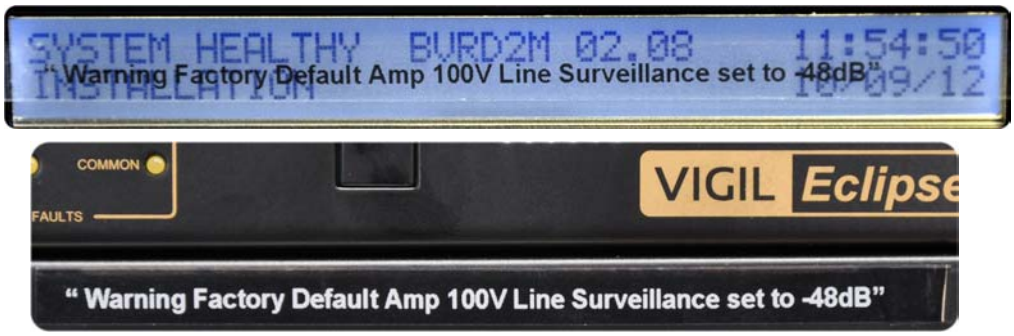
COMMISSIONING INFORMATION:

Default 100V Amplifier & Loudspeaker Line Surveillance



The 100V Amplifier & Loudspeaker Line Surveillance Levels on this system have been reduced to the Default Setting of -48dB on all outputs.
This default setting ensures surveillance is configured during commissioning with levels suitable for on site conditions.

All 100V Loudspeaker Lines should be checked with an impedance meter, and any problems rectified before connecting them to the system.

The Surveillance Level on each output must be adjusted during Commissioning; the typical setting for surveillance output is between -30dB and -28dB.
A True RMS AC Voltmeter suitable for accurately reading 20KHz or 30Hz is required to ensure the output surveillance signal is the correct level.

For Systems Using BEL1 End Of Line Surveillance

Note: The AC surveillance signal should not need to be greater than approximately 10V RMS to provide a DC return voltage of 6.8V.

If excessively high AC surveillance levels (e.g. above 15V) are required to obtain a satisfactory DC return voltage then there is either a fault on the line or the BEL1 module(s) are not set correctly.

For Systems using DC Monitoring (e.g. BVRDADC, BVRDADIM & BVRDADIS)

The AC Surveillance signal is used for Amplifier Monitoring only and should be set for approximately 10V RMS.
Refer to the relevant Installation Manual for product specific Installation and Commissioning Instructions.

Fault Finding on 100V Loudspeaker Lines and Continuous Surveillance

Baldwin Boxall do not recommend using Continuous Surveillance to find faults on 100V Line Loudspeaker Lines.
If a fault is reported (or suspected) on a 100V Loudspeaker Line the amplifier should be disconnected and a suitable Impedance Meter used to test the line.

Under normal operational circumstances the surveillance tone is only broadcast intermittently (and is a relatively low level of approx 10V RMS) to monitor both the amplifier and the 100V Line Loudspeaker system.
Faulty loudspeaker lines can cause oscillation, overloading and system instability.
This situation can be exacerbated if the monitoring is set to a continuous 20KHz tone at a high level which could also reduce the operational lifespan of the equipment.