

## 9 OPERATION GUIDE

The araya<sup>5</sup> Color Tuning Modules CTM 109, CTM 112, CTM 119 and CTM 119NR utilize standard 0-10V building controls and/or a wireless Light Commissioning Tool (LCT) for controlling on-Planckian correlated color temperatures (CCT), dimming values, off-Planckian color points (color tinting) using the Saturation & Hue feature, and commissioning and activating SceneSet<sup>®</sup>. This document describes how to control the CTM utilizing 0-10V controls, the wireless remote or a combination of the two.

**Light Commissioning Tool (LCT).** The araya<sup>5</sup> LCT wirelessly controls the CTM. While the LCT can act as a stand-alone wireless controller, it is primarily intended to commission the CTM after installation. Each CTM has a unique address and the operator uses the LCT to select the desired CTM, turn power on/off and then set CCT, Dim, Saturation & Hue, and set Scene Presets. The LCT can also be used to trim the dimming levels when 0-10V dimming control is enabled. Consult the LCT Operation Guide for detailed instructions.

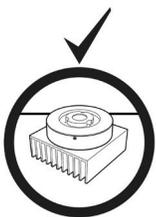
**0-10V Control.** The CTM has 0-10V control wire pairs to control Dimming and CCT. Dimming is controlled by the violet (+) and grey (-) wires. CCT is controlled by the blue (+) and white (-) wires. When a control wire pair is grounded together, the 0-10V control mode is disabled, and the corresponding function is controlled via the LCT.

**Hybrid (wired & wireless) Control.** 0-10V controls and the LCT can be used together to control the CTM. These are the features:

**Trim.** When 0-10V Dimming is enabled, the LCT can adjust the dimming level as a percentage of the 0-10V wired setting.

**SceneSet<sup>®</sup>.** The LCT can set up to 5 Scene Presets which are recalled using a wired 0-10V controller. A scene is comprised of a CCT, Dim and Saturation & Hue level. Individual preset scenes also can be modified and activated with the LCT.

**On-Off Control.** The CTM may be turned on-off by switching the input power from the 12V supply. To store the settings, the lamp needs to remain on for at least 45 seconds after the CTM is initially set using the LCT. When Scene Presets are activated using the LCT, the settings are stored immediately and no wait time is needed. The lamp may also be turned on-off using the LCT without switching the power supply, but a power draw of about 1W will remain.



**For long term reliable operation, proper heat sinking is critical.**



**The CTM diffuser is fragile. Avoid touching the diffuser during handling and assembly.**



**Do not rest or operate the CTM face down against a table or other solid surface.**