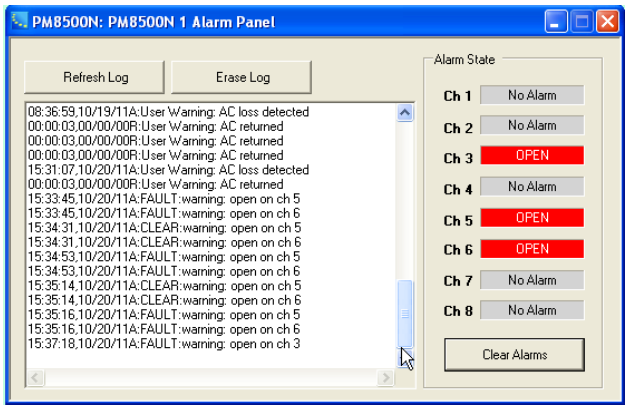
PM8500 Alarm Log and Fault information

The PM8500/N logs the last 50 alarm/faults in an Alarm Log. The log can be viewed by selecting **Menu, Utility, Alarm Log** on the PM8500 front panel. You can also retrieve the Alarm from CSD: in project view right click on the PM8500, select **View Alarm Log**.

CSD



PM8500

*Note: Even when the PM8500 displays FAULT and a description of the fault, it is still possible to select **Menu, Utility, Alarm Log** and view all the faults.*

Alarm/Fault log format

When viewed on the PM8500 alarms are indicated by a number, 1 through 50. When retrieved with CSD, a time stamp is added. There are two types of time stamps, absolute and relative. Relative time stamps start at 0 a

Relative time stamps

Relative times stamps start at 0 when the PM8500 is booted and continue until it is powered down. Relative timestamps have use an hh:mm:ss,mm/dd/yy format followed by '**R**'. For example the following alarm occurred 1 day, 17 hours, 15 minutes and 12 seconds after booting:

`17:15:12,00/01/00R:User Warning: AC loss detected`

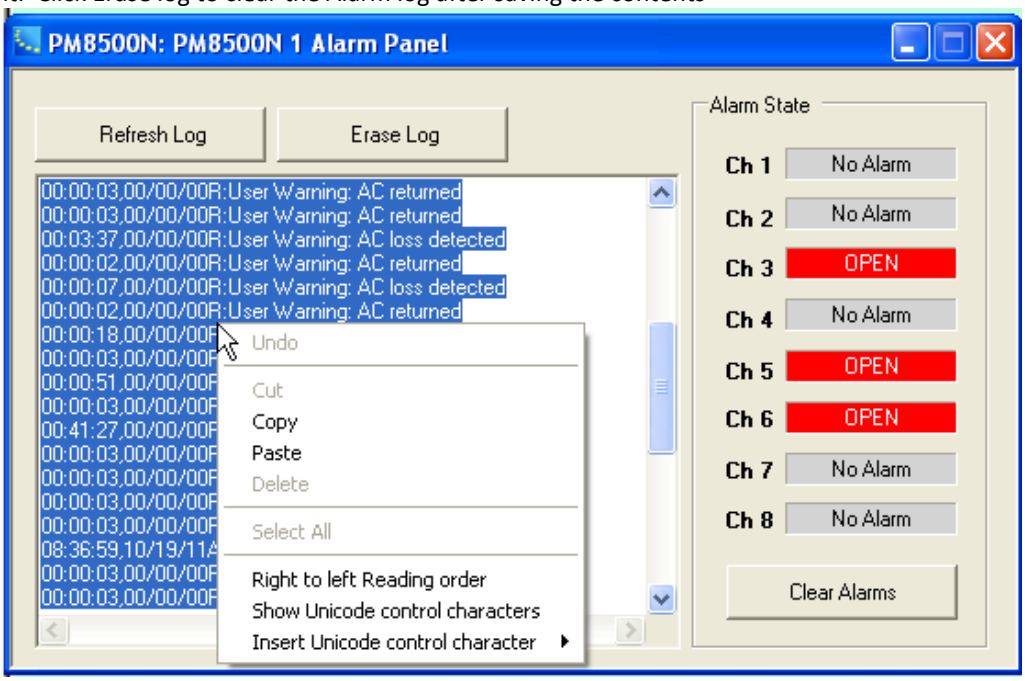
Absolute time stamps

Absolute times stamps are available after going on-line with CSD. All faults after going on-line will contain accurate time stamps until the PM8500 is powered down at which time it will revert to relative timestamps. Absolute timestamps have use the same hh:mm:ss,mm/dd/yy format but are followed by '**A**'. For example the following alarm occurred on February 25, 2011 at 4:46PM (and 1 second).

`16:46:01,02/25/11A:CLEAR:PCA9534(EHF) amp B I2C err`

Saving & Clearing Alarm Logs

It is important to view, save and clear the alarm log when servicing a PM8500. Right click in the Alarm log pane and select Select All to highlight all the alarms. Then right click again and select Copy. You can now paste the complete alarm log into a text document. Click Erase log to clear the Alarm log after saving the contents



Right click to Select and Copy the Alarm log to the clipboard

Faults and Probable Causes

Fault	Most likely cause
Both amp or PS fan fail	Power supply or both amplifier fans are disconnected
Power supply fault - ICV not OK	Power supply failure
power supply fault - DC not OK	Power supply failure
power supply fault - DC_200 not OK	Power supply failure
power supply fault - AC_line not detected	Power supply failure
Flash memory fault	Digital card failure
DSP boot failure	Digital card failure
System Halted	Software error
POWER SUPPLY TEMPERATURE ABOVE MAX ALLOWED!	Power supply failure
AMP 1A TEMPERATURE ABOVE MAX ALLOWED!	Amplifier A failure
AMP 1B TEMPERATURE ABOVE MAX ALLOWED!	Amplifier A failure
AMP 2A TEMPERATURE ABOVE MAX ALLOWED!	Amplifier B failure
AMP 2B TEMPERATURE ABOVE MAX ALLOWED!	Amplifier B failure
audio disabled: DSP I2C error on VI meas ADC ch1-4	Amplifier A failure
audio disabled: DSP I2C error on VI meas ADC ch5-8	Amplifier B failure
audio disabled: DSP I2C error on DAC ch1-2	Amplifier A failure
audio disabled: DSP I2C error on DAC ch3-4	Amplifier A failure
audio disabled: DSP I2C error on DAC ch5-6	Amplifier B failure
audio disabled: DSP I2C error on DAC ch7-8	Amplifier B failure
audio disabled: DSP I2C error on EHF for amp A	Amplifier A failure
audio disabled: DSP I2C error on EHF for amp B	Amplifier B failure

Fault	Most likely cause
no ADC input	Digital card or digital daughter card failure
no proc table loaded	Software error, restore factory defaults
pwr supply temp above max	Power supply failure
amp1_2 temp above max	Amplifier A failure
amp3_4 temp above max	Amplifier A failure
amp5_6 temp above max	Amplifier B failure
amp7_8 temp above max	Amplifier B failure
pwr supply rail below min	Power supply failure
ext digital clk out of range, using internal clk	PMESPLink or PMCobra failure
fuse saver indicates circuit breaker near limit	Power supply failure
DSP processing resources exceeded	Software error
FET temp above max	Power supply failure
ADC CS5364 on input board I2C err	Digital input card (daughter card) failure
ADC CS5364 on digital board I2C err	Digital card failure
ADC CS5368 amp A I2C err	Amplifier A failure
ADC CS5368 ampB I2C err	Amplifier B failure
DAC CS4350 ampA(1&2) I2C err	Amplifier A failure
DAC CS4350 ampA(3&4) I2C err	Amplifier A failure
DAC CS4350 ampB(5&6) I2C err	Amplifier B failure
DAC CS4350 ampB(7&8) I2C err	Amplifier B failure
PCA9534(EHF) amp A I2C err	Amplifier A failure
PCA9534(EHF) amp B I2C err	Amplifier B failure
MCP3423(temp) amp A I2C err	Amplifier A failure
MCP3423(temp) amp B I2C err	Amplifier B failure
ADS7830(PS) I2C err	Power supply failure
Per channel Faults:	
short on ch x/CLEAR:short on ch x	Short detected/cleared on channel x
too much I^2t on ch x	Amplifier failure: x = 1-4 Amp A, x= 5-8 AmpB
large parallel Vdiff on ch x	Shorting jumpers not installed properly
DC voltage detected on ch x/CLEAR:DC voltage detected on ch x	Amplifier failure: x = 1-4 Amp A, x= 5-8 AmpB
EHF detected on ch x	Amplifier failure: x = 1-4 Amp A, x= 5-8 AmpB
User warnings, self clearing	
Internal protection applied on Channel ‘y’	
Limiting applied on Channel ‘x’	Output signal on output ‘x’ would exceed max V_{OUT}
Open detected on Channel ‘x’	No load on output ‘x’
Clipping on Channel ‘y’	Input signal on input ‘y’ is too high
AC loss detected/AC returned	AC removed
Digital Audio Input loss detected	PMESPLink Optical cable unplugged