

Valid Combinations of Equipment Charge Codes and Switch Regimes

	Equipment Type	Lamp /Ballast Charge Codes ending in 100	Lamp /Ballast Charge Codes ending in less than 100	Lamp /Ballast Charge Codes for use with MSL-DVPSR	School Crossing Patrol Warning Signals	Traffic Signal Equipment (Non Dimming)	Traffic Equipment (Dimming)	Miscellaneous (Non Dimming)	Any Legacy Charge Code beginning 800-899 that has been given a dimming circuit watts value	Control Host
	Charge Code range	Prefixed 01 to 50	Prefixed 01 to 50	Prefixed 40, 41, 42 or 50. Also any prefixed 14 and 21-33 where physical dimming is possible	Prefixed 7918 or 7947	Prefixed 7901, 7903, 7905 to 7917, 7919 to 7923, 7925 to 7927, 7930 to 7938, 7940, 7942, 7944, 7946, 7948 ¹ , 7952, 7954, 7956, 7957,	Prefixed 7902, 7904, 7924, 7929, 7939, 7941, 7943, 7945, 7950, 7953 ² , 7955, 7958, & 7959	Codes beginning 800 - 899 except those listed as dimming		815
Switch Regime Type	Switch Regime Series	Valid Combination								
Continuous - No switching - 24 Hour Burning	001	Yes	No	No	No	Yes	No	Yes	No	No
Manually Switched e.g. School Crossing Patrol Flashers	0130 to 0369	No	No	No	Yes	No	No	No	No	No
Part Time Traffic Signals	078 & 079	No	No	No	No	Yes	No	No	No	Yes
Infra Red Photo Cells (see Note Below) ³	100	Yes	No	No	No	No	No	Yes	Yes	Yes

¹ The 7948 Series Charge Code can additionally be used with Dusk to Dawn or self-control Switch Regime types.

² The 7953 Series increases in load at night due to a night light but is treated as per Dimming Charge Codes

³ *Infrared detectors are typically located in the base of bollards (at ground level and under an opaque cover) which results in significantly longer operating hours than if an infrared detector were located within a PECU array in an elevated location. Therefore infrared detectors should not be included within an PECU array but the burning hours should be derived using the extended offsets defined in the Switch Regime Spreadsheet on a passive basis."*

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	Charge Code range	Prefixed 01 to 50	Prefixed 01 to 50	Prefixed 40, 41, 42 or 50. Also any prefixed 14 and 21-33 where physical dimming is possible	Prefixed 7918 or 7947	Prefixed 7901, 7903, 7905 to 7917, 7919 to 7923, 7925 to 7927, 7930 to 7938, 7940, 7942, 7944, 7946, 7948 ¹ , 7952, 7954, 7956, 7957,	Prefixed 7902, 7904, 7924, 7929, 7939, 7941, 7943, 7945, 7950, 7953 ² , 7955, 7958, & 7959	Codes beginning 800 - 899 except those listed as dimming		815
Switch Regime Type	Switch Regime Series	Valid Combination								
Full Night Time Switches	200 to 210, 370 & 380	Yes	No	No	No	No	Yes	Yes	Yes	Yes
Part Night Time Switches	219 to 369, 371 to 377 & 381	Yes	No	No	No	No	No	Yes	No	Yes
Thermal Photo Cells	400 - 499	Yes	No	No	No	No	Yes	Yes	Yes	Yes
Single Stage Dimming Devices	500 -599	No	Yes	No	No	No	No	No	No	Yes
Hybrid Photo Cells	600 - 699	Yes	No	No	No	No	Yes	Yes	Yes	Yes
Part Night Electronic Photo Cells	700 - 799	Yes	No	No	No	No	No	Yes	No	Yes
Electronic Photo Cells	800 - 899	Yes	No	No	No	No	Yes	Yes	Yes	Yes

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	Charge Code range	Prefixed 01 to 50	Prefixed 01 to 50	Prefixed 40, 41, 42 or 50. Also any prefixed 14 and 21-33 where physical dimming is possible	Prefixed 7918 or 7947	Prefixed 7901, 7903, 7905 to 7917, 7919 to 7923, 7925 to 7927, 7930 to 7938, 7940, 7942, 7944, 7946, 7948 ¹ , 7952, 7954, 7956, 7957,	Prefixed 7902, 7904, 7924, 7929, 7939, 7941, 7943, 7945, 7950, 7953 ² , 7955, 7958, & 7959	Codes beginning 800 - 899 except those listed as dimming		815
Switch Regime Type	Switch Regime Series	Valid Combination								
mCMS⁴ (Continuous- No Switching)	998990	YesNo	No	No	No	No	No	Yes ⁵	No	No
CMS (Switching)	998 & 999	Yes	No	No	NoYes	No	No	Yes	No	No
MSLDVPSR	A01-AZZ, B01-BZZ, C01 – CZZ, and D01-DZZ, F01-FZZ and G01-GZZ	No	No	Yes	No	No	No	No	No	Yes

⁵ [Currently only used for electrical vehicle charge so therefore only valid with 8901000000100](#)

Valid Combinations of Controller Charge Codes and Switch Regimes

	Description	Time Switch Controllers	Thermal Photocells	Hybrid Photocells	Electronic Photocells	Electronic Photocells (Latching relay) [Discontinued]	Infra Red Photocells	Electronic Photo-Cell Timeswitch [Discontinued]	Electronic Controls (e.g. CMS devices) ⁶	VPSR/MSD Controls and Controls integral to Ballasts
	Equipment Code	91	92	93	94	95	96	97	98	99
Switch Regime Type	Switch Regime	Valid Combinations								
Continuous - No switching - 24 Hour Burning	001	N/A/No	N/A/No	N/A/No	N/A/No	N/A/No	N/A/No	N/A/No	N/A/No	N/A/No
Manually Switched e.g. School Crossing Patrol Flashers	010 to 039	Yes	N/A/No	N/A/No	Yes	N/A/No	N/A/No	N/A/No	Yes	N/A/No
Part Time Traffic Signals	078 to 079	YesN/A	N/A/No	N/A/No	N/A/No	N/A/No	N/A/No	N/A/No	N/A/No	N/A/No
Infra Red Photo Cells	100	No	No	No	No	No	Yes	No	No	No
Time Switches	200 to 399	Yes	No	No	No	No	No	No	No	No
Thermal Photo Cells	400 - 499	No	Yes	No	No	No	No	No	No	No
Single Stage Dimming Devices	500 -599	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes
Hybrid Photo Cells	600 - 699	No	No	Yes	No	No	No	No	No	No
Part Night Electronic Photo Cells	700 - 799	No	No	No	Yes	Yes	No	Yes	No/Yes	No
Electronic Photo Cells	800 - 899	No	No	No	Yes	Yes	No	Yes	No/Yes	No
CMS and mCMS	990-999	No	No	No	No	No	No	No	Yes	No
VPSR – Photocell Controlled	A01-AZZ, B01-BZZ, D01-DZZ, F01-FZZ and G01-GZZ	No	Yes	Yes	Yes	Yes	No	Yes	No/Yes	Yes

⁶ Where “No/Yes” is shown this is only applicable to small scale CMS trials and temporary UMSO inventory amendments

	Description	Time Switch Controllers	Thermal Photocells	Hybrid Photocells	Electronic Photocells	Electronic Photocells (Latching relay) [Discontinued]	Infra Red Photocells	Electronic Photo-Cell Timeswitch [Discontinued]	Electronic Controls (e.g. CMS devices) ⁷	VPSR Controls and Controls integral to Ballasts
	Equipment Code	91	92	93	94	95	96	97	98	99
VPSR – Timeswitch Controlled	C01-CZZ	Yes	No	No	No	No	No	No	No	Yes

⁷ Where “No/Yes” is shown this is only applicable to small scale CMS trials and temporary UMISO inventory amendments