



Audemat Relio

By Brian Urban

KUT Radio, a service of the University of Texas at Austin has been looking for a transmitter remote control to replace the existing aging and maxed-out system. We wanted a remote that was state of the art, had a graphic user interface, multi-user, IP connectivity and dial-up capability. After looking at everything on the market and demoing one unit in our shop, couldn't find something we would be happy with. Then, at the 2008 NAB Show we saw the Audemat Relio. Now this had potential: IP, dial-up, multi-level multi-user, lots of channel capacity, graphic user interface and graphic programming. As an added bonus, 32 command channels, 32 status channels, and 24 metering channels took up 5RU. We requested a demo unit from Audemat, who delivered a fully functional system, not a pre-packaged demo unit.

Relio is a simple-looking unit with exceptional capability. It has 64 digital (status) inputs, 64 digital (relay) outputs and 24 differential analog (meter channel) inputs, as well as four serial ports (selectable RS-232, RS-422 or RS-485).

Out of the box Relio must have a custom configuration installed, which is built using Audemat's Script

Script Easy

Script Easy programming starts with defining the system in the site section summary tab. Once the summary is completed, the configuration is applied. Then you can move on to the monitored equipment tab and define all the inputs and outputs to the system. Click the add equipment button, name the device and add the Digital Status, Digital Command, Analog Metering, SNMP settings and any Scriptlet for that equipment. Once all the equipment I/O is complete, move on to the cabling tab where the logical I/O is connected to the physical I/O panels. Click on Link Status for each section and Script Easy assigns each I/O to a port on the connector panel. Physical input/output ports can be changed by selecting a different port in the link to column.

Metering, command/control and status functions are defined in the script designer. This is a graphical environment where you place the various elements on a page and connect them together. There are push buttons, digital commands, status, delays, analog inputs, counters, alarms and logic gates available. These elements can be grouped together to perform any number of actions from simply turning a transmitter on or off to complex switching operations such as main/aux transmitter switching with failsafe.

Scripts can be placed on multiple pages to simplify the overall diagram; e.g. the main transmitter on one page, aux transmitter on another, transfer switch on a third. The software is capable of linking elements across pages.

Analog inputs have either three or five outputs, which can be connected to various actions from alarms to contact closures. Building temperature could be set to start an additional air conditioner at a specific temperature, and if the temperature continued to rise, start an exhaust fan and call and/or e-mail an alarm.

Systems can be grouped together so that when you dial in and enter the appropriate code, Relio

Performance at a glance

No need for expansion modules for most systems

Easily programmed

Telephone control

Web control

E-mail notification

64 digital inputs/outputs

24 analog inputs

Graphic user interface

32 command/status channels

24 metering channels

Easy utility. Script Easy is graphical: Drag icons out onto the desktop and connect them together to generate commands, build macros and build the user interface panels.

Because Relio is programmed via TCP/IP, the first thing is to configure the IP address/subnet mask/gateway. This can either be done using a serial cable and terminal program or by attaching a keyboard, mouse and monitor to the unit. I did get the unit to speak serial; however, for some reason it didn't like Hyperterminal at all and refused to respond. A different terminal program worked fine and I was able to program the IP address. E-mail notification, user logins, PPP dial in/dial out, phone alerts, router assignments, etc., can be programmed from the KVM interface or, once the IP address is assigned, through the built-in Web interface.

will read out each parameter for that system. You can also set a macro command to perform a function within that group. Each command is also available by individual DTMF command.

Views

View Designer is the section of Script Easy, that defines what the user control panels will look like. There are several styles of meters with customizable color schemes. Legends can be different for on and off states. About the only thing you can't do with an LED is make it blink. Function buttons are fully sizable with legends inside the button. Colors are not customizable, but the buttons do change color when activated.

MasterView is the operating environment. There are two levels of access: administrator and guest. Administrators have full control of the system, while guests are only allowed to view the system. Administrators and guests can be logged in at the same time.

Script Easy and Master View are Windows applications. Relio itself runs a Linux operating system. Upgrades to Relio firmware are via USB drive. Audemat cautions that you must record all user-defined parameters and save your script to an outside device before upgrading. So when

upgrading the firmware, make sure you have all network parameters, call out lists, mail settings, passwords, etc., copied off the unit before starting the upgrade. Once the unit is upgraded, everything can be re-entered via the built-in Web interface, or by local KVM attached directly to Relio.

Audemat has been very responsive in supporting the Relio and to suggestions for improvements to system programming. They even added a few words to the built in dictionary (you can add your own also). Relio is so intuitive that the lack of detail in the documentation isn't a real problem. Overall, I am very pleased with the Audemat Relio remote control. It isn't washing the dishes yet, but I'm working on that.

Urban is chief operator of KUT Radio of the University of Texas at Austin.

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