Product Release Notes

Finished Good p/n(s): AES 7094 and AES 7794
Firmware and Rev: 7X94 v2.197
Release Notes Rev: Rev 1.0
Date: June 14, 2011

1 Summary

This document describes the improvements implemented in 7X94 f/w v.2.197 which affect the following products:

AES 7094 IntelliPro Full Data Module
AES 7794 IntelliPro Fire Full Data Module

This is the first release of the AES 7794 and it uses the same firmware as the AES 7094 which has been in production for over one year. There are hardware differences between the two products and the AES 7794 is a UL listed product while the AES 7094 is not.

2 New Advanced Configuration Options

The previous AES 7X94 firmware release v1.166 had 10 configuration options. The new v2.197 release includes 7 additional configuration options classified as Advanced Options which are listed below and described in detail in Section 2.1.

Option # 11: Advanced Options Display (default = NO)

NOTE – In order to view and program the following new options on the Hand Held Programmer, Option # 11 must be changed to =YES.

Option # 12: AP Output Gain - (7094 default = 0, 7794 default = 3)
Option # 13: Reset to (Factory) Defaults (default N/A)
Option # 14: Line cut sensing enabled - (default = YES)
Option # 15: CID 4XX (Event Code) letter (default = U)
Option # 16: Modem3 EC Text (Description) to CID Enabled (default = YES)
Option # 18: Voltage pump Enabled (default = YES)

NOTE: There is no Option # 17.

2.1 Description of New Configuration Options

2.1.1 Option # 11: Advanced Options Display (Default = No)

This configuration option allows a user to suppress the new Advanced Options. The default is =NO and, in this mode, the 7X94 programming appears unchanged from previous versions seen in AES 7094. This option needs to be set to YES in order to reveal the 6 new Advanced Options.

2.1.2 Option # 12: AP Output Gain (7094 Default = 0; 7794 Default =3)

This configuration option allows the power of the CODEC amplifier to be raised by pre-defined values. The main purpose is to drive multiple phone interfaces which are often required by fire alarm panels. The AES 7794 default is 3 and the AES 7094 default is 0. AES Technical Support staff may give instructions to change this default in some applications; otherwise this option should not be changed in the field.

2.1.3 Option # 13: Reset to (Factory) Defaults

This configuration option allows the 7X94 f/w to be reset to original factory condition. This option may simplify troubleshooting and simplify the process of moving modules between systems.

2.1.4 Option # 14: Line Cut Sensing Enabled (Default = Yes)

With previous f/w versions, several alarm panels (see list below) tested by AES engineering caused a problem when a panel went off-hook to communicate via phone line. In such cases, the 7X94 triggered an incorrect line-cut event and intercepted the transmission, intended to be made via phone line, and directed the transmission via IntelliNet. With this option set to =No, when these panels go off-hook to communicate via the phone line the system no longer causes a line cut condition.

In order for this condition to occur, the Phone Line Option (Option # 1) must have been set to =Yes and the intent of the application is to use phone line as primary communication and AES IntelliNet as back-up and to monitor the phone line.

Affected alarm panels – tested and determined to cause this problem:
Several Napco brand panels
Bosch/Radionics 6112
Bosch/Radionics 8112

NOTE: When Option # 14 is set to =NO, an actual phone line cut WILL not be detected. For other alarm panels, the line cut sensing functionality operates as intended and no action is required.

2.1.5 Option # 15: CID 4XX (Event Code) Letter (default = U)

In cases where a CID event code in the 400 to 499 range needs to be translated as an alarm event, set this option to = C. The default is = U to describe or to prefix a User Number (000 – 999) since the 400 to 499 range event codes are typically related to open/close reporting or access control.

2.1.6 Option # 16: Modem III Event Code Text (Description) to CID (default=Yes)

This configuration option enables the 7X94 to scan the Modem III description field for text specific to events that are typically silent at the local site and that the dealer may not want to have sent through as a general alarm message (E140 / R140). When this option is = YES, Modem III alarm messages will be translated not only based on the Event Code (EC) from the Modem III packet but also from the contents of the text used to describe the event.

If the following text is present anywhere in the description, the corresponding CID alarm message will be transmitted – rather than a general alarm message.

PANIC	E120
PANIC	R120
DURESS	E121
DURESS	R121
SILENT	E122
SILENT	R122
AUDIBLE	E123
AUDIBLE	R123
FIRE	E110
FIRE	R110
HOLDUP	E122
HOLDUP	R122

2.1.7 Option # 18: Voltage Pump Enabled (Default = YES)

Some alarm panels do not work properly with the 40V on the phone line provided by the 7X94. This is mostly common with older alarm panels and with the 4x2 pulse format – see alarm panel info below.

This configuration option is a troubleshooting feature that allows the user to turn off the 40V wet voltage circuit and, essentially, make the 7X94 operate with the same wet voltage as the older AES 7067 IntelliTap II (around 12V).

Alarm Panel Info (this may apply to other old alarm panels):

- **FBI XL-2** - works with the voltage pump ON (=YES) when using CID format, but does not work when the format of the AP and the 7094 is changed to 4x2. In this case set this configuration option to =No.
- **Optex Morse** several panels - the panel dials out but once at the off-hook voltage level, the panel does not acknowledge the handshake tones and there is a failure.

In both case above, set this configuration option to =No

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3 Bug Fixes

3.1 Bosch 6112 Alarm Panel - Account Number

PROBLEM: When a 6112 panel was using the 7X94 with Modem II format, the conversion of the account number digits was not correct. For instance, account number ‘5201’ was being translated as ‘52A1’.

SOLUTION: This release fixes this problem and a “0” is translated as a “0”.

3.2 Bosch 6112 Alarm Panel – Keypad Panic Alarms

PROBLEM: When a 6112 panel is using the 7X94 with Modem II format, the 7X94 does not generate an alarm message when a Panic Alert (keypad command 7 or command 9) is produced.

SOLUTION
Translate panic event for 6112 in Modem II to a suitable CID event. There is no way to differentiate between Command 7 and Command 9 other than using a code description.

On the 6112:
Command 7 on Modem II, translates to E122 C000 (M3 event code = 08)
Command 9 on Modem II, translates to E122 C009 (M3 event code = 08)

NOTE: The zone distinctions above can be programmed via the Bosch RPS (Bosch programming tool). The default setting is blank on both commands, which causes the 6112 to NOT PRODUCE an event even when communicating with a Bosch Receiver. In order to produce an event, the zone has to be non-blank (0 and 9 are the common options, as these do not translate as physical zones). The user should use the RPS (Bosch programming tool) to assign a different zone for each command that will be reported in the CID translation.

3.3 Bosch 7412 Alarm Panel - Area Translation

PROBLEM: On the Bosch 7412GV2, the CID translation of the area was not correct. When the area was set to 1, the 7X94 translation was sending the area value as 0. For instance, 7X94 CID reported E140 C01 005 when it should have been E140 C02 005.

SOLUTION: modify the area interpretation on the 7412.

3.4 Intercept mode

PROBLEM: In the previous version of firmware there was a sequence of programming steps that inadvertently rendered the POTS intercept mode non-functional. The sequence that causes the problem was as follows:

1. Power up, default mode is POTS=NO
2. Change to POTS=YES
3. Intercept works
4. Now, if you change back to POTS=NO (intercept no longer applies) and then back to POTS=YES, the intercept no longer works.

SOLUTION: Cause of the error condition was found and corrected on the release v2.197 release.

4 General Code Improvement

4.1 Board ID from ID resistors

This is an improvement for manufacturing that enables the use of the same firmware in both the 7094 and the 7794.

4.2 Invalid Modem II or Modem III Event Code

7X94 will now send a new CID message (E999) when it receives an unknown event to translate when using either Modem II of Modem III format.