

DIGITALVIEW®



Ambient Light Detector Kit

Kit 70220-3

Overview:

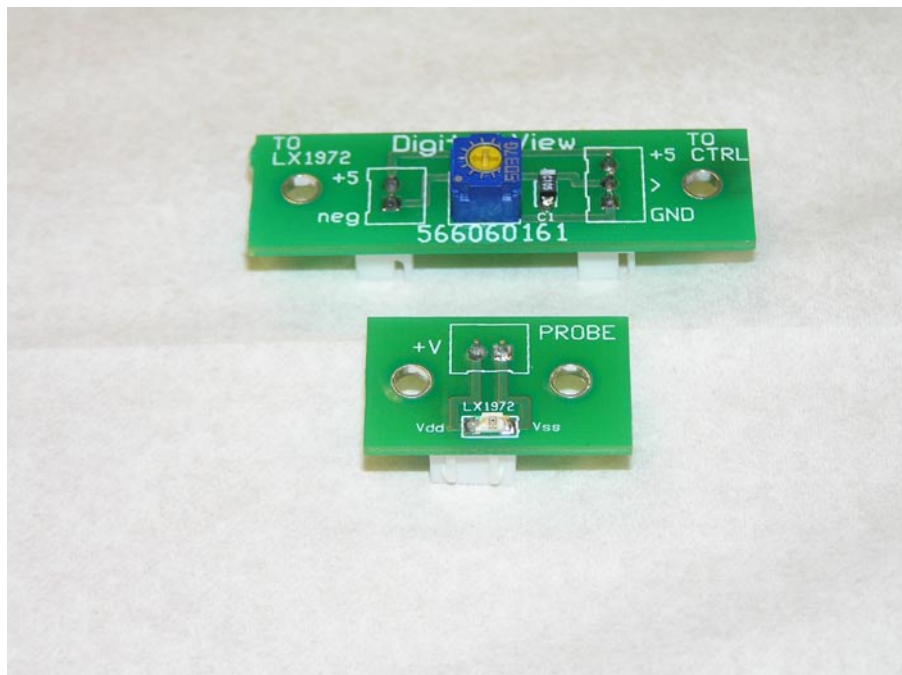
The Ambient Light detector Kit works only with the Digital View SV-1920 controller and on version V0.41 or higher.

The kit provides the controller with the ability to monitor ambient light conditions and to automatically adjust the light output of the display accordingly. The light output is controlled by using both the inverter dimming functions to manage the backlight and the menu "brightness" control that is controlling the black level of the LCD display. The controller provides for three separate levels of brightness and an automatic light averaging function that monitors the ambient light levels over time to prevent "flashing" of the display.

Kit Contents:

The kit consists of two primary parts, the Light Sensor Board and the Adjustment Potentiometer Board. The sensor is designed to permit it to be installed within a monitor housing and using a light pipe or a similar lens to observe the external light conditions. The adjustment board is also designed such that it can be mounted to be accessed from the outside of the monitor in order to calibrate the monitor to the local conditions.

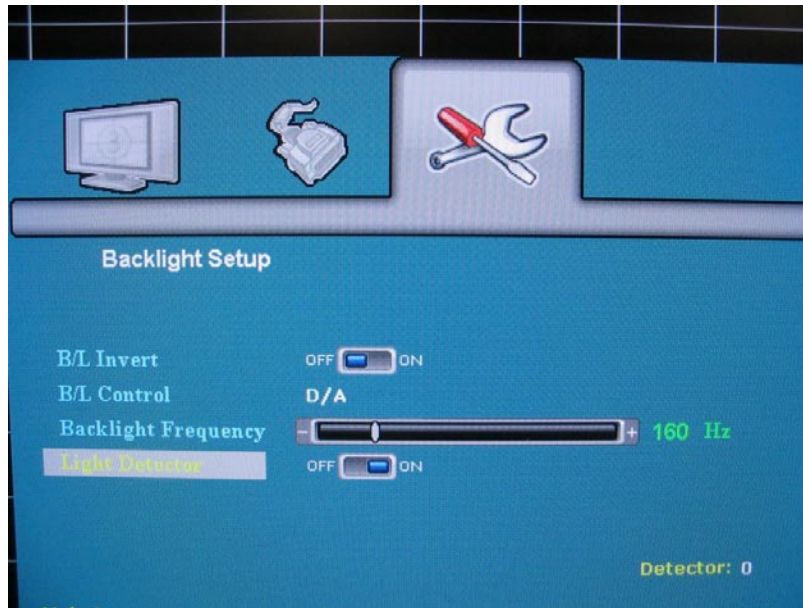
The kit includes two cables – a 426020910-3 a 60mm (24") 2 pin cable connecting the Sensor to Adjustment board and a 426031200-3 3 pin cable that connects the Adjustment board to connector CN9 on the SVH-1920 controller.



Installation:

The sensor should be installed so that it is “seeing” the ambient light and not in a shadow or a recess. The adjustment board should be mounted where the potentiometer can be conveniently accessed after the monitor has been installed.

The Light Detector mode must be enabled in the Utilities Page of the Setup Mode under the Backlight Setup function by toggling the indicator to be ON.



Note: Backlight Set Up

Other selectable features on this page are chosen according to the type of inverter being used.

- B/L Invert: Selects as whether the inverter get brighter as the voltage or PWM frequency increase or as it decreases
- B/L Control: Select according to the type of inverter brightness management D/A for analog voltage control or PWM control
- Backlight Frequency: Adjusts between 100 and 220Hz and is set according to the inverter recommendation

Calibration:

With the monitor installed in the final location, the adjustment potentiometer is used to calibrate what is the brightest ambient light to be expected. Observing the value shown for the Detector in the bottom right corner of the page, adjust the potentiometer to get the highest value possible (255).

To verify calibration, shield the sensor from direct light and observe that the screen dims after approximately 30 seconds. Covering the sensor completely (typically a finger will pass too much light or turning off the lights) will result in the both the backlight and the LCD brightness being set to minimum.

The three video levels are:

Brightest:	B/L = 100%	LCD Menu Brightness = 50
Mid level:	B/L = 50%	LCD Menu Brightness = 25
Lowest:	B/L = 0%	LCD Menu Brightness = 0%