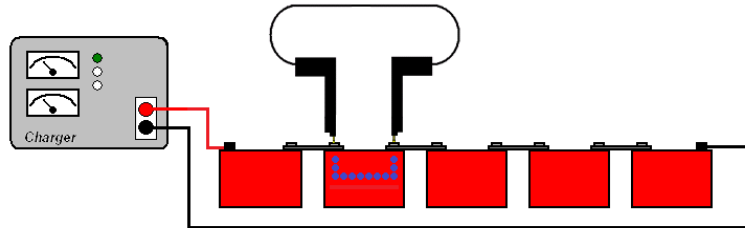


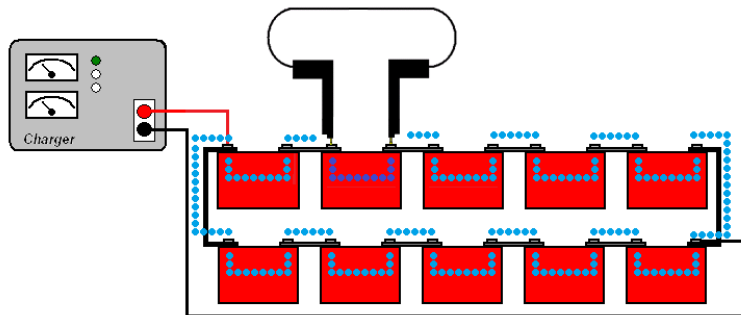
# Parallel Battery Strings

**Performing ohmic testing on parallel strings:** Parallel strings present a challenge when performing ohmic testing. This is because a parallel battery string has multiple paths for the test current to flow.

In a series string the injected test current only has one path, through the battery under test. Since all the test current goes through the battery under test a proper repeatable measurement is made.



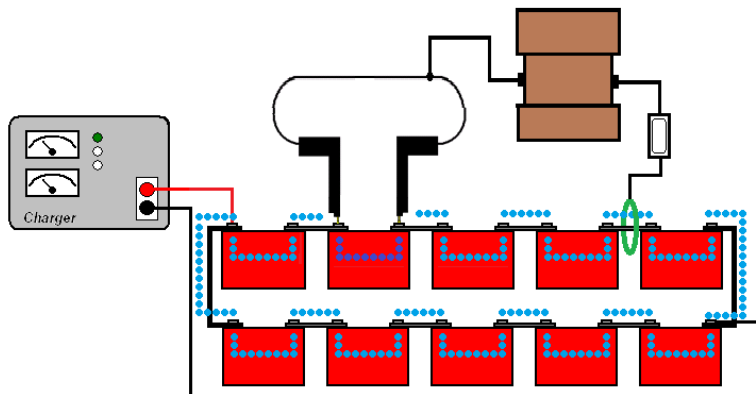
A parallel string has multiple paths for the test current. This means that some of the current the BITE3 is measuring is escaping through the parallel path.



If a battery begins to fail in the string parallel to the string under test it will draw a different amount of current. This will change the amount of current the BITE3 is measuring, hence changing the measurement in the battery under test. This will give false measurements throughout the string, making it difficult if not impossible to locate the problem cell. Traditionally the only way to test parallel strings was to sectionalize the strings, eliminating the parallel current path.

The BITE3 offers an optional current CT that can be used to measure the current through the parallel path. (The escape current)

Place the optional CT around an inter-cell connection (strap) in the parallel path and set the BITE3 to escape mode.



The BITE3 will now measure the escape current and subtract that from the actual test current. This will allow a proper measurement of the battery under test regardless of the condition of the batteries in the parallel strings.

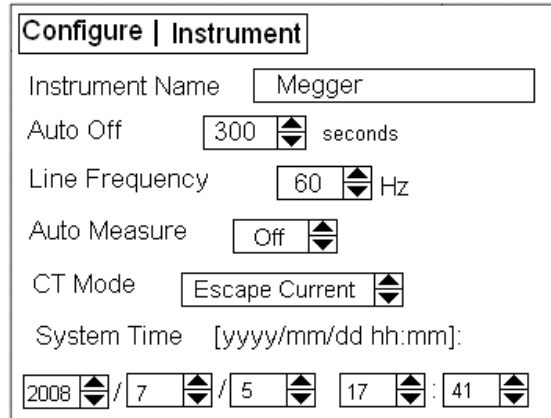
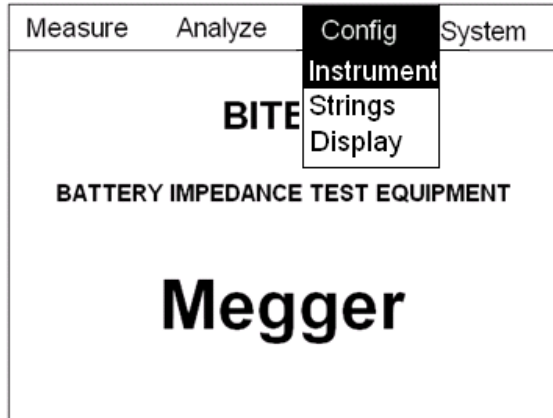
To place the BITE3 in escape mode simply connect the optional AC Current probe to the unit. Place the probe around a battery inter-cell connection (strap) in the parallel section.

On the unit press the MENU button then scroll over to CONFIG then select INSTRUMENT then press ENTER.

Set the CT Mode to ESCAPE CURRENT.

Save and Close this screen.

Now perform a standard impedance test.



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