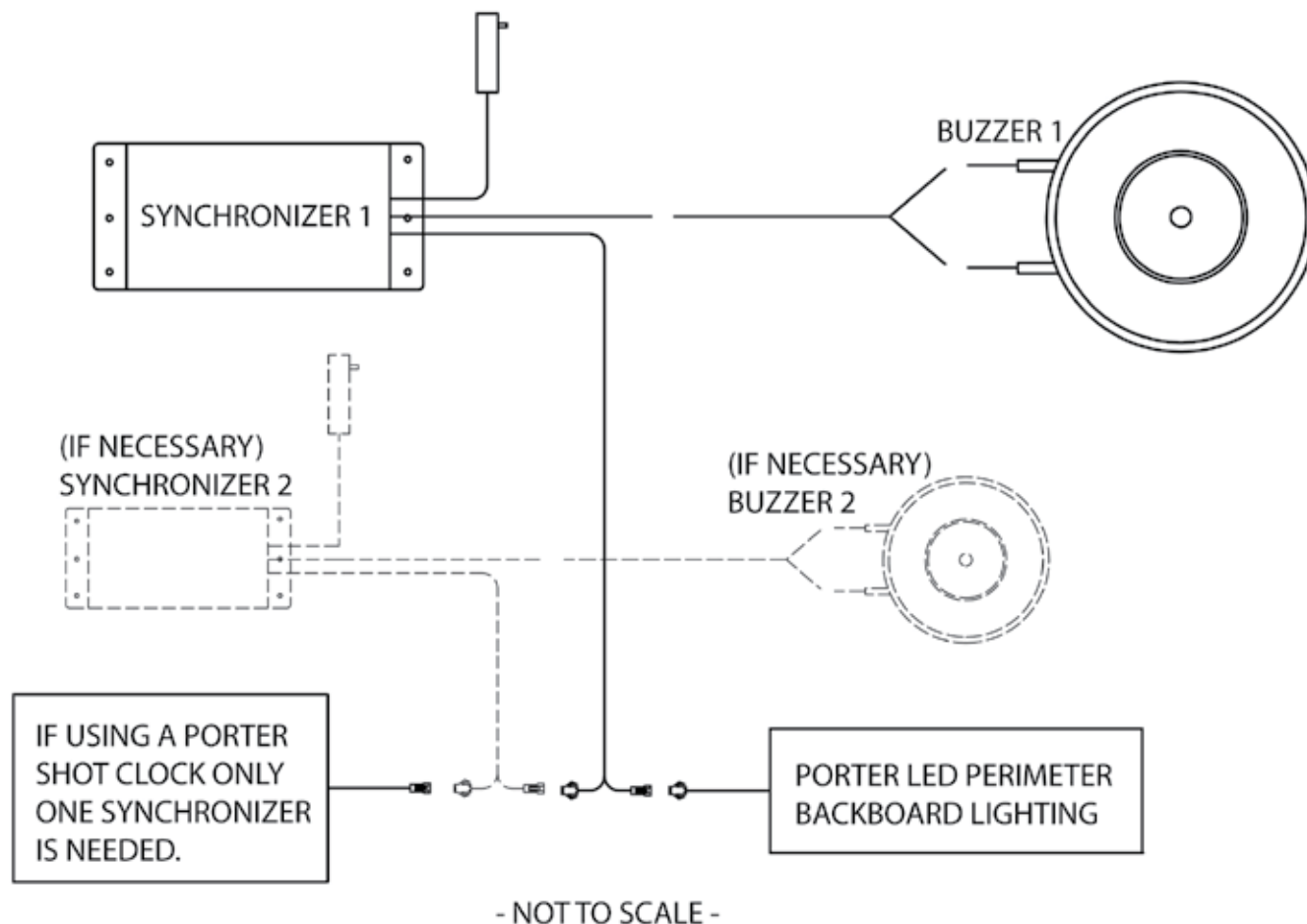
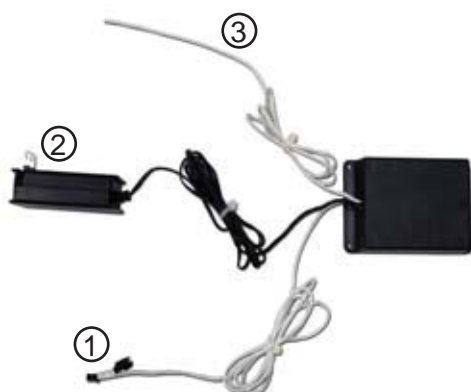


Wiring of all electrical components shall be completed by a trained and licensed electrical contractor in accordance with local codes and manufacturer's instructions. All conduit, wiring, junction boxes and components not specified here in shall be furnished and installed by the electrical contractor.



The LED Synchronizer is designed to connect Porter Backboard LED Perimeter Lighting to an external buzzer from a scoreboard or shot clock. The LED Synchronizer can also be connected directly to the output from a Porter Shot Clock or daisy chained to other LED Synchronizers.



The LED Synchronizer consists of a housing with 3 wire connections:

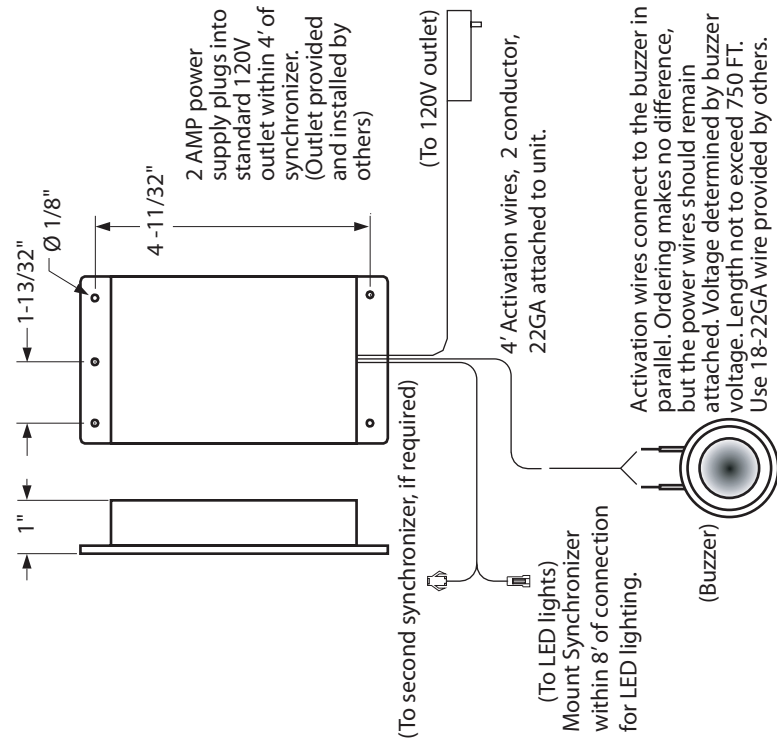
- 1) LED Perimeter Lighting Plugs - Connects to the LED lights and if necessary, daisy chains to additional LED Synchronizers.
- 2) Standard 120V power plug - Plugs into standard 120V wall outlet.
- 3) A two-conductor coil wire - Connects to the leads on the buzzer and powers a relay coil (see below).

The LED Synchronizer is shipped with a 120V relay coil installed and additional coils for 6V, 12V and 24V provided. (see page 3 for more information on Determining the Coil Voltage).

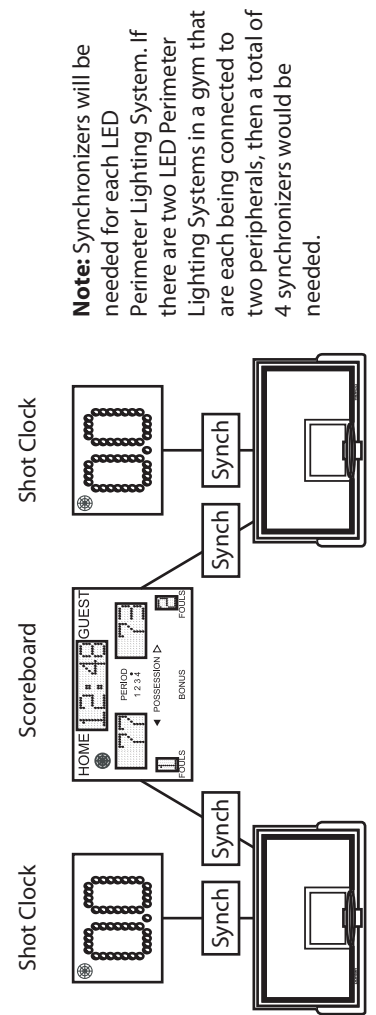
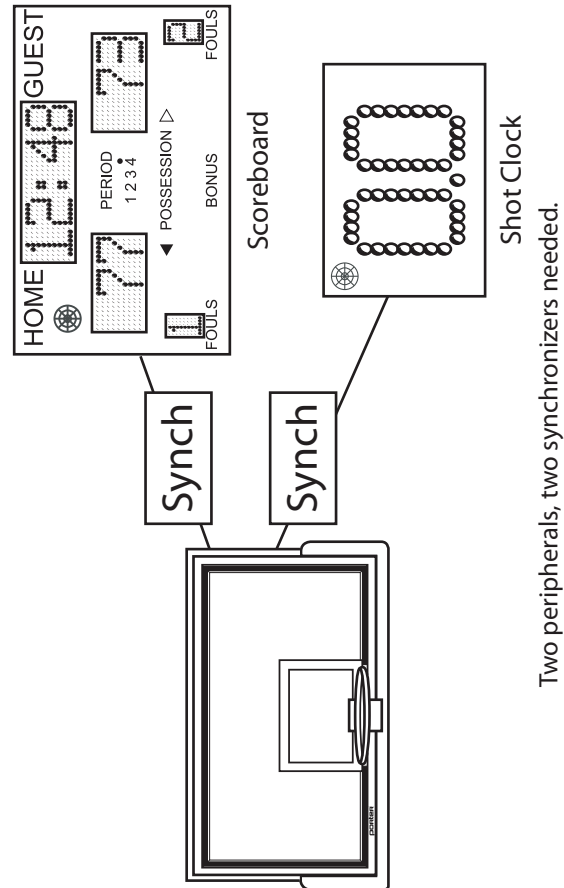
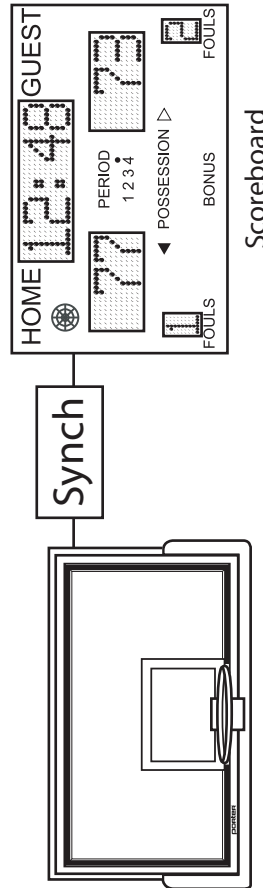
For use with 821208 LED Perimeter Lighting when connecting LEDs to shot clocks and/or scoreboards.



RECOMMENDATION:
Prior to installation the operating voltage of the two wires powering the buzzer should be measured. The 8212081 is shipped with a 120V relay installed and replacement coils of 6V, 12V, and 24V. The relay coil must match the voltage of the buzzer. If the buzzer voltage does not match one of the relay voltages, contact Porter Athletic for alternatives.



NOTE: LED Perimeter Lighting Synchronizer will illuminate the Perimeter LED backboard lights in response to the signal from a buzzer. Lights will illuminate whenever the buzzer is activated.



SPECIFICATIONS

PORTER No. 8212081 LED PERIMETER LIGHTING SYNCHRONIZER

PORTER No. 8212081 LED PERIMETER LIGHT SYSTEM SYNCHRONIZER For use with Porter No. 821208 or 002080L1 LED Light Systems

The Porter LED Perimeter Lighting Synchronizer No. 8212081 (herein referred to as The Synchronizer) shall be designed to provide a powered signal to a Porter Perimeter LED Light System No. 821208 or 002080L1 (herein referred to as an LED Perimeter Lighting System) when connected to third party peripherals. If the LED Perimeter Lighting System is only connecting to Porter peripherals then a synchronizer is not needed. The synchronizer responds to the voltage signal generated by a scoreboard or shot clock buzzer. The Synchronizer shall consist of a housing yielding three multi-conductor wires designated as: 1) The Power Supply, 2) The LED Connection Plug and 3) The Activation Wires. The housing shall internally contain a relay with a modular "pluggable" coil. This coil must match the operating voltage of the buzzer. The Synchronizer housing shall initially contain a 120 Volt coil with additional replacement coils of 6V, 12V and 24V included. Buzzer operating voltages other than those stated require a special coil; contact Porter for more information. Prior to installation, the operating voltage of buzzer must be measured to ensure the proper relay is used.

The Synchronizer shall be designed such that the LED Connection Plug will have a chord of no less than 4 feet that connects to an LED Perimeter Lighting System. The Synchronizer must be mounted in close proximity to the LED Perimeter Lighting System such that the wiring and housing will be unobtrusive. The LED Connection Plug also connects to a second Synchronizer if required for connection to multiple non-Porter peripherals.

The Synchronizer shall be designed such that the power supply will have a length of no less than four feet and plug directly into a standard 120 Volt outlet.

The Activation Wires shall consist of a 22 GA two conductor wire of no less than four feet. Additional 18-22 GA wire, up to a maximum length of 750 feet, must connect one of these wires to one of the two wires powering the buzzer with the second activation wire connecting to the second wire powering the buzzer. Each connection must be made in parallel with the original wiring remaining in tact.

Wiring of all electrical components shall be in accordance with local codes, and in accordance with manufacturer's instructions. All conduit, wiring, junction boxes, and components not specified herein shall be furnished and installed by the electrical contractor



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LED PERIMETER LIGHTING SYNCHRONIZER DETERMINING BUZZER VOLTAGE

Determining the Coil Voltage (and installing the proper relay coil)

It is necessary to determine the voltage of the buzzer to select the correct coil. In order to check the voltage of the buzzer, complete the following steps:

Tools:

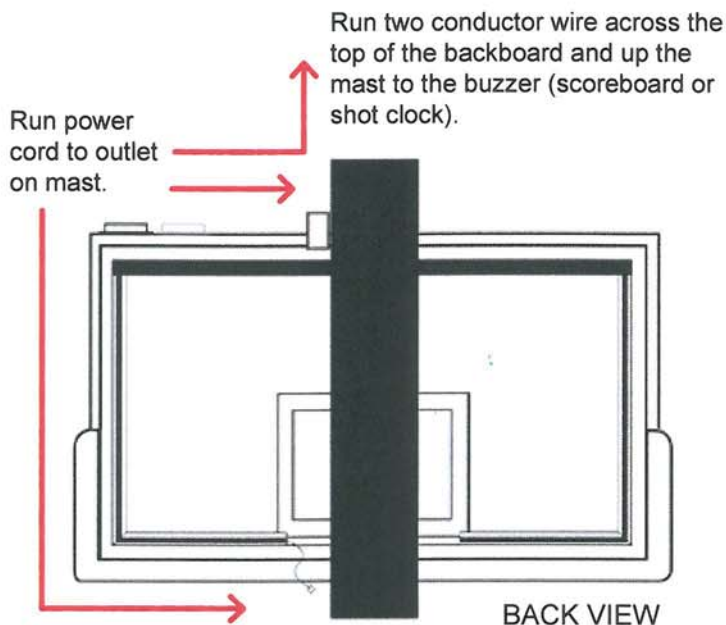
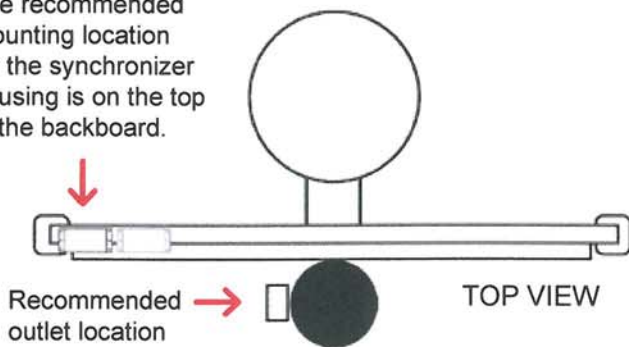
- voltmeter
- knife
- electrical tape

Steps:

- 1. ENSURE POWER IS OFF.**
2. Remove any housing around the buzzer exposing the wires.
3. Identify the two wires supplying power to activate the buzzer.
4. Find bare metal contacts on each wire, it may be necessary to unplug the wires from the horn if they are attached via connectors. Or it may be necessary to strip away some of the insulation to access the bare wire. Double check that power is off before stripping the insulation.
5. Re-establish power to the unit.
6. With the buzzer activated, check the voltage between the two wires. Normally this voltage will be one of the following: 120 Volts, 24 Volts, 12 Volts, or 6 Volts.
 - If the voltage is not listed above, please contact your Porter dealer with the voltage requirements to receive the proper relay coil. The remainder of the system can still be installed, however, the proper relay will need to be installed to activate it.
7. Once the proper relay coil has been identified, remove the 4 screws recessed in the bottom of the synchronizer housing. Once the housing is open press the coil release button latching the relay coil to the relay housing. The relay coil should pop out. Then plug in the correct coil ensuring that it snaps in place. Reattach the two pieces of the synchronizer housing.

Mounting hardware is not included.

The recommended mounting location for the synchronizer housing is on the top of the backboard.



If using a second synchronizer it should be mounted next to the first one (shown in gray on the diagram).

Mounting:

The LED Synchronizer is typically mounted on the backboard frame and should be mounted near the LED Perimeter Lighting such that the connector from the synchronizer can easily connect to the LED Lights. The housing has six .14" diameter holes for #4 screws to aid in mounting the unit. It should be mounted securely and unobtrusively. If a second synchronizer is necessary it should be mounted next to the first one and follow the same setup.

The synchronizer should not be permanently mounted until the buzzer voltage has been tested and the proper relay coil installed.

General Wiring:

The LED Synchronizer requires a 120V power supply. The suggested installation spot for the outlet is on the mast just behind the backboard. Additionally, two conductor wire (18-22 GA) must be run from the synchronizer to the buzzer that will activate the LED Lighting. Reference the next page for buzzer wiring information.

Wiring to the buzzer

With the proper relay coil installed and wire running from the two conductor coil wire to the buzzer, ensure power is off and connect the coil wires to the two wires that power the buzzer. Ensure that all bare metal is well insulated after the wires are connected. The power wires from the clock to the buzzer should remain attached.

Testing

Once all connections are made, power up the game clock and/or the 24 second clock. First test the game clock by ensuring that the LEDs turn on when the buzzer sounds on the game clock. Then, if applicable, test the 24 second clock to ensure that the LEDs turn on when the clock reaches 0 (when the buzzer sounds).

⚠ WARNING: Cancer and Reproductive Harm –
For more information go to www.p65warnings.ca.gov