

## **Application Note**

## **Leviton HDBaseT™ Operating Temperature Considerations**

With all of the electronics crammed into smaller and smaller devices, required to support so many features, its no wonder some of them run on the warm side. HDBaseT is no different. It must follow the laws of thermodynamics and disipate the energy not involved in doing work just as any other machine. As with so many other devices this heat is disipated through conduction from the heat source to a heat sink and then through convection from this sink to the surrounding air. All of this to say that that the Leviton HDBaseT extenders, like many other's devices, run warm.

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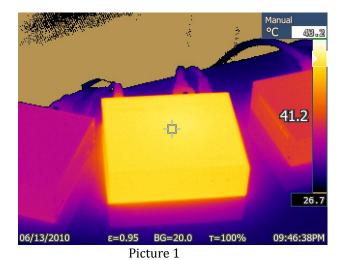
Product Line:

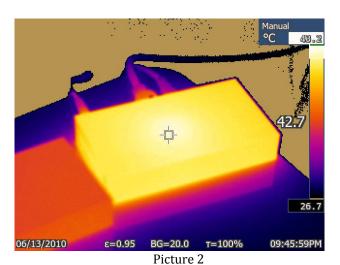
When in full operation they can reach temperatures of  $43^{\circ}\text{C}$  or  $109^{\circ}\text{F}$ , which isn't much compared to other devices (lighting dimmers for instance have a UL limit of  $60^{\circ}\text{C}$  or  $140^{\circ}\text{F}$ ) but may cause concern when tucked into a small cabinet

Part Numbers Affected: 41910-HT\*

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limit of  $60^{\circ}$ C or  $140^{\circ}$ F) but may cause concern when tucked into a small cabinet. The first image below is of the 70m extender receiver (41910-HTO) and the second image is of the 100m extender receiver (41910-HTE). The transmitters are sitting to the left of each receiver in the pictures and run much cooler.





The fact that the receivers run at this temperature does require some forethought when mounting them. Make sure there is enough airflow in small cabinets. And when it comes to mounting the recievers behind wall mounted flat panels, mechanical methods such as plastic cable ties or even screws into a suitable surface behind the display make for a lasting fixture. Double-sided tape can work but, consideration for the operating temperature must be taken into account.