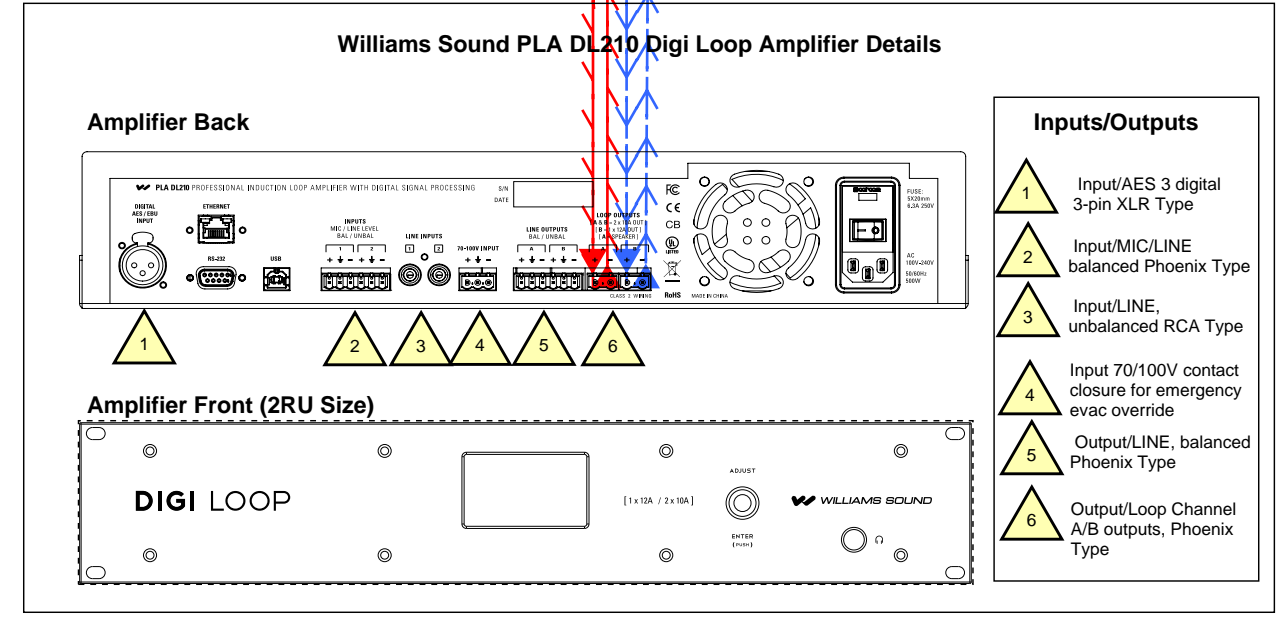
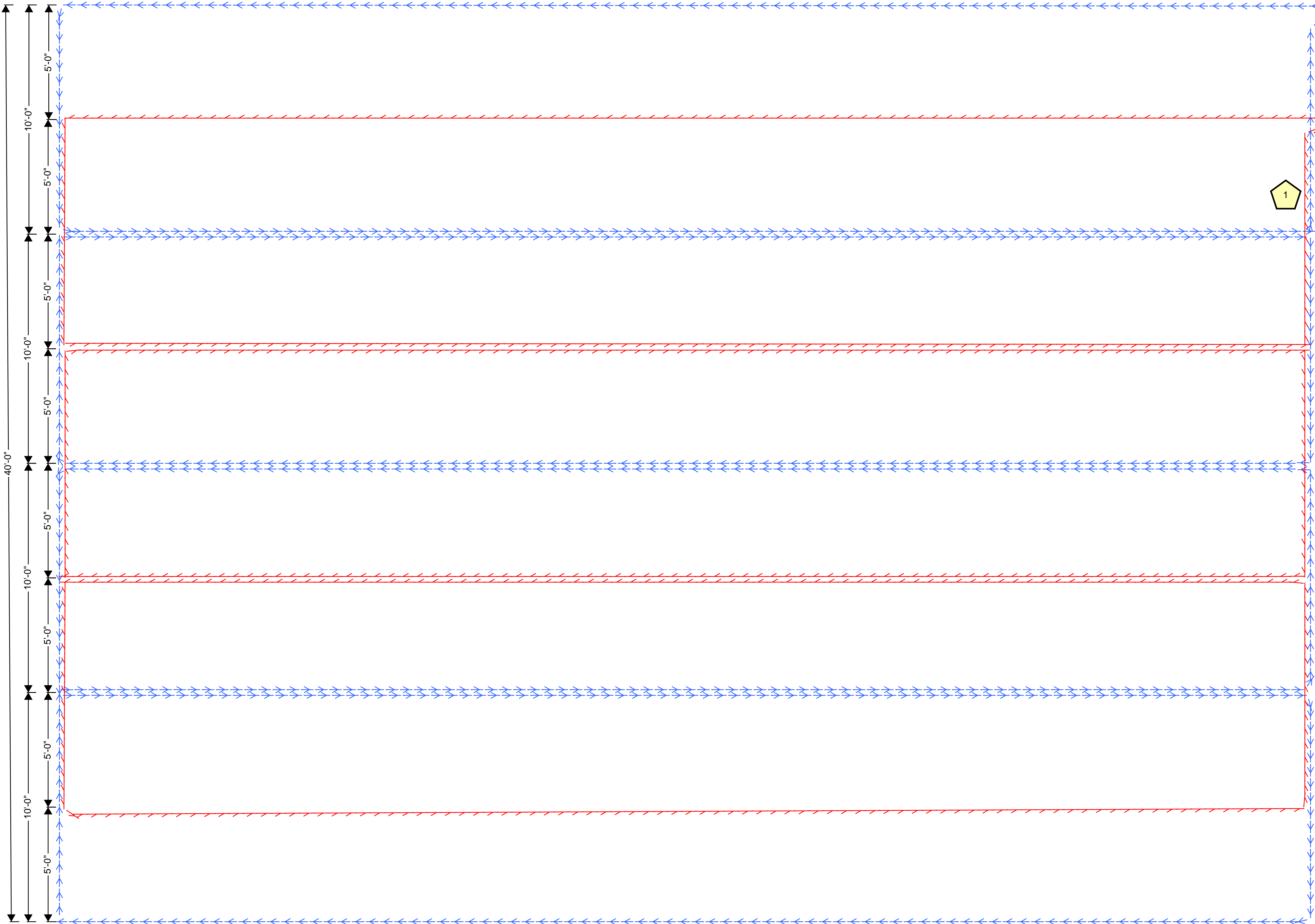


1 2 3 4 5 6 7 8

A
B
C
D
E
F



Installation Notes

Before any installation is performed, a site survey must be performed to account for environmental electro-magnetic fields (EMF). These fields can be generated by commercial kitchen equipment, lighting and poor building grounding among others. Using an approved electro-magnetic field strength meter calibrated to 0dB @400mA/m @ 1kHz reference, the background signal to noise (S/N) ratio to the reference must be no less than 32dB and preferably >=47dB. Measured S/N levels <32dB must be reported to project stakeholders and remediation measures investigated. Low S/N levels can result in an ineffective and noisy induction loop system.

Magnetic Induction Loop wire shall be taped into place before permanent installation and tested to account for metal or EM anomalies. A Magnetic Induction Field Strength Meter shall be used to walk the room while test tones of 100Hz, 1kHz and 5kHz are injected into loop system. No deviation in any frequency shall be greater than +/- 3dB to the 0dB reference in any location 5' within the loop system per ANSI/IEC 60118-4. Report any deviations greater than +/-3dB in any frequency to YOUR COMPANY HERE before installation.

Loop run from amplifier to room shall be 12 AWG or 14 AWG twisted copper pair until it is separated at loop start and transitioned to flat copper tape lines (send/return). Transition from stranded copper to flat copper wire should be soldered, with the flat copper folded over the solder connection resulting in a triangle. A rubber mallet may be used to flatten transition with light tapping. Cable run from loop amplifier to loop start should be <= 50'. Measured resistance per loop channel and at amplifier should not be below .50 Ohm or exceed 1.5 Ohm.

Double sided tape should then be placed upon a clean and dry floor surface for the base of the flat copper wire. Once the double sided tape is in place, remove the top layer of tape covering to expose the adhesive. The flat copper wire should then be centered atop the tape with no part of the copper wire crossing the edges of the tape. At corner transitions, flat copper wire may be folded to complete a 90° turn. Again, use a rubber mallet to lightly flatten copper corner.

Once the flat copper wire is in position, make final checks with a voltage meter to make sure continuity is maintained throughout the loop system.

Once loop system continuity has been verified, finish the loop by applying Williams Sound loop finishing tape with ADA compliance notification and cut warning. This will provide a notification as to the purpose of the loop system to future flooring contractors.

No portion of the magnetic induction loop system wire shall be exposed and/or otherwise visible on either side of Williams Sound finishing tape.

The loop system should now be ready for commissioning according to IEC 60118-4

Key Notes

1 Loop lines shown separated to illustrate wire direction, over-laying lines, and estimated installation location. Burying or otherwise taping (2) over-laying wires down together is acceptable if the wire flow is in the same direction.

2 = Magnetic Induction Loop Wire Channel 1

3 = Magnetic Induction Loop Wire Channel 2, 90 degrees out of phase

SCALE: NA

DESIGNED FOR
WILLIAMS DESIGN
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PROJECT
2-Channel Phased Array
Induction Loop System

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SHEET
DC4