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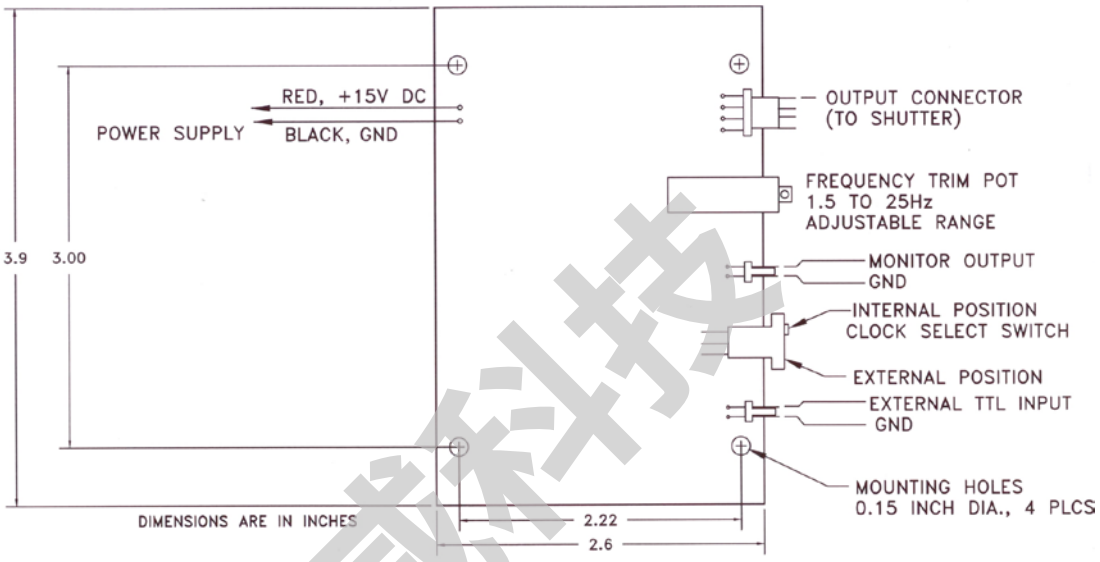
INSTRUCTIONS FOR USE OF THE DSH-65-PC DRIVER WITH THE SH-65 SHUTTER/CHOPPER

07-101200

1. Carefully remove shutter/chopper from plastic box.
2. Mount shutter/chopper onto a solid mount. Use #6-32 screws.
3. Connect shutter/chopper to the DSH-65 “OUTPUT” connector.
4. Connect the DSH-65 to a 15 VDC power supply (150mA max).
5. Use the “EXT. INT.” selector switch to select the mode of operation.
    a. In the “INT.” mode, the shutter/chopper operates as a low frequency chopper, with the chopping frequency is set by an internal oscillator.
    b. In the “EXT.” mode the shutter/chopper is controlled by an external TTL signal to open and close the device.
6. “INT.” mode:
    a. Set the selector switch to the “INT” position.
    b. Turn on power. The shutter/chopper will operate as a variable frequency chopper. The chopping frequency is set by an internal oscillator and is controlled by the “FREQ” trim pot.
7. “EXT.” mode:
    a. Set the selector switch to the “EXT.” position.
    b. Turn on power. The position of the blade in this mode is controlled by a TTL input signal to the TTL input connector.
        I. White wire: TTL input
        II. Black wire: ground
    a. With a “HIGH” TTL input or with no TTL input: the shutter is open.
    b. With a “LOW” TTL input or a short to GND: the shutter is closed.
    c. The response time of the shutter is approximately 10 msec.
8. The “MONITOR” output:
    a. Output is a TTL output signal that can be used with a lock-in amplifier.
        I. White wire: TTL monitor output.
        II. Black wire: ground The scanner will oscillate at the resonant frequency of the scanner. The scan amplitude can be adjusted by using the “AMPL.” trim pot.


RED, +15V DC
POWER SUPPLY
BLACK, GND
OUTPUT CONNECTOR
(TO SHUTTER)
FREQUENCY TRIM POT
1.5 TO 25Hz
ADJUSTABLE RANGE
MONITOR OUTPUT
GND
INTERNAL POSITION
CLOCK SELECT SWITCH
EXTERNAL POSITION
EXTERNAL TTL INPUT
GND
MOUNTING HOLES
0.15 INCH DIA., 4 PLCS
3.9
3.00
DIMENSIONS ARE IN INCHES
2.22
2.6