Code Changes in XDSPRO4P release v0.4.1:

Fixes:

One time format of storage devices:

Fix: In order to remove any lingering disk corruptions that were caused by the old kernel version, after the first reboot after the 0.4.1 code is downloaded to the receiver, the Compact flash contents will be archived to the hard drive and then the compact flash will be formatted. After eight days, the hard drive will also be formatted to make sure that both devices have been completely wiped clean after the 0.4.1 kernel was installed leaving intact only properly formatted files.

Additions:

Integrity Scan:

Features: A new function has been added that does a non-destructive scan of the storage devices to verify they are functioning properly.

Usage: The integrity check is automatically run every time the receiver is rebooted. Additionally, it can be called manually by issuing the **ALIB SCAN** IRD command through an M&C terminal, a telnet session or the Affiliate Webpage.

Format command:

Features: This new command allows the receiver storage devices to be formatted of all content and the file system recreated.

Usage: The general command is **ALIB FORMAT** but a device must be specified for any format to be done. The devices are specified as **CF** or **HDD**. The entire command to format the compact flash is: **ALIB FORMAT,CF**. For the hard drive it is: **ALIB FORMAT,HDD**.

WARNING: ALL SPOTS, PROGRAMS AND FILES WILL BE DELETED

Enhancements:

Recording to both devices simultaneously:

Changes: The receiver will now record to both storage devices simultaneously. This adds another level of redundancy to prevent situations where the compact flash is unavailable causing recordings to be missed.

Live Fix and Format of the storage devices:

Changes: Maintenance to either of the storage devices will no longer require a reboot or any off air time. The device will be gracefully dismounted for maintenance and then remounted when the work is done.   These functions can be called from the front panel under the status for each device, through a terminal or from the Affiliate Webpage.

Storage devices fixed automatically:

Changes: The receiver will now automatically repair a storage device when it detects that it is in need of repair. This will be done in the background and will not negatively affect any live or recorded programs.

REBOOT MAINT:

Changes: The **REBOOT MAINT** IRD command has been given a new parameter that instructs the receiver to reboot during the maintenance window but will reboot the receiver immediately if no window has been set. The command for this is **REBOOT MAINT,2**

Port Lock prioritization:

Changes: A port that is locked will no longer allow manual program changes via the front panel or IRD commands. The port must now be unlocked before any program changes can be made.

PORT LIVE command:

Changes: The **PORT LIVE** IRD command has a new parameter **LOCK** that can be appended to it to change a program and then lock the port. If a port is already locked, the command will be ignored.

Usage: The syntax for the new command is **PORT LIVE,[port],[program id],LOCK.** The values in brackets must be filled in with specific values for the desired program change.

Maintenance Windows:

In the affiliate web page a maintenance windows can be configured and sent to the receiver. These settings should be set only from the web page as the web site settings will over write anything manually specified on the receiver via IRD commands.

Email Alerts:

The web page can now be used to set up the receiver to send email alerts when status faults are encountered. One or more (comma separated) recipient email address can be specified on the web site to receive alerts. Additionally, the faults that will cause the receiver to send alerts are configurable through the web site.

Before the receiver can send alerts, an SMTP server and port must be specified via the **MAIL HOST,[host],[port]** command. The values in brackets must be replaced with the SMTP server and port to be used.

Relay Alarm Alerts:

The relay alarm mask can now be configured from the web page via check boxes. The faults that are selected will fire the alarm relay on the M&C port.

PORT PLAY:

The **PORT PLAY** IRD command has been enhanced to optionally allow a file to be played back a specified amount of time into the file. The syntax to do this is:

PORT PLAY,[port],[recording],[HH:MM:SS.00]

The values in brackets must be filled in with specific values. If the HH:MM:SS.00 parameter is used, the file will begin playing the specified amount of time into the file.

Code fixes, additions and enhancements in XDSPRO4P release v0.4.0:

Fixes:

Kernel:

FIX: We detected and repaired a bug in the Linux kernel that related to caching errors on delivered and recorded files. This fix combined with performance enhancements in the kernel will greatly reduce the number of file corruptions that a small number of receivers were experiencing.

ACTION: After rebooting for the software upgrade, use the **LOAD SHOW** command from and M&C or telnet terminal and confirm that the entries for the kernel show version as 0.4.0. If your receiver is experiencing the No Storage Device (0x00000008)fault after the upgrade, please contact support for assistance in resolving it.

Starfetch:

FIX: The receiver code has been upgraded to improve StarFetch compatibility. Modified dates on downloaded files will now show the correct values.

Action: Confirm that the dates on downloaded files are showing the current dates.

Additions:

Maintenance Windows:

Features: A new feature has been added to the receiver that allows a maintenance window to be specified. During this window a receiver will automatically reboot if it has successfully received a code upgrade. The maintenance window is specified as a time, duration and days from an M&C or telnet session. In the future, it will also be possible to specify the maintenance window from the *myxdsreceiver* website

Usage: See the examples below for instructions on how to set a maintenance window:

- o Every day at 7:00PM for fifteen minutes: **MAINT SET,19:00,15,DAILY**
- o Every Friday at 3:15AM for thirty minutes: **MAINT SET,3:00,30,FRI**
- o Additional days can be specified with commas: **MAINT SET,3:00,30,FRI,SUN,TUE**
- o Values for days are: **DAILY,SUN,MON,TUE,WED,THU,FRI,SAT**
- o Use the command **MAINT SHOW** to display the currently set maintenance window
- o Use the command **MAINT CLEAR** to clear the current maintenance window and disable the feature.

Maintenance Reboot:

Features: A receiver can now be instructed to reboot during the maintenance window even if it hasn't received a code upgrade. This feature can be enabled from an M&C or telnet terminal

Usage: See the examples below for the command syntax

- o **REBOOT MAINT,1** will flag the receiver to reboot during the maintenance window.
- o **REBOOT MAINT,0** will remove the maintenance reboot flag if it has been set.

Port Locking:

Features: Ports on the receiver can now be locked to the program that is currently playing. This will cause the receiver to ignore any program changes form the scheduler. Any recordings that are scheduled will still execute in the background.

Usage: Enable port locking as follows:

- o **PORT LOCK,A** will lock port A to the program that is currently playing
- o **PORT UNLOCK,A** will disable the lock.
- o The lock feature can also be enabled from the front panel by navigating to **Audio Ports** and selecting a port. Under the **Programs** section for each port, the currently playing program will be displayed and the **3** soft key will allow the port to be locked.
- o When the program is locked it will have a flashing lock icon next to the name. Use the **3** soft key to disable the lock.

Enhancements:

ALIB FIX COMMAND:

Changes: The IRD command for fixing the storage devices has been modified to allow a single device to be repaired. Changes are as follows:

Usage: See below for usage:

- o **ALIB FIX,AUTO** will now detect and fix only the device that is in need of a repair
- o **ALIB FIX,FORCE** has new options that will allow it to repair only the compact flash, only the hard drive or both devices.
- o The commands are **ALIB FIX,FORCE,CF   ALIB FIX,FORCE,HDD** and **ALIB FIX,FORCE,ALL**
- o **ALIB FIX,FORCE** and **ALIB FIX,FORCE,ALL** are synonymous
- o Any time a receiver is repairing a storage device, it will display a message indicating so. Previously the receiver may not have displayed the message depending on how the command to repair was sent.