False Alarm Filter S451, S451-B

The S451 is an interface relay that sits between a detector and an intruder alarm control panel to filter off occasional trips caused by the environment, (EG wildlife), and provide a momentary output when the alarm criteria are met. EG 3 trips in a 30 second window. The S451 can monitor either a normally closed, (open to alarm), or normally open, (close to alarm), contact. The momentary output is fixed at 2 seconds so it can be detected by most alarm equipment. As the S451 doesn't latch, it never requires resetting.
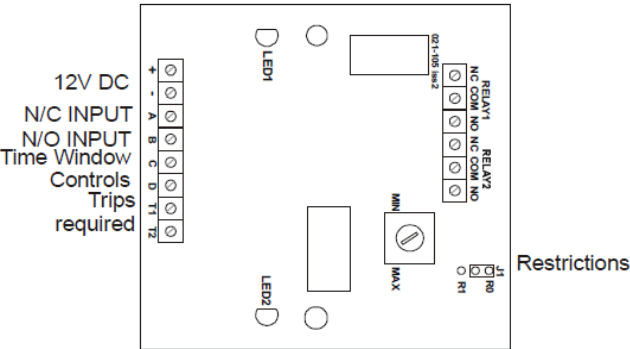
Alarm Criteria

The alarm criteria are based on an active time window, a trip count and allowable trips.

There is a choice of 4 active time windows; 30 seconds, 1 minute, 2 minutes and 3 minutes.

There are 2 trip counts, either 3 or 4 trips.

The allowable trips are either, unrestricted, where any trip will count, or restricted where the trips must be at least 5 seconds apart.
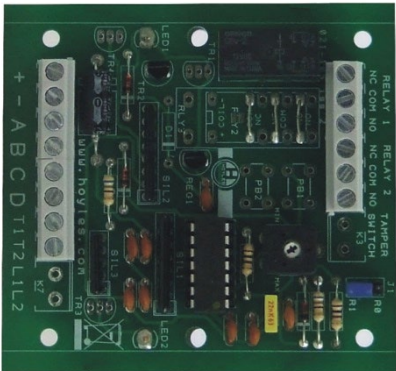

Both inputs (A and B) are with respect to 12v dc +ve

N/C is normally closed opening to trip

N/O is normally open closing to trip

Time Window Controls (C & D) are with respect to +ve

Time	C	D
30 seconds	No Link	No Link
1 minute	Link to +ve	No Link
2 minutes	No Link	Link to +ve
3 minutes	Link to +ve	Link to +ve

Trips Required (T1 & T2)

No Link	3 trips
Link	4 trips

Restrictions (Jumper J1)

Jumper J1 to R0 = no restriction

Jumper J1 to R1 = 5 second restriction

Boxed version available – S451-B

DWG: S451

HOYLES