



**PROGRAMMING**  
**Non-Intelligent Signals**

# Confidentiality and Acknowledgements

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Registered Office: 421 Windchime PL, Colorado Springs, CO 80919 USA

# Introduction

4x2, 4X1, 3X1, 3X2, Ademco High Speed are examples of signals which are considered non-intelligent. They simply notify the system that something happened on a zone. Therefore, it is necessary to program each eventuality within the Manitou application. Some 4X2 signals, such as Radionics and Ademco High Speed, do carry some level of intelligence where the signal will contain an opening, closing, trouble, or alarm. This intelligence still requires a bit of programming in order to best utilize the features within Manitou.

## Programming

Previously, it was necessary to program every eventuality of every possible zone within each customer in order to ensure that all signals were properly addressed. In Manitou, it is possible to use wild cards and this can be programmed at the customer, or Transmitter level, to get the desired results without the excess data entry.

### Activations into standardized events

When an alarm on a zone enters into the Manitou system with a non-intelligent format the Manitou Signal Handler assigns it a value of an Activation (\*A). The next thing that has to occur is that the application needs to know what to do with an "Activation." If left alone, the operator would be presented with an alarm called Activation with a generic action pattern. In order to make the alarm more specific it requires programming. This programming may occur at the Transmitter, or Customer, level. The translation instructions are the same; therefore the examples following will describe this procedure done on the Transmitter types form.

The following sections detail programming of non-intelligent signals for most formats. Please refer to the below image for examples of each section (the line numbers to the left indicate the lines referenced for each section):

		Input				Output					
		DES ▼	Area	Zone	Sensor	Event	Description	Area	Zone	Sensor	Point ID
1	▶	*A	*	@*	*	FA	Fire Alarm	=	=	=	
2		*A	*	1*	*	FA	Fire Alarm	=	1=	=	
3		*A	*	2*	*	MA	Medical Alarm	=	2=	=	
4		*A	*	23	*	MT	Medical Trouble	=	=	=	
5		*A	*	3*	*	BA	Burglary Alarm	=	3=	=	
6		*A	*	35	*	BT	Burglary Trouble	=	=	=	
7		*A	*	8*	*	*T	Trouble	=	=	=	
8		*A	*	B*	*	OP	Open	=	=	=	
9		*A	*	C*	*	CL	Close	=	=	=	
10		*C	*	C*	*	CL	Close	=	=	=	
11		*O	*	B*	*	OP	Open	=	=	=	
12		*R	*	*	*	*R	Restore	=	=	=	

## Lines 1 & 2 - Alarm zones 1-9 and 10-19 (Including A-F)

Line 1 means an Activation on any Area but a zone that is preceded with leading zeros, i. e. zones 1-9. The @ symbol is used as a place holder to ensure that the application can tell the difference between zone 1 and zone 10. The zones 1-9 are all Fire Alarms, if any of these zones were an exception they would be listed individually. The output side shows just an equal sign in both the Area and Zone columns this will pass only the pertinent information through to the output.

Please note! This only works for “Type 1” non-intelligent events. This doesn’t work for all 4X2 signals. If the events are not “Type 1” the individual zones for 1-9 will need to be entered manually.

Line 2 displays any zone beginning with the number one (1) will be translated to a Fire Alarm. The output side shows an 1= on the zone to ensure that the same zone number that comes in with the event also comes out with the event. This enables the ability to enter only the Zone number and description onto the account.

## Lines 3 & 4 - Alarm Zones 20-29

These lines show that all activations on any Area that are within zones 20 and 29 with the exception of 23 are Medical alarms. Zone 23 is a Medial Trouble alarm. In order to push through the zone number as twenty something the two is carried over to the output side. When the exact number zone is listed on the input side, the zone on the output side can be left just as an equal sign and the named zone number will be passed through without the need for the preceding number.

## Lines 5 & 6 - Alarm Zones 30-39

These lines show that all activations on any Area within zones 30-39 with the exception of zone 35 are Burglary alarms. Line 5 shows the exception of zone 35 being a Burglary Trouble. In order to push through the zone number as thirty something the two is carried over to the output side.

When the exact number zone is listed on the input side, the zone on the output side can be left just as an equal sign and the named zone number will be passed through without the need for the preceding number.

## Lines 7 - Alarm Zones 80-89

This line represents that all zones preceded by 8 are Trouble alarms. The output shows just the equal sign because the output should define the specific zone that is in trouble.

Notice, we have also added CanCancel programming to the Trouble event which allows for a Restore event within 45 seconds on the same zone to cancel the Trouble. For more information on how programming commands can add power to your system, go to BoldGenius Resource Library, to find quick reference guides that step through each item in detail.

## Lines 8, 9, 10, & 11 - Open or Close Signals on a User Number

The first set of Open and Close events here show Activations on zones B and C translated to Openings and Closings, respectively. The output side has only an equal sign on the zone to strip off the B and C and provide the remainder of the zone as the user number, which can then correspond to the contact list user number and provide that User name within the customer activity log.

Some 4X2 signals may have a bit more intelligence by sending in an Open, Close, Trouble or Restore instead of just an activation. Lines 9 and 10, display how an Opening or Closing Signal comes in on zones B or C plus a number, respectively. The application is only concerned with the user number and that requires the stripping of the B and/or C from the input zone.

## Lines 12 - Restore given Cancel Properties

There is no need to program a Restore to a Restore unless there is additional programming required. In the above image the Restore was also assigned Cancel properties so that it may cancel the Trouble signals listed on line 6

## Summary

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The 4X2 signals do require programming for each transmitter's signals. Differing receivers will handle signals differently therefore it is good to have this programming at the Transmitter level for each panel/receiver combination. If custom changes are required for a single customer record those, and only those, changes should be made on the Customer programming form.