Documenting Your System:
Is There Such a Thing As Too Much Information?

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Presumably, a large system could be commissioned with a full set of installation "as-built documents." These drawings and documentation can show the interconnection and location of all devices as they were installed. This includes signal flow, troubleshooting information, cable designations and other pertinent information. Such a document could provide a permanent record of the system that can be updated in the future to reflect changes and additions.

At this point, many owners of large systems may be shaking their heads with an emphatic "No," and owners of smaller systems are wondering how much of this detail and documentation is appropriate for them. Sadly, there is little by way of standards in our industry concerning what documentation should be left behind.

The fact is, documenting a system is handled differently by all parties involved and is driven primarily by what the end user requires, demands and is willing to pay for.

Everything Has a Price

If I were looking for one key differentiator used to justify varying bid amounts, it would be in the sophistication and thoroughness of the system documentation included in the bid. A high-end integrator will invariably bid a drawing package with the system that includes signal flow, cable numbering and designations, floor plans with device locations and junction points, and other documents showing the extent and scope of the system installation, customization and programming.

A cost-effective bidder may forgo the expense of creating such a package, assuming they have such capabilities. The package that they present upon system completion is often limited to a cardboard box containing the system manuals, accessory kits and warning sheets advising you not to operate your equipment in the shower or out in the rain for fear of electrical shock.

Let's assume that all other things — product and installation quality, competence and support — are equal. If the only differentiator in price were the project documentation, what level of detail is appropriate for you? Remember, the reason the well-documented system costs more is simply a function of the labor involved. It takes time and expertise to produce this material and someone will need to pay for it.

Size Matters in Levels of Detail

If we're talking about a very small system or one with a fairly simple topology, not much documentation is needed. At a minimum, the owner should receive that previously mentioned cardboard box.

A simple line drawing should also be provided showing what went where, and any programming tweaks or customizations should be marked in the appropriate manual. A bill-of-material that is reconciled to the system order will prove invaluable down the road when a record of what was installed is needed for repair, expansion or insurance. Finally, a record of serial numbers for all installed equipment is handy. Put all of this material in a file or three-ring binder and save it for that rainy day.

As systems grow larger and more complex, the documentation should ratchet up accordingly. Since its main purpose will be to aid in service or expansion, a good rule of thumb is that the documentation should be a timesaver down the road. Look at everything — system and documentation — as if you were a third party being brought in to review your installation for the first time.

Remember, integrators go out of business and your own support staff may retire or seek employment elsewhere someday. There's nothing like an accurate written record to get you through such a transition if it's in your future.

Make Time for Third Party Review

No matter how basic or complex the system documentation is, make sure every word is reviewed by someone other than the person who put it together.

As a consultant, part of the final sign-off on a project is a final review of all as-built drawings, and it is rare that we don't find a small list of mistakes. These errors can be typos or simple mistakes and are easily chalked up to "human nature." They are easy to fix as part of the review process. However, if they're not fixed, transposed numbers aren't going to jump out at you several years from now. Correcting mistakes in documentation at that point will need to be done the hard way: with ladders, tool belts and an open checkbook.

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