

IPC OR High Heads Downs Cluster Display Intensity and Backlighting

The IPC shall utilize the following functions to support illumination control of its Display and all other lighting emitting sources within it i.e. backlighting, halo rings, gauges etc. as per RQT-002004-704098 Ford Welcome/Farewell and Lincoln Embrace Strategy”:

- Subscribe to “Dimming_lvl” published by BCM via CAN.
 - Additionally subscribe to “Litval” to meet “Smooth Dimming” requirements
- “LE_WF_Illumination Requestor”, section 5.3, with the following default values:
 - Fade On = 40ms
 - Fade Off = 40ms
- “LE_WF_Illumination Response”, section 5.4.

CAN Signals		Switch-Backlighting Illumination “LE_WF_Illumination_Requestor” summary 1	Illumination Intensity ²
Dimming_lvl	Ignition_Status		
Off/ unused / invalid / missing (on reset)	Not-OFF	“Transition On” or “On”	Night_12
Night_1 ... Night_12, Day_1 ... Day_6	Not-OFF	“Transition On” or “On”	Night_1 ... Night_12, Day_1 ... Day_6
Night_1 ... Night_12, Day_1 ... Day_6 -> Missing	Not-OFF	“Transition On” or “On”	Keep last valid Dimming_lvl value > Missing (until “OFF” is received)
Off/ unused / invalid / missing (on reset)	OFF	“Transition Off” or “Off”	Off
Night_1 ... Night_12, Day_1 ... Day_6	OFF	“Transition On” or “On” to intensity	Night_1 ... Night_12, Day_1 ... Day_6 ²
Night_1 ... Night_12, Day_1 ... Day_6 -> Missing	OFF	“Transition On” or “On” to intensity	Keep last valid Dimming_lvl value > Missing (until “OFF” is received)

Note 1: Summary is a generic response, exact response listed in RQT-002004-704098 Ford Welcome/Farewell and Lincoln Embrace Strategy.

Note 2: Shall also monitor and adjust illumination intensity based off of changes in Litval, in order to meet “Cockpit Illumination”/”Smooth Dimming” requirements listed in latest version of ES-H1BT-1A278-AA-VXX

Note 3: Illuminate to Night_12 intensity if warnings present, for duration of active warning.