About:

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Support: http://ls-modcompany.com

Version: 1.0.0.0 – Initial FS19 Release
Version: 1.0.1.0 – Fix running light bug when used on multiple linked trailers when rootVehicle was disconnected.

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Thankyou:

Sven777b @ http://ls-landtechnik.com
Allowing me to use parts of his code as found in the 'BeleuchtungV31.lua'.

Inerti
FS17 - 'extraLight' ideas and script suggestions, Single and Multiplayer testing.

Nicolina
FS17 - Single and Multiplayer game testing.

Important:

The specialization can be freely used without asking for permission.

Modifying this script or converting to other versions of the game is not permitted and not allowed without permission from GtX @ http://ls-modcompany.com

1. Strobe Lights

```
<lightExtension>
        <! -- OPTION 1: Light models built into vehicle. -->
        <strobeLights >
                <! -- lightNode  = Previous generation coronas. -->
                < strobeLight lightNode="0>17|0|0" realLightNode="0>17|0|0"/>
                < strobeLight lightNode ="0>17|1|0" realLightNode ="0>17|1|1"/>
                < strobeLight lightNode ="0>17|2|0" invert="true"/>
                < strobeLight lightNode ="0>17|3|0" invert="true"/>

                <! -- lightNode  = Previous generation coronas. -->
                < strobeLight lightShaderNode="0>17|4|0" shaderIntensity="80 " sequence="100 200 150 250 " />
                < strobeLight lightShaderNode="0>17|5|0" shaderIntensity="80"  sequence="100 200 150 250" />
                < strobeLight lightShaderNode="0>17|6|0" realLightNode ="0>17|6|1"/>
                < strobeLight lightShaderNode="0>17|7|0" realLightNode ="0>17|7|1"/>
                < strobeLight lightShaderNode="0>17|8|0" realLightNode ="0>17|8|1"/>
        </strobeLights>


        <! -- OPTION 2: Load shared light models from XML file. (See XML example below) -->
        <strobeLights>
                <strobeLight linkNode="strobeLight1" filename="scripts/strobeLightOrange.xml" useRealLight="false"/>
                <strobeLight linkNode="strobeLight2" filename="scripts/strobeLightOrange.xml" useRealLight="false"/>

                <strobeLight linkNode="strobeLight3" filename="scripts/strobeLightOrange.xml"
                realLightNode="strobeLight3_Real"/>
                <strobeLight linkNode="strobeLight4" filename="scripts/strobeLightOrange.xml"
                realLightNode="strobeLight4_Real"/>
                <strobeLight linkNode="strobeLight5" filename="scripts/strobeLightOrange.xml"
                realLightNode="strobeLight5_Real"/>
                <strobeLight linkNode="strobeLight6" filename="scripts/strobeLightOrange.xml"
                realLightNode="strobeLight6_Real"/>
        </strobeLights>
</lightExtension>
```

IMPORTANT!

A maximum of 20 Real Strobe lights should be used. A warning will be displayed in log file if this number is exceeded. This limit is set for performance reasons on some computers.

For personal mods this 'log warning' can be disabled by using the following tag.

```
<lightExtension>
        <strobeLights disableRealLightWarning="true" >
        </strobeLights>
</lightExtension>
```

lightNode ="[…]" **(Previous game generation coronas)**
This parameter is optional. There is no default setting.
This is the index of the coronas which are set to visible/invisible.

lightShaderNode ="[…]"
This parameter is optional but recommended for best in game look. There is no default setting.
This is the index of the shader node which will have the 'intensity ' set.

realLightNode ="[…]" **(See 'NOTE' above!)**
This parameter is optional. There is no default setting.
This index should point at a real light only. If the users game settings are set to
realBeaconLights = false or their graphic settings are not (High or Very High) then real lights will not be loaded.

linkNode ="[…]"
This parameter is required. There is no default setting.
This is the index of the transform group to attach shared light loaded from xml file.

filename ="[…]"
This parameter is required. There is no default setting.
This is the filename and path of the XML to load shared strobe light from.

useRealLight ="[…]" **(See 'NOTE' above!)**
This parameter is optional. There is no default setting.

If set to 'true' and shared file and xml contains a 'realLight' then this will also be loaded.

XML FILE Example

```xml
<?xml version="1.0" encoding="utf-8" standalone="no" ?>

<lightExtensionShared>
        <strobeLight>
                <filename>$data/shared/assets/lights/lizard/sideMarker_09Orange.i3d</filename>
                <rootNode node="0" />
                <light shaderNode="0|0" intensity="100"/>
                <realLight node="0|1"   <! – OPTIONAL (Only with custom light objects). -->
        </strobeLight>
</lightExtensionShared>
```

sequence="[.. .. .. ..]"
This parameter is optional - it decides if the following parameters are used.

You can set a defined flashing-sequence by putting in the times (in milliseconds) for each phase
separated by a space. At the end of the given sequence it will start from beginning.
If this parameter is not used then the flasher will switch to random mode and the sequence will be created for you.

invert="[true|false]"
This parameter is optional and only used if a "sequence" is set. Default value is "false".
If you set this parameter to "true" then the flashing-sequence starts with an off-phase.
This is primary used to create an offset for multiple flashers.

minOn="[…]" & maxOn="[…]"
These parameters are optional and are not used when "sequence" is set. Default for both is "100".
Defines the minimum and maximum possible duration (in ms) of the on-phase.
Used for the randomly generated flashing-sequence.

minOff="[…]" & maxOff="[…]"
These parameters are optional and are not used when "sequence" is set.
Default values are "100" & "400".
Defines the minimum and maximum possible duration (in ms) of the off-phase.
Used for the randomly generated flashing-sequence.

2. *Running Lights (DRL)*

These are only active when engine is running just as with BMW, Mercedes-Benz, Volvo, etc.

Example

```
<lightExtension>
        <! -- OPTION 1: Light models built into vehicle. -->
        < runningLights>
                <! -- lightNode  = Previous generation coronas. -->
                < runningLight lightNode="0>17|0|0" realLightNode="0>17|0|0"/>
                < runningLight lightNode ="0>17|1|0" realLightNode ="0>17|1|1"/>

                <! -- lightNode  = Previous generation coronas. -->
                < runningLight lightShaderNode="0>17|4|0" shaderIntensity="80 " />
                < runningLight lightShaderNode="0>17|5|0" shaderIntensity="80"  />
        </ runningLights>


        <! -- OPTION 2: Load shared light models from XML file. (See XML example below) -->
        < runningLights>
                < runningLight linkNode="runningLight1" filename="scripts/runningLightOrange.xml" useRealLight="false"/>
                < runningLight linkNode="runningLight2" filename="scripts/ runningLightOrange.xml" useRealLight="false"/>

                < runningLight linkNode="runningLight3" filename="scripts/ runningLightWhite.xml"
                realLightNode="runningLight3_Real"/>
                < runningLight linkNode="strobeLight4" filename="scripts/ runningLightWhite.xml"
                realLightNode="runningLight4_Real"/>
        </ runningLights>
</lightExtension>
```

IMPORTANT!

A maximum of 20 Real Running lights should be used. A warning will be displayed in log file if this number is exceeded. This limit is set for performance reasons on some computers.

For personal mods this 'log warning' can be disabled by using the following tag.

```
<lightExtension>
        < runningLights disableRealLightWarning="true" >
        </ runningLights >
</lightExtension>
```

lightNode ="[…]" **(Previous game generation coronas)**
This parameter is optional. There is no default setting.
This is the index of the coronas which are set to visible/invisible.

lightShaderNode ="[…]"
This parameter is optional but recommended for best in game look. There is no default setting.
This is the index of the shader node which will have the 'intensity ' set.

realLightNode ="[…]" **(See 'NOTE' above!)**
This parameter is optional. There is no default setting.
This index should point at a real light only. If the users game settings are set to
realBeaconLights = false or their graphic settings are not (High or Very High) then real lights will not be loaded.

OPTION 2:

linkNode ="[…]"
This parameter is required. There is no default setting.
This is the index of the transform group to attach shared light loaded from xml file.

filename ="[…]"
This parameter is required. There is no default setting.
This is the filename and path of the XML to load shared strobe light from.

useRealLight ="[…]" **(See 'NOTE' above!)**
This parameter is optional. There is no default setting.

If set to 'true' and shared file and xml contains a 'realLight' then this will also be loaded.

XML FILE Example

```xml
<?xml version="1.0" encoding="utf-8" standalone="no" ?>

<lightExtensionShared>
	< runningLight>
		<filename>$data/shared/assets/lights/lizard/sideMarker_09White.i3d</filename>
		<rootNode node="0" />
		<light shaderNode="0|0" intensity="100"/>
		<realLight node="0|1"   <! – OPTIONAL (Only with custom light objects). -->
	</ runningLight>
</lightExtensionShared>
```

3. *Beacon Sound*

```
<lightExtension>
        <!—OPTION 1-->
        < beaconSound linkNode="i3dMapping_ref" file=" sounds/siren.wav.wav"
                innerRadius="2.0" outerRadius="40.0"
                <volume indoor="0.5" outdoor="1.00" />
                <pitch indoor="1.00" outdoor="1.00" />
                <lowpassGain indoor="0.80" outdoor="1.00" />
        < / beaconSound >

        <!—OPTION2 -->
        < beaconSound linkNode="i3dMapping_ref" template=" EMERGENCY_SIREN"/>

</lightExtension>
```

This sound will be played in a loop when beacon lights are active.

Example Use:
Emergency vehicle sirens or beacon rotor motor sound.

4. _Combine Fill Warning_ (' FillUnit Combines' Only.)

Example

```
<lightExtension>
        <combineFillWarning percent="80" turnOnBeacons ="true" playWarningSound ="true" warningSoundLoops="3"
        is3DSound="true" >
                <!—OPTION 1 -->
                <!—If no 'alarmSound' is given and playWarningSound ="true" then a standard alarm sound will be used. -->

                <!—OPTION 2 -->
                <alarmSound linkNode="i3dMapping_ref" file=" $data/sounds/tools/rollbelt/rollbelt_alarm.wav"
                        innerRadius="2.0" outerRadius="40.0"
                        <volume indoor="0.5" outdoor="1.00" />
                        <pitch indoor="1.00" outdoor="1.00" />
                        <lowpassGain indoor="0.80" outdoor="1.00" />
                < /alarmSound>

                <!—OPTION 3 -->
                <alarmSound linkNode="i3dMapping_ref" template=" ROLLBELT_ALARM"/>
        </combineFillWarning>
</lightExtension>
```

percent ="[...]"
The parameter "percent" is mandatory.

This number defines the percent value that the beacons will be activated or sound will be played.

turnOnBeacons ="[true|false]"
This parameter is optional. The default setting is "false"

If set "true" then if the actual fill-level reaches the percent set then the beacon lights will turn on. You can manually turn it off if you want to. If the fill-level goes below the percent set then the beacon lights will turn off unless you activated them manually.

playWarningSound ="[true|false]"
This parameter is optional. The default setting is "false"

If set "true" then if the actual fill-level reaches the percent set a warning sound will be played.

warningSoundLoops="[integer]"
This parameter is optional. The default setting is "3"

This number defines the number of loops the sound file will be played.

is3DSound ="[true|false]"
This parameter is optional. The default setting is "false"

If set "true" then the warning sound will be played as a 3D sound for and can be heard even when not within the vehicle as long as the player is in range.

ModDesc Examples:

```xml
<modDesc descVersion="42">
    <specializations>
        <specialization name="lightExtension" className="LightExtension" filename="scripts/LightExtension.lua"/>
    </specializations>

    <vehicleTypes>
        <type name="LE_Example" parent=" baseDrivable" className="Vehicle" filename="$dataS/scripts/vehicles/Vehicle.lua">
            <specialization name="lightExtension" />
        </type>
    </vehicleTypes>
</modDesc>
```

MODS USING THIS SCRIPT:

LINK: *Field Service Trailer*