Industry: Power, Energy, Environment **Application:** Services, Maintenance

Streamline Connections when Auditing the Energy Profile of Multiple Loads

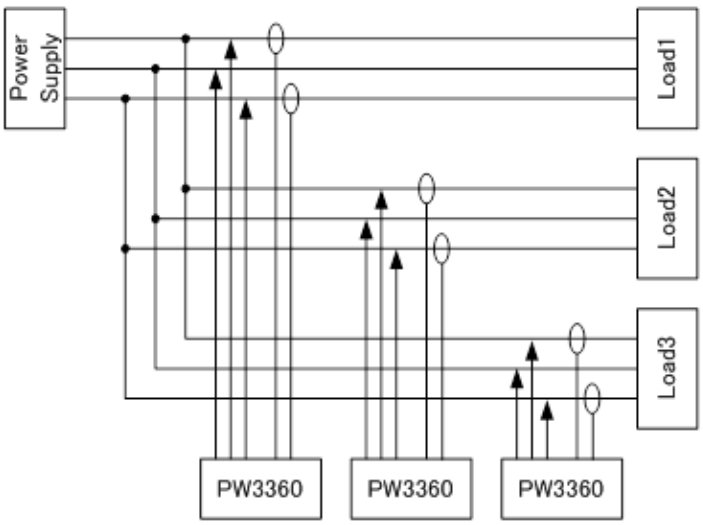
Innovative L1021 Patch Cord Simplifies Connections for the PW3360 Clamp On Power Logger

Energy efficiency is indispensable for lowering energy costs and contributing to emissions reductions. Over the years, we have embraced the common practice of turning off unused lighting and turning our attention towards more energy efficient home appliances. To further pursue energy efficiency, however, one of the key challenges is to properly measure and continue improving energy efficiency savings through energy studies and identifying your energy profile. A comprehensive study includes analyzing which loads are drawing the most power, and using the measurement data, assessing the situation in order to minimize or remove inefficient or unnecessary use of electricity.

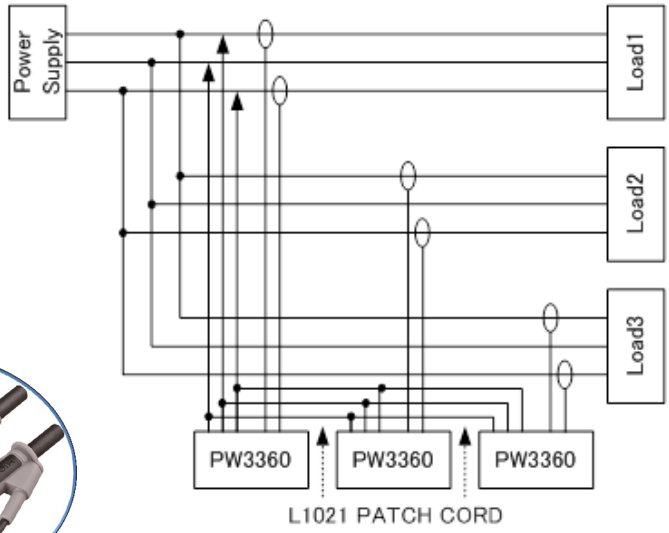
In a building, plant or office, typically more than one load is connected to a single source of power, and to effectively measure the weight each load has on the power supply, it is necessary to measure all loads from the time they are turned on and throughout their operation at the same time so that the data can serve as a basis for changes that need to be made to improve energy efficiency. Measurements can take anywhere from 1 day to 1 week, depending on the operating profile, and changes to how they operate after the energy audit may include rescheduling of loads for better overall energy performance or replacing old, less energy efficiency equipment with more advanced technologies.

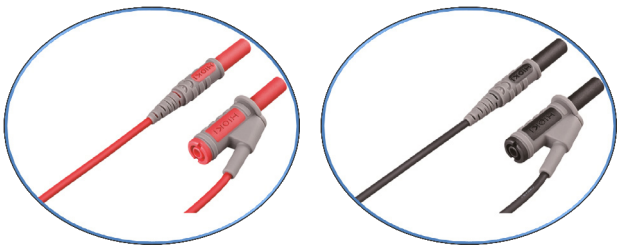
The PW3360 Clamp On Power Logger with 3P4W and maximum 780V measurement capabilities represents the ideal energy logger to facilitate such audits and analyses. A QUICK SET function guides you in making the right connections, and plug-and-play Hioki clamp sensors contribute to creating a safe and turnkey measurement system that can be used by the most novice electricians. A unique option is the L1021 Patch Cord, which lets you consolidate the three sets of voltage leads needed to connect to the 3 loads under measure into just one set on the power supply side in order to streamline measurement and avoid complicated and messy wiring.

Typically, measuring 3 loads at the same time requires you to wire the voltage leads and clamp sensors individually to each load in the following manner:



By simply adding the L1021 Patch Cord, you will only need to connect one set of voltage leads to the cables under measure with one of the energy loggers, and bring the other two sets of voltage cords to the logger side while connecting them to the first set of leads using the patch cords as shown on the right.





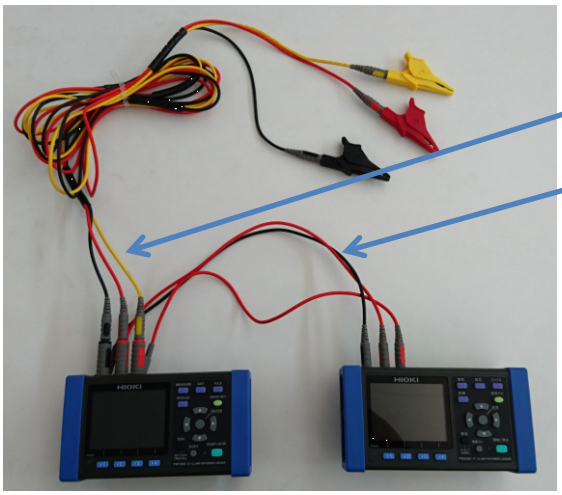
Red or black patch cords

As you can see, this significantly reduces complicated wiring from the logger to the load, which further adds to the convenience and usability of the PW3360 Clamp On Power Logger.

How to connect the L1021 Patch Cord to Measure a Load

1.Short the patch cords with the voltage input terminals of two energy loggers as shown in the figure below
2.Connect the voltage leads to the patch cords
3.Attach the alligator clips of the voltage leads to the cables under measurement
4.Check the voltage value and verify that the connections are secure

Wiring	How many patch cords do I need?
1P2W	2
1P3W or 3P3W	3
3P4W	4



Voltage Lead (L9438 or L1000) Connect to the L1021 Patch Cords

L1021 Patch Cords

Measuring energy efficiency savings before and after measures are installed and assessing persistence of those savings over time will give you a better understanding of the most effective drivers of savings and resource management. The PW3360 Clamp On Power Logger and innovative options such as the L1021 Patch Cord make setup, measurement, and data collection even easier for you to attain the next level of energy efficiency.

Products Used

CLAMP ON POWER LOGGER PW3360

PATCH CORD L1021

CLAMP SENSORS AND VOLTAGE LEADS