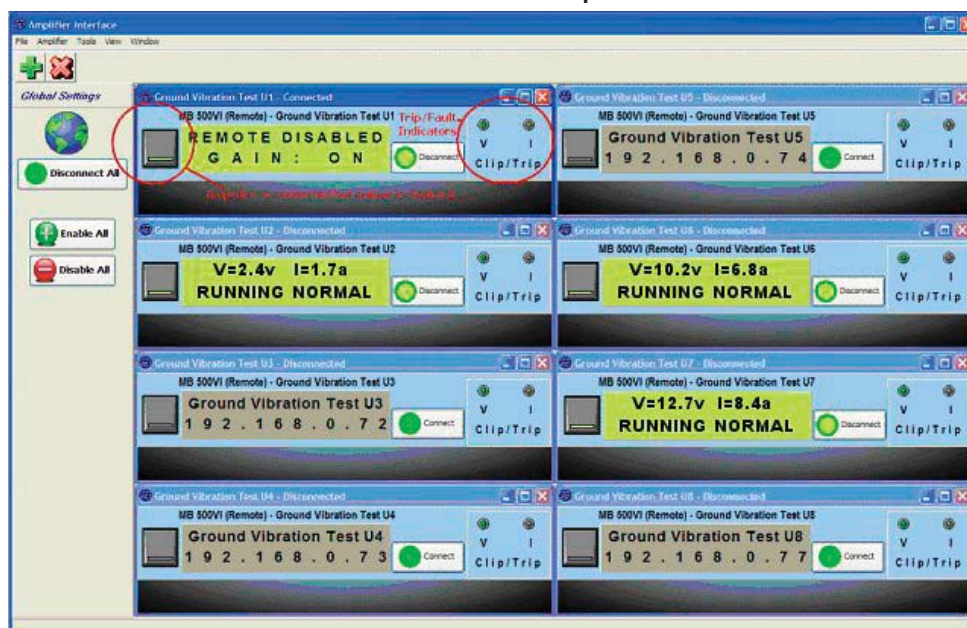


TECHNICAL SPECIFICATIONS

Remote Interface & Control of MB500VI/1000VI Power Amplifiers & Modal Exciter Cooling Packages

- Provides for set-up, monitoring and control of power amplifiers mounted close to modal exciters but at long distances from modal analysis control room (limited only by length of BNC signal cable and Ethernet control cable)
- Observe functions of, and make adjustments to, amplifier from remote distance, identical to functionality available locally at the amplifier
- Remotely monitor temperature of modal exciter moving element coil; turn ON exciter cooling when exciter coils get too hot; turn OFF amplifier when coils surpass shutdown threshold temperature
- Controls up to ten or more amplifiers and cooling packages from remote PC
- Remote interface permits one or more amplifier(s) at a time to be controlled, or all amplifiers may be ENABLED/DISABLED with one master control
- Local and Remote displays are “coordinated” – showing same information; minimizes operator uncertainty of status and wasted time running back and forth from amplifier to control room
- Loss of or failure of Ethernet connection does not stop SSPA from running – goes automatically to “Local” mode only – disconnect appears on remote GUI
- Remote Operation includes INPUT ISOLATION on AUDIO INPUT BNC’s (both DC and AC coupled inputs) which eliminates ground loops caused by widely separated amplifiers and PC that do not share common GROUNDS [NOTE: Voltage and current monitor output BNC’s should NOT be used in this mode!]
- RTD inside Exciter connects to control board, allowing amplifier to monitor cooling status of exciter and to control exciter cooling package in three (3) ranges: a) exciter temperature low – no cooling required; b) exciter temperature elevated – cooling required and ON; c) exciter temperature too high – FAULT and DISABLE amplifier. Temperature ranges are pre-defined for the connected exciter – no user adjustment required!
- Separate connector on amplifier rear panel interfaces to exciter to read internal RTD AND to provide connection to cooling package solid state relay to turn ON when commanded by amplifier microcontroller
- User provides wired Ethernet switch and cables; 23” display recommended for ease of viewing

Remote GUI Example



Local and Remote Functions

FUNCTION	LOCAL CONTROL	REMOTE CONTROL
Enable/Disable	Via local GAIN control	Via remote ENABLE GUI switch
Gain Adjust	Via local GAIN control, digitally adjusted in percent of full scale, 0 to 100	Via remote Gain Level text box (new feature)
Mode Adjust	Voltage or Current mode selected via toggle switch	Voltage or Current mode selected via GUI control
Status Indicators	LED displays selected operating mode (voltage- or current-feedback)	GUI indicates operating mode (voltage- or current-feedback)
	LED indicates clip or trip on voltage or current	GUI indicates clip or trip on voltage or current
Clip/Trip Level	Adjusted by above Mode switch AND “Up/Down” switch for changing level	Adjusted by GUI Mode select AND “Up/Down” control in GUI for changing level
Display	Used to adjust setup parameters	Functions via GUI identically to the local display
	Clip/trip voltage Clip/trip current	
	Reports <ul style="list-style-type: none"> • Status Enable/Disable • Measured Vout (rms) • Measured Iout (rms) • Cooling temperature range & status • Gain level 	
	Reports FAULTS <ul style="list-style-type: none"> • SSPA current trip • SSPA voltage trip • SSPA overtemp • Exciter cooling status 	

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