Protosoft V 3.0
Protocol
Lighting control system
Configuration Software & diagnostics Manual

Table of Contents

PROSOFT V3.0 and RAU-96 user manuals. 05-2025

Requirements to Program the PROTOCOL dimming System Wall Stations (PSFxx)

1. Loads schedule (wattage and location of each load as well as control zones)
2. Control stations locations & number of switches at each.
3. Number of dimmer packs (PDxxx) and control stations (PSFxx)
4. A list of all dimmable and non dimmable loads such as Lamps and fans.

Step 1: Starting a new project:

Start out by clicking the file tab found in the top left hand corner of the application screen, and select *New Project*.

Step 2: Naming and saving a project.

Once you have clicked on the New Project icon, a New Project window will appear.
Name the project and it will automatically be saved in the programs file under DLS.
To save in any other locations go to file then select save project as and select a location.

Step 3: Adding Floors

To add a floor, right click the project name that appears on the left hand side of the application window. Select *Add Floor* option from the list provided.
Repeat step 3 for all floors that need to be added.

Step 4: Adding Rooms

To add rooms, first determine the number of rooms. Then right click on the desired floor icon and select *Add Room* for the list of options. Repeat step four until you have added all rooms. A room icon will appear for every room made.

Step 5: Adding Stations PSFxx

To add wall control stations to a room(PSFxx), simply right click on the desired room and select *Add Station*. You will have the option of choosing between the different types of stations and button layouts as shown on the three screens below.

Repeat Step 5 for all remaining stations

Note: Once desired station and button layout has been established, an “Add New Station to Room 1” window will appear. Fill in and check the appropriate information for the station as needed.

Note: A Yellow station Icon and its red switches should appear below its corresponding room.
8 button station
16 button station

Copy & Paste feature

Users can use the copy and paste feature to copy Floor, Room and station layouts.

Copy:

To use the *Copy* feature simply right click on the object you would like to copy ex. Floors, Rooms or Stations and select copy.

Paste:

To use the *Paste* feature just right click on the icon atop the icon that was copied and select paste. For examples, if you copied a *Floor* you would right click on project name and select paste. If you copied a *Room,* you would right click on the floor it is designated to and select paste. If you copied a *Station* you would right click on the Room you wanted to add it to and select paste.

STEP 6 Adding Dimmer Packs (PDxxx)

Click on Dimmer pack tab and right click on Job's name
An ***Add Power Pack*** Tab appears.
A selection from different dimmer pack modules is available:
PD404: 4 x 480 Watts @ 120V
PD408: 4 x 960 Watts @ 120 V
PD804: 8 x 480 Watts @ 120 V
PD216: 2 x 2000 Watts @ 120 V

After selecting the type of dimmer pack, the (*add new power pack)* window appears. Check that the information in the window is correct and click add to add the power pack.

STEP 7 Adding Loads:

To add loads, right click on the room for which you are adding the load to and select the *Add Load* option.

Adding loads: Example add ceiling lamp

Note: Once load for Ceiling lamp is added, it will appear as a light bulb icon on the bottom part of the application shown below

Note: From the drop down list, select whether the added load is Incandescent, Florescent, Motor, Electronic Low Voltage or Magnetic Low Voltage type of load.

Adding a Motor load such as a fan = not dimmable

Once all of the loads have been added, they will appear under the *Unassigned Loads* tab as shown below.

STEP 8 Assigning Loads to dimmer packs

To assign loads, click on ***Dimmer Pack*** tab .
The list of dimmer packs, previously added, will appear. Drag the loads under *Unassigned Loads* to its respective circuit on Under the *Dimmer Pack* Tab. Note: An *A* will appear on top of the circuit icon as shown below for Circuit 1
Screen shows that all loads have been assigned

STEP 9 Switch programming

Click on ***Switch programming*** tab.

Assigning Switch function

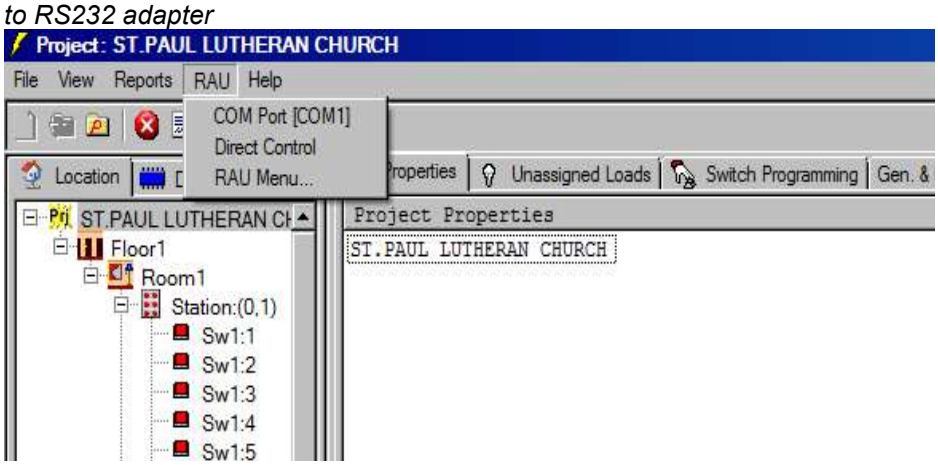
After assigning the function (dimmer, preset, etc.) you click on Assign load, and a “Select Load and click add” window will appear. Select desired load to be controlled and press add.

Once load has been assigned, it will appear in the “Dimmer Loads” space under the “Switch Programming” tab

Once all dimmer loads have been assigned to their respective control switches in the corresponding stations, proceed to the *Gen. & Dwnld.* tab located to the right of the *Switch Programming* tab. This is where downloading to the control stations takes place.

STEP 10 Downloading switch programs to PSFxx control stations.

Note: The RAU-96 should be connected to the RS232 port of your PC directly or through an USB to RS232 adapter



The selection of the COM Port is dependent on which Port the RAU is plugged into. If it is the first, then the screen above shows the correct COM port chosen. If it is the second you would go and change it by clicking on the COM Port heading in the RAU menu shown on the next page.

Once clicked the COM Port Select window appears. Select the correct COM and click OK.
Note: If the correct COM port is not selected the download will not occur.

To begin the station programming process, begin by clicking on the Generate All Stations button shown above on this screen.

Once it generates all station files, they will be displayed as shown on the screen below

To download to a station simply select the station to be downloaded by checking the appropriate check box and then clicking the *Download Selected* button. This brings up the Communication Password window with the appropriate password shown below.

To proceed with station programming just click on the ok button shown above. Note: You should be able to see the progression of the download in the bar directly below the *Download Selected* button shown above.

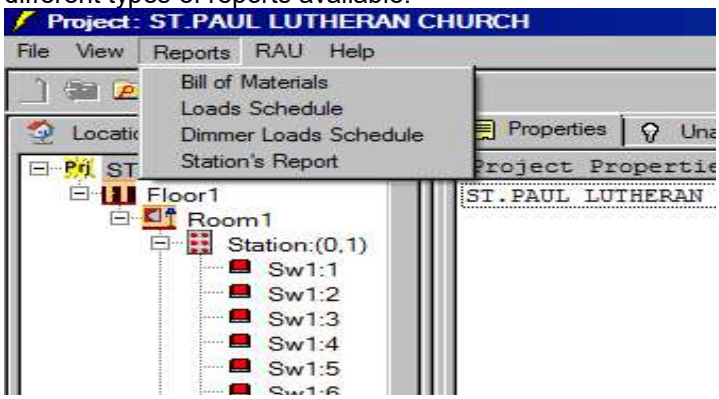
Once complete, the State of the stations should read programmed as shown below.

Progress Bar is the bar shown in grey below the Download Selected button.

Repeat download to other selected stations.
An error in the download means that the control station does not have the proper ID number (address) or is not connected.

STEP 11 Generate the job reports

Select the REPORTS tab on the Main menu screen shown below. A drop box will show the different types of reports available.



The Bill of Materials consists of two parts the *Report Data* & *Report* shown in the two screens below

.

To get the report on all the loads within the system, select the *Loads Schedule / Report* shown on the screen below.

Repeat the same process for the *Panel & Stations Report.*

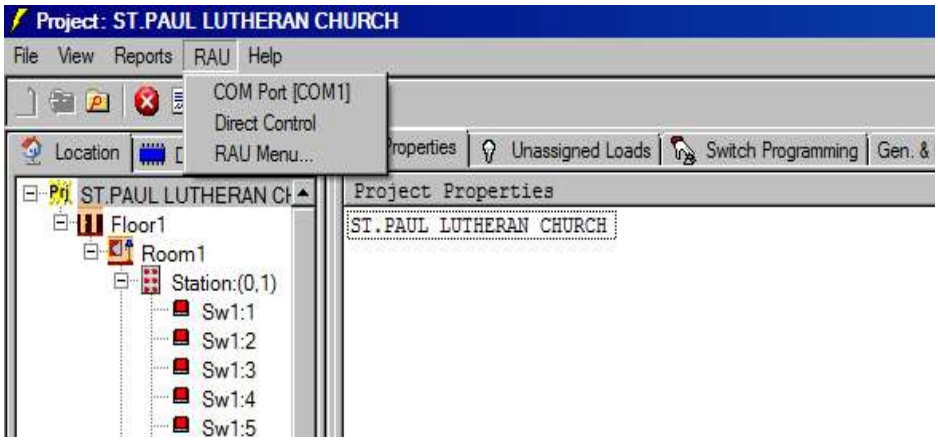
Panel Report (dimmer modules Schedule)

For a report showing the physical location of stations & description of button assignments click on the *Station Report*

Diagnostics

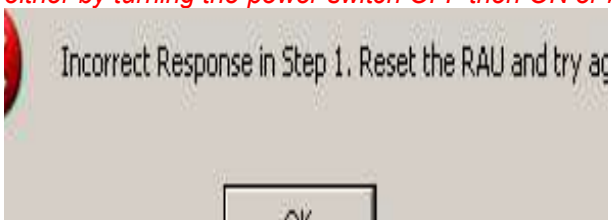
To assist in identifying loads and checking switch assignments connect the RAU 96 to the PC.

Click the RAU tab then select the **Direct Controls** option. Used to run quick installation checks



Type in password (*Default password is 1234*) then press enter

If the following "Reset the RAU" message appears then the RAU-96 should be LOGGED OFF either by turning the power switch OFF then ON or by following the steps on page 26.



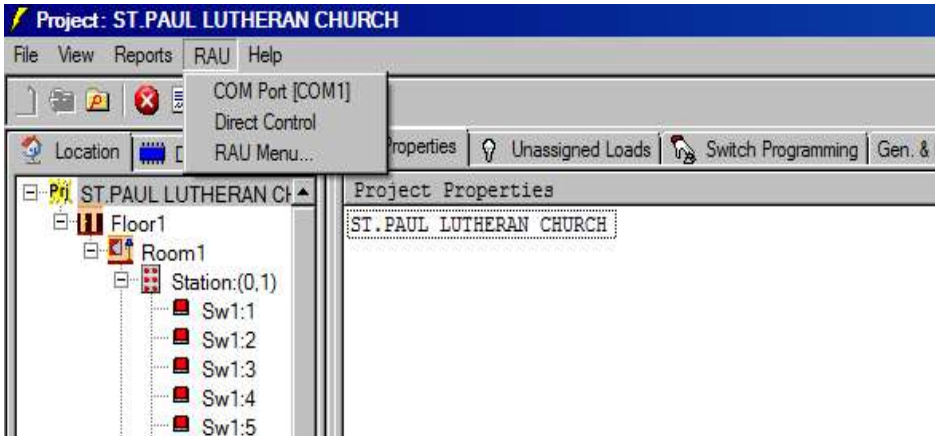
A direct command screen will open. Select a load that you want to find in the installation
Push the ***ON*** tab or the flash tab so you can visually Locate the load in the installation.

To identify a switch's ID or to check if a control station is operating properly
Click on the ***CAPTURE*** tab then push the switch on the actual key pad and the switch will be highlighted in the window as shown below

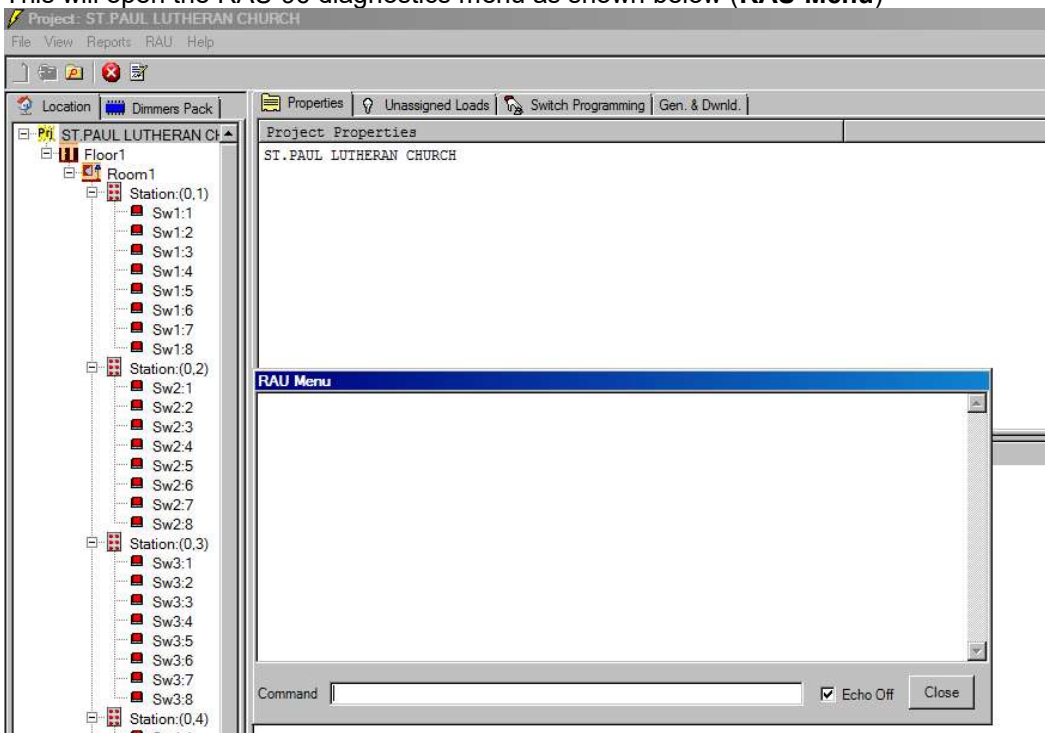
The pressed switch will be highlighted.

RAU Menu used to run direct system diagnostics

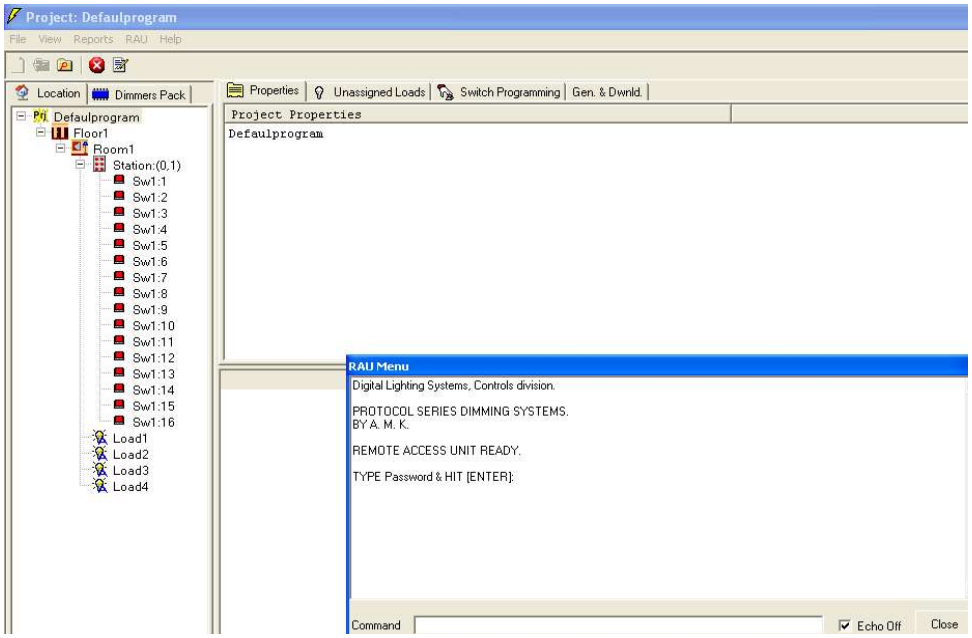
Click on the RAU tab then select **RAU Menu**.



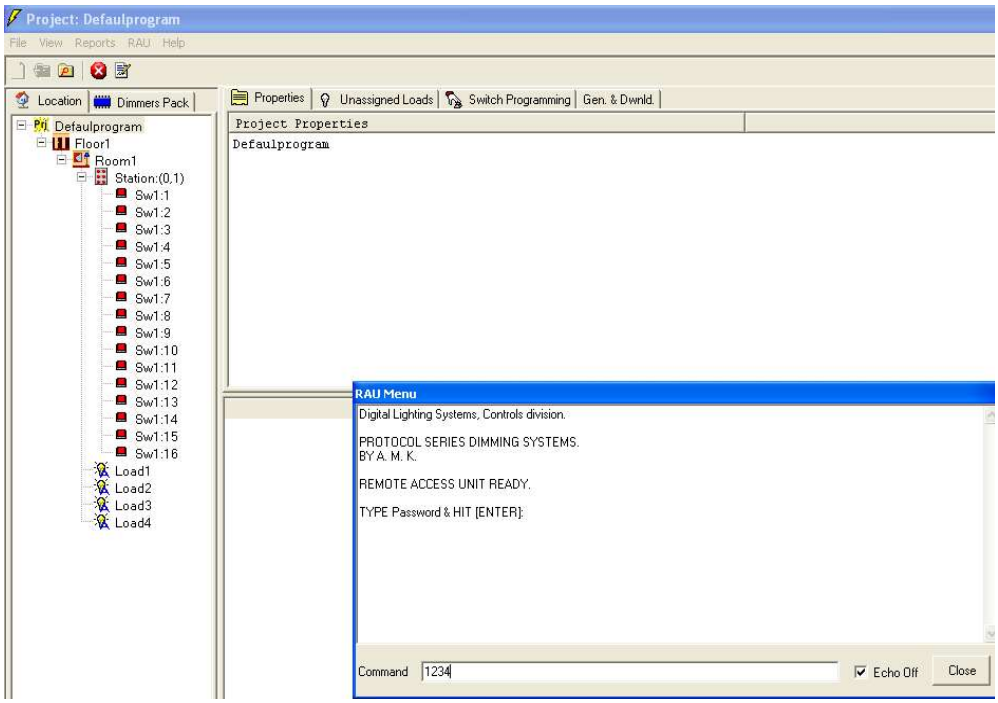
This will open the RAU 96 diagnostics menu as shown below (**RAU Menu**)



Press enter



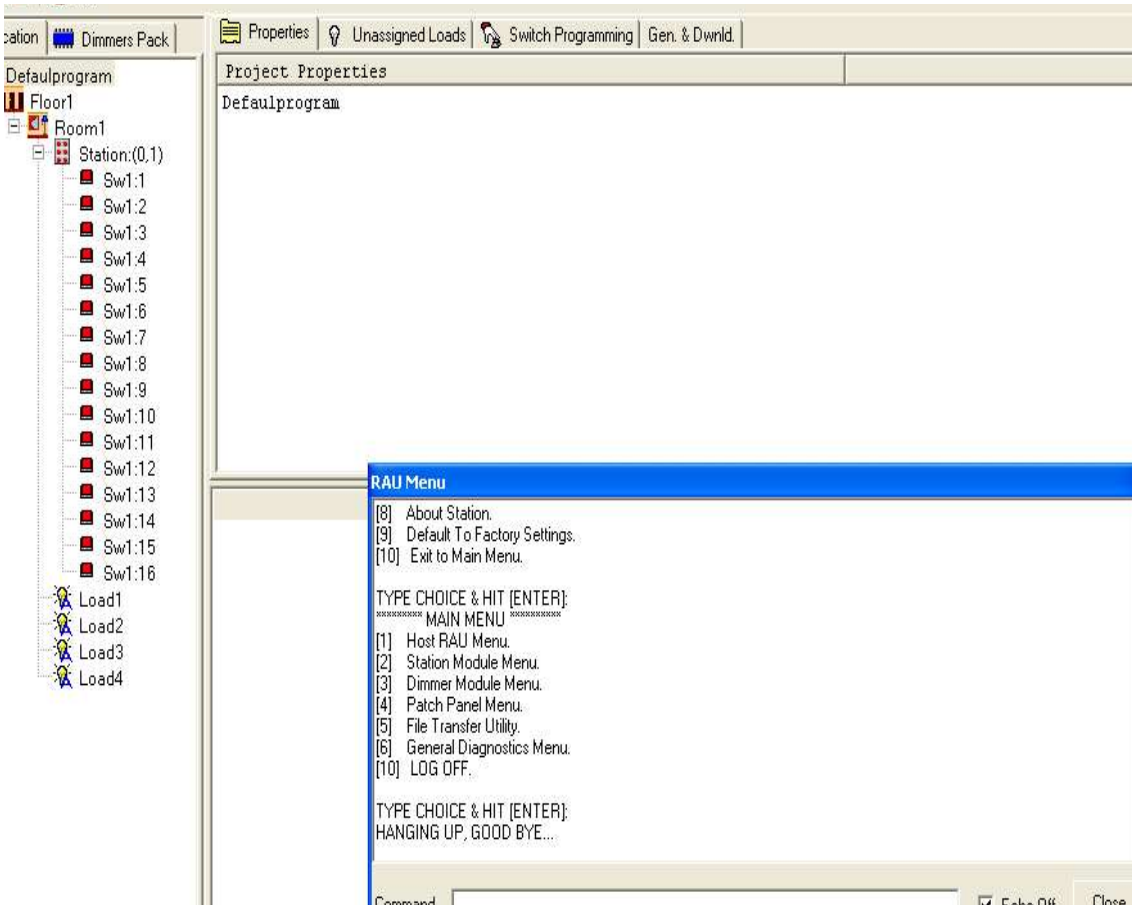
Type in password (Default password is 1234)



Then press enter.
The main menu window will open
(if you receive RAU> in the command line this means that the RAU-96 is in the ASCII Direct Command mode, type ***MENU** to go out of the direct command mode and to go back to RAU-96 menu)

LOGGING OFF BEFORE CLOSING ***RAU MENU*** :

Before returning to the PROSOFT other functions the RAU-96 should be Reset by going back to the MAIN MENU and Typing 10 to LOG OFF



RAU-96 MENUS, PROMPTS AND MESSAGES

********* MAIN MENU **********
[1] Host RAU Menu.
[2] Station Module Menu.
[3] Dimmer Module Menu.
[4] Patch Panel Menu.
[5] File Transfer Utility.
[6] General Diagnostics Menu.

[10] LOG OFF.

TYPE CHOICE # & HIT [ENTER]:

The main menu is logically divided into sub-menus, each dealing with a particular system component or main task. The remainder of this document explores these sub-menus individually.
A. The Host RAU Menu
********* HOST RAU MENU **********
[1] Modify Site Password.
[2] View Current System Configuration.
[3] Modify Current System Configuration.
[4] Auto Detect Current Active Configuration.
[5] Copy Auto Detect Results to Current Configuration.
[6] Save to RAU Memory.
[7] Send Configuration to Individual Nodes.
[8] About RAU.
[9] Default to Factory Settings.
[10] Go To Command Mode
[11] Exit to Main Menu

TYPE CHOICE & HIT [ENTER]:

A1. [1] Modify Site Password
The password must be 4 characters long and may be a combination of numeric and alphanumeric characters. The system asks for the new password twice for verification. Make sure you record your password and store it in a safe place.
A2. [2] View Current System Configuration
This selection displays how many of each type of hardware component there are supposed to be in the system. The information consists of the number of stations, dimmer modules, Room combiners (station keypads patchers) and RAU's. It also includes the line frequency at the local installation site. This information is stored in the RAU's nonvolatile memory. If actual values have not been entered at some point, default values are displayed instead.
A3. [3] Modify Current System Configuration
The RAU needs to know the hardware makeup of the system (No. of stations, dimmers, etc...). This information may be entered and/or modified at any time. The RAU can automatically retrieve the information from the system (A4). At this point, the user will be prompted to enter the numbers for each type of component. The information supplied by the user remains in temporary memory at this point and will be lost upon a power failure. To store the information in the RAU's nonvolatile memory see (A6).

A4. [4] Auto-Detect Current Active Configuration
Provided that all components are in working order, the RAU can automatically detect the system configuration by starting at the highest allowable address for each type of component and polling it. When a component replies the RAU stores this number in a scratch pad type location and goes on to polling a different type of components until done with all. To store the information in the RAU's nonvolatile memory see sections (A5 and A6).

A5. [5] Copy Auto-Detect Results to Current Configuration
Copy the numbers found for each type of component in AUTO DETECT [4] to the configuration temporary memory list.
A6. [6] Save to RAU Memory
This option directs the RAU to copy the system configuration into its nonvolatile memory. Prior to this point all information would be lost upon a power failure.
A7. [7] Send Configuration to Individual Nodes
Each type of component in the Protocol system needs to have part or all of the information in the system configuration list. Using this option, the RAU sends the correct information to each node (component on the system) automatically.
A8. [8] About RAU
This feature is provided and performs a similar function in all sub-menus. Every system component contains program code (software). The "About" feature provides a convenient way to check the device's code version and date without having to read its label.

A9. [9] Default to Factory Settings
This feature is provided and performs a similar function in all sub-menus. When changes are made to configuration and settings of certain components, it may be desired to revert to the original factory settings before any programming was done to the component. This features returns the component to its default settings. To copy the settings into the nonvolatile memory, the "Save to Memory" option must be invoked.
A10. [10] Go To Command Mode
The RAU will accept ASCII COMMANDS through the RS232 port. To return to RAU normal operation type ***MENU** and enter.
A11. [11] Exit To Main Menu
Upon selection, the sub-menu is exited and control is given back to the Main menu.

B. The Station Module Menu
This sub-menu interacts mainly with the Protocol control stations.

********* STATION MODULE MENU **********
[1] Default Switch Configuration Memory.
[2] Set # of Station Nodes.
[3] Set # of Dimmer Nodes.
[4] Save to Memory.
[5] Buttons Utility.
[6] Preset Security.
[7] View System Configuration.
[8] About Station.
[9] Default To Factory Settings.
[10] Exit to Main Menu.
TYPE CHOICE & HIT [ENTER]:

B1. [1] Default Switch Configuration Memory
This features overwrites the switch configuration of the station and must be used cautiously. The following options are presented:

FILL SWITCH CONFIGURATION MEMORY WITH:
1=CONSTANT VALUE 2=FACTORY CONFIGURATION
ANYTHING ELSE TO ABORT ?:

B1-1. Selection 1
If desired every location in the switch configuration memory area is replaced with a specific constant value. This is mostly used for hardware testing and has little practical use in the field.
B1-2. Selection 2

If desired the station may be forced to revert to its built-in default switch configuration. This is mostly used for hardware testing and has little practical use in the field.

B2. [2] Set # of Station Nodes

In general, Protocol stations are required to know the total number of stations in the system. This information is included in the configuration file or may be entered or modified at this point. To store this configuration information in nonvolatile memory see section (B4).

B3. [3] Set # of Dimmer Nodes

In general, Protocol stations are required to know the total number of dimmer modules in the system. This information is included in the configuration file or may be entered or modified at this point. To store this configuration information in nonvolatile memory see section (B4).

B4. [4] Save to Memory

This option directs the Station to copy the system configuration entered in B23 into its nonvolatile memory. Prior to this point all information would be lost upon a power failure.

B5. [5] Buttons Utility

This item invokes the following sub-menu:

********* STATION BUTTONS MENU **********
[1] Monitor Buttons.
[2] Change Button Numbers 1-8 to 9-16.
[3] Restore Original Button Numbers.
[4] Exit to Station Menu.
TYPE CHOICE & HIT [ENTER]:

B5-1. [1] Monitor Buttons

This feature causes the RAU to monitor and display the information that a station sends to the dimmers every time a switch is pressed. This is a powerful troubleshooting tool that can determine the following:

If the station address is set correctly. The information displayed begins with the station address followed by a period and the switch number. For example 23.09 indicates switch 9 on station 23. If the switch is configured correctly, the displayed information contains all the items in the switch configuration, including function, rate, preset number, etc...
If the switch is addressing the correct group of loads. Loads are displayed beginning with the dimmer module address followed by a period and the output number. For example 11.2 indicates output 2 of dimmer 11.

B5-2. [2] Change Button Numbers 1-8 to 9-16

A station configuration file contains switch definition for 16 switches. By using this feature a station with only 8 physical buttons (1-8) may be made to address switches 9-16 instead.

B5-3. [3] Restore Original Button Numbers

This reverses the action in B5-2 and returns the station switch addresses to 1-8. Actions taken in B5-2,3 must be followed by a Save to Memory to save the new status into the nonvolatile memory.

B5-4. [4] Exit to Station Menu

Returns control to the main station menu.

B6. [6] Preset Security

The control station presets are automatically locked once the station is reset or powered down. Once scene presets have been programmed, a station may be locked in order to prevent inadvertent changes to the scenes. Whenever the presets on a station have been locked or unlocked, this action must be followed by a Save to Memory action to save the status into the nonvolatile memory. It is advisable to lock the presets on DCI-16 modules after the scenes have been programmed.

B7. [7] View System Configuration

This causes the station to send the system configuration it contains (No. of stations and No. of dimmers).

B8. [8] About Station

This feature is provided and performs a similar function in all sub-menus. Every system component contains program code (software). The "About" feature provides a convenient way to check the device's code version and date without having to read its label.

B9. [9] Default to Factory Settings

This feature is provided and performs a similar function in all sub-menus. When changes are made to configuration and settings of certain components, it may be desired to revert to the original factory settings before any programming was done to the component. This features returns the component to its default settings. To make this change into the nonvolatile memory, the "Save to Memory" option must be invoked.

B10. [10] Exit To Main Menu

Upon selection, the sub-menu is exited and control is given back to the Main menu.

C. The Dimmer Module Menu

This sub-menu interacts mainly with the Protocol dimmer modules.

********* DIMMER MODULE MENU **********
[1] Initial/Erase Memory Presets.
[2] Set Low Trim.
[3] Set High Trim.
[4] Set Load Types.
[5] Save Settings to Memory.
[6] Control Load.
[7] View Current Settings & Levels.
[8] About Dimmer.
[9] Default To Factory Settings.
[10] Exit to Main Menu.
TYPE CHOICE & HIT [ENTER]:

C1. [1] Initial/Erase Memory Presets

The dimmer modules store the preset levels in nonvolatile memory. When desired all preset levels may be initialized to the same value. A value of 1 initializes all levels to OFF (0%) and a value of 254 initializes all levels ON (100%). Caution must be used in order not to inadvertently erase all dimmer presets.

C2. [2] Set Low Trim

The low Trim is the lowest dimming level that a dimmer output is allowed to reach during normal operation. A value between 0% & 40% may be directly set here or by a dimmer configuration file (filename.Dxx) that is downloaded to the dimmer. Trims for dimmers can be set individually for each output (1-4) or for all four outputs by entering a 5 for the output number when prompted. A Save Settings to Memory must follow to write the change in nonvolatile memory.

C3. [3] Set High Trim

The High Trim is the highest dimming level that a dimmer output is allowed to reach during normal operation. A value between 60% &100% may be directly set here or by a dimmer configuration file (filename.Dxx) that is downloaded to the dimmer. Trims for dimmers can be set individually for each output (1-4) or for all four outputs by entering a 5 for the output number when prompted. A Save Settings to Memory must follow to write the change in nonvolatile memory.

C4. [4] Set Load Types

The load type is used to identify the type of load that a dimmer is controlling. A value between 1 & 4 can be directly set here or by a dimmer configuration file (filename.Dxx) that is downloaded to the dimmer. Currently the load types are for documentation purposes only. Load Types can be set individually for each output (1- 4) or for all four outputs by entering a 5 for the output number when prompted. A Save Settings to Memory must follow to write the change in nonvolatile memory.

C5. [5] Save Settings to Memory

This option directs the dimmer module to copy the High Trims, Low Trims, Load Types and current output levels into its nonvolatile memory. Prior to this point all information would be lost upon a power failure.

C6. [6] Control Load

The RAU allows direct control over the dimmer outputs and presets. Levels may be set and presets stored or recalled. These control actions can be applied to one load at a time, to an entire module (4 loads) or to every load on the system. To save the changes into nonvolatile memory, the Save Settings to Memory must be invoked.

C7. [7] View Current Settings & Levels

The High Trims, Low Trims, Load Types and Current Output levels of any dimmer module in the system can be viewed using this option.

C8. [8] About Dimmer

This feature is provided and performs a similar function in all sub-menus. Every system component contains program code (software). The "About" feature provides a convenient way to check the device's code version and date without having to read its label.

C9. [9] Default to Factory Settings

This feature is provided and performs a similar function in all sub-menus. When changes are made to configuration and settings of certain components, it may be desired to revert to the original factory settings before any programming was done to the component. This features returns the component to its default settings. To make this change into the nonvolatile memory, the "Save to Memory" option must be invoked.

C10. [10] Exit To Main Menu

Upon selection, the sub-menu is exited and control is given back to the Main menu.

D. Patch Panel Menu(room combiner)

This section specifically pertains to applications in hotel ballrooms where a Patch panel (Room combiner)) module is used to link/un-link control stations depending on a particular partition.

********* PATCH PANEL MENU **********
[1] Set # of Dimmer Nodes.
[2] Set # of Station Nodes.
[3] View System Configuration.
[4] View Current Event Partition.
[5] Save to Memory.
[6] View Current Partition for Individual Station.
[7] Activate/Deactivate Current Partition.
[8] About Patcher.
[9] Default To Factory Settings.
[10] Exit to Main Menu.
TYPE CHOICE & HIT [ENTER]:

D1. [1] Set # of Dimmer Nodes

In general, Protocol patch panels are required to know the total number of dimmer modules in the system. If not already done at the factory this information may be entered or modified at this point. To store this configuration information in nonvolatile memory see section (D5).

D2. [2] Set # of Station Nodes
In general, Protocol patch panels are required to know the total number of rooms in the partition. Each room can have one master station and up to three slave stations. If not already done at the factory, the number of rooms (not the total number of stations) may be entered using this feature. To store this configuration information in nonvolatile memory see section (D5).

D3. [3] View System Configuration
This causes the patch panel to send the system configuration it contains (No. of stations and No. of dimmers).

D4. [4] View Current Event Partition
The patch panel links the master station in each room with one or more master stations from other rooms. A list kept in the patch panel showing the rooms that are patched together can be viewed by selecting this option.

D5. [5] Save to Memory
This option directs the Patch panel to copy the system configuration entered in D12 into its nonvolatile memory. Prior to this point all information would be lost upon a power failure.

D6. [6] View Current Partition for Individual Station
Each master station in a partitioned system receives a list of the rooms that it is patched with after it has been issued a patch command by the patch panel. The rooms associated with a particular master/slave station may be viewed by selecting this option.

D7. [7] Activate/Deactivate Current Partition
This selection is used to link or un-link rooms without losing the previous partition information.

D8. [8] About Patcher
This feature is provided and performs a similar function in all sub-menus. Every system component contains program code (software). The "About" feature provides a convenient way to check the device's code version and date without having to read its label.

D9. [9] Default to Factory Settings.
This feature is provided and performs a similar function in all sub-menus. When changes are made to configuration and settings of certain components, it may be desired to revert to the original factory settings before any programming was done to the component. This features returns the component to its default settings. To make this change into the nonvolatile memory, the "Save to Memory" option must be invoked. In the case of the patcher the number of rooms and dimmer modules are reset to 12.

D10. [10] Exit To Main Menu
Upon selection, the sub-menu is exited and control is given back to the Main menu.

E. File Transfer Utility

This menu is used to transfer configuration files created by "Create System files" option of the Protocol software to individual system components. There are two types of files created, station files and dimmer files. The station files have an extension beginning with .S followed by the station number. For example JOB_XYZ.S023 is a file belonging to station #23. Each of the station files contains definition information for 16 station switches and includes the total number of stations and modules information. The dimmer module files have an extension beginning with .D followed by the dimmer number. For example JOB_XYZ.D15 belongs to dimmer module #15. Each of the dimmer files contains High Trim, Low Trim and Load Types information for 4 dimmer outputs. There is no need to transfer dimmer files to the dimmers if the dimmer's high and low trims have not been modified from their default 100% and 0% values, during station configuration.

**********FILE TRANSFER UTILITY **********
[1] Send File To Device.
[2] Exit to Main Menu.
TYPE CHOICE & HIT [ENTER]:

E1. [1] Send File To Device
Selecting option 1 invokes the following sub-menu:

WHAT DEVICE TYPE:?
[1] Dimmer [2] Station [3] Patcher [4] PAU Virtual Station [5] Cancel
TYPE CHOICE & HIT [ENTER]:

E1-1. Dimmer

Select 1 if file is intended for a dimmer module and give the RAU the dimmer number you are sending the file to. Skip to Selecting a file to download.

E1-2. Station

Select 2 if file is intended for a station or a DCI-16 module and give the RAU the station number you are sending the file to. Skip to Selecting a file to download.

E1-3. Patcher (room combiner)

Select 3 if file is intended for a programmable patch panel and give the RAU the station number you are sending the file to. Patch panel files have a (.Snn) extension. Skip to Selecting a file to download.

E1-4. PAU Virtual Station

The PAU (Phone Access Unit) acts like a virtual station (for more information about availability, contact Digital Lighting Systems). It uses a standard station configuration file. Select 4 if the file is intended for it and give the RAU the PAU number you are sending the file to.

Selecting a file to download

When the RAU gets the device number it displays the following message:

PLEASE SEND HEX FILE FROM FILE TRANSFER MENU .
STATION FILE NAME EXTENSION= (.Snn)
DIMMER FILE NAME EXTENSION= (.Dnn)
TO ABORT DOWNLOAD PRESS [ENTER]

At this point, using the mouse, Click on File_Transfer from the File Menu, select Download to System. Select the appropriate file filter in the file browser window. All files of the type selected will be displayed. Scroll to the appropriate file (extension=device number) and press OK. The RAU will do the rest. If no error messages are displayed, the operation is successful.

E1-5. [5] Cancel

Select 5 to cancel the download process.

E2. [2] Exit to Main Menu

Returns control to the main menu.

F. General Diagnostics

The majority of system diagnostics and troubleshooting can be done from this menu. There are three similar sections relating to station, dimmer and Patcher modules.

*********GENERAL DIAGNOSTICS **********
STATION [1] Check [2] Flash [3] Reset
DIMMER [4] Check [5] Flash [6] Reset
PATCHER [7] Check [8] Flash [9] Reset
[10] Hold Net. [11] Release Net. [12] Exit to Main
TYPE CHOICE & HIT [ENTER]:

F1. [1] Check Station

The RAU prompts the user for a station number. Then it begins checking stations in descending order starting with the number supplied by the user. If a station fails to respond for any reason, the RAU displays its number with an ERR (error) next to it. When done the RAU displays SYSTEM CHECK DONE, CONTINUE [ENTER].

Check the stations that failed (if any) for proper connections or ID settings. Reset the stations and repeat the check until all stations pass this test. Press "ENTER" key to continue.

F2. [2] Flash Station

Upon giving the RAU a station number, the station having this address will start pulsing its LED's. This is a good tool to check if a station has been assigned the correct address and installed in the right location. This option also provides a convenient way to check if the same address has been assigned to more than one station. To stop the flashing reset the station (see F3).

F3. [3] Reset Station

If a particular station failed during a check, this operation performs a software reset on the station. Just respond to the RAU with the station number. In most instances this will solve the problem. If it does not, a hardware reset may be necessary. The hardware reset may be implemented by turning power off to the station for few seconds or by pressing the station's reset button. The reset button is located between switches 1 & 5, behind the front cover. Use a nonconducting object such as the tip of a pencil to push the reset button.

F4. [4] Check Dimmer

The RAU prompts the user for a dimmer module number. Then it begins checking dimmer modules in descending order starting with the number supplied by the user. If a dimmer module fails to respond for any reason, the RAU displays its number with an ERR (error) next to it. When done the RAU displays
SYSTEM CHECK DONE, CONTINUE [ENTER].

Check the dimmer modules that failed (if any) for proper connections or ID settings. Reset the dimmer modules and repeat the check until all dimmer modules pass this test. Press "ENTER" key to continue.

F5. [5] Flash Dimmer

Upon giving the RAU a dimmer module number and an output number, the output of the dimmer module having this address will start flashing. This is a good tool to check if a dimmer has been assigned the right address and/or if the right loads have been connected to its outputs. This option also provides a convenient way to check if the same address has been assigned to more than one dimmer. To stop the flashing reset the dimmer module (see F6).

F6. [6] Reset Dimmer

If a particular dimmer module failed during a check, this operation performs a software reset on the dimmer module. Just respond to the RAU with the dimmer module number. In most instances this will solve the problem. If it does not, a hardware reset may be necessary. The hardware reset may be implemented by turning power the dimmer module's power off and back on, using its circuit breakers.

F7. [7] Check Patch panel

The RAU prompts the user for a patch panel number. Then it begins checking patch panels in descending order starting with the number supplied by the user. If a patch panel fails to respond for any reason, the RAU displays its number with an ERR (error) next to it. When done the RAU displays
SYSTEM CHECK DONE, CONTINUE [ENTER].

Check the patch panels that failed (if any) for proper connections or ID settings. Reset the patch panels and repeat the check until all patch panels pass this test. Press "ENTER" key to continue.

F8. [8] Flash Patch panel

Upon giving the RAU a patch panel number, the patch panel having this address will start pulsing its LED's. This is a good tool to check if a patch panel has been assigned the right address and installed in the right location. This option also provides a convenient way to check if the same address has been assigned to more than one panel. To stop the flashing reset the patch panel (see F13).

F9. [9] Reset Patch panel

If a particular patch panel failed during a check, this operation performs a software reset on the patch panel. Just respond to the RAU with the patch panel number. In most instances this will solve the problem. If it does not, a hardware reset may be necessary. The hardware reset may be implemented by turning power off to the patch panel for few seconds or by pressing the patch panel's reset button. The reset button is located between switches 1 & 5, behind the front cover. Use a nonconducting object such as the tip of a pencil to push the reset button.

F10. [10] Hold Net

This function is used to disable network communications. When invoked all stations and other host devices will stop sending switch activations to the network until the "Release Net" function is received (see F11).

F11. [11] Release Net

This function is used to re-enable network communications. It can be used in conjunction with "F10" to reset the software communications drivers of all Protocol devices connected to the network.

F12. [12] Exit to Main

Returns control to the main menu.

G. Logging Off

To log off the system, select 10 from the main menu. Wait for RAU to respond with the "GOOD BYE" message. Press the Disconnect button and exit Protocol.

H. RAU Error Messages

H1- INVALID CHOICE
Data entered in response to a prompt is not within valid limits.
H2- INVALID PASSWORD
The password entered is either invalid or has the wrong format.
H3- DATA FILE ERROR DETECTED, PLEASE CHECK FILE !!!!
Press [ENTER] to Continue...
Information contained in a configuration file contains errors. Check the configuration and generate system files again.
H4- DEVICE ERROR DETECTED, PLEASE CHECK DEVICE !!!!
Press [ENTER] to Continue...
The device receiving this file did not respond properly. Check connections to the device , Reset the device and try again.

THE END