



- » Fundamental Axiom: Dialight countdowns are **driven** by the same 120 volt wires that operate the ped signal icons
 - ↳ During a preemption therefore, Dialight countdown behavior is driven by the pedestrian icon behavior
 - » Traffic signal controllers can accommodate several types or levels of preemption, and the controllers drive the ped icons in different ways for different levels of preemption
 - » Types or levels of preemption that controllers can respond to include *transit (bus)* which is the lowest level of preemption, *emergency vehicle (fire, police, ambulance)* and *railroad*
 - » Railroad preemption is the highest level of preemption, from a controller's perspective
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- » Controllers are usually programmed to go into a *track clearance* mode when they receive a railroad preemption input from a track switch or some other device, which means they will immediately try to clear railroad tracks of cars, peds, bikes, etc that might be blocking the tracks
 - » Track clearance mode will usually give a very short green indication to cars that are parked on, or in the immediate vicinity of the tracks, and then quickly cycle through yellow and then to red for that particular traffic movement
 - » If a traffic movement that conflicts with an approaching train happens to be green, and happens to have an active ped walk or ped clearance interval (flashing don't walk) displayed when the railroad preemption is received by the controller, the controller will immediately drive the green vehicle indications to yellow, and then to red, and immediately terminate the walk or flashing don't walk ped indications, and immediately go to solid don't walk ped indications
 - » If the ped icons go to solid don't walk earlier than initially programmed, the countdown will sense the truncated ped movement, and skip the remaining time to display "0", and then go dark
 - » The countdowns and peds will work normally on the next ped cycle, unless another preemption input happens to immediately occur (1), (2)
 - ↳ (1) In the cycle immediately following a preempted cycle, if the ped movement that was preempted is activated, the countdowns for that ped movement will display the initially programmed time, unless they sense two, consecutive, **identical** duration reduced ped clearance times. If this condition occurs, the countdowns for the preempted ped movement will assume the ped clearance timing was reduced via reprogramming of the controller interval settings, and they will then reprogram themselves to this new time setting. Note however, that Dialight countdowns only require one *extended* ped clearance interval to reprogram themselves. This methodology allows the countdown to reliably distinguish between a preempted ped phase, and a reprogramming of the controller ped interval settings
 - ↳ (2) As requested by the City of Los Angeles, Dialight countdowns now have the option, via alternate dip switch settings, to leave the countdown display dark during the cycle immediately following a ped interval timing change (reduced OR extended) while the countdown relearns or confirms the phase timing