



# Changes to ET90000 via Firmware Versions 4.01.1 and 4.00.1

Some customers would like for the **EXTERNAL** overrides to only be allowed to extend the scheduled program rather than override the schedule. This prevents the loads from being shut off due to an override either timing out or being activated then deactivated during a scheduled ON event. This can work with several different types of overrides and for several different applications.

## Example 1.

An office building has their main lobby lights turning ON at 7:00 AM and OFF at 6:00 PM. They are using an occupancy or motion sensor for an override, so that if someone is present outside of that normal schedule, the lights will be turned ON. Most occupancy sensors or motion sensors have a built in time-out period of anywhere between 30 seconds to 2 hours. For this example we will use a 30 minute time-out period. If someone were to enter the area at 6:45 AM, the loads would turn ON, the schedule would then take over at 7:00 AM, and the lights would not turn OFF at 7:15 AM when the sensor timed-out.

With Firmware Version 4.01.1, even though the schedule starts at 7:00 AM, the override of the sensor would cause the loads to turn OFF at 7:15 AM. (Also, every time the sensor sensed motion, it would cause for the loads to turn ON and OFF basically ignoring the schedule that was in place) Utilizing 4.00.1 would keep the lights ON during the scheduled times while allowing for the overrides to work properly after hours.

## Example 2.

A Gas Station is using the ET90000 to control their canopy and parking lot lights, and want them to come ON 1 hour prior to Sunset and turn OFF at Sunrise. They also want a photo control to allow for lights to come ON if it becomes dark during the day due to inclement weather. If inclement weather was taking place around the Sunrise time and it was dark enough out, instead of the lights being turned OFF due to the schedule, the loads would remain ON until the photo control sensed enough light to turn the loads OFF.

With Firmware Version 4.01.1, even with the photo control determining that the lights should remain ON, the schedule would override the loads causing them to turn OFF even though it is still dark outside, defeating the purpose of the override.

## Example 3.

An office building has their hallway and common areas scheduled to come ON at 8:00 AM, and turn OFF at 9:00 PM. They are using a Momentary push button switch as a 1 hour override for those loads for the cleaning crew, or for workers if they will be staying after hours. If a worker realizes at 8:45 PM that they will be there past the 9:00 PM time, they can press the override and initiate the 1 hour override, and now the loads will stay ON until 9:45 PM, providing them with the extra time they need to finish up.



With Firmware Version 4.01.1, if the override was pressed at 8:45 PM, the loads would still turn OFF at 9:00 PM, causing the worker to have to go back to the override switch and press the button again to initiate the 1 hour override. Another issue in this example would be that if there was an accidental press of the override switch during the scheduled ON time, once the 1 hour override expired, the loads would actually shut down even during normal business hours, and would need to be overridden every hour until the following day when the schedule could take back over.