

UNEXPECTED O-C or C-O SEQUENCES IN THE TIMING REPORT

The PME-500-TR's high sampling resolution (10 kHz) allows state transitions as short as 0.1 milliseconds to be detected.

Mechanical misalignment, dirt, or wear in the circuit breaker's pole insertion may cause momentary contact losses to occur, most typically during the close maneuver.

These ultra-short state transitions are detected by the PME-500-TR and included in the analysis report as O-C or C-O sequences that may interfere with the overall evaluation. When this is the case, the user should ignore the intermediate sequences and use only the final, steady-state timestamps displayed for each pole. As an alternative the DEBOUNCE parameter can be used to do this automatically.

DEBOUNCE

The DEBOUNCE parameter in the SET menu determines the minimum duration that a state transition must have at any pole before the PME-500-TR adds it to the report as an O-C or C-O sequence. Its value can be chosen among the following list:

DEBOUNCE	TIMING REPORT CONTENTS
0	any change of state longer than 0.1 ms will be listed
0.5	only O-C or C-O transitions longer than ½ millisecond will be listed
1	only O-C or C-O transitions longer than 1 millisecond will be listed
2	only O-C or C-O transitions longer than 2 milliseconds will be listed

NOTE: The state chronogram will show *all* state changes regardless the value set for DEBOUNCE, with the only restriction of the printer's resolution

The following figure illustrates an example where 1-ms C-O transitions are detected at poles #1 and #2 during a CLOSE test. These transitions could have been removed from the report by adjusting the DEBOUNCE parameter to 2 ms.:

