



Miranda Technologies Ltd

Release Notes

Presmaster 5.3.4 Software Release Notes

Release history

5.3.4 point release (February 2011)

New Features:

- BZ 5919 - Show currently active bus selections on Kaleido.
- BZ 5920 - Update Kaleido with source names.
- BZ 5709 - Log when Automation sends a take but no actions are armed.
- BZ 5961 - Dialogs entered are now named in the logs.
- Audio metering rate is now configurable.

Problems Resolved:

- BZ 7245 - NVision drivers use one message queue for all instances/serial ports.
- BZ 6034 - Nvision (NV9000) driver not reflecting external routes.
- BZ 6305 - GPIO on PresStation can behave strangely.

These three items all improve performance on higher latency networks:

- Numerous bugs - shrink Panel-PCS packet size to increase performance.
- BZ 5776 - Drain network sockets when possible.
- BZ 5775 - Increase network socket size.

5.3.3 point release (December 2009)

Problems Resolved:

- BZ: 5760 - Network router driver doesn't get crosspoints at start-up.

5.3.2 point release (December 2009)

Problems Resolved:

- BZ: 5655 - Probel drivers don't support "bad signal" bit.
- BZ: 5488 - Intuition control is not disabled by the Auto On/Off button.
- BZ: 5423 - Asrun logs do not log any Intuition commands.
- BZ: 5533 - Command tunnelling fails to an Intuition.
- BZ: 5506 - Group monitoring is mis-routing Always Show Source.

5.3.1 point release (October 2009)

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Problems Resolved:

- BZ: 5475 - Setting the Intuition fade rate from automation fails
- BZ: 5484 - Under automation all the intuition keyers can look armed, even if they do nothing.

5.3 release (October 2009)

New Features:

- Rationalised thread naming in the messages log.
- Clarified log data from the network interface.

Problems Resolved:

- BZ: 4969 - Error in the automation command 0x0047 Intuition Media Check response.
- BZ: 5172 - File filter types occasionally get corrupted during configuration conversion
- BZ: 5321 - Output gain does not Zero when pressed.
- BZ: 5153 - Grabbing one channel from another doesn't always pick up all fresh data.
- BZ: 5152 - Dropping a channel whilst the cache is updated in the background causes a crash
- BZ: 5151 - Browser never caches if the Imagestore has > 4000 images on it.
- BZ: 5115 - PresMaster doesn't support a U-Fade from Automation.
- Cleared potential lock when caching Imagestore media

5.2 release (August 2009)

This release is partnered by a PresConfigurator release - V3.2 build 090714-0927

New Features:

- BZ: 4700 - Allow hot cut VGPIs/Macros. This option can be enabled in the Panel configuration screen.
- BZ: 4701 - Allow physical GPIs to initiate the VGPIs/Macros. The following example panel config maps physical GPIO inputs 23-28 to the VGPIs.:

```
gpio
{
    invgpi1="23"
    invgpi2="24"
    invgpi3="25"
    invgpi4="26"
    invgpi5="27"
    invgpi6="28"
}
panel
{
    ...
```

Problems Resolved:

- BZ: 4968 - JL Cooper fader behaviour is erratic and sometimes incorrect

5.1.2 point release (July 2009)

This release is partnered by a PresConfigurator release - V3.2 build 090707-0918

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Problems Resolved:

- BZ: 4798 - NVision CR routers are unreliable with the PresMaster. Note: This also requires an update of the Compact Router firmware.
IMPORTANT! - There are now two NVision drivers named: nvision-nv9000 and nvision-cr. Any existing nvision installation will require the driver to be changed as a result of this upgrade.
- BZ: 4774 - Group monitor routes now guaranteed to be set on a channel change, even if this would make no change. (1/2)
- BZ: 4774 - Monitor routing unreliable after a network drop. (2/2)
- BZ: 4745 - One Panel disconnecting from a PCS causes all other Panels to lose tallies from that PCS.
- BZ: 4806 - Diagnostics doesn't grab network information from a PCS3.
- BZ: 4775 - PCS channel connections not initialised correctly.
- BZ: 4906 - Post router tally delay doesn't work for some source transitions.
- BZ: 4773 - Automatic Imagestore media caching should occur after a channel is grabbed and rendered.
- BZ: 4577 - Allow automation to index keyers as they were prior to V5.0, this requires the new key "force_num_keyers" to be added to the port section for every automation connection that you want to use it. Configuration example:

```
...
ports
{
  port4
  {
    allow_unsolicited_packets="true"
    automate_dsk="true"
    comment=""
    control_at_startup="false"
    device_protocol="tx-220"
    device_type="automation"
    force_num_keyers="2"
    log_auto_in_to_asrun_log="false"
    log_auto_out_to_asrun_log="false"
    take_delay="0"
  }
  ...
}
```

- BZ: 3360 - Too many 750 browser threads. (Partial Fix)
- Internal - Added the ability to enable debug logging relating to the network processes.
- Internal - Should the network comms start to get over loaded drop audio metering packets from being sent.
- Internal - If a new source name is detected as being identical to the existing one an update is not sent to the Panels.
- Internal - Should now be more resistant to automation requesting channel changes faster than we can cope.
- Internal - Poll rate of network interface now more efficient.
- Internal - Should now cope better if an entry in the SPA is requested to be removed when it isn't in the hash table. Possible deadlock avoidance and logging clean-up.

5.1.1 point release (March 2009)

Problems Resolved:

- BZ: 4481 - AsRun logger can become disabled if the "Save PCS Config" button is pressed.

5.1 full release (March 2009)

This release is partnered by a PresConfigurator release - V3.2 build 090318-1036

New Features:

- BZ: 4101 - NVision router driver enhanced to turn on and handle unsolicited tallies / subscriptions.
- BZ: 3706 - Asrun logger logs arm or disarm of mix.
- BZ: 4023 - GVG_RCL router driver logs the reason for a serial failure.
- BZ: 4166 - Increased the number of sources per channel from 100 to 512.
- Enabled / Disabled status of unit shown on web interface front page.
- .vpg now included by default for Intuition file filters.
- BZ: 3817 - Monitor routing has been rewritten to be much more flexible and support more routes. Up to ten arbitrary routes can now be made on any channel selection. These can be ANY routes desired on any layer, matrix or router that is in the PCSes equipment list. This requires a new configuration, so existing systems using monitor routing will require their configuration to be manually updated. The new configuraton requires work in both the system.conf and panel.conf, e.g.:

This snippet of panel.conf would configure a panel to request ten routes to be made to destinations 20-29 on a channel change. The sources routed are defined in the system.conf for the channel chosen.

```
panel
{
    shot0="172.16.1.1^0"
}
monitor_routes
{
    dest0="20"
    dest1="21"
    dest2="22"
    dest3="23"
    dest4="24"
    dest5="25"
    dest6="26"
    dest7="27"
    dest8="28"
    dest9="29"
}
```

This snippet of system.conf would configure the first channel to allow ten routes to be made if the Panel requested it on a channel change. Sources 30-39 would be routed on a channel change

```
prescontrols
{
    172.16.2.2
    {
        chan_a
        {
            ...
            routers
            {
                layers
                {
                    ...
                }
                matrix
                {
```

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```
    ...
}
monitor
{
    route0
    {
        router="^8"
        layer="0"
        matrix="0"
        src="30"
    }
    route1
    {
        router="^8"
        layer="0"
        matrix="0"
        src="31"
    }
    route2
    {
        router="^8"
        layer="0"
        matrix="0"
        src="32"
    }
    route3
    {
        router="^8"
        layer="0"
        matrix="0"
        src="33"
    }
    route4
    {
        router="^8"
        layer="0"
        matrix="0"
        src="34"
    }
    route5
    {
        router="^8"
        layer="0"
        matrix="0"
        src="35"
    }
    route6
    {
        router="^8"
        layer="0"
        matrix="0"
        src="36"
    }
    route7
    {
        router="^8"
        layer="0"
        matrix="0"
        src="37"
    }
    route8
    {
        router="^8"
        layer="0"

```

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```
        matrix="0"  
        src="38"  
    }  
    route9  
    {  
        router="^8"  
        layer="0"  
        matrix="0"  
        src="39"  
    }  
    }  
}
```

Problems Resolved:

- BZ: 3815 - Group monitoring fixed to work with "always show source".
- BZ: 4267 - Intuition layers incorrectly assigned from automation.
- BZ: 4431 - Source Groups can't always be selected.
- BZ: 4009 - Panel with no setup for J.L.Cooper audio console crashes.
- BZ: 4046 - J.L.Cooper audio console not working correctly.
- BZ: 4093 - Added Take button to auto-assist GUI.
- BZ: 4124 - Pesa & Utah router drivers missing since V4.8.
- BZ: 4299 - Running automation with group monitoring enabled causes performance hit.
- BZ: 4235 - Having no IP address can cause the fp mirrors to fail.
- BZ: 2987 - FP Mirror on Webserver missing 1 character per line.
- BZ: 4134 - GPI in's don't work.
- BZ: 2994 - Webserver enable / disable on startup doesn't save state.
- BZ: 1407 - Web interface reset script on PCS003 doesn't work.

5.0.2 point release (November 2008)

Problems Resolved:

- (Bugzilla 3866) Now enables new connect commands to be received whilst doing a disconnect. This was following a request from Omnibus.
- (Bugzilla 3982) Infocatch now works correctly from the webserver.

5.0.1 point release (November 2008)

Problems Resolved:

- Web content was not installed, so after installation the web interface was no longer available. Please ensure that after upgrade from an earlier version that the unit is rebooted.

5.0 full release (November 2008)

New features:

- ((Bugzilla 1943 & 565) A channel configured to have an IS750 and Intuition now exposes all four keys of the IS750 in the main panel GUI and under automation. This has led to a considerable rework of the user interface not only showing the four keys of the IS750 but also showing the keys of the Intuition
- Automation now addresses the first Intuition keyer as 4 when an IS750 is configured in the system.

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- (Bugzilla 3229) It is now possible for the user to configure the GPI outputs of the panel. This, for example, enables the operator to choose to output all 10 GPIs for the router sources.
- New web interface, this includes the ability to run infocatch from the web server.
- (Bugzilla 3490) On PresStation main dialogue the FTB and FTS buttons at the bottom of the GUI were labelled fade and silence. These have been changed to show 'Fade to black' and 'Fade to silence'.
- (Bugzilla 1176) The channel button on the PresStation (to the left of the channel selectors) now shows which channel group is currently selected. So for example if on the first channel group this will display 'Chan 1-10'.
- (Bugzilla 1953) There is now a config option to disable asrun logging on the PCS. The option is named `asrun_logging` and should be put in the main channel part of the system config file. Set this to false to disable asrun logging.
- (Bugzilla 3510) The ImageStore browser now displays five buttons to the left of the thumbnails. These are: Still, Anim, Clip, Audio and Templates. By selecting the required buttons the contents of the browser can be changed to just show those files selected by the button or buttons selected. In addition the file types shown on each of these buttons can be stored for each keyer in the channel of the system config file. An example of the settings is:

```
still_file_types=".oxt"  
template_file_types=".tem, .pag"
```

The following fields are available:

```
still_file_types  
anim_file_types  
audio_file_types  
template_file_types  
clip_file_types
```

- (Bugzilla 515) The audio meter scale adjustments used to be lost when the panel was restarted. These changes can now be saved by selecting the 'save panel config' button.
- Added the machine control buttons to the PresStation. This is available by selecting the button 'Machine Control' to the right of the channel selection buttons.
- Network router driver changed to stop commands being sent to the network router faster than once every 100mSec as detailed in the specification of the Network router.
- Added new automation error message when automation tries to change a panel to another channel and the panel is in the middle of acquiring a channel.
- Now display > Empty < message if there is no graphic loaded into a keyer on the Imagestore or Intuition.

Problems Resolved:

- (Bugzilla 2795) Aux follow mode did not work.
- (Bugzilla 3653) If you go into the front panel mirror for the IS750 when this was already in use by another application, the panel mirror will not display. If the panel was then dropped and reacquired the panel could lock up during the acquisition process.
- (Bugzilla 2651) The take button did not flash when a macro was armed.
- (Bugzilla 2752) The GPI on the PCS to indicate that a channel was acquired did not work.
- (Bugzilla 3355) The `set_identity` script could break the IP configuration.
- (Bugzilla 3543) The audio voltage alarm is invalid for an IS750, this was showing false warnings on the alarm panel, so this alarm has been removed.
- (Bugzilla 3647) The Imagestore only allows one connection to the front panel mirror. If something had access to the Imagestore front panel when the panel tried to look at the mirror this would not be

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displayed. Having done this the panel would never again be able to look at the mirror even if the other connection to the mirror was dropped.

- (Bugzilla 2560) Infocatch does not work on a PCS003, this is fixed if you use this via the web interface.
- (Bugzilla 3358) Channel button interlock was broken so that on a panel rapidly dropping or reacquiring a channel could lock up the panel.
- (Bugzilla 3499) Removed the Miranda contact information dialogue.
- Fixed problem on the Probel Aurora driver to remove some potential to miss messages from the router.

4.8.1 point release (September 2008)

New features:

- (Bugzilla 3489) Using the extended automation command 0x0033 it was only possible to load fill and key 1 in to a keyer. This command has now been extended so that any of the 3 fill and key inputs of the IS750 can be loaded into a keyer.
- (Bugzilla 3489) Extended the number of routes that can be made for group monitor routing from 10 to a user configurable number up to 16.
- (Bugzilla 3505) Added new automation command to disconnect a channel from a panel.
- (Bugzilla 3506) Added an unsolicited automation tally that is sent out each time the automation button is pressed on the currently connected panel.
- (Bugzilla 3510) Added the display of vaf, tga, pag and oxi files in the PresMaster browser.

Problems Resolved:

- (Bugzilla 3507) Fixed problem on GVG Acappella router whereby selecting a preset source would cause an incorrect tally to be displayed on the program bus.
- (Bugzilla 3509) Added a configurable delay between making a crosspoint and getting a status on the Nvision router driver.

4.8 full release (April 2008)

New features:

- When using the GVG_RCL protocol the router source names can now be automatically obtained from the router. To enable this feature set `use_router_srcnames="1"` in the port section for the router in the PCS system configuration file.
- When a channel is grabbed you can now configure the channel to switch all the current sources on the panel mapping to 10 pre-defined router destinations so that the current preset sources are output to these router destinations. These can be input sources for an MVP so that the MVP can be setup to show the video on the ten preset buttons. This output also follows any changes made on the panel to the source group or source mapping table. To enable this mode add a `group_monitoring` section to the panel configuration, which has the format:

```
group_monitoring
{
    enable_group_monitoring="true"
    group_mon_dest0="10"
    group_mon_dest1="11"
    group_mon_dest2="12"
    group_mon_dest3="13"
    group_mon_dest4="14"
    group_mon_dest5="15"
```


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```
group_mon_dest6="16"  
group_mon_dest7="17"  
group_mon_dest8="18"  
group_mon_dest9="19"  
}
```

- Added a configuration option so that automation commands to and from the PresMaster can be logged to the asrun logs. To enable logging of automation commands to the PresMaster set the config flag `log_auto_in_to_asrun_log="true"` in the automation port section of the PCS system configuration file and to enable the logging of tallies out of the PresMaster set `log_auto_out_to_asrun_log="true"` in the same section.
- Bugzilla 2715: All automation commands to and from the PresMaster are now added to the xlog.
- Bugzilla 2667: The number of ImageStore image files that can be supported by the browser has been increased to 8000.
- Added a new feature to optionally cut down keyers and voice overs and to disarm anything armed when a program bus source is selected directly. To turn this on set "cut down on pgm change" to on in the panel configuration dialogue or set `cut_down_on_pgm_change="true"` in the panel configuration file preferences section.
- Auto assist added, this new feature is enabled by turning the option 'Auto assist mode' on in the panel configuration dialogue or by setting `auto_assist_mode="true"` in the panel configuration file preferences section. In this mode the four buttons on the PresPanel in which the Auto On button is in the middle take the order from left to right: Skip Next, Hold Next, Cue Next and then the Auto On button moves to the right hand position. The Take button also moves to the position of the roll button and the existing Take button becomes Take Next. Pressing any of the buttons: Skip Next, Hold Next, Cue Next or Take Next send out an unsolicited tally to automation (Ext 0928) when pressed.
- Added a 'reset all' button to the source dialogues, pressing this button resets any changes to the input audio sources level, mute or preset back to 0db, off and normal.
- Added new automation command to change a panel to a given shotbox (Ext 0x0043).
- Added a new automation command to get which shotbox a panel is connected to (Ext 0x0044)
- Added a new tally to indicate which shotbox a channel is connected to (Ext 0x0843).
- Added a new unsolicited tally to indicate that a panel has acquired the automation channel (Ext 0x0845).
- Added a new unsolicited tally to indicate that a panel has dropped the automation channel (Ext 0x0846)

Problems Resolved:

- Fixed problems experienced at Canal+ where connection to the PCS would be lost by the panel and in some circumstances the panel would need to be reset.
- Bugzilla 2713: Empty keyers on an ImageStore and Intuition are now handled correctly in the main panel dialogue.
- Bugzilla 2549: The IS750 front panel controls lock up on the PresStation after about 10 seconds work.
- Bugzilla 2647: The ImageStore Front Panel mirror dialogue fails to respond after use of ESC key.
- Bugzilla 2653: The ImageStore front panel mirror did not display the IS750 front panel correctly.
- Fixed problem on the PCS003 that the alias IP address could not be setup from the front panel.

4.7.4 point release (March 2008)

Problems Resolved:

- Possible buffer overrun in Imagestore driver fixed.
- Probel Aurora was logging failed crosspoints for every request, filling log files and affecting performance.
- Probel Aurora could possibly miss an Ack.

4.7.3 point release (February 2008)

Problems Resolved:

- Removed the hostname lookup in the takeover dialog. In certain network topologies this could cause the Panel/Station to appear hung for up to 30 seconds whilst a name was resolved.

4.7.2 point release (February 2008)

Problems Resolved:

- Increased the timeout time for a connection between a panel and a PCS, this could be too short on a heavily loaded older system on a heavily loaded network.

4.7.1 point release (February 2008)

Problems Resolved:

- Fixed bug that caused controlled kaleidos to switch to the no channel layout if any shotbox was disconnected from it's channel
- Reverted changes to the way the PresStations IP Addresses were configured since this could sometimes get confused during the upgrade from the old style to the new style

4.7 full release (October 2007)

New features:

- Multiple panels can now control one channel on a PCS. This feature will only work on a PCS003 and on a PresStation. By default the old method by which only one panel can control a channel is enabled. To enable sharing requires a configuration setting in the PCS configuration file and there are optional further control options on the configuration of this feature in the panel configuration file. Please see the user manual for information on setting up this feature.
- A reset all button has been added to the pst, pgm and aux dialogues. Pressing this button resets all the audio parameters.
- The panel can be configured so that it enters into auto-assist mode. In this mode the four buttons that used to contain the auto on button now have the following functions: skip next, hold next, cue next and auto on. In addition the take button replaces the roll button and the take button becomes take next. Whenever any of these four auto-assist buttons are pressed a tally is sent out to automation to indicate that the button has been pressed.
- A panel option has been added so that any keyers and VOs that are cut up or armed are automatically cut down and dis-armed if a hot punch of a source on the program bus is made.
- A panel option has been added to flash the arm LEDs on the keyers if they are armed.
- Changed to how ip addresses are configured on the PresStation. This brings them in line with how the PCS003 handles them. Added set_ip_address script to the station.

Problems Resolved:

- Bugzilla 2525: Fixed the preview feature.
- Bugzilla 2517: Voice over rate was being ignored by the ImageStore.

4.6.1 point release (March 2008)

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Problems Resolved:

- AsRun logger nows logs keyer events when they occur during a transition.

4.6 full release (October 2007)

New features:

- Added support for the IS750.
- Now allows kaleido layout changes on source group change.

Problems Resolved:

- Bugzilla 2137: Fixed problem retrying on the Philips2 driver. If there was an error on making a route, which seems to often happen with a Philips router, the retry mechanism was sometimes failing causing a failure making a crosspoint on the router.
- Bugzilla 1855: On a PCS-003 and a Prespanel talking to a two channel 4 key system under automation and using a Network 16 x 16 router. If a half to full page image is cut up on DSK 3 or 4 then the preview output flickers badly. This mainly happens when a transition is set or the Preset bus is changed.
- Fixed problem with Report markers being logged in the message logs during a breakaway.

4.5.3 point release (October 2007)

Problems Resolved:

- Fixed a crash in the Leitch router driver if a tally of the form S? received.

4.5.2 point release (September 2007)

Problems Resolved:

- Bugzilla 1816: The old load live automation command did not work.
- Bugzilla 1927: Automation command to alter the VO rate doubled the value each time rather than setting it.

4.5.1 point release (September 2007)

Problems Resolved:

- Fixed a problem in the Philips2 router driver. It was possible to get the driver in a state whereby the retry would not happen as a result of a NAK coming back from the router. Found at WUSA who were experiencing router presets not happening.

4.5 full release (April 2007)

New features:

- Added MVP support for the Kaleido KX, this needs to have two configuration options added to the panel configuration file. Firstly type="Kx" and secondly room="Room Name". An example is:

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```
port256
{
    device_protocol="kaleido"
    device_type="mvp"
    ip="10.0.0.1"
    master="false"
    net_port="13000"
    room="Master Control"
    type="kx"
}
```

- Improved reporting and arrun logging for FTB and FTS so that you can see from where the command was initiated and also the direction in which the fader is going.
- Improved asrun logging when making a route an extra asrun log had been added to resolve any confusion about which router source is being made (Bugzilla 1339).
- Changed the alarm ranges for the IS300+ PLL voltage.
- The PCS now sends its timecode to the panel which is then logged in the panel's message log (Bugzilla 1259).
- Added new philips2 router driver. This was added because some customers were finding the older philips driver unreliable.
- The PresMaster can now use the new gain set command on the IS300, IS300+ and ISHD. Need to set a new configuration option `new_gain_command="true"`, under the main channel section (i.e. where `chan_name` is set).
- The Sony router driver now has a configurable delay between the set and get command, by default this is 20msec.
- The PCS drives four GPOs to indicate whether the output on programme is AES or embedded for each channel.
- New nvision router driver, this is called "nvision".
- It is possible to modify the labels on the preview buttons in the audio control dialog. To do this enter the `profile_name` entry into the `meter_profile` section of the `system.conf` file. If there is a `meter_profile` section with no `profile_name` definition the button name will default to "profile x" where x is the button number. With no `meter_profile` section the previous button default names will be used, i.e. Preview, PGM input, VO input and so on. Example:

```
meter_profile1
{
    profile_name="This is the first button"
    pairname1 = "1"
    pairname2 = "1"
    pairname3 = "1"
    pairname4 = "4"
}
meter_profile2
{
    profile_name="This is the second button"
    pairname1 = "2"
    pairname2 = "3"
    pairname3 = "4"
    pairname4 = "5"
}
meter_profile3
{
    profile_name="This is the third button"
    pairname1 = "6"
    pairname2 = "2"
    pairname3 = "6"
    pairname4 = "2"
}
```

Problems Resolved:

- Improved error handling if a tally from a router is lost in the post transition cleanup. This improves the recovery process from this error condition.
- Fixed problem whereby acquiring a channel on a PCS003 from a PresStation would only partially acquire the channel(Bugzilla 1368).
- The audio monitoring preview mode is now picked up from the ImageStore rather than forced at startup (Bugzilla 1282).
- Meters flashed when the profile was changed (Bugzilla 1247)
- The lost connection between panel and PCS error message kept appearing in the PCS logs during transitions (Bugzilla 1182)

4.4.2 point release (October 2006)

Problems Resolved:

- Fixed problems programming the bios on newer versions of the ProxH501 processor card as fitted to the PCS003.

4.4.1 point release (September 2006)

New Features:

- Modified the Philips router driver so that you can now change the configuration option to switch all layers. This was changed so that Canal+ could switch simultaneously the HD & SD layers of their router. To make the configuration file change add the line `switch_all_layers=true` under the port section for the router. For example:

```
port12
{
    comment="Philips Router"
    debug=0
    device_protocol="philips"
    device_type="router"
    inputs=64
    num_layers=2
    num_matrices=1
    outputs=64
    switch_all_layers=true
}
```

Problems Resolved:

- Asrun events are now accurately time stamped at the time of the event, rather than the time the message is written to the asrun log

4.4 full release (August 2006)

New features:

- Introduction of the PCS003
- Probel_aurora driver now supports associated switching via the `index_switch` configuration the router's port section of the configuration

Configure it by adding the line: `index_switch="true"` In the port section of the router.

Below is an example in context:

```
port15
{
    device_type="router"
    device_protocol="probel_aurora"
    inputs="128"
    outputs="128"
    num_layers="1"
    num_matrices="1"
    index_switch="true"
```

- The aux bus can now be setup to follow the program bus so that when you make a switch on the program bus a switch is also made on the aux bus. This option can be turned on and off, by a new button added to the bottom right hand corner of the source dialog. To select the sources which are switched on the aux bus, you will need to enter entries into the channel source mapping section such as:

```
chan_sources
{
    aux_alt0="1"
    aux_alt1="2"
    aux_alt2="4"
```

This definition means that when program source 0 is switched the aux bus will route input 1 and so on.

- Also you can set up the system with aux bus routing to make a program switch on another channel.

```
routers
{
    router_pgm_follow_aux="true"
    router_pgm_follow_aux_chan="1"
```

In this case the program bus on channel 1 will follow any changes made on the aux bus on the channel which has this section added.

- - ◆ Added button for setting the machine into and out of aux bus follow mode in the source dialog.
 - ◆ Load live layer 2 now works on the IS300+ in addition to the ISHD.
 - ◆ On startup the PCS issues an XK command to the ImageStore to identify the machine type. If the ImageStore has the correct version of software 1.13 onwards then the PresMaster can configure itself to take into account specific information about the ImageStore. This leads to correct reporting of alarms.
 - ◆ The gvg_n driver now has a configurable delay between transmissions and also suppresses debug logging of source errors unless all the sources in a tally are bad.
- Problems resolved:
 - ◆ Any gain or clip value changes were not updated in the dialog (Bugzilla 778).
 - ◆ In the source window if you had the maximum number of sources if you scrolled to the bottom row of the available sources you are presented with an empty box. If this is selected it should clear the source from the currently selected group entry. This for some reason had stopped working, this change now makes this feature work again (Bugzilla 878).

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- You can no longer browse audio files from the DSK dialog (Bugzilla 792).
- Problem stopping the operator selecting the self keying on an IS2 has now been fixed (Bugzilla 762).
- Fixed problem that lots of aux_altxx="-1" entries were appearing in the configuration file (Bugzilla 876).
- GVG native driver has extended rx buffer to cope with multiple layer tallies.
- Fixed software crashes on PresStation when an illegal DSK number was received from the PCS.

4.3 full release (May 2006)

New features:

- Added GVG Acappella router.
- Added automation commands to support audio lead and lag.
- When REPORT MARKER [3] is displayed we now display the time waited for the end of transition, in case it ever drops through without waiting.

Problems resolved:

- Fixed a potential error in the transition engine which could cause the REPORT MARKER timer to kick in too early.
- Fixed an error message appearing incorrectly in the panel logs. This was due to the panel pinging the control even when no channel was acquired. (Bugzilla 586)
- Fixed a crash in the gvg_n and gvg_f router driver if the router returned an error in the tally.
- Fixed a software crash in the panel.

4.2.2 point release (March 2006)

Problems resolved:

- In the 4.2.1 release using the jog wheel to adjust the input audio gain for a source was very difficult to use. This is now much smoother and easier to select a new gain value.

4.2.1 point release (March 2006)

Problems resolved:

- In 4.2 a dialog was added to indicate that another panel had acquired the channel. This used to sometimes report the wrong IP address of the panel that had acquired the channel. Have now removed this IP address so the dialog now just says "Another Panel has taken control". (Bugzilla 445)
- Asrun log numbering is now in the format 001 so that windows lists the logs in order. (Bugzilla 444)
- The slowest transition rate that can be set is now 100 frames. It was possible to set slower transitions, but these could not be handled correctly by the ImageStore. (Bugzilla 447)
- Two part transitions such as a 'V' fade could delay too long (3-4 frames) at black.
- If you went in to the PST or PGM audio level adjustment dialog on the panel and zeroed all the input channel level gains, using the 'All levels' and 'Zero' options this would zero the gain values, but if you subsequently tried adjusting the values with the jog wheel they would jump back to their earlier values. (Bugzilla 457)
- It was possible to display a tab for a non-existent ImageStore when selecting the alarms dialog on the Panel. (Bugzilla 459)
- Voiceover shuffles are no longer lost when the PCS is reset. (Bugzilla 425)
- Added the pm_e2fsck.sh script to the installation.
- Added more message reporting to the save PCS code to try to diagnose any problems in this feature.

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- Fixed a potential lockup acquiring a channel.
- Fixed a communication problem with the ImageStore. This was seen in logs as reports of timeout errors. These timeouts caused a 900mSec timeout communicating with the ImageStore. If this happened during a transition, the transition could be delayed for 900mSec. (Bugzilla 456)
- Fixed a possible panel crash if an illegal timecode is read.
- Jog wheel now has low acceleration set in the source edit dialogs.
- Fixed a problem with the Utah_new router driver not handling high layer numbers correctly.
- If communication to a panel was lost on a PCS it could temporarily cause transition problems.
- Fixed a problem that pressing the 'zero' button increments the input gain instead of zeroing it. (Bugzilla 454)

4.2 full release (December 2005)

New features:

- Kaledio channel changing via Ethernet, allows channel change to change the layout on the Kaleido. Also the system can be configured so that the panel follows changes of layout on a given panel.
- New router driver for the GVG Encore router controller. This driver is the gvg_rcl. This utilises the GVG RCL communication protocol.
- Utah router driver has been updated to support the newer Utah routers (utah_new).
- You can now arm an Intuition fade or cut from the Intuition menu and from automation. In addition using the panel configuration you can also have a button to cut the DSK up or down immediately
- In the Intuition template browser dialog, fade rate buttons have been added so that the rate of transition can be changed.
- New FTS & FTB soft buttons added to the main PresStation dialog
- IS300 audio (.OXE) files are now displayed in browser
- On a PresStation the number of channel shotbox buttons on the main dialog has been increased to 10. You can also name these channel buttons and define a logo to put onto these buttons.
- Can name the channel groups.
- Added dialog to display that another panel has taken over the channel.
- Added breakaway revert to PresStation
- Each pair or group of pairs of meters can be named. This can be setup on a per audio group basis. This enables the naming of audio pairs for IS300 & HD.
- Added two new automation commands. The first is to get a panel to acquire a channel on the PCS, and the second command is to get the panel number that is currently acquired on a specified panel.
- Added new automation command. This will enable the PCS to periodically report to automation that the panel is in automation or manual mode.
- Added ability for ImageStore to action a PresPanel take via the existing serial interface. This requires a new release of the ImageStore to implement this new automation command.
- Improved ASRUN logging.
- An xlog can now be saved in the PCS from a secret keypress on the panel (Audio 1 + Audio 5 + Group 5 for PresPanel or PST + Source + Audio 2 for a PresStation).

Problems resolved:

- When a channel was changed the variables in old_state were cleared rather than set to a specific value. This means that when the tally for the FTB or FTS state was received it would fail the test to see if the values had changed. Now reset this old_state to an invalid value so the FTB and FTS always redrawn when the first tally for these is received after a channel change.
- PGM Copy now sends j605 instead of j608
- GPI bug on panel - Bus GPIs were staying on after transition.
- GPI take used to only ever pulse once.

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- In dsk dialog - Pressing the preview screen positions the keyer wrongly depending on keyer size, standard and aspect ratio.
- Panel config scrolling now scrolls any knob binds too.
- Fixed gvg_n multi-source tallies.
- Increased timeout value for ImageStore monitoring to 100 seconds before warning that ImageStore has been lost is displayed.
- Voiceover was arming after automation disabled if it was armed while enabled
- The DVE/Macro mint now lights for both the vgpi assign screen as well as the dve edit screen
- Fixed problem seen at SSVc when randomly hitting PresStation A/V split key and the Take key. Could appear to lockup the unit. This in fact was not locked up but panel and PCS could get out of sync.
- Changed alarm values so that they more accurately represented the correct values that they should alarm on.
- Changed report in sony_9pin.c to refer to a VTR rather than a router
- Acquiring channels was unreliable. Changed acquisition communication from UDP to TCP to resolve this.
- Increased Pesa delay for safety only.
- Removed some debug reports from router_probel.c
- Fixed a stuck at B problem in breakaway. This is caused by pressing the same breakaway button twice in succession.
- Very nasty bug involving a deadly embrace causing problems like seg faults and locks when a channel is dropped while getting file list.
- Fixed problem when channel is acquired, meter profile is 0, even if lamp 3 is lit
- You can now deselect the AV breakaway state without a stuck-at-b
- Live logo was displayed on backdrop dialog when Intuition was configured this now correctly displays the Intuition logo.
- Load live was not appearing in DSK browser if there where no images on the ImageStore unit.
- Strange links pointing back to themselves from the release script
- Channel names were getting corrupted when no logo could be found to be associated with the name.
- Flipping between two DSK mints on a PresStation on a channel with IS2s crashed the software.
- Fixed a problem on a PresStation, when the station carried out certain actions, the channel shotbox buttons flashed. This was particularly noticeable when running under automation.
- Fixed problem in VTR control, if the rotary knob was used to jog the VTR on release of the knob the VTR would carry on jogging.
- The PresMaster now detects correctly the type of ImageStore or PCS that is in the system and displays the appropriate alarms for the device.
- In the DSK settings dialog, sometimes the Key source, mode and invert settings could incorrectly change by themselves.
- If the network was lost the network lost message would be displayed. If this was due to the PCS being reset then the message would never go away and the only way the operator could get this message to go away would be to acquire another channel. This was a particular problem on a single channel system. Now after about a minute of displaying the network error, if the network has not been re-established then the channel is dropped from the panel.

4.1.5 point release (3rd November 2005)

- Added a GPO signal from the PCS when the Take button is pressed. The GPO will happen on GPIO port A pin 9 when channel 1 take carried out, pin 10 for channel 2, pin 11 for channel 3 and pin 12 for channel 4.

4.1.4 point release (15th September 2005)

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- Improved the gvg_n router to resolve some problems working with the GVG7000 router at WOWT. This involved:
 - ◆ Handling tallies that return multiple layers within one tally.
 - ◆ Rather than waiting for an ack before sending the next command, just wait for a small delay. We were finding that some ack's can take several seconds to respond.
- Fixed a problem reading boolean entries from the config files. This showed up in the PresStation, if you looked at the program or preview bus dialog, under the audio type entry the embedded or aes entry would not always display correctly.
- In the PCS the timeout mechanism for detecting that an ImageStore is not connected to the PCS has been increased from 10 to 100 seconds to see if this will decrease the timeouts I am seeing in some PCS logs.
- In the alarm monitoring of the ImageStore 12volt rail the voltage limits have been changed from 11.4 to 12.6 volts to 10.7 to 13.5 volts.

4.1.3 point release (8th August 2005)

- Resolved problems with the Utah Scientific router driver using the SC4 controller.
- Improved Pesa router driver to fix slow and unreliable router switching.

4.1.2 point release (8th August 2005)

- Fixed crash in panel when you acquired another channel quickly after acquiring the current channel.
- Added pcs config options to change the spam timeout, spam frequency and poll timeout for the pesa and utah drivers. The default values for these settings are spam_freq 50000 uSec, spam_time 500000 uSec and poll_time 1000000 uSec. To change these default settings add the following entries into the pcs config file (times are all in uSec).

```
port<num>
{
spam_timeout= "50000"
spam_freq= "50000"
poll_time= "50000"
```

- Added pcs config option to disable the leitch driver listening to the xy bus. By default the driver will listen to the xy bus, to disable listening add the following config option:

```
port<num>
{
disable_listen_to_xy_bus= "true"
```

4.1.1 point release (5th July 2005)

- Added configuration option so that an extra delay can be added after the router tally is received before doing the post-transition clean-up and switching ImageStore back to A. To setup this delay add the entry post_router_tally_delay="nn" (where nn is the delay in mSec) into the routers section of the PCS configuration file. For example

```
routers
{
post_router_tally_delay="750"
router_mix_a="^0"
```

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By default if there is no entry this delay will be 0.

- Added configuration option to stop the PresMaster sending any audio shuffles to the ImageStore. This stops a conflict if the automation system is controlling the ImageStore shuffles directly. To do this insert the entry `audio_input_control="false"` into the PCS configuration file. For example:

```
prescontrols
{
  172.16.3.27
  {
    channels="1"
    chan_a
    {
      field_rate="50"
      frame_rate="25"
      chan_name="ISI Chan"
      automation_port="0.0.0.00"
      audio_input_control="false"
      chan_proc
      {
```

By default if there is no entry this option will be set to true.

4.1 full release (5th July 2005)

- New features
 - ◆ Fixed IP addressing of units has been removed.
 - ◆ Driver added to control the Evertz MVP.
 - ◆ Audio lag feature added to PresPanel and PresStation.
 - ◆ Audio lead feature added to the PresStation.
 - ◆ Audio and video breakaway feature enabled in the PresStation.
 - ◆ Added IP address of the unit to the footer of the web site main page.
 - ◆ IP and MAC addresses of the unit can now be seen from the web site on the maintenance page.
 - ◆ MAC addresses of the units is displayed in the version info dialog window.
 - ◆ MAC address is stored in the config files.
 - ◆ BIOS is flashed earlier so that if there is a problem the installation stops quicker.
 - ◆ When doing a release it only updates the BIOS if this needs changing.
 - ◆ If the panel loses it's Ethernet connection, it will display an error dialog indicating that this has happened. When the cable is reconnected the warning dialog is removed and the panel re-grabs the channel.
 - ◆ Added check so that if the connection to the ImageStore is lost then a REPORT will be made into the log files.
 - ◆ VGPI arm and take state has now been added to the asrun logger.
 - ◆ Added 2 new config options: `stuck_at_b_debug` (enables shuffle debug currently) and `ignore_audio_tallies`.
 - ◆ Added 3 finger reset to PresStation, pressing the PST + Source + Automation mints resets the PresStation. The PST + Source + Audio 1 mints reset the PCS.
 - ◆ Auto mixer arm option added for audio and video breakaway.
 - ◆ Network router now switches layers.
 - ◆ Geometry fixes to ISHD preview browser.
 - ◆ Added second load-live button when setting up an ISHD.
- Problems resolved

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- ◆ Fixed problem that PresStation logs were not being rotated.
- ◆ Fixed a problem that sometimes the touchscreens were rotated by 90 degrees.
- ◆ Ensures that the permissions on all log files is correct.
- ◆ Reduction of timeout errors talking to the ImageStore or Intuition.
- ◆ Backup files are now removed when the IP address is changed on the front panel of the PCS.
- ◆ Disabled lamp flash rate setup button for PresStation as this cannot be changed on these units.
- ◆ If the PCS was powered up before the ImageStore or the ImageStore for some reason was powered down, the audio meters would no longer function until the PCS was restarted.
- ◆ On channel acquisition of a channel connected to an Intuition sometimes the dsk 3&4 buttons would light up.
- ◆ In config file if the allow_remote_mixer_control label is to to ON then the ImageStore shuffle tallies are ignored.
- ◆ Fixed bug with the time not being set in the hardware of the unit when setup in the web interface.
- ◆ Load live now works from automation.
- ◆ If you use Restore Defaults command to restore the panel configuration, this information was not sent to the PCS, so a lot of the commands (those used by the PCS) would not be updated, and would therefore continue to work in their previous state.
- ◆ Used to be able to select audio lead and lag at the same time.
- ◆ Used to be able to select audio or video breakaway when in audio lead or lag was selected.
- ◆ Fixed a five second timeout delay that sometimes occurred after audio or video breakaway started.
- ◆ Fixed problem if you changed the contents of a single scribble strip entry, the first entry of the next scribble strip entry would be cleared.
- ◆ HD load live layer was loading incorrectly.
- ◆ Fixed problem if the Imagestore comes up with it's foreground faded to black, the PCS could ignore the tally, and it was not possible to get the fade to work, until the Imagestore was faded up manually.
- ◆ Backdrop dialog shows the correct logo when connected to the ISHD.
- ◆ On PresStation in the button disable window it used to display the FTS and FTB buttons which are not on the PresStation.
- ◆ Fixed problem on PresStation that the serial number was not reported in the Version number window.
- ◆ Fixed a problem with a take from automation not taking a VGPI.
- ◆ Fixed a problem if you changed DSK dialog whilst caching the thumbnails from the ImageStore then sometimes you would finish up with an dialog with no thumbnails and the only way to get these back was to reset the unit.

4.0 full release (22nd February 2005)

- PresStation enhancements:
 - ◆ Combined PresStation and PCS within PresStation allowing standalone operation.
 - ◆ Support for Alto.
 - ◆ Touch screen support.
- Support for Intuition.
- Squeezy DVE preset setup.
- New PROM (version 2.53) to resolve panel flashing problems.

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- Added option to put logo and text onto the channel buttons in the 'Current Channel Select' window.
- Improved installation script, allows:
 - ◆ Setup of Touch screen support for PresStation.
 - ◆ Setup of Alto on PresStation.
 - ◆ PresStation standalone mode (i.e. PCS running on PresStation).
 - ◆ Memory tester added, primarily for test but probably useful as a diagnostic tool.
 - ◆ new_alias_ip script added to PresMaster classic units.
 - ◆ Open network ports locked down to improve device security.
- Added automation button disable.
- Image existence automation command added.
- Source group selection from currently unused hard buttons next to machine control buttons.
- ASRUN logger now stamps timecode on every action.
- Fixed the following problems: End of transition timed out if we got video tallies after audio tallies.
- Transition & transition dialogue corruption
- Included fixes for stuck-at-B problem from 3.2.3.
- DVE mint crash.
- If you open the PST/PGM or PVW/AUX window, and then repeatedly change the source for the appropriate bus then the panel would eventually lock up.
- Audio Type AES/Embedded disabled, it never worked anyway and no-one used it. It still represents correctly the audio type in use for each source.

3.3 full release (24th August 2004)

- T-Bar functionality changed/fixed. The T-Bar now no longer does a transition, it safely fades between A and B.

3.2.3 point release (November 2004)

- Various fixes to cure 'stuck at b' problem.
- Addition of extra transition logging
- Restoration of save PCS configuration function in panel.

3.2.2 point release (21st October 2004)

- New config entry: take_delay added in the automation section. Puts a user configurable delay (in msecs) between reception of a take command and it's action. It's use is logged in the messages logs.
- Automation button can be disabled from button disable dialog.
- Source selection can be locked out by a panel preference.
- Changes to Leitch driver (via-pro driver) to aid debugging.
- Changes to signal handling - a crash now gives a core dump of the faulting thread, this can be mailed to RnD for error analysis.

3.2.1 point release (22nd July 2004)

- Fix for leitch_via driver causing crashes
- sonyf Driver included from v2 tree.
- Fixed Probel SWP8 (probel_8) driver - *should* affect Aurora installations only

3.2 full release (11th June 2004)

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- MUCH faster channel acquisition
- Fixed config saving
- Fixed Leitch via driver
- FULL VO shuffle control
- Router debug enableable from config
- Bullet proofed channel connection, plus more logging
- Improved PCS startup time
- Messages and asruns viewable from web i/f
- Clock setting through web i/f

3.1.1 point release (23rd April 2004)

- A fix to handle erroneous and unnessecary commands sent by Harris automation that cause:
 - ◆ Bad port errors
 - ◆ Automation not in wait start errors
 - ◆ crashing in rare cases
- Bullet proofing of various other automation commands
- Monitor routing fixed
- AES monitor routing fixed
- Multi layer support for the pesa driver
- Layer support added to Utah router driver
- Better compatability with 3d dve in IS

3.1 full release (12th March 2004)

- Always Show Source (aka Magic Source Ten) + options
- File type icons in dsk browser (turn on in config dialog)
- Panel requesting control over tcp (better internal dealing of network)
- Dialogs display their name in the titlebar
- Warning appears in titlebar if there is a panel/PCS Version conflict
- Config dialog scrollable (to fit more options on)
- Browsing of .clp & .oxw files
- Bug Fix in the config reader - more linear (speed increase)
- Bug Fix in the config reader (true/false improved)
- Card graphic changed (for a telephone number)
- New scripts (presenable & presdisable)

3.0.3 point release (22nd December 2003)

- Fix to allow mpeg clips and Easysound files to be viewed in the DSK browser.

3.0.2 point release (12th December 2003)

- Addition of the Utah router driver.

3.0.1 point release (9th December 2003)

- Bug fixed whereby if an automation system armed a keyer to cut up/down when it was already up/down the arm LED would light next to the keyer although no action would be taken.

3.0 full release (24th November 2003)

- Passive mode - Making all areas of the panel reflect the state of the Imagestore rather than making any assumptions. Most obviously affected are the audio dialogs and keyer dialogs. Crucially this allows automation control of the Imagestore rather than the Presmaster in a Presmaster system if desired.
- DVE rewrite - This is a necessity for passive mode and is a COMPLETE rewrite from ground up of all the DVE subsystem, allowing any DVE to be actioned and supporting the new 3D/Dual Squeezy. This is all through VGPIs.
- Virtual GPIs - These support the new DVE system and enable complex transitions to be fired manually from a single button press. They are a lot more than just DVE control however and should be thought of as programmable macros.
- A new X-Server - The interface for our windowing system has been overhauled giving far greater reliability - no more jiffy bug and panel reset issues.
- A new kernel - This gives increased stability, speed and added flexibility for the future.
- New system start-up scripts - Combined with the new kernel this makes Presmaster boot up times in the region of about 30 seconds.
- New installation system. Just connect your web browser to the presmaster, log in and select your version, upload a new version or restart the unit. All versions are now signed to protect against mistakes or data corruption - 3.0.1 was the first release to be issued that uses this. From 3.0 there should be little reason for ANY console action to be required on the PM, hopefully we can let customers upgrade their own units taking some of the load off of support.
- New system and version updates - These are now separated to keep regular updates small.
- New transition system - this removes the before and after hold off times, the system performance is still limited by the router response time however we should now not have any dropped/incomplete transitions, just maybe some late ones.
- Knowledge of what licences are available on each Imagestore connected to a Presmaster system. This allows automatic configuration of a DVE and a lot more in the future. This should also aid debugging a system installation. The DVE is now no longer required to be in the configuration of a unit.
- True GPI/Os allowing warnings and basic operation through this ubiquitous interface; specification available on PM website.
- DSK Thumbnails with ISHD!
- Many threads removed, far more consistent behaviour from PM.
- Pesa driver bug fix.
- 422 bug found in P167 h/w, fixed by ECN 1127.
- New handling of channels.
- New handling of channel acquisition.
- U-Fade from Automation fixed.
- U-Fade from Take Key fixed.
- V-Fade from Automation fixed.
- V-Fade from Panel fixed.
- VTR Pre-Roll fixed.
- Asrun logger now removes old log files (== three months in age, the logs should be cleared before putting this install on the unit).
- Audio Matrix changes, now reflect settings on IS.

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- Save PCS config re-enabled, but saves back to a separate file (saved.conf) as it is still incompatible for a reload.
- Mark and cue now use VTR commands rather than intelligence in the PCS.
- Fix in Imagestore driver for BAD buffer overrun.

2.05.11 point release (9th September 2003)

- router_network and router_network_aes drivers now merged. A switch gangs both SDI and AES.

2.05.10 point release

- Debug taken out of network router driver to improve performance. Still needs combining with network_aes.

2.05.9 point release (29th July 2003)

- Sierra router driver fix

2.05.8 point release (2nd June 2003)

- Sony driver that does fake tallies for speed added as "sonyf"
- Sony driver updated to V5 - has non-repeating list and handles src & dest over 127

2.05.7 point release (19th May 2003)

- Changed warning temperature back up to 60 degrees celsius.

2.05.6 point release (13th May 2003)

- Sony driver changed to handle slow tally responses from HDSX-5800.

2.05.5 point release (29th April 2003)

- Bug fixed Sony driver (allows routes over 128).

2.05.4 point release (14th March 2003)

- Bug fixed GVG driver.

2.05.3 point release (14th March 2003)

- Bug fixed Pesa driver.

2.05.2 point release (27th February 2003)

- Imagestore HD integration compatability.
- New Pesa router driver (232) "pesa_new".
- Removed group output being set with master gain (should help in ESSA installations).
- Fixed bug where on restarting the panel the first button that must be pressed is a transition or else the panel h/w would hang.
- New set_version script to handle point releases

2.05.1 point release (13th February 2003)

- New Philips router driver.

2.05 bug fix release (17th December 2002)

- Roll light and button fixed.
- Inverse wipes from automation now represented correctly.
- Control over V/O channel shuffles.
- Fixed install script removing message log config file.
- Added variable gateway support to set_identity script.
- Increased dialog swapping stability (only seen under extreme use).
- Removed "Save PCS Config" until further notice.
- VTRs timeout correctly when not connected.
- Removed erroneous debug reporting from Leitch.
- Invalid audio source number being displayed in source dialog for blank selection fixed.
- More improvements to the overall feel of the jog wheel.
- DSK dialog optimised for faster redraw times.

2.04.1 point release

- Install Script fixed.
- Debug removed from Leitch driver

2.04 release (8th November 2002)

- Fix in X-Server to stop prespanel hangs, also released as individual patch.
- Fixed bug causing IS2 to hang upon saving keyers.
- Added jog wheel acceleration option in panel config dialog - three speeds, off, low and high.
- Fixed shot box string length bug.
- Reverted experimental Leitch Via driver to working version.
- Increased maximum dests in Leitch Via driver to 64.
- Improved calibration of the jog wheel speeds.
- Fixed bug causing main screen not to update thumbnails if a previously non-existent one was loaded.
- Fixed meter levels in edit-source dialog (the right sides representations were offset).
- Disabled use of voiceover matrix (representation was incorrect).
- Correctly labeled preset 1&2 transition types in transition dialog.
- Fixed the VTR shuttling instead of jogging.

Presmaster Software Release Notes

- VTR heads now no longer thread & unthread while jogging.
- Jog speeds have been recalibrated for ease of single frame selection.
- Generally more stable VTR use - driver completely conforms to Sony 9-pin protocol (01/11/02).
- Complete and stable rewrite of the PCS's front panel menu, including:
 - + Reliable PCS restart.
 - + Editable IP addresses from the menu.
 - + Ability to 'name' individual PCS's for at-a-glance identification.
 - + Easily modifyable menu structure (implemented as shared objects - see additional notes).
 - + LM80 server daemon to allow front panel to display health information without prescontrol running.
- New install system - simple one file, one line release -> install procedure.
- Rewritten set_version script; now tidier and handles library and lm80daemon versioning.
- T-Bar control re-enabled.
- PSU identification in s/w matches that printed on the unit.
- Application built with correct version libraries for O/S version.
- Application built with newest compiler.
- Previous s/w releases size optimised/debug removed.
- Better buffer overrun protection in core code.

Additional notes for front panel installation

The new Presmaster release contains only one file. This file should be put on a unit in the normal manner (e.g. ftp) and then run. It will unzip itself and install the files necessary. These files are :-

Unchanged :-

/root/versions/prescontrol_2_04
/root/versions/prespanel_2_04
/root/versions/fp_menu_2_04

New :-

/root/versions/lm80_daemon_2_04
/root/etc/fp_config.xml_2_04
/root/etc/menus.xml_2_04
/root/lib_2_04/health.so
/root/lib_2_04/ipaddr.so
/root/lib_2_04/name.so
/root/lib_2_04/serial.so
/root/lib_2_04/system.so
/root/lib_2_04/uptime.so
/root/lib_2_04/version.so
/root/lib_2_04/yesno.so

Explanations of the changes

lm80daemon - the lm80_daemon is a tiny server that talks to the lm80 health sensing chip. Then the front panel code and the prescontrol code ask it for the health info.

fp_config.xml and menus.xml - these are the definitions the front panel uses to know what it should look like, how it should act, and what it should use to act like it. They are just plain text files that follow the xml standard.

.so files - these files are what is known as shared objects or shared libraries. They are the linux equivalent to

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windows .dll files and are small independant parts of code that get used by the front_panel to display and act on certain menu options. In order for the front_panel to operate properly it looks for these libraries in the /root/lib directory. In order to do this we create /root/lib as a symbolic link to /root/lib_2_04, a symbolic link is almost the same as a windows shortcut, the only difference being that the application does not know it is a shortcut, it thinks it's the real thing. By doing this we have the application always look in the same place but keep the version history intact, allowing easy reversion.

2.03 bug fix release (13 September 2002)

- Stopped some memory getting trampled...
- Fixed install_patch to handle different units properly.

2.02 release (11 September 2002)

- DSK dialog redone to add keyer parameter changes
- Added progress bar to cache manager.
- Extended image load tally now sent when allow_unsolicited_packets="false".
- Now can't select transition type (to alter with jog wheel in tran dialog).
- A change of vo state (through panel or automation) now sends a 53h tally.
- Contains a panel crash bug fix.
- IS2 command tunnelling through automation.
- Fixed scrolling down in the browser sometimes didn't allow you to see all of the images.
- Only change is that the extended image load command will now work doing a load live if you specify the filename to be "LIVE" (must be caps).
- Possible buffer overflow fixes.
- Stack tracing on fatal crash.
- Realtime priorities and pre-emptive scheduling.
- Re-enabled "Save PCS Config"!
- T-Bar disabled.
- New installation system.
- More time-code fixes.

2.01 release (18 July 2002)

- Added Network AES router driver (network_aes).
- Added GVG Native protocol router driver (vgv_n).
- Sony router fix.
- New accurate audio meters.
- New audio meter configuration dialog for rescalable, and fully configurable meters. Added peak hold "falling" mode, fractional decay speed, manual config of db values, added L-R balance bars, added presets, dynamic text labels, etc.
- Can now insert a blank X-point in group (effectively delete).
- Audio Levels no longer locked out by automation button.
- Machine control dialog shows a "not available in this ver" msgbox.
- Video preview dialog shows a "not available in this ver" msgbox.
- Countdown timer dialog now displays frames for consistency.
- Can no longer press greyed out dve if there is no dve.
- Timecode accuracy fixes;

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- Timecode display no longer jumps up & down.
- Timecode display updated more often/smoothier.
- Frame_rate no longer needs to be in panel.conf.
- With TC on; Does not drift on PAL, NTSC, SMPTE DF.
- With TC on; Does not add or take random hours.

2.0 release (3 May 2002)

- Added new main screen with various information displays.
- Added an alarm dialog to configure the alarm level and view diagnostics.
- Added an about dialog under the Miranda logo with contact information.
- Added sony router support.
- Added leitch-via router support.
- Fixes in leitch router driver.
- Added peak hold on audio meters.
- Fixed DVE geometry being wrongly represented in the DVE dialog.
- Added extended tally 0x433, image loaded.
- Fixed automation command id 0x53.
- Fixed automation command id 0x68.
- Filenames tidied in dsk browser.
- Load live now says "loaded" when loaded.
- All dialogs updated with graphical enhancements/textures.
- Minor fix to the signal handler

1.31 Bug-fix release (19 March 2002)

- Added Pesa router support
- Added shuffles for voice overs
- Fixed DSK arm and take from automation
- Fixes to the serial numbers being mis-reported

1.3 Bug-fix release (31 January 2002)

- Fixed panel crashing.
- Fixed VO from automation.
- Added extended VO commands for automation.
- Improved flow through software of 'Take' to prevent missed transitions.
- Fixed fade to black occurring in the wrong place in a dual IS/2 system.
- Fixes to panel preferences interfering with automation.
- Fixed transition representation from automation on panel.
- Omnibus router driver fixed.
- GVG router driver fixed.
- Repeating video breakway.
- Armour plated extended automation commands.
- Removed erroneous error reporting.

1.19 Bug-fix release (30 October 2001)

- Fixed crashes caused by the lack of a configured AUX bus.
- Fix to network connection to IS2 for front panel mirror and DSK Dialog.
- VFade geometries in Transition Dialog are now fully adjustable.
- Made more robust to calls from Automation passing source numbers out of range.
- DVE presets can no longer have negative geometry.
- Improved VTR Jog control with some simple Hysteresis to allow smoother control of VTR.
- Channel Select dialog only shows Shot boxes that are actually allocated to channels.
- Re-working of tally packets sent to Panel to stop flashing lights during end transition cleanup.
- Many fixes to interaction of panel preferences with channel, especially when under automation control.
- Added ability to turn off transmission of unsolicited packets in automation interface for Automation systems that are unable to deal with this.
- Internal handling of signals in the software to allow the Prespanel and Prescontrol to shutdown and restart reliably, when asked to do so.
- Implemented Internal timer for Presmaster that is locked to station timecode via VITC or LTC.
- If a preset bus source change is requested during a transition, this is held until after the transition has finished and is then made. This fixes a major issue with certain Automation systems driving presmaster.
- Major improvements made to transition engine to handle post transition cleanup. Has also made significant performance increases.
- Monitor Routing now includes support for AES.
- Fix to extended Automation DSK commands.
- Implemented Source Audio shuffling under automation.
- Implemented Voice Over shuffling, both in VO dialog and under automation.
- Channel select bug fixed.
- Timeout implemented for during Channel Acquisition. PCS will not allow the panel to connect until it has fully initialised.
- Added Automation Power up tally command.
- Full implementation of layer support within presmaster, when supported by particular router's protocol. This allows for matrix and level to be defined for each of the 3 buses plus matrix and upto 4 levels for aes switching for each of the 3 buses.
- Implemented Probel SWP08 (General Remote) protocol for multi-layer probel router support.
- Fix wakeup packet bug in Philips ES-Switch protocol
- Implemented media save button in DSK dialog to allow modifications made to media's keying parameters to be saved.
- Fix to DSK media browser crash when connecting to a non-existent Imagestore.
- Implemented Panel functionality to show sources providing Video and Audio to the Programme Bus in an Audio/Video breakaway scenario.
- Implemented Front Panel mirror for cascaded Imagestore plus prescontrol that panel is currently connected to.
- New version of Presconfigurator to incorporate additions to channel's configuration as well as numerous bug fixes.
- Added button to enable full control of a channel from a panel while automation is enabled.

1.18 Bug-fix release (29 July 2001)

- VTR names now come from the source name.
- Automation now supports Voice Over duck levels.
- Source's Audio shuffle parameters now supported from automation driver.
- When acquiring a channel, information of progress is displayed on screen.

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- Flash rate, scribble brightness and lamp brightness are now shown as percentages rather than absolute values in panel preferences.
- Implemented Philips Venus router protocol.
- Implemented GVG native router protocol.
- Fix for selecting sources in Leitch router driver greater than 9.
- Ability added to disable FTB and FTS buttons.
- Fixed unpredictable behaviour with panel preferences.
- Major fix to network TCP/IP connection problems
- Countdown timer now stops when leaving a channel
- Panel now displays status when connecting to a channel.
- Fixed bizarre behaviour with Panel Preferences.
- Imagestore Front Panel Mirror now works correctly
- Added timecode support for both Panel and Control for VITC and LTC.
- Fixed bizarre behaviour when Midground Keyers was faded to black.
- DVE presets can now be editing on the Fly using the Preview output.
- Fixed startup bug with Omnibus router driver.
- Panel now gives Media Alias IP addresses in version info Dialog.
- Front panel menu now gives information on type of device connected to each port and counts successful and unsuccessful packet rx and tx.
- Fixed problems with countdown timer on panel.
- Audio/Video breakaway and revert problems now fixed including operation with the T-Bar.
- Accuracy problems with DVE Edit preset dialog now resolved.
- Presconfigurator updated to match the functionality of this release.
- Ability to edit the source selected on a particular bus now implemented. Edit source button removed from Source Dialog.
- Edit source dialog will only allow one to select AES if an AES router is present.
- Front panel mirror now handles auto-repeat of keys. (Imagestore v2.09 required)
- AsRunLog added for better traceability of what system does in case of problems.
- Major reliability improvement to Imagestore Driver.

1.17 Bug-fix release (29 March 2001)

- Added support for source audio shuffle and audio source levels to automation.
- Automation tallies for DSK3 and DSK4 now supported via extended tally packet.
- Fixed incorrect VFade functionality. (Imagestore v2.09 required)
- Fixed VFade bug in automation driver. (Imagestore v2.09 required)
- Improved networking reliability.
- Added Read-Only versions of edit source dialog to PGM, PST and AUX bus dialog buttons.
- Fixed bug with transition times used by Keyers.

1.16 Bug-fix release (13 March 2001)

- Added support for DSK 3 and DSK4 in Automation driver.
- Fixed Audio Meter freeze bug.
- Fixed occasional bug with network connections.

1.14 Bug-fix and extra functionality release (6 March 2001)

- DVE edit preset dialog now implemented with aspect ratio locking mode while editing.
- DVE presets with width and height upto 400% now supported.
- DVE presets with negative heights and widths now supported allowing for vertical and horizontal flips.

1.18 Bug-fix release (29 July 2001)

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- Ability to edit DVE rates.
- PVW, PGM & PST dialog buttons now display source properties of the particular buses source in a read only manner.
- DVE rates of slow, medium and fast now apply to all DVE presets and are not specified per preset.
- DVE presets now support smooth/linear profile switching.
- Channel's imagestore now uses the DVE presets specified in the presmaster configuration.
- Small fix to cascaded Imagestore support.
- Support for revision 3 boards.
- Front panel of PCS now implemented via a separate executable with full LM80 status info.
- Front panel now flashes up LM80 warnings like PSU failure for example.
- Software Programmable firmware support now added.
- Reliability and efficiency of Imagestore driver greatly increased.
- Added support for DSKs 3 & 4 to be controlled under automation.
- Reliability and efficiency of Automation driver greatly increased.
- Add support for setting Source Audio levels via Automation.
- Improved reliability of network connections between PCS and P100.
- Bug with Checksum handling for extended packets in Automation Driver now fixed

1.13 Bug-fix release

- Front panel menu implemented on prescontrol to allow mechanism for obtaining ip addresses, running time and a means by which the prescontrol can be rebooted.
- Fixed bug with trying to initialise a channels second imagestore when not present.
- Fixed bug whereby a channel number greater than 4 could be requested on a prescontrol which would cause a crash.
- Panel now receives LM80 status of the prescontrol it is connected to on a regular basis to allow panel to report errors such as Power supply failures.
- Added Leitch router support.

1.12 Bug-fix release (15 January 2001)

- Restore defaults button added to Panel Configuration Dialog
- Scribble Strip Brightness control

1.11 Bug-fix release with added functionality (9 January 2001)

- Fixed panel bug where switching between channels with different routers sometimes caused incorrect sources to be displayed, on multi-channel systems.
- Added mechanism which stops channel crashing when network connections to controlling panel were broken.
- T-bar now fixed so that it behaves correctly.
- Added Audio/Video breakaway revert mode so that when either part is split from the other, one can revert to the initial state rather than having to complete the transition. This also works with T-bar.
- Panel configuration dialog now added to allow users to customize the behaviour of the channel when controlled by the panel. Also has control for Lamp Brightness and Flash rate and the ability to save configuration on panel.
- Edit source dialog now added to allow for modifying audio parameters of a source.
- Audio preview modes added under Audio Dialog button. Also implemented 5 short cut buttons to first five audio preview modes. Preview modes assigned are defined in panel.conf, modification via panel will come in a later version.
- All V-fades no hold in black.
- T-bar to handles V-fades using a double sweep action for the entire transition.

1.14 Bug-fix and extra functionality release (6 March 2001)

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- DVE via automation now supported.
- Support for a 2nd Imagestore per channel implemented giving 4 levels of keying.
- Prescontrol now resilient to Imagestore reboots.

1.06 Bug-fix release (12 December 2000).

- Fixed to a crash caused by DSK loading live via Automation.
- Changes to transition triggering mechanism to fix operational bugs while under automation control.

1.05 Bug-fix release (5 December 2000).

- Fixed broken network connection panel causing prescontrol to hang while under automation control
- Automation now supports load previous dsk image.
- Improved handling of Imagestore wakeup packets for obtaining ip addresses.

1.04 Bug-fix release (3 November 2000).

- Transition Dis-arming at end of transition
- Voice over taken to air on button press, rather than armed.
- Voice over take possible from Panel with automation enabled.
- At end of transition, Programme Bus is set to the source the Preset Bus was on when the transition started.
- Added support for all 24 channels in the Channel Select Dialog.
- Prescontrol now resilient to Imagestore reboots.
- Imagestore media ip address is obtained on Imagestore wakeup. (tt669)
- Audio Metering is enabled once Imagestore has been rebooted.

1.03 Bug-fix release (9 October 2000).

- A/V Breakaway fixed.
- Machine Control: Make jog wheel behave better with Sony VTRs.
- Removed Take key block in CVM when channel is mid-transition.
- VTR play and stop now cancel jog. (tt851)
- Enabled tallies tasks in IS2 driver. + fixed DVE mode bug which this fix showed up in development.
- Increased TX retries in IS2 driver to 3 to cope with dropped byte problem.
- SDB loads /mnt/i565cache/system.conf if it exists, else it tries to load ./fallback.conf. If this doesn't exist then prescontrol exits with an error.
- On startup the SDB reports whether ./fallback.conf or /mnt/i565cache/system.conf is being used.
- Removed registering of channel state that isn't needed to be stored in the machine generated config file.
- Software fix for flickering scribble strips. (tt813)
- Sources above 24 weren't available via automation driver (tt839)
- Channel state section in machine generated config files wasn't located under the relevant prescontrol section. (tt835) & (tt836) & (tt837)
- Existence of Machine generated config file would crash prescontrol on startup. (tt840)
- DVE preview bug while DVE is mid transition fixed.
- Added Cut to A for video and audio on program bus press. (Had accidentally been removed.)
- Increased temperature and decreased voltage alarm values.
- VTR intermittent start problem fixed.
- DVE de-arming and re-arming the same preset again used to require the preset button to be pressed twice.
- Problem with DSK image names not being terminated fixed.

1.11 Bug-fix release with added functionality (9 January 2001)

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- Disabling T-bar and pressing "Take" now completes the transition. (tt817)
- Preset VTR no longer rolls on Take Key press when no transition is selected. (tt854)

1.02 First full release (8 September 2000).

- DVE dialog disabled if no DVE fitted.
- Machine Control: Cue (for pre-roll).
- Machine Control: Indication of VTR in local mode.
- Timer reset stops the timer. (tt805)
- Config file: Absence of IP in a.b.c.d^n indicates local IP address. (tt736)
- Identity script saves out the parameters it was given.
- Install script backs up existing binaries and fallback.conf.
- Ability to interrogate prespanel for its serial number. (tt687)
- Panel PSU failure warning shown on the LCD.
- Omnibus DSK features.
- No longer need aux router section (and port) in config file if aux bus not used.
- Prescontrol no longer sends the panel packets when no channel is acquired by the panel. (tt738)
- Panel can connect to a channel after a controlling panel shuts down without dropping channel. (tt606)
- Automation state held correctly when switching channels. (tt776)
- Prescontrol resilient to automation requesting sources out of range. (tt777)
- Removed spurious error messages on prescontrol when under automation. (tt779)
- Removed unimplemented packet messages on PCS terminal. (tt780)
- Fixed prescontrol lockup during long transitions. (tt782)
- Automation commands supported on channels other than 1. (tt792)
- Machine control scribble strips update on channel change. (tt810)
- New dialogs cause the correct "mint" to illuminate, rather than lamp zero. (tt820)

1.01 Installation release (16 August 2000).

1.00 Internal release (July 2000).