FAQ: How do I program my 2600 module to simulate the Group Modes present in the 8500 and 8213 modules?

8500 / 8213 Group Mode	2600 Equivalent Functions
Mode 0: Outputs operating in Mode 0 function as a simple limit switch and are not affected by the input terminal or group channel.	Program the Limit Switch On/Off setpoints.
Mode 1: When a group is placed in Mode 1 its outputs will function as normal limit switches. The difference between Mode 1 and Mode 0 is that you can use the Group Input to Apply a Preset to the Group Position. Typically the Group Input is tied to a sensor that detects a registration mark on the machine or a product. When the mark is sensed, the Group Position is preset to the value programmed in the Group Preset parameter. This synchronizes the outputs in the group to the registration mark or the product. Any transitions of the Group Input are ignored until either of the Group Channel's On/Off setpoints are reached.	Use the Limit Switch Shifting programming block. Every time the selected input becomes active, the internal position that the limit switch fires on will be set to the Preset Value. The Preset Value is also programmed in the Limit Switch Shifting programming block. One input can be used on multiple Limit Switch outputs. Difference: There is no group window to condition the input. The internal Limit Switch Position will be changed to the preset value every time the input transitions from inactive to active.
Mode 2: Mode 2 is very similar in operation to Mode 1. The only difference between the two is that the outputs in Mode 2 are normally disabled, and will only become active for one cycle after the Group Input is detected. The Group Input is used to preset the Group Position to the value stored in the Group Preset parameter. When the Group Position is preset, the outputs are enabled, and the Group Input disabled, until the dwell in the Group Channel is reached. Typically, the Group Input is tied to a sensor that detects the presence of product. When the product is sensed, the group outputs are synchronized to the product and are allowed to fire. The outputs will not fire again until the next time the input is detected.	Use the Limit Switch Shifting programming block together with the Window ANDing function that is programmed as part of the ANDing programming block. The Limit Switch Shifting programming block will set the internal position that the limit switch fires on to the preset value every time the input transitions from inactive to active. The Window ANDing programming will allow the output to fire only when the input has been active within the Enable Window. The same input must be used for both functions. Difference 1: The internal Limit Switch Position will be changed to the preset value every time the input transitions from inactive to active. It does not wait for the next enable window to occur. Difference 2: The On/Off setpoints cannot be located within the Enable Window.

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Mode 3: Outputs operating in Mode 3 can be active only when the group control input is active. The group channel On/Off points are not used in mode 3.	Use the Simple ANDing function that is programmed as part of the ANDing programming block. One input can be ANDed with more than one output.
Mode 4: Outputs operating in Mode 4 will be active for one cycle only when the group's input transitions from 0 to 1 between the group channel's On and Off points. The cycle ends when either the group channel On or Off point is reached, at which point the outputs will turn off.	Use either Pulse ANDing or Window ANDing, both of which are programmed as part of the ANDing programming block. Use Pulse ANDing if the On/Off setpoints are contained within the Enable Window. Use Window ANDing if the On/Off setpoints are not contained within the Enable Window. Difference: There is no separate Enable window when using Pulse ANDing. In this case the On/Off setpoints act as the Enable Window.
Mode 5: Outputs operating in Mode 5 will be active for one cycle only when the group's input is active in the range between the group channel's On and Off points. The outputs will be active only when the resolver's shaft is turning, or if the first cycle input is active. The outputs will turn off after there is no change in position for either 504ms or 120ms, depending on how the tach response parameter is set. The cycle ends when either the group channel On or Off point is reached, at which point the outputs will turn off.	Use either Pulse ANDing or Window ANDing, combined with RPM ANDing, all of which are programmed as part of the ANDing programming block. Use Pulse ANDing if the On/Off setpoints are contained within the Enable Window. Use Window ANDing if the On/Off setpoints are not contained in the Enable Window. Difference 1: There is no separate Enable window when using Pulse ANDing. In this case the On/Off setpoints act as the Enable Window. Difference 2: No First Cycle Input

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