

## *Section 15 – Physical Diagnostic Utility*

### **FEATURES**

This utility allows the user to see the physical inputs and outputs associated with a logical or physical control panel, input mnemonic, output mnemonic, and level mnemonic. It also provides the user the opportunity to view outputs associated with a logical or physical input.

This utility can be used in conjunction with the Physical Remapping Utility. The user must be logged into the network for this utility to function.

Note: The Physical Diagnostic Utility does not support remote PC operation.

This is an MDI application. An MDI application has a window within which multiple MDI child windows, which are frame windows themselves, can be opened, each containing a separate document (or a log file for this utility).

### **MENUS**

#### *File*

New – Allows the user to create a new Diagnostic Log File.

Open – Allows the user to open an existing Log File.

Close – Closes the frame window that has the keyboard focus. If only one child frame window is open, this will close that child window.

Save – Saves the log file that is open in the child frame window, which has the keyboard focus.

Save As – Saves the log file to a different filename.

Print – Prints the current log file.

Print Setup – Sets up the printer.

Recent Files – Lists the last four log files being created or opened.

Exit

#### *View*

Toolbar – Allows the user to display or hide the toolbar.

Status Bar – Allows the user to display or hide the status bar.

Input Mapping – Provides the user with the input mapping table.

Input/Output Exception Table – Provides the user with the Input or Output Exception tables.

### *Options*

Manual – Allows the user to update the log file manually.

Automatically – Allows the user to update the log file automatically.

### *Window*

Cascade – Cascades all non–minimized MDI child windows.

Tile – Tiles all non–minimized MDI child windows.

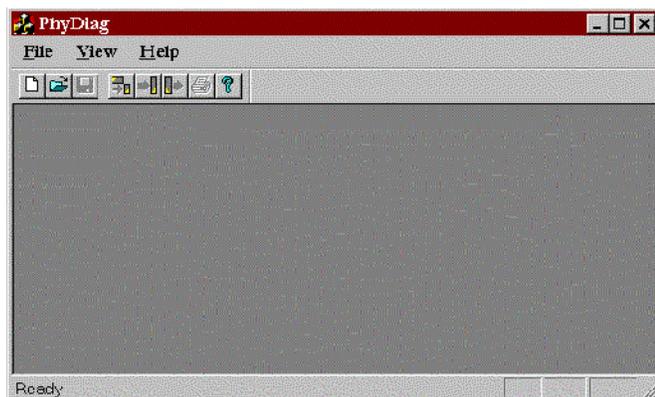
### *Help*

About PhyDiag

Displays the About dialog box.

## **FUNCTIONALITY**

Figure 15–1 shows the main MDI frame window that the user sees when entering the application.



**Figure 15–1.**

*File > New*

Selecting this item brings up the following dialog:

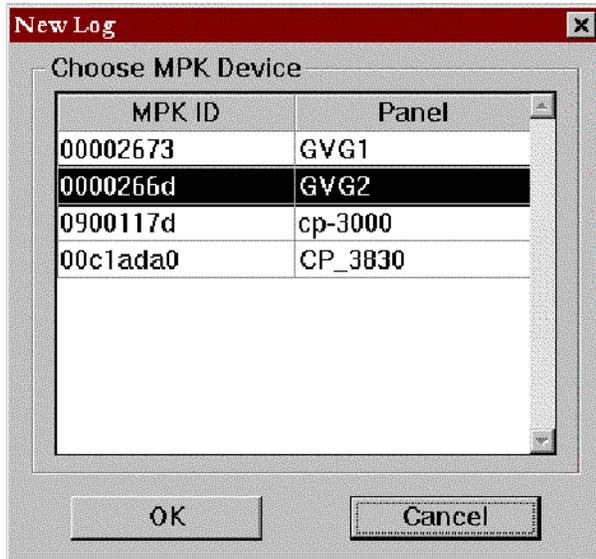


Figure 15-2.

Select a control panel (MPK device) by clicking on one row of the grid table. The row will be highlighted and the OK button will be enabled. When OK is selected, the following dialog will be displayed:

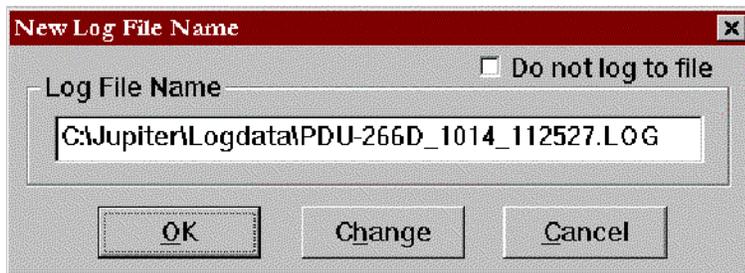


Figure 15-3.

This dialog displays a filename that consists of the name of the control panel the user has chosen and the current time and date. Select the **Change** button to change the filename. If OK is selected, a MDI child frame window containing an empty log document will be displayed:

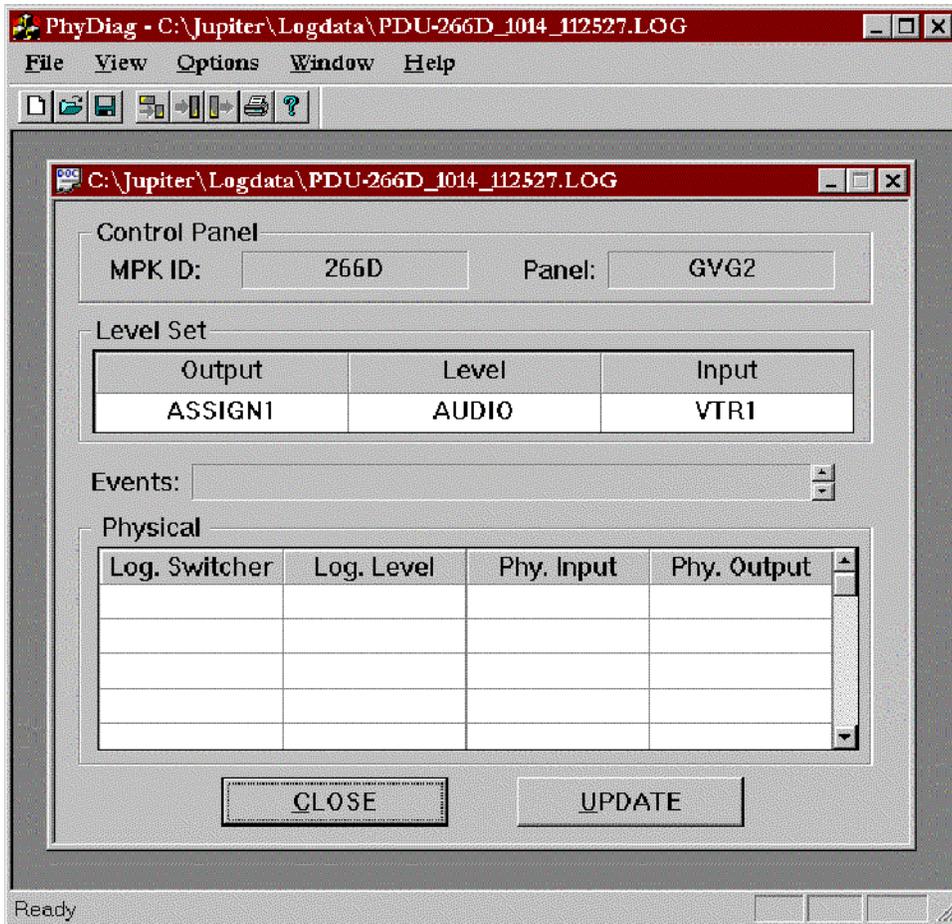


Figure 15-4.

The title bar of this MDI child window shows the log file name, and the first two fields of the dialog show the control panel the user has chosen. To display the associated physical information, select an output, input and level mnemonic. **Once these fields are filled in**, select **UPDATE** to display the “Physical” table.

The Physical table displays the switcher, logical level name, physical inputs and outputs associated with the logical information. The user may select to update the table and log manually or automatically by selecting the **Manual/Automatic** toggle in the **Options** menu. Note that multiple lines of information may be displayed for each event if the currently selected input/output/level uses path-finding.

The contents of this scrolling display can be saved as a CSV (comma delimited) file by selecting the File > Save menu option.

#### Selecting By Output

When the “Output” field is selected from the “Level Set” table, the “Output Select” dialog is displayed:

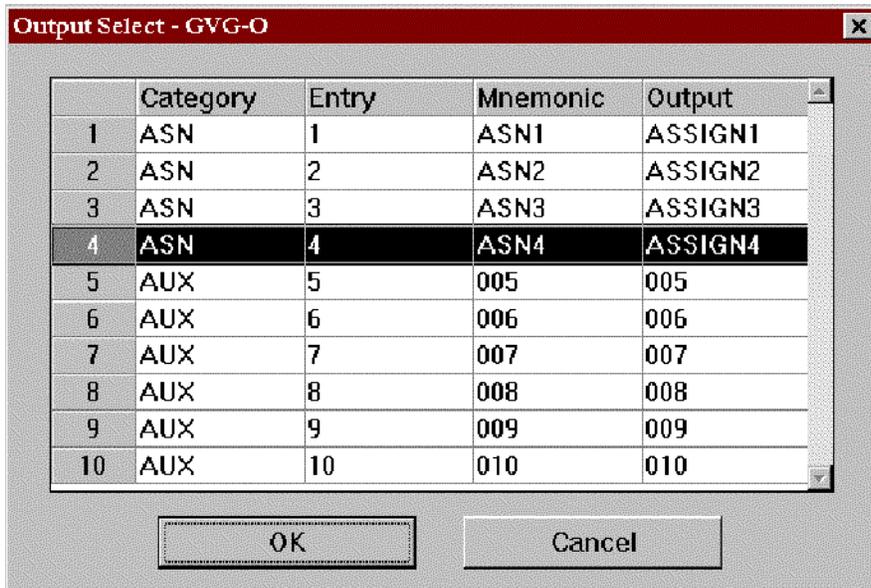


Figure 15-5.

The title bar of this window displays the Control Panel Output Set name as well as the logical control panel name.

The table displays the output set for the selected control panel. To select an output, click on any row in the table, and click “OK.” The output mnemonic is displayed in the **output** field of the **Level Set** table in the Physical Diagnostic child window.

*Selecting By Level*

When the “Level” field is selected from the “Level Set” table, the “Level Select” dialog box is displayed:

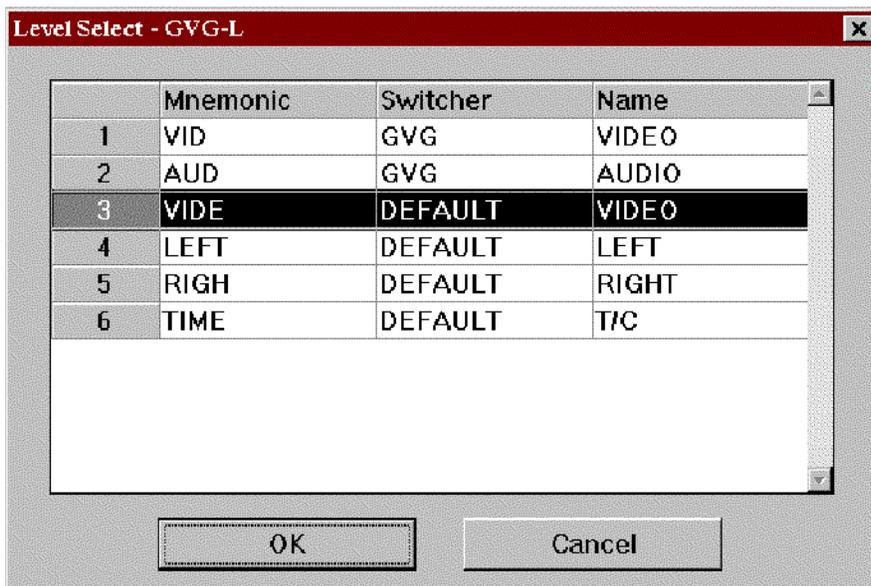


Figure 15-6.

The title bar of this window displays the Control Panel Level Set name as well as the logical control panel name.

The table displays the level set for the selected control panel. To select a logical level, click on any row in the table, then click “OK.” The level mnemonic is displayed in the **Level** field of the **Level Set** table in the Physical Diagnostic child window.

NOTE: If the selected output and level set have an input associated with it, then the input mnemonic will be displayed in the **input** field of the **Level Set** table. If no input is associated with the selected output and level, an INVALID red color mark will be displayed in the input field of the Level Set table.

*Physical Data Update*

After selecting the panel mnemonics, the **UPDATE** button of the MDI child window will be enabled to allow the user to update the physical information. All events will display in the window with a scroll bar, if necessary. If “path-finding” is in use, there will be multiple lines of data for an event. The data will be written to a comma delimited CSV log file, as displayed in the title bar of the child window. The log file will have the capability of being printed to the currently selected Windows printer. The user may select to update the table and log manually or automatically by selecting the **Manual/Automatic** toggle in the **Options** menu.

*File > Open*

This menu allows the user to view and print an existing log file. The following **Open** dialog is displayed to allow the user to choose an existing log file:

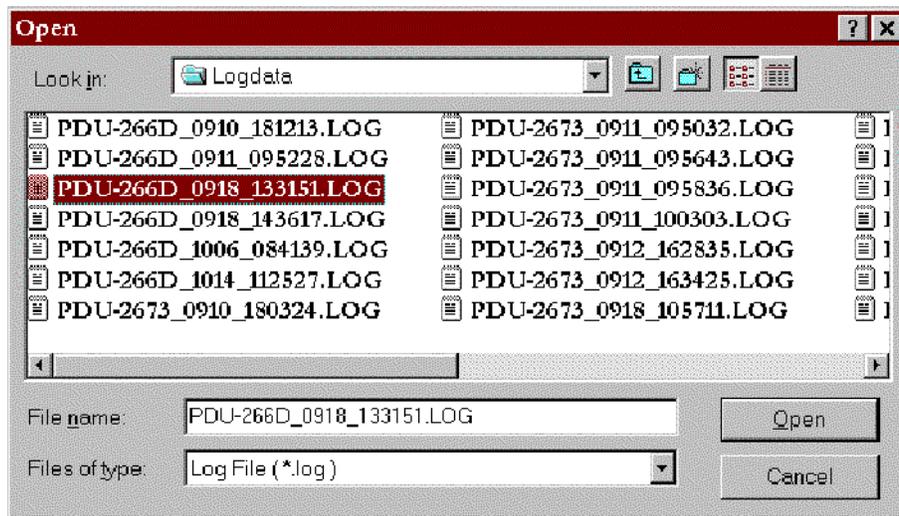


Figure 15-7.

After the user selects a file, a MDI child window as in File > New containing the information of all the events in the log file will be displayed.

*View Menu*

The View menu contains **Input Mapping**, **Input Exception Table**, and **Output Exception Table** items.

**INPUT MAPPING**

Input Mapping allows the user to view the mapping of Logical Outputs; Physical Outputs can also be viewed by selecting a logical switcher, logical level, and an input, as seen in the following window:

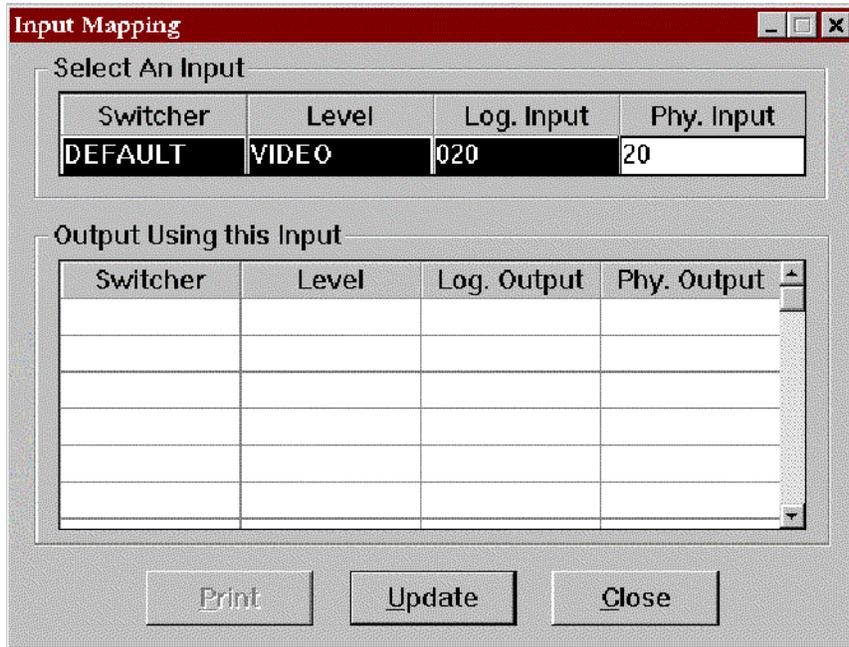


Figure 15-8.

Inputs are selected either by physical number, or logical name. **Once all the fields are filled in**, the program will then display a list of outputs the input is currently switched to. The information in this table can be printed to the currently selected Windows printer.

### EXCEPTION TABLES

The Input and Output Exception Tables display the current physical input and output remappings:

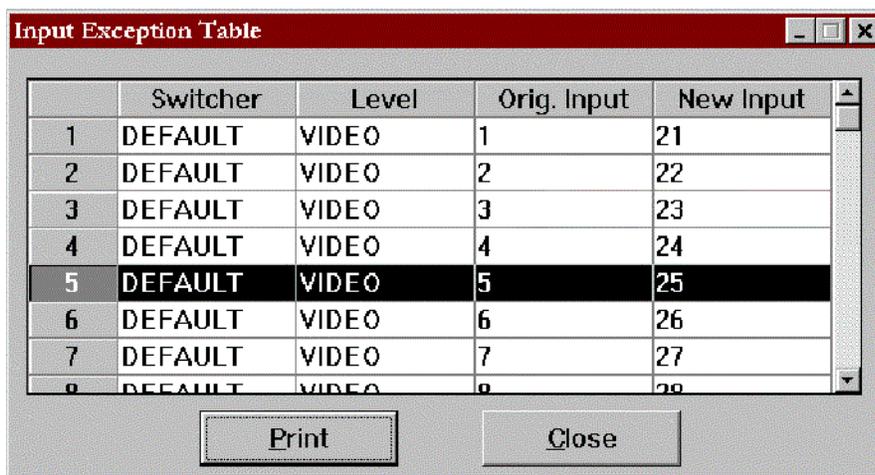


Figure 15-9.

These Input or Output exception tables are entered from the Physical Remapping Utility. They can be printed to the currently selected Windows printer.