

Express Installation and Setup

Caution: Laser radiation is emitted from the module, so the user must not stare into the FC adapters.

For rack-mount Express modules, the chassis must first be installed in a rack. The chassis fits any standard round or square hole rack and utilizes two units of space. The chassis may be face-mounted or mid-mounted using the additional brackets provided. Modules come preinstalled in the chassis, so only the chassis must be installed.

To add a module(s) to an existing chassis, first remove the chassis from the rack. Then remove the face plate from the chassis. The new module can now be slid into the chassis and screwed in place, at the top and bottom. Next, power must be connected in the back of the new module by using the DC power plugs provided at the rear of the chassis. There is capacity for up to seven modules in the chassis.

Stand alone Express modules may be installed where needed using the base plate available from LightLOC. Express modules are available for indoor or outdoor use and may be installed outside in weatherproof enclosures.

Before using a LightLoc Express module, fiber going to the monitored system must be run back to the location where the Express module is located and be terminated with FC connectors (one at each end of the loop). These connectors are then connected to the FC adapters (labeled IN and OUT) on the Express module. The FC adapters are typically on the front of the module, as shown below, but some versions have FC adapters on the rear of the module.



Figure 1: LightLOC Express FC Adapters

At the rear of the module, check that the terminal block is attached and make any required connections. The rear terminal block contains the relay outputs and remote control inputs. See the User Manual for details on these connections. Figure 2 below shows the front panel of the Express module. The LED indicators are visible at the top of the box, and the FC adapters are seen just below the LEDs. Figure 2: Front View of the LightLoc Express Module



Figure 2: LightLOC Express Module Front Panel

Once all fibers are secure, the Express module(s) are powered up. Verify that the green POWER light for each module is on. Also, verify that the BREAK MOMENTARY middle LED light (second red LED from the left of the module) is not lit. If lit, there is a break in the fiber or severe attenuation, requiring immediate attention. (Note: Failure to connect the rear terminal block or terminate it correctly may result in an alarm if the remote capabilities are enabled.)

Taking A Baseline: Below the FC adapters, four control key switches are visible on the front of the device. The lower left-hand switch, labeled BASELINE, is used to reset the system baseline by securing the state of the system to be monitored. When the module is powered up, the BASELINE switch must be reset to monitor the configured system. This is performed by simply switching it on and then turning it back to its original position. If the fiber is broken or severely attenuated, the baseline may not be taken. After taking the baseline, the BREACH MOMENTARY red LED light on the front of the Express module should turn off. Once an accurate baseline is taken the device is monitoring the configured system.

Clearing Latched Alarms: After taking a baseline, it is necessary to acknowledge and clear alarms. (Powering up the device or taking a baseline can generate latched alarms.) This is done by switching the ACKNOWLEDGE key switch (the lower right-hand switch on the front of the module) on and then turning it back to its original position. All red LEDs should be off and only the green power LED should be lit.

Whenever the Express module is powered down and restarted, a new baseline should be taken to ensure the device has the most accurate value for the current system state. Additionally, the latched alarms should be cleared by acknowledging them.