

POOL LAB[®]

PL SERIES HYBRID SYSTEMS



Designed for use in high demand commercial and semi-commercial pool or spa applications.
NOTE: Pool Lab Hybrid systems are suitable for single bodies of water only*.

** Due to the vastly different and highly dynamic demand requirements in commercial pools vs. commercial spas we recommend they should always be treated as two completely separate bodies of water with separate filtration systems, and separate Pool Lab systems.*

Download the complete instruction manual at <http://www.poolab.com.au>

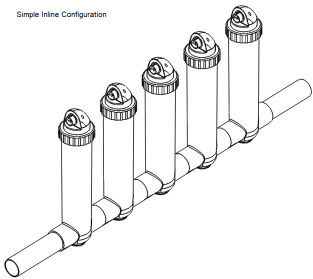
PL Series Hybrid Systems consist of:

- 1 x Pool Lab ASP, auto sampling photometer for automated chlorine output and pH control
- 1 x PL-COMM, 45g/hour salt chlorinator and master controller with the option of connecting up to 4 x PL-LT, 45g/hour salt chlorinator slave units.
- 1 x dual port chemical injection housing. This should be installed AFTER the chlorinator cells. (ie. between the chlorinator cells and the pool return)

PL-LT units must be connected to the PL-COMM master controller with the data cable(s) provided. PL-LT units have dual data ports allowing units to be daisy chained together.

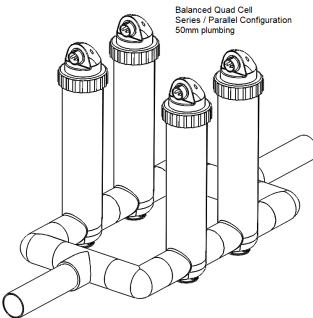
For multiple cell installations care must be taken to ensure all cells have sufficient flow, especially where all cells are installed on a single filtration system. The minimum recommended flow is 100 LPM through each cell. See below for plumbing examples:

Simple In-line Configuration



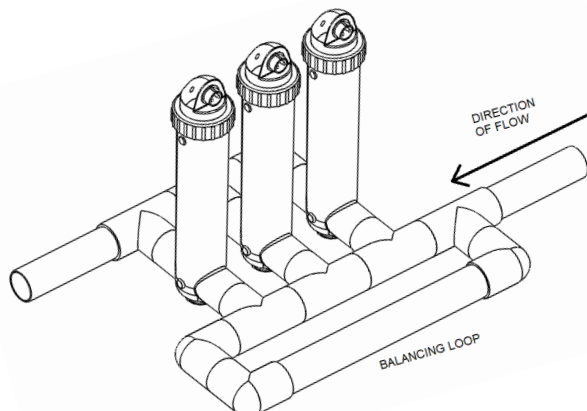
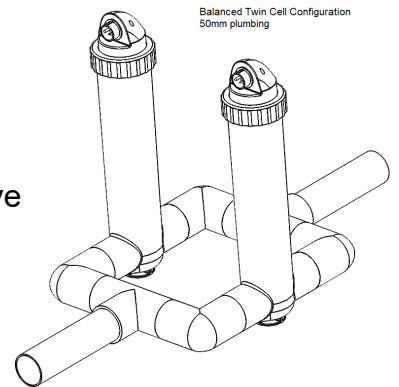
Series In-line cells: The simplest method is to plumb the cells in series, although this is the most restrictive method in terms of flow. This method is generally suitable for smaller systems with 40-50mm plumbing and a pump < 2.5HP.

Balanced Quad Cell Series / Parallel Configuration 50mm plumbing



Balanced parallel configurations: For higher flow rates the cells can be split into two banks. Care must be taken to ensure both banks of cells receive similar flow. The examples shown achieve this with a symmetrical layout. This method is suitable for mid-size systems with 50-65mm plumbing and pumps 2.5HP or larger.

Balanced Twin Cell Configuration 50mm plumbing



High Flow parallel configurations: This configuration is the least restrictive in terms of flow, however it does require a larger pump. This layout is recommended for systems with pumps over 3HP and where 65mm plumbing is used. To ensure sufficient flow through all cells, as a general guide we recommend the pump be at least 1HP for each cell in parallel. The addition of a balancing loop on the inlet side of the cells significantly improves cell flow balance

(eg. 5 cells in parallel as shown would require a 5HP pump)

POOL LAB[®]

PL SERIES HYBRID SYSTEMS

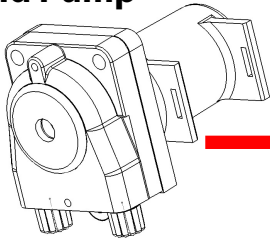


PL-LT and PL-COMM Models
IDEAL SALINITY: 3000 ppm @ 25°C

Data Cables and Accessories Wiring

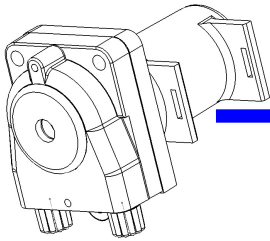
ACID PUMP LIQUID CHLORINE PUMP ASP EXP / LT

Acid Pump



PL-COMM
 All models

Liquid Chlorine Pump



BUS CONFIG
 A B

COMM (< LT) EXP (LT >)

PL-LT #1
 Hybrid 90 and above



BUS CONFIG
 A B

COMM (< LT) EXP (LT >)

PL-LT #2
 Hybrid 135 and above



BUS CONFIG
 A B

COMM (< LT) EXP (LT >)

PL-LT #3
 Hybrid 180 and above



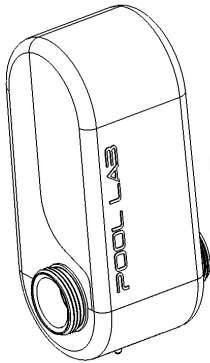
BUS CONFIG
 A B

COMM (< LT) EXP (LT >)

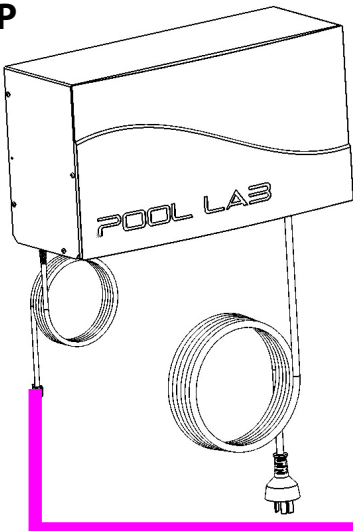
PL-LT #4
 Hybrid 225



ASP



EXP



Note: Bus Configuration jumpers are used to identify each PL-LT connected to the system

Pool Lab EXP connects to the EXP port of the last PL-LT (or PL-COMM for Hybrid 45 models)