

TekEzLink™ is a unique TCP/IP based protocol allowing for easy integration of AMX and Crestron type control systems. Utilization of this protocol allows the control system to control and monitor multiple video projectors in real time without polling or the resultant taxing of the control system's processor. Another of the benefits of using TekEzLink is the ability to change a video projector without having to modify the existing control system program. In addition, it is possible for up to four separate controllers to be able to simultaneously connect to a TEK 2 using the TekEzLink.

This is all made possible by using Macros for control commands and a unique mapping of feedback data from the currently loaded TEK 2 drivers. The Macro commands are configured via TekManager through utilization of TekWizard or the TekManager properties window. The feedback commands are only configurable through TekWizard from the TekEzLink button on the Device page.

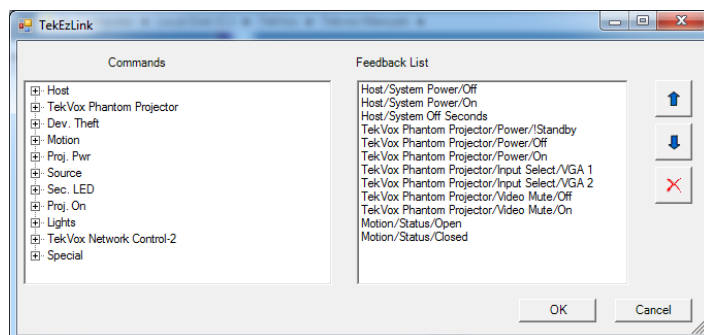
If you have ever placed 10 or more video projectors on a control system, you may have noticed the control system slowing down during polling causing the touchscreen buttons to lag. Sometimes you either have to remove all polling or slow it down to about 3 to 5 minute intervals in order to reduce the lag to acceptable limits. So if a projector feedback is required, like projector mute, there is going to be long response times causing user dissatisfaction.

Through using TekEzLink, and creating a distributed processing system, there are no longer issues with the control system slowing down or long delays with feedback. Even with 50 projectors on the control system, feedback will seem like real time. The control system manages the user interface and main logic, while the TEK 2s manage the video projectors.

Since TekEzLink can have up to 4 simultaneous connections, other systems can control the TEK 2 and get feedback at the same time. For example, if a user has an iPhone App that they want to use to control the projector, and Johnson Controls needs to monitor the occupancy sensor for light control, having the extra connections makes this possible.

Creating TekEzLink feedback elements

To create the TekEzLink feedback elements, just drag the item you want to monitor from the Commands list to the Feedback list. Each feedback element is assigned a number enumerated 1 through n. Use the Up, Down and Delete operation buttons to modify the list. You can use the Report button on the Finish page to display a list of these commands that can be used in external programs.



If you need to change the projector driver, you must make certain the Macros and the TekEzLink feedbacks match. For the feedback list you need to print out the old list as a reference. Then locate the command you want to replace and drag it into the Feedback list. Move this new command below the old command and then delete the old command. Do the same for all other commands that need to be replaced. After all of the commands are completed, a new list can be printed and compared against the old list for change accuracy. All enumeration values must match for the feedback commands.

For more information about TekEzLink see the TEK 2 User's manual at <http://www.tekvox.com/downloads/UM-TEK2.pdf>

Conclusion

With TekEzLink and the TEK 2, you get a great method to control and monitor video projectors and other devices without a lot of software and protocol research. Including TEK 2s into your system also gets you the TekManager software for free, allowing you to monitor and control hundreds of projectors throughout a campus. . In addition, there are modules already provided by TEKVOX for both AMX and Crestron to speed up customer integration. When it is time to replace a projector, just load a new driver into the TEK 2 and your control system will be working with the new projector without any change to the existing program.