

bluePRINT[®] SYNC[®]



bluePRINT SYNC[®]

⚠ WARNING

- HIGH CURRENT interconnects must be properly terminated. Poor crimp quality can cause heat build-up and fire. Follow crimp connector manufacturer instructions.
- DO NOT install this product or route any wires in the Air Bag Deployment Zone. Refer to vehicle Owner's Manual for deployment zones.
- Do NOT use system to disconnect headlights, brake lights or other safety equipment.
- Unit may become hot to touch during normal operation.
- Failure to properly install connectors, fuses or wiring may cause vehicle failure or fire.
- Installation must only be performed by trained technician. Installer must determine vehicle wiring configuration and proper integration of system.
- Use proper wire gauge. All power wires connecting to positive (+) or negative (-) battery terminal or local chassis ground (-) must be sized to supply at least 125% of max. current and properly fused at power source.
- Install protective grommets when routing wire through firewall or metal.

SoundOff
Signal 

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INTRODUCTION:

The bluePRINT SYNC[®] module synchronizes displayed flash patterns between vehicles that are commonly equipped with bluePRINT SYNC. Any time two or more vehicles are utilizing the same pattern, they will be synchronized.

Configuring the system to utilize the synchronization functions requires our bluePRINT3 app. Also, the following hardware must have the listed minimum version of firmware installed.

Central Controller: 3.08

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NOTICE:

Installers and users must comply with all applicable federal, state and local laws regarding use and installation of warning devices.

Improper use or installation may void warranty coverage.

To review our Limited Warranty Statement & Return Policy for this or any SoundOff Signal product, visit our website at www.soundoffsignal.com/tech-services/returns/.

If you have questions regarding this product, contact **Technical Services**, Monday - Friday, 8 a.m. to 5 p.m. ET at 1.800.338.7337 (press #4).

Questions or comments that do not require immediate attention may be emailed to techservices@soundoffsignal.com.

ENHANCING SAFETY THROUGH INNOVATION

GPS T-SPLITTER WARNING:

GPS signal T-Splitters should not be used with bluePRINT SYNC[®]. This goes for an aftermarket antenna, as well as the magnetic antenna included with bluePRINT SYNC. The GPS antenna must be directly connected to bluePRINT SYNC, and not shared with other devices.



Antenna - Dashboard Installation

HARDWARE INSTALLATION INSTRUCTIONS:

1. Install the included GPS antenna in a location with a clear view of the sky. Common locations for the GPS antenna are on the exterior of the vehicle (utilizing the magnetic surface), adhered to the windshield of the vehicle, or on top of the vehicle's dashboard. In any scenario, make sure to locate the GPS module away from any high heat sources. Do not secure the module at this point; leave extra coax cable to allow for GPS final placement.

NOTE: It is possible to use an aftermarket GPS or multi-band antenna with bluePRINT SYNC[®]. However, due to variables of aftermarket manufacturers, SoundOff Signal[®] does not offer GPS signal troubleshooting in these cases.

Additionally, using a GPS antenna with the incorrect frequency or gain can damage the bluePRINT SYNC module, voiding the warranty. See Page 3 for antenna specifications.

2. Remove any paneling necessary to route the antenna cable to the installation location of the bluePRINT SYNC module. While routing, ensure there are no sharp bends or kinks in the coax cable. Be sure to protect the coax cable from any sharp edges, or high heat. SoundOff Signal recommends using split loom to protect the antenna wire further. Secure the antenna wire whenever possible.
3. Connect the SMA antenna connector to the bluePRINT SYNC module.
4. On the opposite side of the bluePRINT SYNC module is an Ethernet port for interfacing with bluePRINT[®]. Connect the supplied Ethernet cable between bluePRINT SYNC and the Control Panel data bus. The connection can be made at the Central Controller or at the Control Panel itself. Use the provided Ethernet parallel splitter when necessary.

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bluePRINT SYNC® LED LIGHT INDICATORS:

Upon power up, bluePRINT SYNC will seek a GPS signal lock to gain sync data. GPS signal updates happen automatically when a signal is available. At minimum, bluePRINT SYNC will need to updates once every eight hours to keep in sync.

Normal Operation

Yellow Light Flashing every 1 second, with a long flash on the 10th second. Green is steady.

Green Flashing

- One flash per second indicates bluePRINT SYNC is currently looking for GPS lock.
- Two quick flashes indicate bluePRINT SYNC had GPS lock but has lost it. This is a normal condition that can be affected by line of sight to the sky.

Signal Troubleshooting

During bluePRINT initialization from the sleep state, bluePRINT Sync® may be unable to acquire a GPS lock when there are obstructions blocking a view of the sky. Common obstructions are parking garages and indoor repair facilities. This is normal; moving the vehicle to an area where a clear signal is available will allow the system to update and acquire GPS lock.

Error Condition

If both lights are flashing simultaneously every second, an error has occurred. Please contact SoundOff Signal® Technical Support at (800) 338-7337, option 4.

MOUNTING:

After verifying normal operation, mount the GPS antenna in the permanent location and re-install any paneling removed in the hardware installation steps. Secure the bluePRINT SYNC module.

PROGRAMMING CONSIDERATIONS:

- bluePRINT SYNC works by controlling the timing of light patterns. Two (or more) bluePRINT SYNC equipped vehicles with the same pattern active will be synchronized.
- Programmers should consider scenarios where two vehicles can be on a scene at the same time. Because bluePRINT® frequently utilizes Matrices to modify patterns, consider how park, speed, slide switch position, and other environmental variables can affect the currently displayed pattern.
- Setting all the slide switch positions to fall back to the same flash pattern when the vehicle is in park or at lower speeds is an effective way to ensure synchronization of the vehicles when at a scene.
- An example of the above: All vehicles switch to the “Road Runner” pattern once below 10mph. This is regardless of the slide switch position or if the vehicle is in park. Once above the 10mph threshold, lighting patterns switch to “Quint” for slide position 2, and “Warp 1-2-3” for slide position 3.
- bluePRINT® SYNC works best when paired with bluePRINT Link®.

REQUIRED ANTENNA SPECIFICATIONS FOR USE WITH bluePRINT SYNC®	
INTERFACE CONNECTOR	SMA
ANTENNA FREQUENCY	GPS - 1.575GHz GLONASS - 1.602GHz
LNA VOLTAGE	3.3Vdc
LNA GAIN	> 20dB @ 3.3Vdc
POWER CONSUMPTION	< 12mA
IMPEDANCE	50 Ohm

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