



# LENZ LIGHTING SPREADSHEET

by Phil Hartung



Here is a table with all available values for CV51 in the Lenz series decoders. Some values are not useful as mentioned below.

CV51 VALUE (DECIMAL)	BIT VALUES				RESULT
	CV51.3	CV51.2	CV51.1	CV51.0	
0	0	0	0	0	Directional lamps, no dimming, F0 on/off
1	0	0	0	1	Independent lamps, F0=fwd, F1=rear
2	0	0	1	0	Directional lamps, no dimming (because bits 2 and 3 are both 0), F0 on/off
3	0	0	1	1	Independent lamps, F0=fwd, F1=rear, no dimming because biths 2 and 3 are both 0
4	0	1	0	0	Directional lamps, no dimming, F0 on/off
5	0	1	0	1	Independent lamps, F0=fwd, F1=rear
6	0	1	1	0	Directional Lamps, F0=on/off, F1=dim front only (if on)
7	0	1	1	1	Independent lamps, F0=fwd, F1=read, F4 dims front only
8	1	0	0	0	Directional lamps, no dimming, F0 on/off
9	1	0	0	1	Independent lamps, F0=fwd, F1=rear
10	1	0	1	0	Directional Lamps, F0=on/off, F1=dim rear only (if on)
11	1	0	1	1	Independent lamps, F0=fwd, F1=read, F4 dims rear only
12	1	1	0	0	Directional lamps, no dimming, F0 on/off
13	1	1	0	1	Independent lamps, F0=fwd, F1=rear
14	1	1	1	0	Directional Lamps, F0=on/off, F1=dim either lamp (if on)
15	1	1	1	1	Independent lamps, F0=fwd, F1=read, F4 dims both lamps

Since CV51.1 set doesn't make any sense without either 51.2 or 51.3 set, Values 2 and 3 are useless (same as 0, 1). Also, have 51.2 or 51.3 set without 51.1 set is useless, resulting in values 4, 5, 8, 9, 12, and 13 are useless. Leaving, 0, 1, 6, 7, 10, 11, 14, and 15 are useful.

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