

Manitou Signal Processing Attributes (Commands)

Manitou Signal Processing Attributes may also be called Signal Processing Commands. **Signal Processing Attributes** are what the *Manitou Signal Handler* uses to define some standard functionality and handling of Event Codes and Event Categories. The following details each command and its purpose.



Please note that these attributes are CASE SENSITIVE and generally work in pairs for trip and restore.



Do not change the default values until you have a clear understanding of their use and purpose!

Upper Case Letters - Status Qualifiers

The Upper Case letters apply statuses to the events with these parameters. For example, Open and Close attributes set the zone status and notify the Signal handler to check the schedule for violations.

- **A - Line Fault on Line 1**
 - This event signals a Line Fault condition on line 1. The line fault status will be set in the STXSTS table for the Transmitter.
- **B - Line Restore on Line 1**
 - This event signals a Line Restore condition on line 1 for the Transmitter if the TX is in Line Fault it will be restored. All signaled events other than line faults should use this flag.
- **C - Opening**
 - This event signifies an Opening. The area to which it relates is supplied either by the signaling equipment or by the channel programming area field if present. The open/close flag for the area will be set on the SAREA table.
 - This attribute should be on all Opening type events.
- **D - Qualifies C Unexpected Opening**
 - This event qualifies the 'C' character, and is only used if the 'C' character is present, to signify that this event should be modified to an unexpected open if appropriate, i.e. a second Open signal received in an area that is already open.
 - This attribute should be on all Opening type events.
- **E - Qualifies C Early/Late Opening**
 - This event qualifies the 'C' character, and is only used if the 'C' character is present, to signify that this event should be modified to an early open/late open/re-open if appropriate. i.e if the signal is to be checked against a schedule.
 - This attribute should be on all Opening type events.
- **F - Closing**

- This event signifies a Closing. The area to which it relates is supplied either by the signaling equipment or by the channel programming area field if present. The open/close flag for the area will be set on the SAREA table.
 - This attribute should be on all Closing events.
- **G – Qualifies F Unexpected Closing**
 - This event qualifies the 'F' character, and is only used if the 'F' character is present, to signify that this event should be modified to an unexpected close if appropriate, i.e. a second Close signal received in an area that is already closed.
 - This attribute should be on all Closing events.
- **H – Qualifies F Early/Late Closing**
 - This event qualifies the 'F' character, and is only used if the 'F' character is present, to signify that this event should be modified to an early close/late close if appropriate, i.e if the signal is to be checked against a schedule.
 - This attribute should be on all Closing events.
- **I – Qualifies A and j to a Network Failure**
 - This event qualifies the 'A' and 'j' characters to mean Network Failure (instead of the normal Comms Failure).
- **J – System Test condition**
 - Used to signify this event notifies a routine System Test condition.
 - Do Not use on periodic Transmitter Tests.
- **K – Transmitter Test condition**
 - Used to signify this event notifies a routine Transmitter Test condition. The transmitter that is applies to is the one on which it was received.
 - Any test events that is intended to update the test timing intervals must have this attribute.
- **L – Fire Test condition**
 - Used to signify this event notifies a routine Fire Test condition.
- **M – Qualifies L – Unexpected Fire Test**
 - Used to qualify the 'L' character to signify that this event should be modified to an unexpected fire test if appropriate. i.e if received at a time not scheduled.
 - This will require the use of general schedules.
- **N – Executive Protection condition**
 - Used to signify this event notifies a routine Executive Protection condition. i.e a signal that is sent regularly between certain hours. This requires a Check-in type General Schedule on the Customer record.
- **O – Restore Required**
 - Used to signify this event requires a Restore.
- **P – Restore capable**
 - Used to signify this event can Restore a specific zone.
- **Q – Restore All zones**
 - Used to signify this event can Restore all zones in an area.
- **R – Restore All zones for Event Category**
 - Used to signify this event can Restore all zones in an area for the event's category.
- **S – Open all Areas**
 - Used to signify this event should Open all Areas on the system.
 - Often used on the OG event (Group Opening)
- **T – Closed all Areas**
 - Used to signify this event should Close all Areas on the system.
 - Often used on the OG event (Group Opening)

- **U – User event**
 - This event is a User type event.
 - This translates the zone on the event to a User number, where it will go to the contact list to look for a person match to that number.
- **V – Bypass condition**
 - This event signals a Bypass condition.
- **W – Unbypass condition**
 - This event signals an Unbypass condition.
- **X – Trouble condition**
 - This event signals a Trouble condition.
- **Y – Trouble Restore**
 - This event signals a Trouble Restore condition.
- **Z - Non-receivable**
 - Used to signify that this event is non-receivable (i.e may only be generated internally by the system). This can flag events operators would need to send manually for specific processing. Such as an Elevator alarm.

Numbers

The numbers manage what the Signal Handler checks for translations. Use these carefully and sparingly.

- **1 – Transmitter not significant**
 - Used to signify that the transmitter number is not relevant on this event, and will therefore not be displayed.
 - **Use carefully.** This parameter can affect the signals' ability to utilize Transmitter or Customer programming.
- **2 – Area not significant**
 - Used to signify that the area number is not relevant on this event, and will therefore not be displayed.
 - **Use carefully.** This parameter can affect the signals' ability to utilize Transmitter or Customer programming.
- **3 – Zone not significant**
 - Used to signify that the zone number is not relevant on this event, and will therefore not be displayed.
 - **Use carefully.** This parameter can affect the signals' ability to utilize Transmitter or Customer programming.
- **4 – Reserved – not currently in use**
 - This event is not currently in use.

Lower Case Letters

Lower Case letters empower the signals themselves. For example, the **attribute** enables the event received may be canceled by a restore event.

- **a – Duress condition**

- Signifies that this event signals a Duress condition.
- **b – Reserved – not currently in use**
 - This event is not currently in use.
- **c – Cancel by Restore**
 - Signifies that this event can be cancelled by a zone restore, provided the signal was generated as the result of an activation on the zone/transmitter in question and the customer has the AUTOCANC option set to TRUE.
 - The most important factor here is the *Customer account must have Auto Cancel checked on the Options form*. This attribute will have zero affect on any account with this checkbox disabled.
- **d – Can be Canceled**
 - Signifies that this event can be cancelled by an abort-type event providing the customer has the IGNOREABORT option set to FALSE.
 - Abort-type events will be Cancel events flagged with the 'g' or others flagged with a cancel properly within the Transmitter or Customer programming. Provided the IGNORE ABORTS option on the Customer Options form is turned OFF
- **e – Open event can cancel**
 - Signifies that this event can be cancelled by an open-type event providing the open-type event relates to the same area as the event being cancelled and the customer has the IGNOREABORT option set to FALSE.
 - This attribute would need to be applied to the Opening events so as to allow the cancel through an Opening. If the Ignore Abort checkbox on the customer Options form is selected this attribute is ignored.
- **f – Line Restore can cancel**
 - If Line Fault Type 'A' or 'j' is true then this event can be cancelled by a line-restore-type event, providing the signal was generated as the result of an Activation on the transmitter in question.
 - This attribute would need to be applied to the line restores in order for this to have an affect on the failure events.
- **g – Abort qualifier for d**
 - Signifies that this event constitutes an abort for the purposes of cancelling alarms flagged with a 'd' specified above having the same Event Category and Area.
- **h – Open Abort qualifier for e**
 - Signifies that this event constitutes a open-abort for the purposes of cancelling alarms flagged with an 'e' as specified above.
- **i – Delete alarm if it is canceled**
 - If 'c', 'd' or 'e' is true then this option tells the signal handler to delete the alarm if it has been cancelled and the alarm state is new and suspended.
 - This is necessary to tell the Signal Handler to remove the alarm from the alarm queue. Pay attention to the **AND** in this attribute.
- **j – Line Fault on Line 2**
 - This event signals a Line Fault condition on line 2. The line fault status will be set in the STXSTS table for the Transmitter.
- **k – Line Restore on Line 2**
 - This event signals a Line Restore condition on line 2 for the Transmitter if the TX is in Line Fault it will be restored. All signaled events other than line faults should use this flag.
- **l – Two-Trip**
 - Signifies that this event can participate in Two-Trip delays.
 - Without this attribute the signal will not work for Two-Trip programming.
- **m – Entry/Exit**
 - Signifies that this event can participate in Entry/Exit delays

- Without this attribute the signal will not work for Entry/Exit delays.
- **n – Delete alarm if it is canceled**
 - If ‘c,’ ‘d,’ or ‘e’ is true then this option tells the signal handler to delete the alarm if it has been canceled when the alarm state is new or new/suspended.
 - This is necessary to tell the Signal Handler to remove the alarm from the alarm queue. Pay attention to the OR in this attribute.
- **o – Low Battery**
 - Signifies that this event represents a Low Battery (or Battery Trouble).
- **p – Low Battery Restoral**
 - Signifies that this event represents a Low Battery Restoral.
- **q – Time Based Billing**
 - Signifies the event qualifies for operator time based billing.
- **r – Reserved**
 - Signifies the event qualifies as a check-in signal.
- **s – Reserved**
 - Signifies the event qualifies as a final check-in signal.
- **t – Secondary Transmitter Test**
 - Used to signify this event notifies a secondary Transmitter Test condition. The transmitter that this applies to is the first one that is found if this signal is redirected to another system (same customer).
- **u – Reserved**
 - This command is not currently in use.
- **v – Confirmed alarm**
 - Signifies that this event implies a confirmed (verified) signal.
- **w – Multiple alarms of this event allowed (TX) – Not implemented**
 - Used to signify that multiple alarms of this event are allowed, provided that the transmitter number is different in each. Not implemented.
- **x – Multiple alarms of this event allowed (Area) – Not implemented**
 - Used to signify that multiple alarms of this event are allowed, provided that the area number is different in each. Not implemented.
- **y – Multiple alarms of this event allowed (Zone) – Not implemented**
 - Used to signify that Multiple alarms of this event are allowed, provided that area and the zone number is different in each. Not implemented.
- **z – Multiple alarms of this event allowed (TX and Zone) – Not implemented**
 - This attribute indicates that Multiple alarms of this event are allowed, provided that the transmitter and zone number is different in each. Not implemented.

Pairing Attributes

As noted above, many signal processing attributes work together to support one another. Here are some examples:

- **A & B** and **j & k** are used to manage *Line Faults* and *Line Restores* for primary and secondary, respectively.
- **P, Q,** and **R** work together when requiring *Restore* events and identifying which events require a restore and which may restore those events.
- **V & W** are *bypass* and *unbypass* and must be flagged on any bypass or unbypass event codes.
- **X & Y** manage Trouble and Trouble Restore events.
- **C, D,** and **E** and **F, G,** and **H** qualify the *Open* and *Close* event codes to allow for the Signal Handler to manage any

exceptions to the schedules. Without these attributes, the Signal Handler will not properly flag schedule exceptions.

- **I** (captiol eye), changes the state of events with **A & j** from **Communications Failures** to **Network Failures**.
 - **J & K** qualifies **test** conditions to satisfy transmitter test periods.
 - **S & T** translate **Open** or **Close** events to apply to **ALL** areas on the system and transmtter in question.
 - **Z** is used for an event code that the Receiver would not send.
 - **1, 2,** and **3** restricts what the Signal Hander may or may not view.
 - **c, d, e,** and **f** allow for alarm events to be cancelled by the parameters of canceling or restoring event.
 - **g, h, i,** and **n** applies on a restoring event to give that event the power to cancel the alarm event that may be canceled.
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