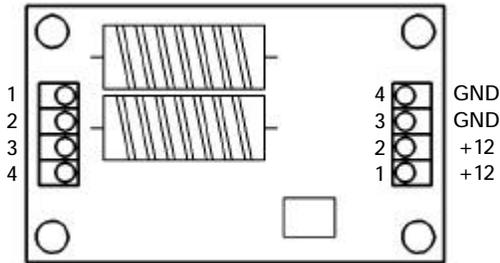


# KEEP-A-LIVE

Item #588

INPUT FROM CAB /  
THROTTLE

(TERMINALS 1 & 2)



OUTPUT TO TRACK  
(TERMINALS 3 & 4)

+12 must be from a regulated  
power supply such as  
our 12VPS.

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The KEEP-A-LIVE was designed to allow the DALLEE ELECTRONICS family of current sensing detection devices (TRAK-DT, TRAK-DTT / TRAK-DTA) to display proper signal and occupancy indications even though there is no propulsion power in the track. Previously, there had to be power in the track and something drawing current in order to activate the detection devices. With the KEEP-A-LIVE connected to the track and the 12 VDC regulated power applied to the detection circuits all locomotives or rolling stock that normally draw current will be detected. For simplicity of operation the KEEP-A-LIVE installs on the output of each throttle (CAB) and acts as a pass through for that throttle. For complete coverage, one additional KEEP-A-LIVE should also be connected to the track in situations when no throttle is selected.

## INSTALLATION AND WIRING INSTRUCTIONS

The KEEP-A-LIVE is fully assembled on a circuit board measuring 2 X 3.25 inches with mounting standoffs located at the four corners. There is a four position terminal connector at each side of the circuit board. One connector is labeled "CAB" and "TRACK" and the other connector is labeled for "+12" and "GND". The terminals labeled "CAB" are to be connected to the variable output from your throttle or power pack. The terminals labeled "TRACK" are the output from the KEEP-A-LIVE and are to be connected to the track through whatever control methods you currently employ. Input power for the KEEP-A-LIVE must be a regulated 12 volts DC and we suggest that you use the DALLEE ELECTRONICS 12VPS (item 369) for this purpose. AC voltage to the 12VPS can be supplied either by

a separate source or from the AC terminals of your power pack provided the capacity of the pack is adequate to drive both the KEEP-A-LIVE and your train. The "+12" terminal connects to the "plus" of the 12VPS and the "GND" terminal connects to the "minus" of the 12VPS. There are two terminals for each connection provided on the KEEP-A-LIVE to make it easier for connecting several devices to the 12 volt supply. It is possible to power the KEEP-A-LIVE from the same 12VPS that is powering the detection circuits as long as the total current capacity of the 12 VPS has not been exceeded.

## OPERATING WITH THE KEEP-A-LIVE

In a multi-cab control system it is suggested that one KEEP-A-LIVE be installed on each CAB with at least one additional KEEP-A-LIVE to cover the "off" or no CAB position of the block selector controls. As a practical matter, all throttles (CAB's) should be "off" at the beginning of an operating session. Also, all track block CAB selectors should be in an "off" or no CAB selected position. With the 12 volt power for the KEEP-A-LIVE and the TRAK-DT's turned on all occupied blocks should so indicate and all signals should show the correct aspects. These indications will show the location of all trains or at least the location of all items of rolling stock that would normally draw current. When a track block is switched from "off" to one of the CAB's, that CAB's KEEP-A-LIVE will initially maintain the proper detection status in that block. As the throttle is turned on the actual current flow of the moving train will be sufficient for proper detection.

## OBSERVATIONS

If block selector controls have terminals available in the "off" position it is a simple matter to wire a KEEP-A-LIVE to these terminals. This would be the case with rotary selector switches and most push button devices which are similar to older 5-line telephones. When toggle switches are used to select CAB's the "off" position is usually a complete disconnect. To provide for a KEEP-A-LIVE it becomes necessary to employ additional switches which will allow an "off" connection. Essentially, for two CAB's you really need three. In certain situations you may have a switch which totally disconnects a section of track within a block. If this section of track has its own TRAK-DT, then detection during disconnect would be desirable. If these switches are all DPDT, no center off, then one extra KEEP-A-LIVE could be applied to the "off" of all of these track sections all over the layout.

The exact number of KEEP-A-LIVE units needed for these "off" positions is dependent on the total number of detection blocks involved, how many of these blocks could be occupied at one time and signal loss due to wiring. This will have to be determined by experimentation on each layout. For planning purposes it is suggested that blocks be grouped for connection to the "off" KEEP-A-LIVE units. Several groups can be connected to a single KEEP-A-LIVE to see if detection is complete. The groups can then be separated as needed until coverage is adequate.