

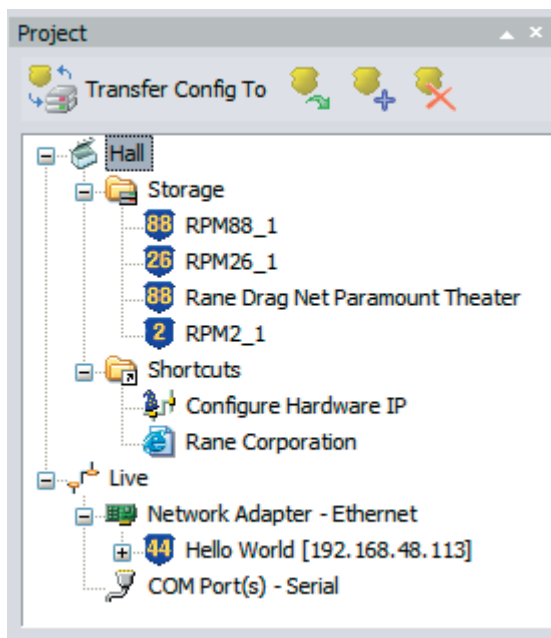
## Drag Net Quick Start

Rane's tradition of writing a one page Quick Start section in our manuals has been revamped. Since this section is four pages, it's called the *Mostly* Quick Start section.

Drag Net software installation is straight forward — just run the **setup.exe** file included on the CD-ROM or downloaded from Rane's website ([www.rane.com/dragnet.html](http://www.rane.com/dragnet.html)) and follow the on-screen instructions.

You are prompted to create a new project and device configuration the first time Drag Net is launched. Enter the project name and file storage location on your hard drive. A second dialog allows you to create a new device configuration. Select a device type, RPM 26z for example, and specify a hard drive storage location to create a new configuration.

Once a new project and configuration have been created, a collection of windows is displayed within the Drag Net interface. These windows can be independently resized, opened, closed, docked and floated as you prefer.



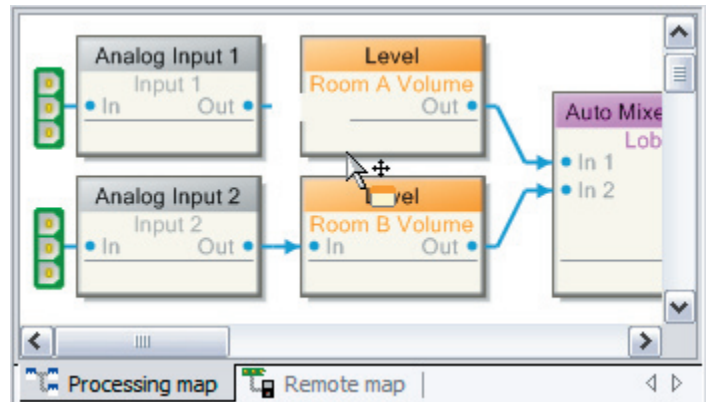
The **Project Window** is comprised of three folders and provides links to Storage configurations, Shortcut links to other files or applications, and a list of Live devices. Think of a Project as an editable database of links — only the *links* to files are contained in the Project file (\*.prj file extension). The Project file neither stores nor contains any of the settings for a particular device configuration, it just consolidates and manages links to the relevant files (for examples, the RPM 26z configurations are stored with a .r26 file extension, and the RPM 88 configurations have a .r88 extension). Changes to a Project's contents are automatically saved. Only one Project at a time can be viewed in the Project window.

- The Storage folder displays a list of “offline” or Storage configurations residing on the local hard drive. Add links to new or existing configurations to the Storage folder by right-clicking within the Project window and selecting either New or Add file(s).

- The Shortcuts folder displays a list of links to non-Drag Net files or applications (e.g. project spreadsheets, proposal documents), URLs, and even email recipients. Double-click on a Shortcut to open it using the associated application. Add additional links to the Shortcuts folder by right-clicking within the Project window and selecting New.
- The Live folder displays a list of “online” Drag Net devices. Click on the **Poll** icon or right-click in the Project window and select **Poll for devices**, then choose one of the polling options. The Live folder is populated as the polling operation progresses.

*Transfer configurations between Storage and Live by dragging and dropping configurations from one folder to another, or by using the **Transfer** menu.*

*All outputs are intentionally muted each time a new configuration is transferred to a Live device. Unmute each output individually or use the **Mute Outputs** button in the toolbar to toggle the mute status of all outputs (after carefully pondering the consequences, of course).*



The **Device Configuration Window** displays the current device configuration, activated by double-clicking a Storage or Live configuration (or alternately by right-clicking and selecting Open Item). It is comprised of two distinct views: the Processing Map and the Remote Map. Toggle between views using the tabs at the bottom of the window.

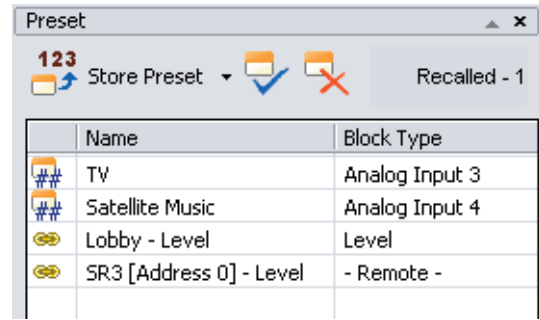
The **Processing Map** serves two basic functions:

- It allows drag and drop techniques to assemble and connect any combination of signal processing blocks between the inputs and outputs of a Storage configuration. It is not possible to add or delete signal processing blocks or connections on a Live configuration.
- It allows you to view and edit, in real-time, all signal processing parameters for Storage or Live configurations. Double-click the processing block or right-click and select Properties to display a Properties (parameters) dialog. Changes made to a Live configuration are automatically transferred to and saved in the Live device. Changes made to a Storage configuration must be saved using the Save command.



The **Remote Map** is used to configure the Versatile Input Port (VIP) and the RW-485 Remote Interface Port, if the RPM unit is so equipped. The VIP accepts either contact closure switches for Preset recall, or 0-5V potentiometer-on-a-wall devices for Level control. Double-click Edit VIP Properties in the Parameter Window to allocate multi-pin or single-pin control. Multi-pin control is used with contact closure switches to recall Presets, or to select inputs in a Source Selector, for example. Single-pin control is used for independent parameter control: to adjust levels using a potentiometer, or to engage the Push-to-Talk function of an Auto-Mixer input, as examples. See the “Using the Remote Map” section of Drag Net’s Help (Help > Help Topics) for the full scoop.

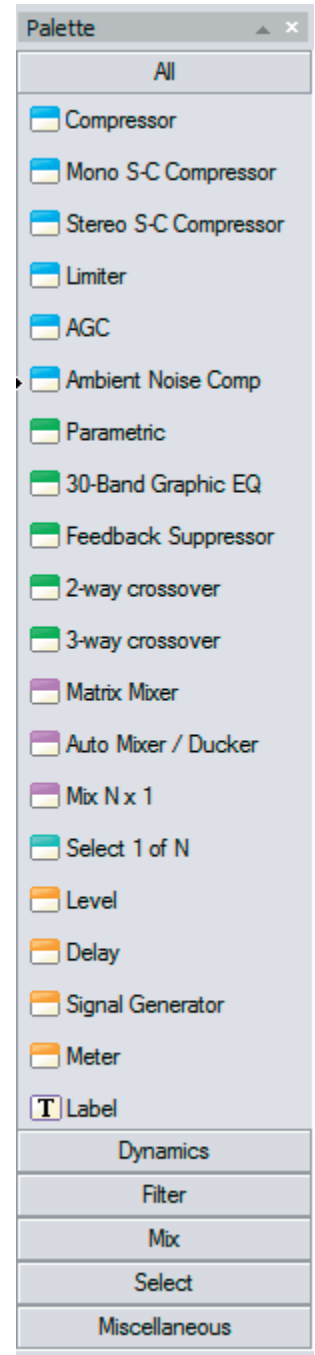
The Remote Interface Port uses Rane’s RW 485 protocol to communicate with our SR series of Smart Remotes. Double-click Add/Edit Remotes in the Parameter window and follow the on-screen instructions to add new Remotes or edit existing Remotes. Smart Remotes can perform many functions including Preset Recall, Source Selection, and Level control. See the “Using the Remote Map” section of Drag Net’s Help (Help > Help Topics) for more information.

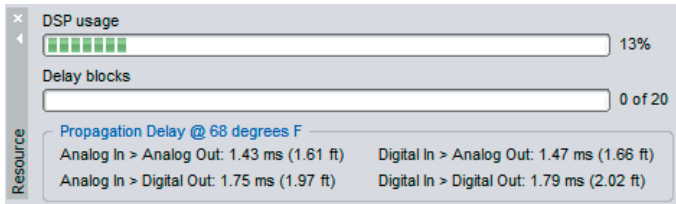


The **Preset Window** manages the creation and storage of Presets. A Preset may contain any or all of the processing and control blocks displayed in the Device Configuration window. Add blocks to the Preset block list by dragging and dropping them from the Device Configuration window to the Preset window, or by right-clicking the block and selecting Add to preset. Remove blocks from the Preset window by selecting one or more blocks from the list, then using the Delete key or the Remove Selected Block(s) button. Click the Store button and select a Preset number to store the current settings of all blocks contained in the Preset block list.

Presets are recalled using the Recall Presets button in the toolbar at the top of the screen. When a Preset is recalled, only the parameters or Remote Map associations of the blocks contained in the Preset change; all other blocks maintain their current settings, thereby creating a parameter overlay effect. The Preset window does not have to be visible in order to recall Presets.

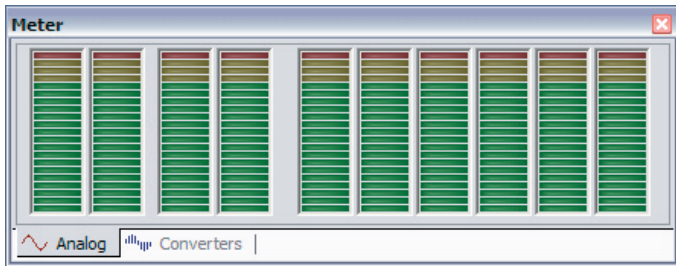
The **Palette Window** displays the audio processing blocks used to create Storage configurations. Drag and drop blocks from the Palette to the Device Configuration window to develop your audio system. The various tabs (Dynamics, Mix, etc.) are used to sort the Palette window by block class. Select the **All** tab to display all available blocks.





The **Resource Window** displays usage information specific to the hardware device you're working with. The DSP usage meter indicates the amount of DSP "horsepower" used by the current configuration, and is always accurate. There is no need to hit a "compile" button, since Drag Net automatically compiles on the fly as you work. It is possible to exceed 100% DSP usage when developing Storage configurations, but it is not possible to transfer the Storage configuration to a Live device. The Delay blocks meter indicates the amount of audio delay memory used in the current configuration. Audio delay memory differs from memory used by other signal processing functions; thus, it is given its own meter.

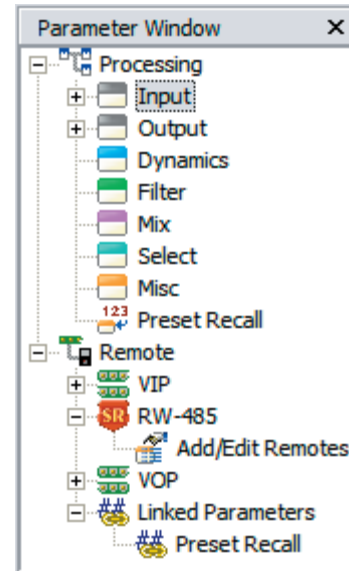
Propagation delay (latency) statistics for both the analog I/O and the AES3 digital Input are also displayed in the Resource window. The propagation delay varies slightly with the quantity of signal processing blocks used in the configuration. Importantly, the propagation delay for all analog I/O is forced to be the same (referred to as "Delay Compensation"), in order to maintain the relative timing between input signals (unless you add a Delay block to the signal path, of course).



The **Meter Window** provides two tabbed views of all input and output levels of a Live device. The Analog tab shows the calculated level, in dBu, at each analog input and output.

The **Converters** tab displays the dB Full Scale (dBFS) reading immediately after the input A/D converters and immediately before the output D/A converters. The AES3 digital input meter (dBFS) is displayed in both views.

The number of meters provided varies with device type. Meters are only active when working with a Live device.



The **Parameter Window** displays a tree structure view of all signal processing and control blocks used in the active Device Configuration. It is organized by block type (Input, Output, Dynamics, Filter, etc.), with individual parameters appearing as sub-entries beneath each block entry.

Individual parameters within a block are prefaced with "##".

The Parameter window is primarily used to set up associations between parameters and remote control devices (VIP pins, Smart Remotes).

Other things you can do with the Parameter window:

- Double-click any entry to view its Properties dialog.
- Drag-and drop entries from the Parameter window into the Preset window to quickly build Presets.
- Edit VIP Properties.
- Add or Edit RW 485 Smart Remotes.
- Edit VOP Properties.

*Handy tip:* The Parameter window supports multi-select operations. Simply ctrl-click or shift-click multiple entries to perform the same action for the entire selection – add a range of blocks to the Preset window, for example. Alternately, you can select a top level block – the Input block, for example – and perform actions on all related sub-entries.

## Big Picture Concepts

### Storage Mode versus Live Mode

When you first create a Drag Net device configuration, it is stored and appears under the Storage folder of the Project Window. Think of this as *offline* mode. Any changes made to Storage configuration are saved to your computer only; they are not updated automatically on the Live device.

Storage configurations are transferred to a Live device, which appears under the Live folder of the Project window after successfully polling for devices.

After transferring the configuration from Storage to Live you can adjust parameters, build Presets, and set up Remote Map associations in real time on the Live device. You can not add/delete blocks or wires. Think of this as *online* mode. All changes are automatically saved to the Live device; however, periodically transfer the Live device settings back to a new or existing Storage configuration in order to maintain an offline (backup) copy of system settings. Live device settings are not automatically kept in synch with Storage configurations.

## File Concepts

A Storage configuration consists of:

- The Processing Map (schematic/audio signal flow).
- Parameter settings (gains, delay, EQ, etc.) and Preset info.
- Remote Map link info.

In Drag Net 4.2 and higher, these items are stored in a single configuration file (see Project Window on page 1). This makes it easier to track, transfer between computers or email your Drag Net configurations. Previous to 4.2, this data was in three independent files.

### Dragging Tips (Storage mode)

**Audio flow:** Drag and drop blocks from the Palette window to the Processing Map to build the audio portion of a Device Configuration.

**Control:** Drag and drop items from the Parameter window to the Remote Map to build the control portion of a Device Configuration.

Move blocks around the Device Configuration window by left-clicking the block to select it, then dragging the block to a new location while continuing to hold down the mouse button. Alternately, left-click the block to select it, hold down the CTRL key, then use the arrow keys to reposition the block.

Drag and drop blocks from the Device Configuration window to the Preset window to add blocks to the Preset block list.

Drag and drop configurations between the Storage and Live folders in the Project window to transfer configurations between the PC and a Live unit.

### Wiring Tips (Storage mode)

Wires can be dragged from Out pins to In pins found on each processing block. A couple tips:

- You must wire from an Out pin to an In pin.
- Any Out pin can be wired to as many In pins as desired — a dedicated split block is not required. It is not possible, however, to connect multiple Out pins to a single In pin. Use mixers or selectors for this purpose.

### Presets

The current settings of a device (all Properties, or parameters) are always stored in working memory and displayed in the Device Configuration window, making for a true WYSIWYG (What You See Is What You Get) interface. Each user-definable Preset can store processing block Properties and Remote Map settings for subsequent recall. A Preset can be comprised of any or all processing or control elements displayed in the Device Configuration window.

Only the processing parameters and the Remote Map settings are stored in Presets — it is not possible to change the wire routing or signal flow using Presets. If you require a completely new signal flow, you must either draw all required parts of the system in the Processing Map and then toggle Presets to route the audio between the various system blocks using selectors or mixers, or transfer a new Storage configuration from the PC to the Live device.

### Storing to Presets

Click the **Add All Blocks** button, located next to the Store Preset button in the Preset window, to populate the Preset block list (Name/Type) with all blocks on the Processing Map. Store a Preset by clicking the **Store Preset** button and selecting a Preset number. The current settings of each block in the list are stored, the device configuration is automatically saved, and the stored Preset is automatically recalled.

It is also possible to store and recall a subset of processing and control blocks. Drag and drop (or alternately right-click a block and choose **Add to Preset**) only the blocks you want stored in the Preset from the Device Configuration window to the Preset window. When the Preset is recalled, only the settings of the blocks contained in the Preset are modified; all other blocks remain unchanged from their current state. Thus, recalling the Preset “overlays” the current settings with a subset of new parameters.

### Recalling Presets

The **Recall Preset** button in the toolbar at the top of the screen recalls previously stored Presets. When a Preset is recalled, its number is displayed in the upper right corner of the Preset window, the block list in the Preset window is populated, and small numbered tags appear in the lower right corner of each processing or control block comprising the recalled Preset. Clear these tags by right-clicking within the Device Configuration window and selecting **Clear all preset tags**.