

autopilot®

PX1 DIGITAL LIGHTING CONTROLLER



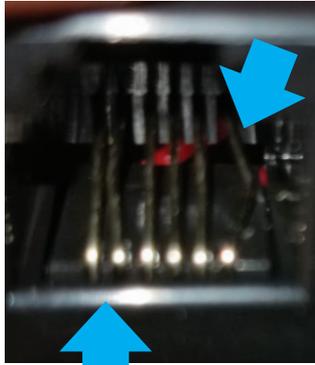
TROUBLESHOOTING COMMON PX1/BALLAST PROBLEMS

We have identified several common issues that can occur for PX1 users that may appear to be caused by malfunctioning ballasts or PX1 units. By identifying the true nature of such issues on-site whenever possible, and taking steps to correct them, you can avoid taking ballasts or PX1 units out of their setup for any length of time.

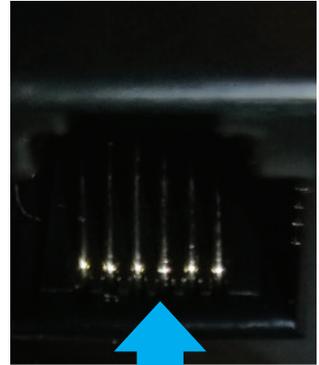
If you are having problems with PX1 communication, please review this troubleshooting guide to help isolate and pinpoint the specific problem before submitting a product return to the manufacturer.

FIRST STEPS

- 1. Check the integrity of the RJ12 cable/T-connector connections.**
If any of the small metal contact pins inside the female RJ12 T-connector (splitter) are out of alignment, this could prevent communication between the ballast and the PX1, and cause intermittent lighting failures throughout the grow room. Visually check to see if any of these pins are bent and as a result no longer properly make contact.



BENT PINS



STRAIGHT PINS

Sometimes the pins can be only slightly bent, with the condition hard to see visually, and yet still cause a loss of communication between the components. If one portion of the T-connector is faulty, it still could send a signal through its functioning side to lights down the line, and this could be why you might observe that some lights are not working properly while some are still working fine.

- 2. Check for moisture buildup within the RJ12 connections.**
In high humidity conditions, condensation entering the RJ12 connections can cause failure. One simple remedy for this is to cover the connections with electrical tape to prevent atmospheric humidity from easily entering the connections. If the RJ12 connections have already been exposed to a lot of moisture or condensation, try changing the cable as well as the RJ12 T-connector.
- 3. Check the clear plastic plug of the RJ12 cable.**
If it is damaged, it could continue to bend the pins on new T-connectors. In this case, replace the RJ12 cable.
- 4. Change positions of the lighting systems.**
To help isolate the problem, try swapping out lighting systems that *do not* work with units that *are* working properly in the grow space. If the faulty ballast works in a different position, the connectors could be the problem.

OTHER THINGS TO CHECK

Are you using an Autopilot PX1 or some other brand of controller?

The Autopilot PX1 uses a digital signal and Phantom ballasts are designed to be compatible with the PX1. We cannot guarantee that Phantom ballasts will be compatible with any other lighting controllers.

Is the lamp locked into place correctly?

Shut down the system and unplug the ballast power cord from its power receptacle. After the lamp has had 10+ minutes to cool, check the lamp installation to be certain that it is seated correctly. For DE lamps, please reference Page 3 of the Phantom DE instructions for photos of proper lamp installation in order to double-check that your DE lamp is correctly seated and installed.

Are you using timers?

The PX1 has a built in timer and should not be connected to any external timers.

What is the model number of your ballast(s) and the voltage you are using?

Make sure the ballast type is compatible with the voltage of the power system in your grow room, grow facility, or greenhouse.

What is the error code the ballast(s) is flashing as indicated in the instructions?

The LED indicator lights on Phantom DE ballasts give specific information about ballast status through the flashing patterns. If your ballast's LED indicator lights are flashing, consult your ballast instructions to determine which of the signals it is transmitting. It might be signaling a minor problem that can be easily solved without returning the ballast.

Is the lamp in the correct orientation?

For proper operation, double-ended (DE) lamps must be oriented so that the high voltage wire end (the end near the getter, which is the small square tab attached to the wire loop) is installed in the socket end closest to the ballast. Please see Page 3 of the Phantom DE instructions for a diagram of DE lamp anatomy and photos of proper lamp installation in order to double-check that your DE lamp is installed correctly.

Have you double-checked the RJ12 connections to confirm that the signal flow is correct?

Just one RJ12 plug patched the wrong way could cause one or more light systems to be unresponsive to commands from the PX1. Please study the diagram below and your own connections to be sure that the RJ12 cables are patched correctly.

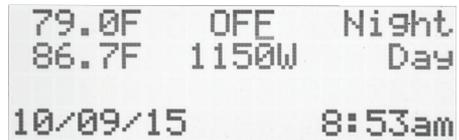
Can you email us a photo or video?

Often a photo or a few seconds of video can be the fastest way to show us the nature of an issue. If possible, use your phone to send us a photo or a video that illustrates the problem.

Are you mistaking the ballast wattage display of the Zone page(s) for the dimming setting on the Home screen?

An error that we have seen some users make is thinking that the dimming (wattage output) control is located on the Zone page; however, it is actually set from the Home page (the one with the date, time, and temperatures displayed).

Correct screen for setting the dimming:



Are you saving your settings by pressing the Enter button every time you change a setting?

Always remember to press the blue Enter button after changing settings on the date/time page, Zone A page, and Zone B page. When you save settings on these pages, a display reading "Settings Saved" appears for 750 ms (three quarters of a second) confirming that the data has been saved.

