

# APPLICATION ADVISORY

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*Xantech's Application Advisory defines and clarifies specific applications for our products to enable you to maximize their performance advantages. With a better understanding of the abilities and limitations of the product, you will know exactly which model to spec out for a given application. As with any type of product, each model will have its own unique abilities and limitations. Knowing these facts will save you time, money and unnecessary frustration. Please feel free to contact our Technical Support Department with any questions you may have.*

## Xantech's New "80" Series CFL-Friendly IR Receivers

**Q: Now that these new CFL (Compact Fluorescent Light) - Friendly IR receivers have been developed, why shouldn't I spec them out for all my installations?**

**A:** The 780-80 and 291-80 were developed to meet the needs of customers who have environments where Infrared Interference is caused by electronically ballasted fluorescent lighting, such as CFL and other forms of electronically ballasted fluorescents, or by sunlight. They work extremely well under these conditions.

Both models feature highly effective IR receiver chips that are specifically designed to reject continuous high frequency noise signals emitted by these types of sources. They are primarily intended to be used therefore, to overcome problems associated with such environments.

Because of these special design characteristics, please keep in mind that the "80" series do have the following limitations:

1. Only one 780-80 or 291-80 may be used per room or in the same area. If two were to receive the same IR signal simultaneously, differences in their re-modulated output frequencies will cause the remote control commands to be unrecognizable by the controlled equipment (e.g. AM/FM Receiver, VCR, Laserdisc player, etc.).
2. They will not repeat the command codes from a Xantech 679 or RC16 programmer. This means they **will not** pass commands on to Xantech models RT16, 670, 671, 676, 677, 680 or 686. There may be other manufacturer's remote codes that these models will not work with as well. Be sure to check for compatibility with all proposed equipment before spec'ing a system.
3. They won't solve IR interference problems caused by intense 60 Hz, magnetically-ballasted fluorescent lights, because such lighting radiates noise that is low frequency in nature.
4. They cannot be operated in a 2-wire phantom power mode.

The moral of the story is that if you need to use an IR receiver outdoors or in a room with electronically ballasted fluorescent lights—then by all means spec out the 780-80 or 291-80. They work extremely well in these applications and most others as well, particularly those that take advantage of their excellent range. But remember their limitations.

Where necessary, continue to specify the 780-10, 291-10 or our other models. They are compatible with all our products, can be used in multiples in the same room and will work perfectly in the majority of your applications.