

General Instructions and Information

Although Speedotron Black Line power supplies vary in power and features, they all operate under the same principles. The following instructions apply to the entire Black Line series. For maximum equipment life and for safe, dependable operation of power supplies, we advise you to follow these general rules.

- Before doing anything with the power supply make sure that the **Model** and **Power** switches are in the off position and the **Reset** button (circuit breaker) is fully depressed into its socket.
- Connect light cable(s) to the **Light Unit Outlet(s)** on the power supply (with the 103B, 202VF and 206VF lights, connect the light unit cable to the light unit before connecting to power supply), selecting the appropriate outlets for the desired power level. (Refer to the diagrams on the side of the power supply.)
- To insert, align the light unit plug with the power supply outlet and apply even pressure while pushing. Make sure that all light unit cables are firmly seated.
- Make sure cables are out of pathways or are taped to the floor to prevent accidentally disconnecting cables from power supply.
- **Never** connect or disconnect a light unit while the power supply is turned on. **Never** insert or remove flash tubes while the light unit is connected to the power supply. Be sure flash tubes are fully seated into light unit sockets. (Read instructions in the Light Units section of this manual for more information on light unit assembly and operation.)
- Always make sure your **Model** and **Power** switches are off when disconnecting or connecting light units. Speedotron power supplies are equipped with arc-protected outlets. However, as with any electrical equipment, arc-over (an electrical discharge between two physically disconnected electrical terminals) is a possibility. When light cables, flash tubes or power cords are improperly seated, arc-over may occur. Also, if your light unit or power supply malfunctions, or the power cord or the internal wiring in the studio is improperly terminated or defective, there is a chance of arc-over. Severe power supply damage and operator injury may result if arc-over occurs.
- Plug sync extension into **Sync** socket and connect other end to PC cord for camera. *All sync extensions require a standard male AC twin-blade type to PC sync cord to connect to a camera or lens.* The power supply end of the sync extension cords provided is a standard male AC twin-blade type sync connector with the exception of the 405 and 805 sync extensions. These sync extensions have a 1/4" international (phone jack) plug.
- A slave tripper (Speedotron #23510) may be installed in the **Sync** socket to fire the power supply. If the slave tripper fails to trigger the power supply when another flash fires, remove the slave, rotate it 180° and reinstall it in the socket. The 805 features a built-in slave trigger for added convenience.
- Connect AC power cord into **Power Input** on power supply. Always use a three-wire ground power cord and a properly grounded wall outlet with all Speedotron power supplies. Failure to do so may cause the power supply

to intermittently misfire. Do not use a three prong-to-two prong "ground eliminator" adapter.

- Once the light units are properly assembled and installed, the power cord is installed and the sync extension is connected, turn the **Power** switch on. **Do not immediately fire the unit on the first use or when the unit has been idle for periods over 3 weeks. Allow several minutes for the power supply's capacitors to form. Once this procedure has been followed at these times, subsequent use of the power supply requires no waiting period.**
- **Ready/Push to Flash** button may be depressed to verify proper system operation.
- When Power is on, be sure **Ready/Push to Flash** indicator is illuminated before switching **Power, Combine/Isolate, or Fast/Slow*** controls. **Do not** move these switches while the unit is recycling.
- Each Black Line power supply's unique features are fully explained in the next section of this manual.

Never attempt to make repairs to your Speedotron equipment. All electronic flash systems operate on high voltage and power. It is very dangerous to open a power supply.

To summarize, set-up should go as follows:

- Make sure power supply is off (both **Model** and **Power** switches in the off position) and unplugged.
- Connect light units to power supply. Inspect all connections, flash tubes and modeling lights. Set desired ratio.
- Connect sync cable to power supply and camera
- Connect power supply to AC. Turn on power supply and wait for it to reach full charge.
- Test to see that all light units are flashing and slave triggers (if any) are functioning.

Power Ratios

Black Line equipment is capable of symmetrical (all light units receiving the same amount of light) or asymmetrical (ratioed) power distribution. Controlling distribution is as easy as flipping a switch.

Each power supply is divided into three channels with different levels of power, except for the 405 (which has two). These channels may be joined for even (symmetrical) output to all outlets or separated for unequal (asymmetrical) output to a set of outlets in one or more channels. Power distribution charts are provided in the next section of this manual and on the side of each power supply.

When we refer to ratioing, we are describing the levels of power output from the power supply to the light units only. These power output ratios do not mean that the light falling on the subject will be at that same ratio. This will only occur if the light units are the same and have the same flash tube, reflector, cable length, light control accessories, are at the same distance to the subject, and there is no overlap of lighting on the subject, etc. Power output ratios are only offered as a guide to help you determine your lighting arrangements.

*Not available on 405/805 power supplies.