Using Restrike Testing with the 2574R
v1.00 Xitron Technologies Inc
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Configuration

The 2574R will always collect restrike data for each tube for which the following are all true –

- The tube section is fitted. A 2571R can only test one tube, the 2572R tests two tubes, the 2573R tests three tubes and the 2574R tests four tubes.
- The tube must have started. This is detected by the presence of a measurable frequency and voltage (more than approx. 20Vrms) on the ballast output following any configured inrush period for the ballast.
- The Startup Profile must be running. Restrike data is collected only until the startup profile completes, this provides a user configurable method of controlling the total time over which restrike data is collected.
- The tubes must not be configured for RESISTOR load with AUTO loading selected. All tubes are tested, whether configured as being part of a ballast or not, as long as they are configured for automatic selection of a resistive load. Any other type of load selection can be used, or the RESISTOR load with a forced load state may be used.
- The tube voltage must have exceeded the configured strike detection voltage for a minimum of the configured minimum strike detection time.

Reading the Restrike results via the Front Panel (General Purpose mode)

All restrike results are accessible from the numeric results screen by selecting the RESTRIKE data.

Reading the Restrike Results via the IEEE

In any operating mode, the present restrike data may be read by using the standard READ= type of command and reading the desired data. The keywords for the restrike data are as follows –

RESTRIKE-MAX-V[*tube*/*type*]

This returns the highest RMS (*type* = RMS) or peak (*type* = PK) voltage across the tube while greater than the configured strike detection voltage. The tube for which data is required is requested by replacing *tube* with the letter A, B, C or D as appropriate.

RESTRIKE-AVG-HIGH-V[*tube*]

This returns the average RMS voltage across the tube while greater than the configured strike detection level for all strike attempts.

RESTRIKE-AVG-LOW-V[*tube*]

This returns the average RMS voltage across the tube while lower than the configured strike detection level between all strike attempts.

RESTRIKE-MIN-V[*tube*]

This returns the lowest RMS voltage across the tube while lower than the configured strike detection level.

RESTRIKE-AVG-STRIKING[*tube*]

This returns the average time (in seconds) while the voltage across the tube is continuously greater than the configured strike detection level for all strike attempts (i.e. total time above strike detection divided by the number of strike attempts).

RESTRIKE-AVG-WAITING[*tube*]

This returns the average time (in seconds) while the voltage across the tube is continuously lower than the configured strike detection level for all strike attempts (i.e. total time below strike detection divided by the number of strike attempts).

STRIKE-ATTEMPTS[*tube*]

This returns the number of times that the voltage across the tube transitioned from below the configured strike detection level to above it.

Restrike Test Results

All restrike data shown above, with the exception of the STRIKE-ATTEMPTS data may be included to be tested as part of a CHECK step in the test sequence. In any test results obtained via the IEEE interface these data are denoted by the following test result codes (the codes shown are for tube A, add 1 for tube B, 2 for tube C, or 3 for tube D).

STRIKE-MAX-V (peak)	460
STRIKE-MAX-V (rms)	465
RESTRIKE-AVG-HIGH-V	470
RESTRIKE-AVG-LOW-V	475
RESTRIKE-MIN-V	480
RESTRIKE-AVG-STRIKING	485
RESTRIKE-AVG-WAITING	490