# miniR700® リリースノート

 $\sim \! 01.06.23$ 

## [2013/10/07版]

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#### 01.06.23 [2013-09-13]

- PCM の設定に於いて、PCMBitSync/PCMFrameSync チャネルで Pack Mode が選択 されている場合に固定値が適用されない様に変更
- 約16KBに固定されていた TMATS レコード長を実環境に即した可変サイズに変更
- webui の ie に於ける AM801 設定画面の表示上の不具合を解消
- For PcmBitSync and PcmFrameSync channels, attributes that are dependent upon the Pack Mode selection are no longer forced to certain constant values when they are unused. Thus several values may no longer have to be re-entered when switching frequently between modes.
- The fixed TMATS packet size of nearly 16KB is now variable, allowing the packet filler to be only enough to make it a multiple of 4 bytes. However the packet will still be padded to fit the requirements of continuous (circular) recordings; large TMATS contents and/or large future block sizes can now be accommodated.
- Using Internet Explorer, the Runtime Control heading for the AM801 on the multiplexer setup page was split across two lines; this has been corrected.
- Since 01.06.20, it was possible to get out of date svn revision/date information in the banner and in release notes.

### 01.06.22 [2013-08-22]

- AM-122/132 で、Record Path Monitor が有効な状態で起動した場合に異常なデータが 出力される不具合の解消
- AM-122/132 で、".dub"が実行された場合に設定がリセットされる場合のある不具合の 改修



- ethrdwr ユーティリティの改修

- An intermittent problem with invalid video data from AM122/AM132 channels could occur when booting up with Record Path Monitor enabled. This was fixed by resetting the encoders during initialization.
- It is possible with current firmware for AM122/AM132 channels to be reset if they are running when a .dub operation is started. A workaround was added to re-enable the channels in this case.
- Fixed issues with Chapter 10 packet verification in the ethrdwr utility.

### 01.06.20 [2013-08-13]

- AM-264 の FireWire モニターチャネルに属性追加
- AM-801 内プロセッサとのインターフェイス改修
- ethrdwr ユーティリティの拡張
- mrsh ユーティリティの移動(/usr/ampex/bin)
- Attributes were added to the AM264 Firewire Monitor Channel to control PHY packet filtering and multi-frame packing. A Bad Signal Error may now be reported by .HEALTH; it is tied to the PHY indicator LEDs.
- Support was added for IRIG106-11, including a -11 TMATS level selection. In this case AXC¥BFM-n is replaced by R-1¥AF-n-i. The TMATS level is now set by G¥106 when TMATS is read in. R-1¥ASR-n is now a non-channel attribute. The parallel type .HEALTH name was changed from PARAIN to PARIN. Comparisons in TMATS files are now case insensitive; fixed handling of modify lines and comments. The .RCC-106 command is now an alias for .IRIG106. A .TMATS



CHECK [n] mode was added that returns save time, version and HW\_MISMATCH. A .HWCONFIG INPUTS option returns the channel ID list.

- The AM801 inter-processor interface now looks for a set of capabilities flags; this is intended to facilitate future enhancements.
- The ethrdwr utility now supports UDP, and an option to check Chapter 10 packet integrity.
- The mrsh utility now runs in /usr/ampex/bin; a symbolic link to it is created for backward compatibility.

### 01.06.18 [2013-06-13]

- AM-801 の"Active Capture"モードの不具合解消
- Problems were fixed with "active capture" modes introduced in 01.06.17: the AM801 sniffer could be left enabled, so that sniffer packets were counted in .dxs command; .health and TMATS indicated MSGIN instead of ETHIN type for these modes.

### 01.06.17 [2013-06-12]

- AM-801 に"Active Capture"モード (UDP ユニキャストでの sniff) 追加
- MUX の型番を検出するように改修
- New "active" capture modes were added to AM801 acquisition (provided the Ethernet Channel revision is 3.0 or later). These record in the same way as the normal firmware capture mode, but the AM801 maintains a network presence; thus UDP may be unicast to the AM801 IP address, or it will subscribe to specified

multicast groups. Performance enhancements were made to handling of incoming frames.

- Mux board type detection was enhanced to check for type information in a CPLD if the FPGA is not functional; this may allow firmware to be programmed. Also, placeholders are used for an unknown type, rather than treating it as the end of the stack. The firmware for an unknown board type may be programmed by supplying an unknown\_fpga file with the appropriate suffix.

### 01.06.16 [2013-05-30]

- PCM マイナーフレームカウンタ(IDC)への対応
- AM-122/132 の「ビデオフレームレート」属性の追加
- TMATS 内の誤情報の削除
- Support was added for PCM minor frame counters (IDC) in PCM channels with frame sync (channel revision 3.0 required). This includes new counter attributes in TMATS and the Multiplexer Setup web page (along with minor cosmetic tweaks).
- An attribute was added to specify the video frame rate for AM122/132 boards, defaulting to maximum (30 for NTSC, 25 for PAL). Note that the overall bit rate is specified at maximum frame rate; lower frame rates will result in lower bit rates (this is not necessarily a linear relationship).
- Fixed TMATS section prefixes which were incorrect when adding extra lines.

### 01.06.15 [2013-05-14]

- AM-801の LINK パラメータの追加(デフォルトの 0 で Auto)
- AM-801 へのトレース機能追加



- muxtest ユーティリティの不具合解消
- A Link Speed parameter was added to the Multiplexer Setup Page for the Ethernet Channel, and to TMATS as AXC¥ESPEED. This forces the AM801 to advertise only the selected speed (10, 100 or 1000). PpcSw 01.06.15 is required for this feature to work; the default (0) is Auto as before.
- Support was added to get trace messages from the AM801 on demand. With PpcSw 01.06.15 these are available from a queue to reduce the chance of lost messages, which are now flagged with an asterisk.
- The muxtest utility could fail due to compare errors; these have been fixed by including only test data, not time channel packets.

#### 01.06.14 [2013-03-05]

- UART 入力チャネルにパラメータ 76800 ボーを追加(リヴィジョン 2.2 以降で対応)
- CVSD チャネルへの TMATS 情報の強化
- UART input channels now have an additional baud rate choice, 76800 baud, provided the channel revision is 2.2 or later.
- For CVSD channels, the TMATS sync width (MF4) attribute is now set to 16 bits instead of zero. This produces a sync pattern attribute (MF5) of 16 zeros instead of an empty value.

### 01.06.13 [2013-02-21]

- AM-381 出力レート分解能の強化

- AM-170a での 1440x1152x25 PAL フォーマットへの対応
- AM-264 での FireWire モニターチャネルの追加
- 1394 プロトコルの SCSI-3 規格への準拠
- AM-801 でデータの最後の部分が抜ける場合のある不具合の修正
- トレースログへ数分おきに MUX ボード温度が出力される様になった
- The AM381 output rate resolution was enhanced with over 20 new table entries. Since the number of premod filters has not changed, the new rates will not be selected if either Premod or Aux Premod is enabled. Parameter values for some of the higher original rates were updated.
- Support was added to the AM170a for the AM11b4 PAL format, 1440x1152x25.
- Preliminary support was added for an AM264 Firewire Monitor Channel. Currently enable/disable is the only settable attribute; the data TMATS type format (R-1¥IETF) is 1 (physical).
- The 1394 Inquiry response now reports RBC peripheral device type and SCSI-3 compliance.
- Some files could fail to finish an AM801 download operation; this was corrected by reading to the end of an mRMM block boundary.
- Trace messages are now generated every couple of minutes to show board temperatures.

### 01.06.08 [2012-12-14]

- AM-170a/160a と AM-15b1 の組み合わせに新たに 1600x1200p30 のフォーマットが追加

- A new video input format 1600x1200p30 was added for the AM15b1, and for the AM13b1 with a firmware update. The new format can be used with an AM170a or AM160a encoder.

### 01.06.06 [2012-12-11]

- Native GPS への対応は"Built-in GPS"へ変更された
- Time channel references to Native GPS have been replaced with "Built-in GPS".
  The TMATS attribute TFMT can no longer be 'N'; switching to external GPS mode is done with a new IEXTGPS vendor attribute. For this external mode a new baud rate parameter can be set to expect 4800 baud.
- Since 01.06.01, if no RMM was present, a 5-second wait for it would delay system startup. This was particularly relevant for a miniN system.

### 01.06.05 [2012-11-06]

- AM-901 GPS ボードでの NMEA シリアルポートへの対応
- 0x400c チャネルの無効化への対応
- Support was added for the new AM901 GPS board with Time Channel. This channel can get time from an on-board GPS receiver or from an external NMEA serial port.
- Time channels can now be disabled; for the original on the mR-X0n, this requires a firmware upgrade. All enabled channels will create Chapter 10 packets.
  However only the first (lowest numbered) enabled channel can be used to set



system time; this is also the channel which will create the first time packet, which follows the TMATS packet.

### 01.06.04 [2012-10-16]

- AM-261 で IIDC カメラ使用時の非同期応答不具合の解消
- ".health"返り値ビットのうち"Setup Failure"が有効になった
- A problem with unexpected asynchronous responses from IIDC cameras could cause significant reliability problems in release 01.06.03 when recording with an AM261.
- A .health flag "Setup Failure" may now be set when there is a problem setting up an IIDC camera at start of recording (e.g. missing camera or an invalid combination of format/mode/rate); otherwise the flag is cleared.
- The web page tooltip for Legacy setup now shows the format and mode used.

### 01.06.03 [2012-10-09]

- AM-261 への IIDC(DCAM)入力への対応
- IEEE1394 チャネルに対する TMATS と".health"の対応
- More generalized support for IIDC (DCAM) cameras was added for the AM261. The original mode is now called Legacy and the new mode is called Enhanced. Several video formats and video modes can be selected, as well as additional frame rates. Combinations of these parameters are rejected that would result in a packet size greater than 4KB.



- TMATS and .health support was upgraded for IEEE1394 channels.

### 01.06.02 [2012-07-30]

- 新しい X02 ファームでの".bit"コマンドに対する改修
- AM-801 からダウンロードした場合に不要なデータが記録される不具合の解消
- 1394B-mRMM のヘッダに誤ったシリアル番号が記録される不具合の解消
- AM-11b4の PAL 信号不具合の解消
- rmmtest ユーティリティへのオプション追加
- Support was added for new X02 firmware which will allow a choice to reroute the BIT switch discrete input to an Event Channel (otherwise this channel will not appear). This selection is added to the discrete section of the recorder setup page and is shown at the end of '.version system', if firmware supports it.
- The CG User Defined channel was renamed as Recorder Log.
- A bug was fixed in the setup for an AM801 download; the sniffer packet filter disable setting could affect playback, resulting in an extra layer of packetization in the downloaded file.
- The recorder serial number written in RMM headers was incorrect for a 1394B mRMM and for serial numbers whose last four characters start with A-Z.
- A problem was fixed affecting reliability of PAL output from an AO11c1 when used with an AM11b4.
- A '-i<offset>' option was added to the rmmtest utility for the -x software pattern checker, making it possible to examine data errors later in the eBlk.



#### 01.06.01 [2012-05-18]

- PCM シングルスニファモードの追加
- webui の改修
  - ▶ マルチプレクサ設定用 cgi が"index.cgi"から"mux.cgi"へ変更
  - ▶ UARTLength パラメータをドロップダウンリストへ変更
  - ➤ AM-801/AM-204の設定画面の改修(無効時は非表示となる)
- AM-170aの IQP の最小値を"15"へ変更
- H.264 エンコーダ等の TMATS 属性の不具合解消
- ソフトウェア上書き時のプロンプトの表示
- Support was added for a new Single Channel sniffer mode on the AO381 PCM output channel (with channel revision 1.6 or later). The table-driven sniffer mode is now labeled "Advanced". In Single Channel mode, channel ID and rate parameters were added in the same way as was done for Play mode.
- Web pages were significantly modified to support saving each page as "Web Page, Complete"; when the saved page is opened the Reload button and Home link are replaced by a text box where the user can enter a target miniR IP address. This allows setups to be easily propagated to multiple recorders; a check is made that multiplexer channels being committed are in the current hardware list on the target recorder. The Recorder Setup page was re-organized for this purpose, with only one commit button and no separate recorder type selection page. The index.cgi page was renamed mux.cgi, but answers to index.cgi as well.
- A checkbox was added to the multiplexer page to reclaim registry parameter space from unlisted hardware before committing. This is unlikely to be needed unless many different hardware configurations have been used.

- The UART Length parameter is now a drop down list when it appears on the multiplexer setup page. On the FPGA Setup page, the Last Signature and Last File Time displays were removed.
- For the most complex channels, AM801 and AM204, large groups of parameters now disappear from the web page when they are not enabled. This includes multicast groups, TCP client addresses, and M1553 filters.
- The lower limit of the AM170a Initial QP parameter is now 15, since lower values are not always expected to work properly.
- Bugs were fixed involving TMATS attributes, in particular VMUTE for H.264 encoders.
- The muxdub interface type may now be shown by .status statusmode=all.
- The writebbt utility could prompt to override software write protection, even when not write protected at all; this bug was introduced in 01.05.16.

### 01.06.00 [2012-02-13]

- テストデータジェネレータとして新たに"muxgen"が追加された。このモードに因り"testgen"と同様のデータが Chap10 形式で記録される。
- AM-160のバージョン情報が正しく表示される様に修正
- mRMM が書込禁止の場合".record"コマンドが"E 04"ではなく"E 05"を返す様に変更
- イーサネットデータの記録停止時に稀に起きるデータの切捨への対応
- 記録停止時の信頼性向上
- AM-273 パフォーマンス改善
- Linux のカーネル#2 Fri Feb 17 12:50:20 PST 2012

- ▶ CFI フラッシュドライバの 65nM チップのサポート
- U-Boot のブートローダ ビルド:4929
  - ▶ CFI フラッシュドライバの 65nM チップのサポート
- A new record/play interface type "muxgen" may now be selected; it is similar to "testgen" but uses a test generator/checker in the first multiplexer board. Thus data is contained in Chapter 10 packets; there are also time packets and a TMATS packet. The .dxs report now includes channel 0x0411 for this purpose. A number following "muxgen" selects test pattern 0-7 similar to "testgen". If the Record Path Monitor mode is Enabled, this will be suspended during '.record ifrec=muxgen' and resumed when recording is stopped.
- Reporting of '.version all' was improved for a malfunctioning AM160 PIC at startup. In this case PicSwRev and CodecRev lines will show revision "????"; previously the lines would not appear.
- When the mRMM is write protected, a .record command now returns E 05 (command failed) instead of E 04 (media full).
- A race condition was corrected when stopping a record session that used the ethernet data interface (the recording could be truncated).
- More safety checks were added to the test for an interrupted declassify operation, when an mRMM is being powered up.
- The AM273 flash write routine was modified to use the buffer size reported in CFI information; this is intended to improve performance when used with 65nM replacement chips.
- Linux Kernel #2 Fri Feb 17 12:50:20 PST 2012
  - > The CFI flash driver was updated to support 65nM replacement chips for system flash.
- U-Boot Bootloader Build: 4929



> The CFI flash driver was updated to support 65nM replacement chips for system flash.