

## NOTIFIER TECH TIP

AFP2800

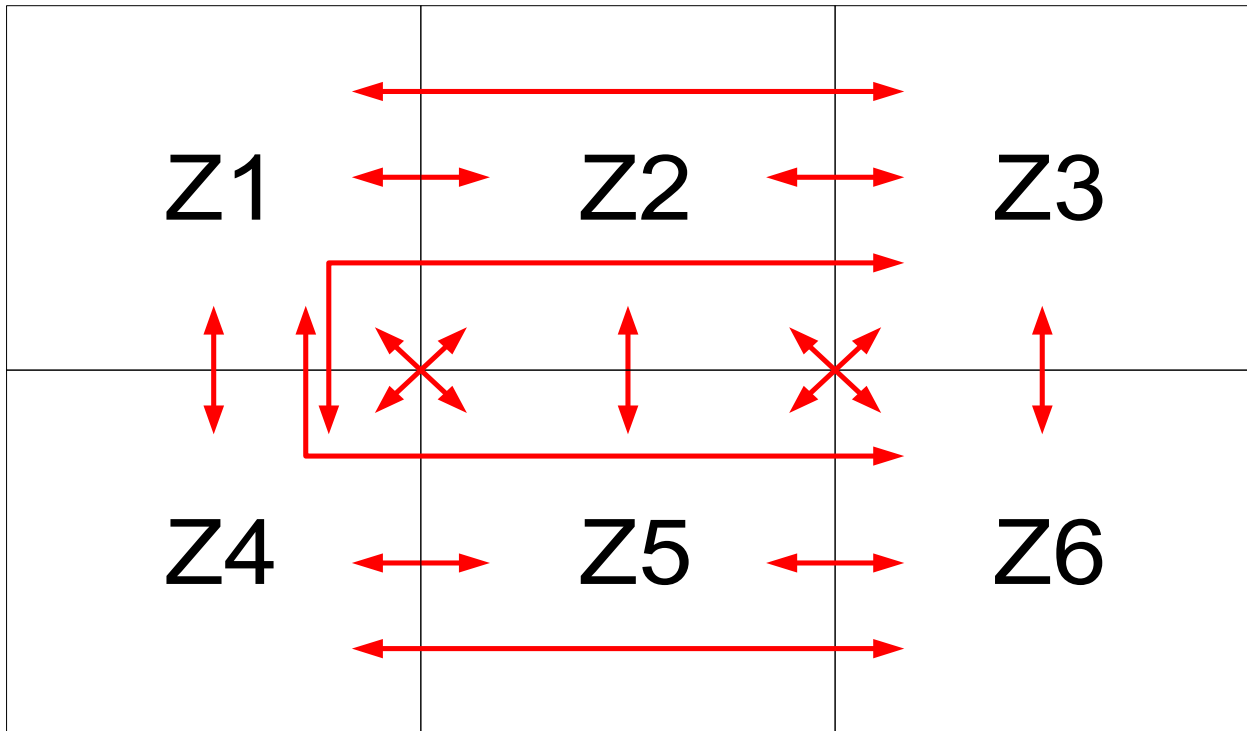
Scripting

“Two Shot Multiple Zones”

v1.1

This Tech Tip details how to achieve “Two Shot” activation of a VP or other OP by a script, where 2 detectors or more have activated in an area, where multiple zones are required to cover larger areas to comply with the Alarm Zone Limitations requirements of AS1670.

### Example Multiple Zone Area



### Example Script against an XR relay

XR1 = ANY2[Z1] or ANY2[Z2] or ANY2[Z3] or ANY2[Z4] or ANY2[Z5] or ANY2[Z6] or  
(Z1 and Z2) or (Z1 and Z3) or (Z1 and Z4) or (Z1 and Z5) or (Z1 and Z6) or (Z2 and Z3) or (Z2 and Z4) or (Z2 and Z5)  
or (Z2 and Z6) or (Z3 and Z4) or (Z3 and Z5) or (Z3 and Z6) or (Z4 and Z5) or (Z4 and Z6) or (Z5 and Z6);

The “ANY2[Z?]” statements cover the situation where (2) detectors or more activate within the **SAME** zone.  
The “(Z? and Z?)” statements cover the situation where (2) detectors or more activate across **MULTIPLE** zones.

More details on the “ANY” operator can be found in the scripting section of the AFP2800 manual

### Explanation

The arrowed lines in the diagram above, indicate all the possible combinations of Zones that must be “ANDed” together, in addition to the individual “ANY” Zone statements, to achieve the desired “Two Shot” capability across the whole area.

For a small number of Zones, a diagram such as that above can be useful in ensuring that all relevant points are written into the script, by simply crossing off or marking the relevant arrowed line combinations that have been entered.

For a larger number of Zones, the following spreadsheet can be used to ensure that all relevant "AND" combinations are covered and checked off.

ZONES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
1	X	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND		
2		X	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND		
3			X	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND		
4				X	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND		
5					X	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND		
6						X	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND		
7							X	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND		
8								X	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND		
9									X	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND		
10										X	AND	AND	AND	AND	AND	AND	AND	AND	AND	AND		
11											X	AND	AND	AND	AND	AND	AND	AND	AND	AND		
12												X	AND	AND	AND	AND	AND	AND	AND	AND		
13													X	AND	AND	AND	AND	AND	AND	AND		
14														X	AND	AND	AND	AND	AND	AND		
15															X	AND	AND	AND	AND	AND		
16																X	AND	AND	AND	AND		
17																	X	AND	AND	AND		
18																		X	AND	AND		
19																				X	AND	
20																						X

- 1 Use or create a spreadsheet with all required Zones as shown above
- 2 The most important "Cells" to create is the "Ladder" pattern (Coloured BLUE and with an "X")
- 3 The "Cells" above the "Ladder" represent all combinations of Zones that must be covered by "AND" ing Zones together
- 4 For every Zone listed on the Left, ensure that all relevent Zones across the top have a corresponding "AND" statement