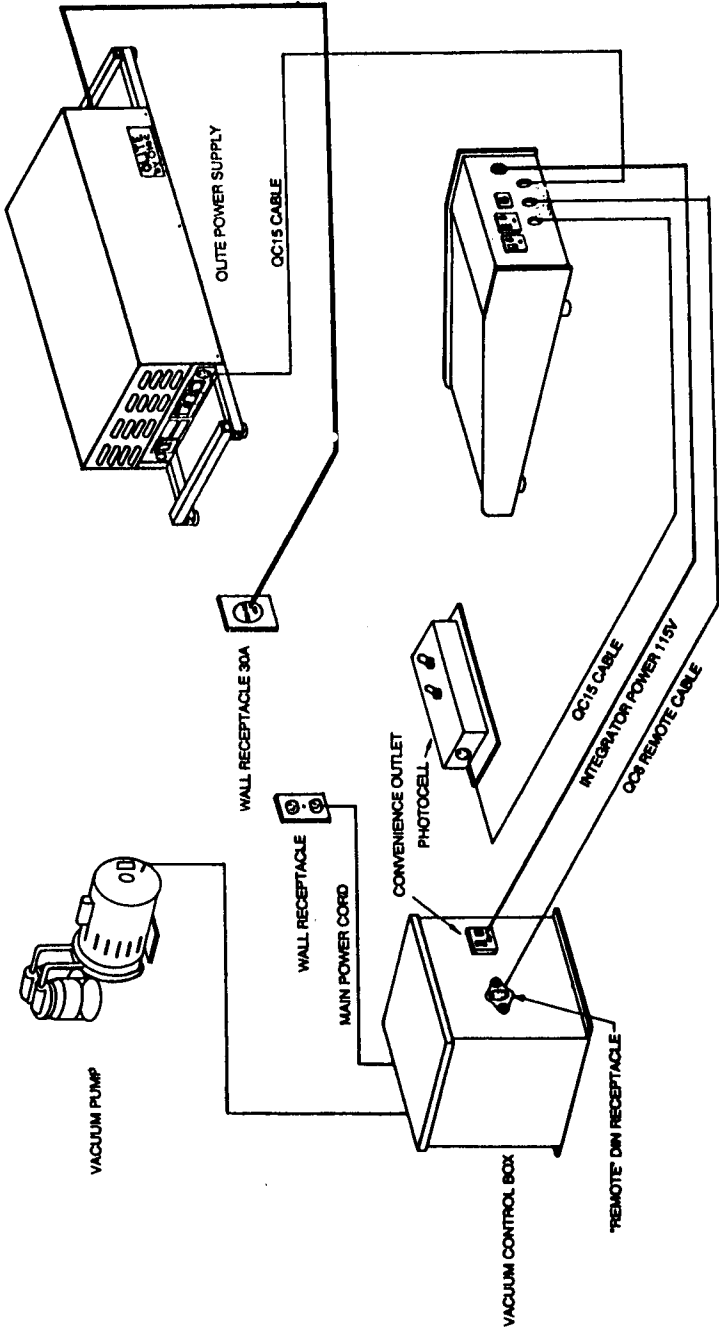
Calibration of light sources that are controlled through the AC receptacle

- 1) Press the integrator power "ON" button to turn the Integrator on, (power to the light source is controlled at the interface box). Select HIGH intensity. Press the MEASURE button, then slowly adjust the "A" and "B" adjustments on the photocell to read approximately 100, then, using the HIGH calibration screw on the back of the Light Integrator, fine-tune adjust the display to read 100. NOTE: On Dual Photocell units such as the PA85, PA86, PA88 & PA89, both Photocells are active. If too much light is received by the Photocell, the Light Integrator will Overload, displaying a flashing "999", indicating greater than 1000, simply close one (or both) photocells as necessary. MEDIUM and LOW output controls on the integrator are not used with Theimer light sources, Intensity selection is done at the Theimer Interface box only, and will show a reduced MEASURE value at those intensities.





SYSTEMS HOOK-UP - THIMER



SYSTEMS HOOK-UP - OLEC