



## L-Tronics Little L-Per

The L-Tronics Little L-Per, more commonly known as L-Per, is a line of portable, compact folding DF receivers made by the L-Tronics company. The receivers in the Little L-Per line are the LH-16 and the newer LL-16 models.

### LH-16

The LH-16 is the first in the series of the Little L-Per line, having been replaced by the LL-16 model. It uses a two-element yagi antenna, with a crystal oscillator-controlled double-conversion receiver, and may be attached to antennas for external use on aircraft or vehicles.

On the face of the device there is

- A left-right dial for signal strength (Receive Mode) or signal direction (DF Mode)
- An audio speaker for auditory confirmation of the distress beacon's distinct signal
- A mode selector switch to turn the LH-16 on DF or Receive Mode, or off
- A volume knob for the audio
- A sensitivity knob
- A radio frequency select knob
- A dial light switch



Since the device relies on internal crystal oscillators for receiving frequencies, the device cannot be configured from its factory preset frequencies. These frequencies typically include the emergency frequency of 121.5 MHz, the training frequency of 121.775 MHz, and the military and civilian emergency frequency of 243 MHz. Some older L-Pers may also include 121.6 MHz, an older frequency formerly used for training.

The LH-16 has the ability to switch between two modes: DF and Receive. In DF mode, the direction of the needle on the dial indicates the direction the operator needs to turn in order to face the direction of the signal. For example, if the operator needs to turn to the right to face the signal, the needle will point to the right, and if the operator is facing the signal, the needle will be centered. Care needs to be taken in this mode to ensure that one is not facing the opposite direction of the signal, as in this case the needle will also be centered. In Receive mode, the needle indicates signal strength 90 degrees to the left of the device. Either or both modes may be used in operating this device, depending upon operator's preference.

## **LL-16**

The LL-16 is the newest model in the Little L-Per line, at a cost of \$750. It features numerous improvements over the LH-16, including built-in handle and stainless steel antennas. The LL-16 incorporates a transreflective liquid crystal display which improves readability under most ambient light conditions. The LL-16 comes with the factory preset frequencies of 121.5, 121.775, 243 and 156.8 MHz (the Marine Calling frequency); however, one advantage the LL-16 holds over its predecessor is the ability to change to other frequencies by the use of a keypad. In this manner, the device is capable of receiving frequencies from a range of 108 to 174 MHz and from 215 to 270 MHz. In addition, instead of two separate modes for signal strength and signal direction, both are displayed simultaneously. The plastic casing floats and is waterproof for up to ten feet, and is designed for up to 15,000 feet altitude. Instead of the two 9V batteries used in the LH-16, the LL-16 employs six of the more commonly available 1.5V alkaline, NiMh, NiCd, or lithium-ion AA batteries.

Operation of the LL-16 is similar to that of the LH-16, and its design ensures that operators familiar with the LH-16 may transfer to the newer unit without additional training or significant familiarization. However, instead of separate Receive and DF modes as on the LH-16, the LL-16 displays both signal strength to the unit's left and signal direction simultaneously. This feature makes the device easier to use. The same external antennas that are used on the LH-16 may also be employed on the LL-16, allowing for use in aircraft and vehicles.