

Example of a Timeclock Gated with an input switch

Each panel in the MX4000 range has multiple, seven day time clocks, allowing items like detector sensitivity to be individually adjusted according to the time of day and day-of-week.

Sometimes there can be additional circumstances that must also be taken into consideration, for example the time clock may only need to come into play when a key switch is operated etc. This ability to “Gate” the time clock with an input device has been built in from version 017 panel software onwards. It allows the time clock to only become active when the input device is also activated.

Timeclock Gate Inputs

The time clock “Gate” input can be taken from either :-

- a) One of the 8 programmable panel inputs. A panel mounted keyswitch can be used, or alternatively an 8-way input terminal board with built in filters is available for the MX4200 & MX4400 panels – part no MXP-014.

or alternatively

- b) A switch input on any of the loops. e.g. Apollo switch monitor unit, or Hochiki SIO unit.

The choice is simply dependant upon the suitability and convenience of wiring to the input device (e.g. panel inputs are faster than an Apollo switch monitor).

In each case these inputs are defined with their Action set to “Control”.

PC Programming

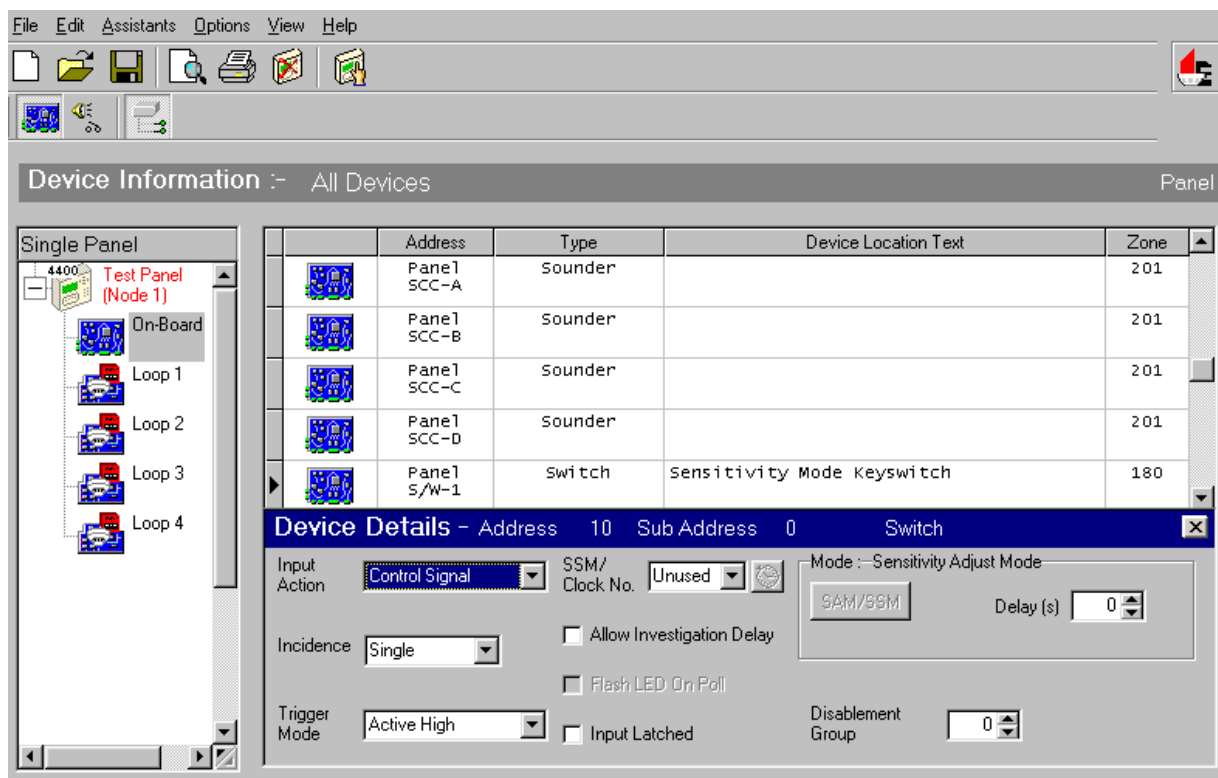
PC version 3.0 (or higher) is required to program the panel.

The example below shows how to change the operating mode of multi-sensor detectors whenever a keyswitch, gated with Timeclock 1 is operated.

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Step 1 – Define the input keyswitch

First the keyswitch that will change between modes is defined. In this example we will use the first on-board switch.

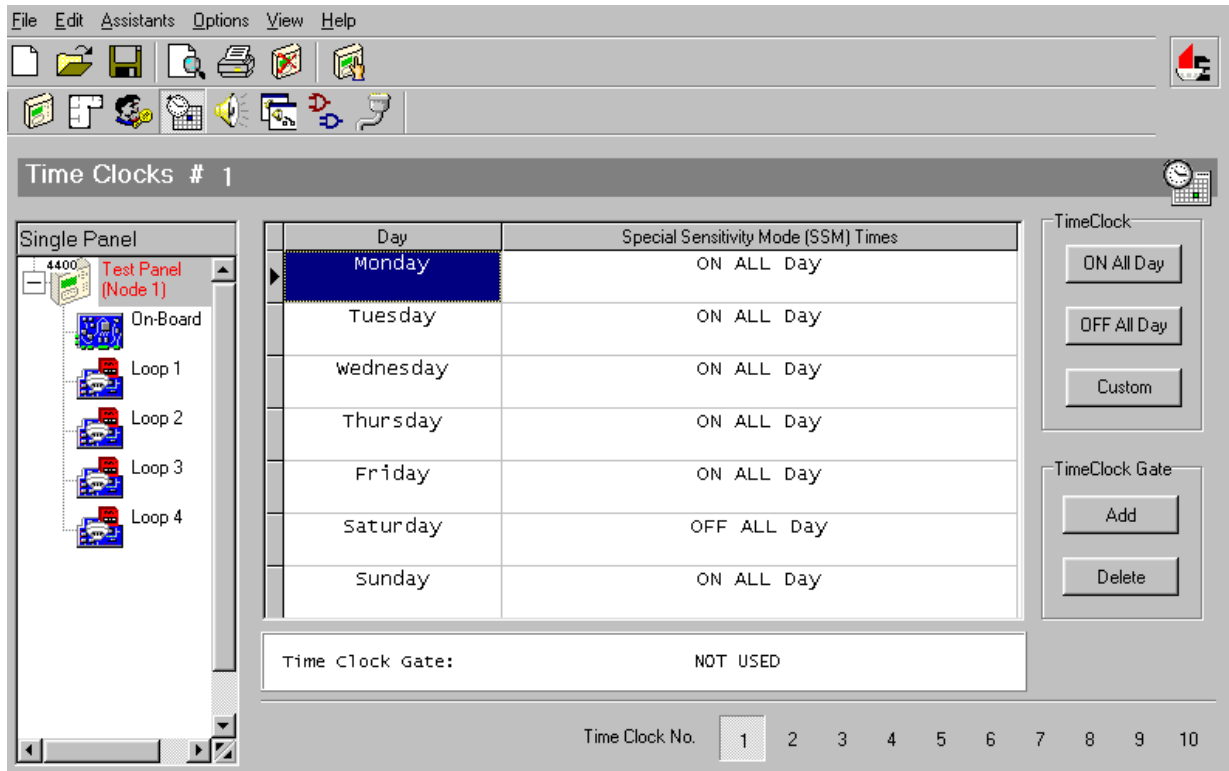


Note that

- The “Action” of the input has been changed to “Control”. (In this example it has been wired to Panel switch 1, but any input can be used as long as the “Action” is set to “Control”).
- The “Input latched” box is NOT ticked.

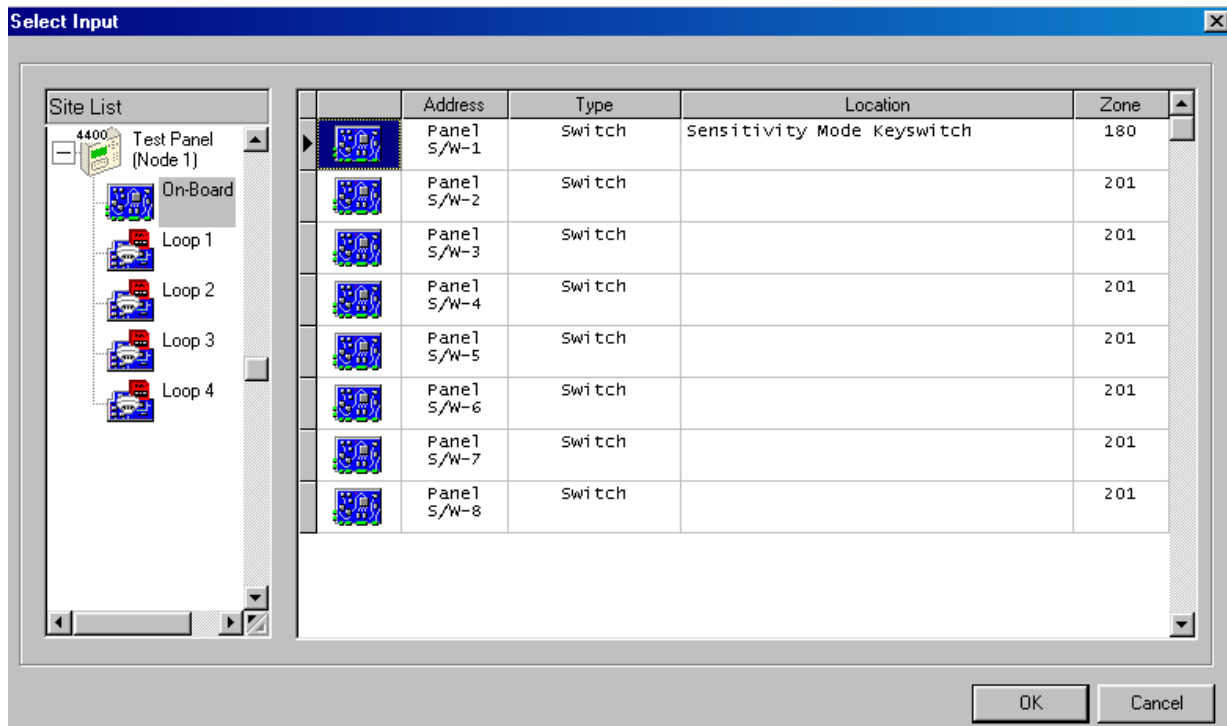
Step 2 – Set the Timeclock

- a) Select any one of the panel timeclocks .
- b) Define when you want the timeclock to be on (to keep it simple, this example shows the timeclock on throughout the entire day, for every day except Saturday).

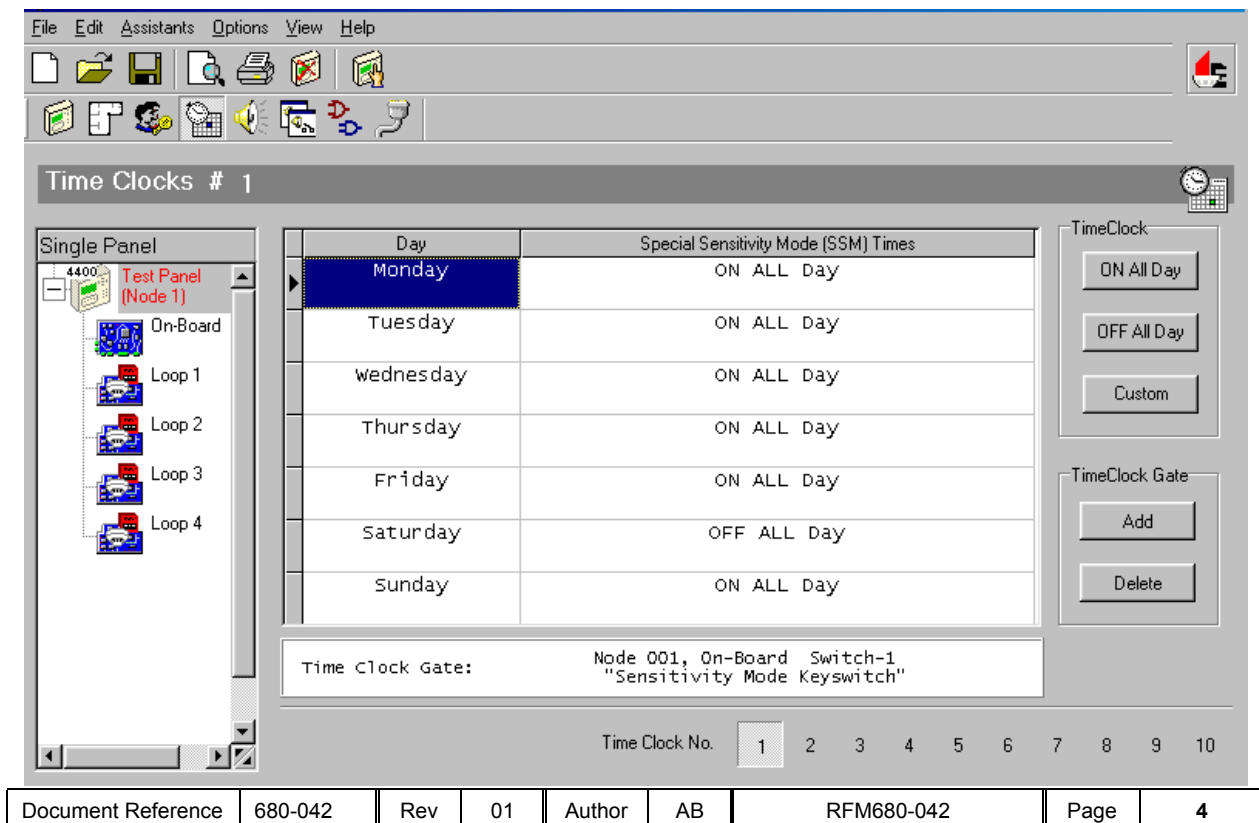


- c) Select the “Add” button on the “Timeclock Gate” options (bottom right)

d) The “Select” menu will now show all the input devices on the panel that you can choose from (if the list is not expanded, press the “+” button in front of the panel icon to expand the tree to show all the connected loops). In this example we are using the “On-Board” switch 1, so click on the “On-board” icon in the tree to bring up all the on-board inputs, then click on S/W-1 switch.



To complete the selection, press OK. The timeclock display will then confirm which input it is gated with :-



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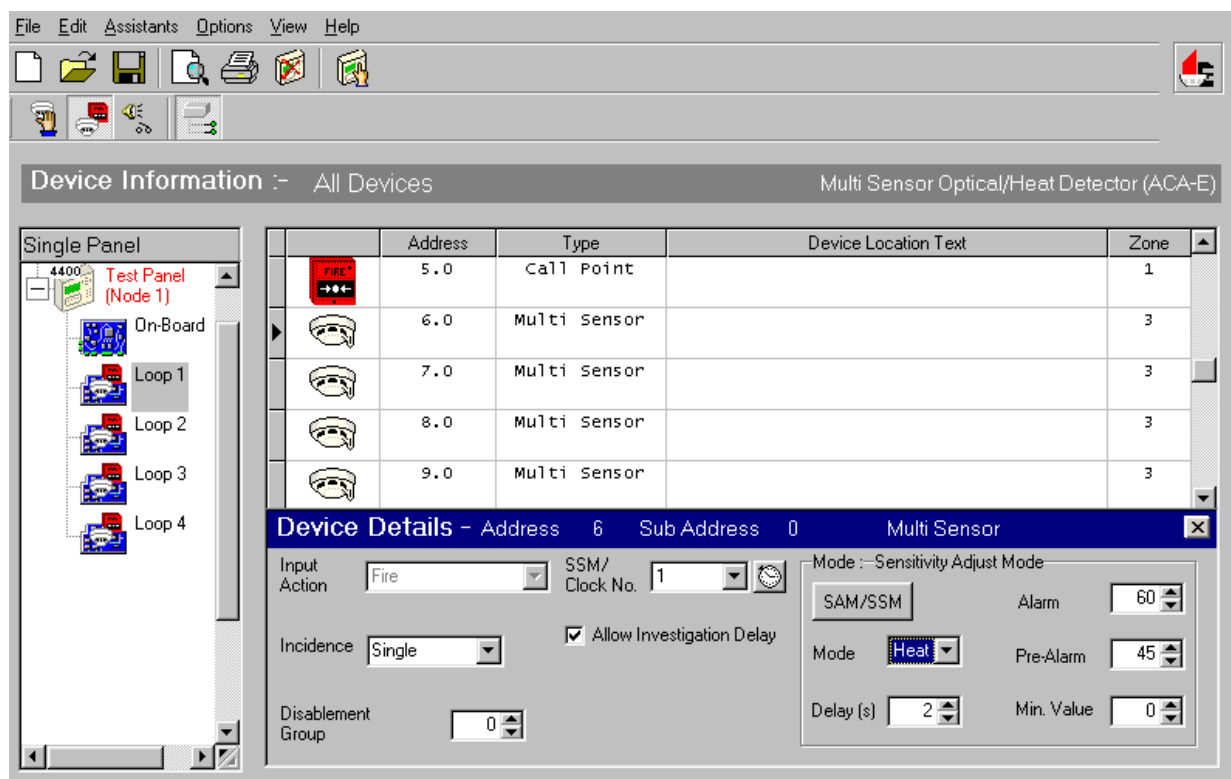
You can use a gated Timeclock in just the same way as an ordinary timeclock.

Just remember that when a gated Timeclock is used, the timeclock will only be active(on) when the input is also active and the actual time is within the specified timeclock on times (in this example, all day except Saturday).

In the following example we will use this gated timeclock to change the operating mode of a multisensor

Step 3 – Allocate the detectors to the Timeclock

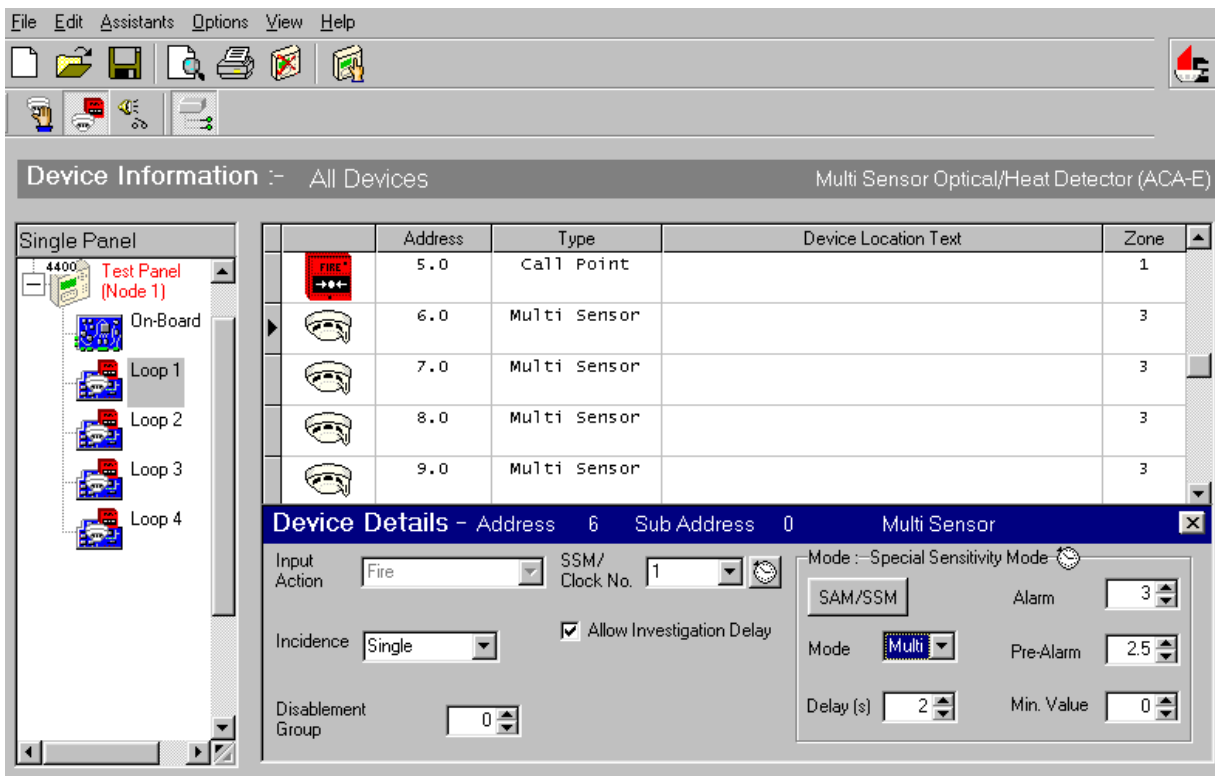
In this example Hochiki detectors have been used - the principle is just the same with Apollo. Select the “Detail” option in the normal manner by double-clicking on the first detector that you want to change mode according to state of the gated timeclock.



Note that

- The sensitivity adjust mode settings will be used whenever the timeclock is not active (i.e. when outside the timeclock times, or when the gate input switch is off). In this example the device is then working in heat only mode.
- The device has been assigned to Timeclock No 1 for it's SSM (Special Sensitivity Mode settings).

To inspect/change the SSM settings, press the SAM/SSM button – the display will then show the words “Special Sensitivity Mode” and display a clock icon to remind you that these only come into play when the timeclock is active.



In the above example the device Mode has been changed to “Multi”, so it will be using combined optical and temperature detection when the Timeclock is Active.

Summary of above example

The detector at address 6 on loop 1 will change modes as shown in the table below

Keyswitch	Day / Time	Detection Mode	Comments
ON	Mon,Tue,Wed, Thr,Fri,Sun	Multi	Operating in Special Sensitivity Mode
OFF	Mon,Tue,Wed, Thr,Fri,Sun	Heat	Timeclock Gate input (i.e. keyswitch) is not active, so Special Sensitivity Mode not allowed.
ON or OFF	Sat	Heat	Timeclock is set to off all day on Saturday, so Special Sensitivity Mode not allowed.