INTELLIVIBE™ POOL LIGHTING SYSTEM: FREQUENTLY ASKED QUESTIONS (FAQ) - DEALERS

Engineering & Design:

 Do the IntelliVibe lights produce white light with white LEDs or by mixing RGB (red, green, blue) LEDs?

The IntelliVibe luminaires contain RGBW (red, green, blue, and white) LEDs (like MicroBrite® LED Lights). When the user selects a shade of white on the white slider, the light emitted is mostly driven by the white LED with the red, green, and blue channels energized just enough to achieve the desired color-temperature from cool to warm white.

- 2. Can the IntelliVibe luminaires operate without the IntelliVibe Controller?

 The IntelliVibe Nano, Micro, and Mezzo Pool Lights will not function without being wired to the IntelliVibe Controller. They must be connected to one of the four physical outputs of the IntelliVibe Controller, either directly or via a junction box. An IntelliVibe luminaire wired directly to a transformer will not operate.
- 3. Can the IntelliVibe Controller operate any legacy Pentair lights or competitor lights?
- 4. Are there plans to make the IntelliBrite® Architectural Series Pool & Spa Lights compatible with the IntelliVibe Controller?

The IntelliVibe lights will launch with three luminaires: Nano, Micro, and Mezzo. An IntelliVibe-compatible large niche light is a potential future product expansion.

- 5. What size/gauge wire is required to run from transformer to controller? Always read and follow all warnings and safety instructions in the owner's manual. Failure to do so could create an electrical hazard which could result in death or serious injury. A 12 AWG wire is required from the transformer to the controller for distances greater than 15 feet and up to 25 feet.
- 6. What size/gauge wire is required to run from the controller to the junction boxes?

 Always read and follow all warnings and safety instructions in the owner's manual. Failure to do so could create an electrical hazard which could result in death or serious injury. A 12 AWG wire is required to run from the controller to the junction boxes.
- 7. Can there be multiple controllers for any given IntelliCenter® Pool Control System to amplify the max 200W limitation?

Yes! Multiple controllers and multiple IntelliVibe systems can be installed and used concurrently. They will show up as different tiles on the Pentair Pool app and are controlled separately. Multi-controller pairing that would allow up to 20 zones controlled on a single IntelliVibe system is a potential future product enhancement.

8. Do the niches for the IntelliVibe Nano Light come with the light or are they sold separately?

There are three different niches for the Nano light to accommodate gunite, fiberglass, and vinyl liner pool construction. Therefore, Nano niches are purchased separately from the Nano lights. Check out the full specifications <u>online</u>.

- **9.** Are there any conduit specifications for the Nano light in underwater applications? The recommended length is a 1-inch rigid electrical rated conduit.
- 10. Has Pentair tested the performance of the IntelliVibe Controller when powered with non-Pentair transformers?

It is recommended that the IntelliVibe Controller be powered with a Pentair transformer. Always follow manufacturer warnings and instructions. The IntelliVibe Controller was tested with competitor transformers with no difference in performance noted. It is also worth noting that the IntelliVibe Controller sends commands to the lights 30 times per second, so even if a message is missed, the lights will get another command 30ms later. This helps all the lights stay synchronized. This method is different than Pentair's legacy lights. When colors are changed on IntelliBrite, GloBrite, and MicroBrite lights, the "command" (a series of off/on cycles) is sent only once. If the light misses this one-time command, it could be out of sync with other lights.

11. The green wire on IntelliVibe lights is for communication. What happens if this wire is accidently connected to ground?

Always read and follow all warnings and safety instructions in the owner's manual. Failure to do so could create an electrical hazard which could result in death or serious injury. If the black and white wires of an IntelliVibe Micro/Mezzo/Nano Light are connected directly to a 12V transformer and the green wire is connected to ground, the light will initiate a start-up sequence (a short series of flashing lights) and then turn off and remain off. The green communication wire is what tells the light what to do. If the communication wire is connected to ground, the light will not receive commands to do anything, and it will turn off after completing the start-up sequence. The light will not be damaged, but it won't operate.

- 12. How are the IntelliVibe lights cooled?
 - All three fixtures dissipate heat through the front lens.
- 13. Will a builder be able to wire the black and white wires of an IntelliVibe light directly to a transformer and have it behave like a legacy MicroBrite light (five colors and seven shows controlled by off/on cycles)?

Always read and follow all warnings and safety instructions in the owner's manual. Failure to do so could create an electrical hazard which could result in death or serious injury. The IntelliVibe luminaires cannot operate without the IntelliVibe Controller. The communication wire must be connected to "tell the light what to do."

14. Should the IntelliVibe system be powered by an IntelliCenter relay?

Always read and follow all warnings and safety instructions in the owner's manual. Failure to do so could create an electrical hazard which could result in death or serious injury. It is not recommended that the IntelliVibe transformer be powered by an IntelliCenter relay. Instead, it is recommended that the IntelliVibe transformer be wired directly to 120V power so the IntelliVibe Controller is always energized and lights can be turned on instantly.

15. Are there any ambient temperature restrictions for using IntelliVibe Nano luminaires outside of water?

IntelliVibe Nano lights have an overtemperature protection circuit that automatically reduces power in 25% increments if the PCBA exceeds specific temperature thresholds. It is possible, in extreme conditions, that the Nano will reach the temperature setpoint that will trigger automatic power reduction.

Features:

16. How many zones can be independently controlled?

The IntelliVibe Controller can be wired to control up to **four** independent zones. There are four physical outputs on the controller. Each output can be assigned to a zone when configuring the IntelliVibe lights. Multiple outputs can be assigned to a single zone. Lights wired to a single output cannot be assigned to different zones.

17. Can the zones be named? Are they editable?

The zones can be renamed — up to 20 characters — to whatever the user wants.

18. Can a user make a custom color show?

There are 12 dazzling color shows included with the IntelliVibe System (the five most popular legacy shows and seven new shows). Users cannot create custom color shows at this time but is a potential future enhanced capability.

19. Do the color shows sync to start at the same time across zones?

Color shows are synchronized in any zones running the same color show. For example, a user activates Stormy Night in all zones, then sets zones 2 and 3 to single color (zones 1 and 4 still running Stormy Night). If the user then switches zones 2 and 3 back to Stormy Night, all four zones will be synchronized. Note: when adding zones to an already-running color show, the color show starts from the beginning.

20. Do all the colors match across all three light types (Micro, Nano, Mezzo)?

The IntelliVibe Nano, Micro, and Mezzo lights all use the same LEDs in RGBW clusters to optimize matching colors across light type.

21. How many different colors can IntelliVibe lights produce?

The IntelliVibe system is capable of 15 million different combinations of red, green, and blue lights, or 15 million different colors.

22. Is there a visible difference between the IntelliVibe Micro and regular MicroBrite lights?

The IntelliVibe Micro light is physically identical to the MicroBrite light except for the three-wire cable (white, green, black) instead of a two-wire cable (white, black) on the MicroBrite light. It is the third wire that provides the communication that enables the advanced features of the IntelliVibe Micro light. The labels are also different, and the IntelliVibe packaging is differentiated by its full color graphics vs. the MicroBrite light's brown boxes.

23. Will Pentair offer a mount for Nano lights to be mounted outside of the pool?

For Nano lights, Pentair will offer three different niches (for gunite, vinyl liner, and fiberglass pools). Pentair will not offer a mount for Nanos used outside of water butmay be considered for future product expansion.

24. Will Pentair offer other water features such as sheers with the IntelliVibe System?

The IntelliVibe system will launch with the three luminaires Mezzo, Micro, and Nano. The Micro light can be retrofitted into ColorVision® Bubblers. Other luminaires or water features will be evaluated for future product expansion.

25. Does the IntelliVibe Controller have an external Wi-Fi antenna?

No, the IntelliVibe Controller does not have an external antenna.

- 26. What size are the Nano lights? Can they be installed directly into a conduit?
 - The diameter of the Nano light is one inch. For proper installation, they should be installed in the Nano niches designed for each pool type.
- 27. If a pool requires more than 200 watts of lighting and requires two controllers, can two IntelliVibe systems be connected to the same Pentair Pool account? Will there then be two separate color wheels/controls for the eight different zones?

Yes, multiple IntelliVibe systems can be connected to a single Pentair Pool account. They will appear as separate tiles on the app dashboard and controlled separately. **How many SKUs are available for the Mezzo trim rings?**

There are five depths of trim rings (16mm, 21mm, 29mm, 32mm, 36mm) and five colors available (white, gray, blue, black, tan) for a total of 25 trim ring options. Check <u>out all the specifications</u> that include replacement parts, accessories, tools, and trim rings online.

User Experience:

28. Can the IntelliVibe luminaires be mixed with Pentair's legacy lights (MicroBrite, GloBrite, and IntelliBrite Lights) in the same pool?

It is highly discouraged to have a mixture of IntelliVibe and legacy lights installed on the same pool. They would have to operate independently as two separate systems. The IntelliVibe system could match the preset colors (red, green, blue) of legacy lights, but the legacy lights cannot match the millions of possible colors of the IntelliVibe system. The user experience would not be good.

- 29. Is there any way to turn on the lights if the Wi-Fi or internet goes out?
 - The controller has a single ON/OFF switch that can be used to power on the lights in their last configuration. All other functionality (changing colors, dimming, schedules, zone control, zone configuration, etc.) is done through the Pentair Pool app.
- 30. What can be controlled by an IntelliCenter system?

All control of the IntelliVibe is done through the Pentair Pool app except for local operation of the power button on the Controller for on/off control. More information on the full IntelliCenter Pool Control System can be found at www.pentair.com/intellicenter.

- 31. How does the IntelliVibe lights show up on the Pentair Pool app?

 Similar to other pool pad equipment, the IntelliVibe system has its own tile on the Pentair Pool app. It is visible in the POOLS menu on the "Pool Devices" tab on the dashboard.
- 32. If the light color changes while running a schedule or timer, does it reset the timer or affect the schedule?

No, manually changing the color does not change schedule setpoints, reset a timer, or initiate a new timer.

33. What is the warranty?

Two years parts and labor warranty with product registration. If bundled with a pump and a filter, the warranty is extended to three years (for the pump, filter, and IntelliVibe system). For terms and conditions regarding warranty coverage and additional information, check out www.pentair.com/warranty.