



Outdoor Notification Testing Example Using the CyberData Paging Amplifier

1.0 Objective of this Document

CyberData receives customer inquiries regarding products for outdoor notification. Since every environment is slightly different, we decided to test our products at our corporate location and provide those results as a general guideline for product selection. The testing was subjective in that the results were based upon a CyberData employee standing in a specific location and determining if intelligible audio could be heard.

2.0 Test Location

CyberData's headquarters is located in an industrial park located in Monterey, California. Outside the building are closely-spaced oak trees with good "see-through" visibility. The cul-de-sac is relatively quiet with the exception being Upper Ragsdale Drive. The speakers are mounted on the top corner of the building facing 90 degrees from each other. They are mounted 18 feet off the ground. Various locations were selected at different distances and elevations. To provide an ambient noise assessment, each location was tested for ambient noise prior to the test messages being broadcast. This test was accomplished with a digital sound pressure meter.

3.0 Test Configuration

The system consisted of a CyberData Paging Amp being configured in High Power (802.3at) mode registered to a 3CX server on the premises. A Grandstream SIP phone was located in the QA lab within the building. The Paging Amp was located on the roof of the building and two of the reentrant speakers (CD#011068) were mounted on the roof at the corner of the building with 8 feet of speaker hook up wire. For the tests, a CyberData employee moved to an area (see map locations in Figure 2) and measured the ambient noise level with a sound level pressure meter. The engineer in the lab then slowly counted to ten. The requirement for intelligibility was that the standard CyberData employee was able to clearly hear the ten count.

4.0 Summary

This test was subjective but will give a potential customer an idea of the outdoor notification capability of the CyberData configuration.

Figure 1. System Configuration



Figure 2 shows the distance and elevation from the speakers that intelligible notifications can be heard. At each location, a decibel meter was used to show ambient noise before the test.



Figure 2. Distance and Elevation from the Speakers that Intelligible Notifications can be Heard



Figure 3. Location of Speakers Mounted on the Building

Figure 3 shows the direction that the speakers were pointed.



Figure 4. Direction that the Speakers were Pointed