

Bus Command Variations

OMNIA® II and HypotULTRA®

HypotULTRA® models 7804 and 7854 are now equipped with Ground Bond test capability. This makes the new HypotULTRA® models equal, in test capability, to the 4-in-1 OMNIA® II models 8204 and 8254. Users who are now using HypotULTRA® 7804/7854 models instead of the OMNIA® II models will need to account for some bus command variations in their control software. This application note covers the main variations that will need to be made to the control software that was originally intended to work with OMNIA® II models 8204/54.

Changes to ADD2 commands from OMNIA® II to HypotULTRA®

The following table highlights the difference in the Baud rate and the ADD2 commands. The new test parameters for HypotULTRA® are highlighted. **For a complete list of bus commands and instrument specifications please refer to HypotULTRA® manual version 2.0:**

	OMNIA® II Models: 8204/8254	HypotULTRA® Models: 7804/7854
Baud Rate	9600	38400
Test Type	Command String	
ACW	ADD2 ACW,Voltage,HI-Limit T,LO-Limit T,Ramp Up,Dwell Time,Ramp Down,Arc Sense,HI-Limit R,LO-Limit R,Offset,Frequency,Arc Detect,Continuity,Scanner Setup	ADD2 ACW,Voltage,HI-Limit T,-LO-Limit T,Ramp Up,Dwell Time,Ramp Down,Arc Sense,HI-Limit R,LO-Limit R,Offset(NOT EDIT-ABLE must be 0),Frequency,Arc Detect,Continuity,Range,Scanner Setu
<i>ACW test has a new parameter Range which needs to be accounted for when adding an ACW test using the ADD2 command</i>		
DCW	ADD2 DCW,Voltage,HI-Limit,LO-Limit,Ramp Up,Dwell,Ramp Down,Charge LO,Arc Sense,Offset,Ramp-HI,Arc Detect,Continuity,Scanner Setup	ADD2 DCW,Voltage,HI-Limit,-LO-Limit,Ramp Up,Dwell Time,Ramp Down,Charge LO,Arc Sense,Offset,Ramp-HI,Arc Detect,Continuity,Range,Low Range,Scanner Setup
<i>DCW test has two new parameters, Range and Low Range that need to be accounted for when adding an DCW test using the ADD2 command.</i>		
GND	ADD2 GND,Current,Voltage,HI-Limit,LO-Limit,Dwell Time,Offset,Scanner Channel,Frequency,DualCHECK	ADD2 GND,Current,Voltage,HI-Limit,LO-Limit,HI-Limit V,LO-Limit V,Dwell Time,Offset,Offset V,Frequency,Scanner Channel
<i>GND test has a new parameters Hi-Limit V, Lo-Limit V and Offset V that need to be accounted for when adding an GND test using the ADD2 command</i>		

Changes to TD? Queries from OMNIA® II to HypotULTRA®

The following table highlights the difference in the TD? query command response between the OMNIA® II and HypotULTRA® instruments:

OMNIA® II Models: 8204/8254	HypotULTRA® Models: 7804/7854
Step_Number,GND,status,Current,Resistance,Time	Step_Number,GND,status,Current,Resistance,Voltage,Time
<i>GND test has a new meter Voltage which needs to be accounted for when getting results back from the instrument.</i>	

New Bus Commands

The following table lists out the new bus commands that have been created for the HypotULTRA® models:

Command	Description	Value
SAG	Add a default Ground Bond test	
ERG n	Edit Metering Range	n=0-1
ERG?	Query Metering Range value	0=Auto, 1=Fixed
SR n	Set System Results format	n=0-2, 0=LAST, 1=ALL, 2=P/F
SR?	Query System Results format	0=LAST, 1=ALL, 2=P/F
STS n	Set System Touch Sound	n=0-1, =OFF, 1=ON
STS?	Query System Touch Sound	0=OFF, 1=ON
SPV n	Set ProVOLT function	n=0-1, 0=OFF, 1=ON
SPV?	Query ProVOLT function	0=OFF, 1=ON
SRS n	Set location for saving test results	n=0-1, 0=Internal memory, 1=USB DISK
SRS?	Query location for saving test results	0=Internal memory, 1=USB DISK
STR n	Set Result format for internal memory	n=0-3, 0=NONE, 1=FAIL, 2=PASS, 3=ALL
STR?	Query Result format for internal memory	0=NONE, 1=FAIL, 2=PASS, 3=ALL
SRL n	Set Results limit for internal memory	n=0-100000
SRL?	Query Results limit for internal memory	n=0-100000
STL n	Set Time limit for internal memory results storage	n=0-99
STL?	Query Time limit for internal memory results storage	n=0-99

**For detailed description of all System and Test parameters please refer to HypotULTRA® user manual*