

## *Allied- Generic Schlumberger ANDI Systems - Release Notes*

**Allied Versions:** GSA0600S or newer  
**Report Date:** June 27, 2008  
**Submitted by:** Bob Danford, Allied Electronics, Inc.

<b>Version(s)</b>	<b>Status</b>	<b>Release Notes</b>
<b>GSA0600S</b>	<b>Released 04/08/1999</b>	<ol style="list-style-type: none"> <li>1. Includes all enhancements from previous versions.</li> <li>2. Added support for the Additech fuel additive system.</li> <li>3. Added support for the Lumitronic (MTI, Inc.) Electronic price sign.</li> <li>4. Added support for Control #, Hubometer and Purchase # prompts at the DPT.</li> <li>5. Added logic to report a failed car wash to the POS. This is utilized for operations where the car wash controller interface resides in the POS (i.e. when car wash codes are provided via the POS).</li> </ol>
<b>GSA0601S</b>	<b>Never Released to Production</b>	<ol style="list-style-type: none"> <li>1. Includes all enhancements from previous versions.</li> <li>2. Added support for card type selection (Credit or Debit). The POS can respond with a completion code that indicates it wants the customer to make the selection. This feature is activated via the DPT Configuration command (DPT J). See the DPT J command for details.</li> <li>3. Added support to allow the POS to control when the ANDI prompts the customer for a receipt. This can be set to prompt for receipt during or after the dispenser starts to fuel, as opposed to before fueling. The enhancement adds new flags to the "print receipt always" flag in the DPT J command (now referred to as receipt prompt mode flag).</li> <li>4. Enhanced the car wash prompt mode and receipt prompt for additional prompting scenarios. See the DPT configuration command (DPT J) for additional details.</li> </ol>
<b>GSA0602S</b>	<b>Released 05/07/1999</b>	<ol style="list-style-type: none"> <li>1. Includes all enhancements from previous versions.</li> <li>2. Support added to ignore the setting of the "Report calling as Idle" and "Report Idle as Calling" flags when the CRIND is offline. See the DPT J command for details.</li> <li>3. Changed maximum number of digits for Vehicle # prompt from 6 to 11.</li> <li>4. Added support for Preset by Volume in the DIS (authorize dispenser) and DPT R (authorize card) commands. See these commands for additional details.</li> <li>5. Added support to report new owning device values based on the key pressed at the dispenser when in a calling state. Please see the DPT Data Element Dictionary section for definitions of the new owning device values.</li> </ol>

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GSA0603S	Never Released to Production	<ol style="list-style-type: none"> <li>1. Includes all enhancements from previous versions.</li> <li>2. Added DPT configuration flag “Minimum Receipt Lines” to the DPT J command. This parameter is used to define the minimum number of lines on a customer receipt. Some DPTs have printers that are equipped with a tear-bar. In order for the customer to be able to grab the receipt it has to be long enough to pass through the chute. Optimal values may differ from model to model and may differ per manufacturer. It is recommended to set the default value for this parameter to 00, this will instruct the ANDI to use a default selection for that manufacturer.</li> <li>3. The system was changed to operate as follows (regardless of the value of Card Type Selection Flag in the DPT Configuration command): <ul style="list-style-type: none"> <li>• Press Credit Outside Key, CRIND displays “Host Unavailable”, no DPT C message generated.</li> <li>• Press Debit Outside Key, CRIND displays “Host Unavailable”, no DPT C message generated.</li> <li>• Dip card without first pressing a key. CRIND displays “Host Unavailable”. ANDI generates DPT C message with completion code set to “N” (no response expected) and Transaction Status set to ‘g’ (host unavailable).</li> </ul> </li> <li>4. Added support for new “Car Wash Enhanced Print” flag in the DPT Configuration command (DPT J). See the DPT J command for additional details.</li> <li>5. The ANDI now sets the following card reader configuration flags to default values if the specified value is unknown for the particular parameter: <ul style="list-style-type: none"> <li>• Operation mode= 1</li> <li>• Receipt prompt mode= N</li> <li>• DPT preset mode= N</li> <li>• Report calling as idle= 0</li> <li>• Report idle as calling= 1</li> <li>• Car wash prompt mode= N</li> <li>• Attendant card mode= 0</li> <li>• Cash acceptor Pay mode= 0</li> <li>• Card type selection mode= 0</li> </ul> </li> <li>6. System includes the new boot loader support, which requires the ANDI to be populated with two RAM boards (Expansion/ Normal RAM slots).</li> <li>7. Added support to report new owning device values based on the key pressed at the dispenser when in a calling state. Please see the DPT Data Element Dictionary section for definitions of the new owning device values.</li> <li>8. Logic was changed to only send prices if needed.</li> <li>9. Enhanced the ANDI menu (press 3-2-1). Added an additional screen for the Idle Status. If the first screen shows "System Not Idle", press the '1' key to display further details regarding the part of the system which reports the "Not Idle" condition.</li> <li>10. The date-time of a card-reader transaction is now established at the start of a transaction and remains the same for the duration of the transaction. Both the DPT R and DPT C messages now contain a Date/Time field (field type ‘e’). For an individual transaction, the content of this field is the same in both messages.</li> </ol>

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<b>GSA0603S (cont.)</b>	<b>Never Released to Production</b>	<ol style="list-style-type: none"> <li>11. A new optional POS SALE ID field has been added to the DPT R message; Field type '@' (0x40), max length 64 bytes. If the POS returns this field in the DPT R response message the ANDI will return it in subsequent DPT R and DPT C messages for that transaction. This allows the POS to attach some arbitrary information to the sale.</li> <li>12. Changed the text from "Insert Card Again" to "Re-Insert Card" for certain Generic prompt sets.</li> <li>13. Includes all enhancements from previous versions.</li> <li>14. Added Transaction Status value "g" (Card Host Unavailable). The Transaction Status is a member of the DPT Status field (field type 'v', used in DPT C message).</li> <li>15. When Transaction Status is "g" the DPT C message will be sent with completion code "N" (no response expected). This prevents the dispenser from going to "POS Unavailable" after the customer dips a card when the POS with card-host server is down (POS issue). Formerly, it was possible for the dispenser to get stuck at "POS Unavailable" until the POS that serves as the card-host re-established communications with the ANDI. This was changed to allow these dispensers to be used for post-pay sales by other POS devices.</li> <li>16. Added DPT configuration flag to allow enabling/disabling of displaying prices in car wash selection menu. The default is to show the price if the value is not programmed in the DPT Configuration command (DPT J). Please refer to the DPT J command for additional details.</li> <li>17. Added support to create a log event (SSC K) for when a printer returns to normal operation (Printer OK).</li> <li>18. Added support to display transactional specific text when supplied by the POS during a sale authorization. The provided text will display for 5 seconds.</li> <li>19. Added owning device "TS" to the dispenser status message (DIS A) when a hot authorized dispenser is denied. This allows the POS to recognized a hot authorized denial condition at the POS.</li> <li>20. Modified the Preset Volume and "Fuel Up To x G" display. The logic was changed to no longer display "Fuel Up To X G" when the transaction type is set to 1 (fill-up) or 4 (auto auth fill-up). Please note that for these two cases, the ANDI will still display "Fuel To \$" at the card reader if the customer enters a fuel preset amount at the DPT (if enabled in the DPT configuration).</li> </ol>

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<b>GSA0603S</b> (cont.)	<b>Never Released to Production</b>	21. Added support for the Milwaukee Electronic Price Sign interface. The price sign connects to ANDI channel 12 in order to maintain the MTI sign interface on channel 15.
<b>GSA0604S</b>	<b>Released 01/09/2002</b>	<ol style="list-style-type: none"> <li>1. Includes all enhancements from previous versions.</li> <li>2. Added support for DUKPT method of debit.</li> <li>3. Added support for additional debit prompt "Enter PIN # or Press NO for Credit" (completion code `)`). If the customer presses NO, the text 'NO' is passed to the POS in the pin block field.</li> <li>4. Enhanced the receipt prompt mode flag in the DPT configuration command (DPT J). The value of 'H' will instruct the ANDI to suppress prompting of the receipt at the beginning of the sale until one of the following completion codes is returned: <ul style="list-style-type: none"> <li>• @= Hot authorization.</li> <li>• W= Keep waiting for authorization.</li> <li>• &gt;= Accepted, POS will authorize dispenser.</li> <li>• A= Accepted/ authorized.</li> </ul> </li> <li>5. Changed timers for "Re-Insert Card" and "Card Read Error Please See Cashier". Formerly the prompt timeouts were hard-coded for 45 seconds and because of an error in the code this timer would run twice (in effect be 90 seconds). This has been changed to use the configurable "DPT Await Card" timer.</li> <li>6. Added support for new Download Modes F (Forced Idle) and S (Forced Timed). See the Load Program Command (SSC J) for additional details.</li> <li>7. Added support for wild cards in the Log Event message. See the SSC K command for additional details.</li> </ol>
<b>GSA0605S</b>	<b>Released 01/03/2003</b>	<ol style="list-style-type: none"> <li>1. Includes Enhancements from previous versions.</li> <li>2. Changed logic to no longer accept a car wash code of all zeroes as a valid code. A report from a field location using the Kesseltronics controller (emulates Ryko) would sometimes do this under error conditions.</li> <li>3. Additionally enhanced logic for Hidden Numeric fleet data. The following methods are used: <ol style="list-style-type: none"> <li>a. <b>Method 1:</b> The ANDI attempts to use Mode 6 in the 0x3F command. When using mode 6, masking is supported without requiring the presence of a SAM/SSM unit. Some debit modules don't support this mode and return an error (protocol NAK). If this error is detected, a flag is set to automatically skip method 1 during the next attempt.</li> <li>b. <b>Method 2:</b> The ANDI then attempts to use Mode 4 in the 0x3F command. This requires the SAM/SSM to be operational. If the SAM/SSM returns a fatal error when attempting to translate the hidden numeric data, the ANDI attempts to use the next method.</li> <li>c. <b>Method 3.</b> Ignore the request for hidden data and get the data in the clear. This is only done in order to obtain the data in the clear as opposed to not processing the sale.</li> </ol> <p>Methods 1 and 2 are skipped if the Model field is set to '9' (disable hidden data). Method 2 is skipped when the SAM is offline when we are ready to prompt for hidden numeric data. The Skip Method 1 and 2 flags are reset when a dispenser goes offline, thus after the dispenser come back online we will try these methods again.</p> </li> </ol>

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GSA0605S (cont.)	Released 01/03/2003	<p>4. The Sale Cancelled Timer as set in the DPT Configuration command (DPT J) was hard coded. The system was modified to use the value as set in the configuration command.</p> <p>5. Added support to allow the POS to print the cash receipt even for cancelled cash sales. This was done by ensuring the ANDI sends the DPT Card Sale (DPT C) message before printing the receipt. This allows the POS to provide print data in the DPT C response message.</p> <p>6. Rebel Oil/Phillips 66 requested a change in regards to Debit at the card reader. The request was to change the DPT display to show "ATM/Debit" instead of "Debit" in all screens related to debit transactions. Some current Generic ANDI users still require the prompt to display "Debit". To satisfy both requirements, a configuration parameter was added "Show Debit As ATM/Debit" in the DPT J command. To remain compatible with older systems it defaults to "No".</p> <p>7. Added enhancements to the Program Fuel Information (DPT D) command. In previous builds, the ANDI would reject a product if both the Name and Short Name fields were blank filled. The ANDI would also stop reading the remainder of the message (i.e. ignore other fuel programming information). The logic was changed to accept blanks in the Name and Short Name fields. This also can be used to restore default values of a fuel product (Gasoline).</p> <p>8. Added support for taxable car wash product (support different car wash tax amounts for each car wash product). Please see the DPT Product Configuration command (DPT F) for additional details.</p> <p>9. Addressed potential issue with regards to operating dispensers in auto payout mode. In some cases, the ANDI sale buffer field would not be cleared after the sale was reported to the POS. Logic was added to check for auto-pay each time a Reserve, Authorize, Stop or Suspend command is received.</p> <p>10. Enhanced Schlumberger interface protocol. The protocol does not support sending a NAK to have the dispenser resend the data. The ANDI is required to resend the Read command. The dispenser always assumes the data was received and it may discard the information once it believes it was sent to the ANDI.</p> <p>After a customer has entered data (card or keyed) at the CardScan device, a status change lets the ANDI know to retrieve the data. The ANDI sends a Read Card or Read Keyed Data command. If there is noise on the communication link, it is possible for the response data to get corrupted. The CRC check would fail on the message. The ANDI resends the Read command but now the data may no longer be available and the dispenser returns an error. This would sometimes cause the controller to time out waiting for the data. After the time out expires, the ANDI would cancel the sale (same as not entering anything a mandatory prompt).</p> <p>To better handle this condition the logic was changed to re-prompt the customer for the information after a Read command is rejected by the dispenser.</p> <p>11. There was a problem with the system not reporting leading zeros entered for fleet card prompts at the dispenser. The code was changed to report the leading zeros to the POS if the dispenser properly reports them and it was changed to use Mode 2 to obtain numerics in the clear.</p>

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<b>GSA0605S</b> <b>(cont.)</b>	<b>Released</b> <b>01/03/2003</b>	<p>12. Fixed a problem with suppressing leading zeros on fleet prompts for dispensers that are not debit capable (without debit modules). This may not be supported on dispensers with older versions of the Schlumberger dispenser software.</p> <p>13. A problem was reported where the dispenser changes the display to “One Moment Please” and exits the numeric prompt mode after the customer pressed the product select button while at a fleet prompt. This causes the transaction to time out and cancel. Logic was changed to refresh the dispenser card reader display each time the product select status changes. This is NOT an ANDI bug. It is a “work-around” for a bug in the Schlumberger dispenser software (main board or debit module).</p> <p>14. If the “Price Level Selection” configuration parameter is set to “Must Select Price Level” or “Must Confirm Price Level” and the dispenser is authorized without specifying a mode of payment, the dispenser display would remain at its idle display. Logic was changed to display “Select Cash or Credit” when appropriate.</p>
<b>GSA0610S</b>	<b>Released</b> <b>07/21/2003</b>	<p>1. Includes all enhancements from previous versions.</p> <p>2. Added support for price per gallon discounting.</p> <p>3. Tokheim’s latest Schlumberger dispenser version addresses problems related to their internal processing of the “Product Select” buttons. Allied had already implemented a “work-around” for these issues. The combination of the two “fixes” yielded unfavorable results in the field. As a result, Allied defined a new value of the <i>Pump Model</i> field for Schlumberger dispensers.</p> <ul style="list-style-type: none"> <li>- Model value '8' will be used to instruct the ANDI to refresh the DPT display after detecting the <i>Product Select</i> change. <b><i>This should be used with Schlumberger dispensers running the old Schlumberger software.</i></b></li> <li>- By default, if the Model is set to '0' (or any value other than '8') we are back to the original (pre GSA0605S Rev 4) behavior. When a change in “Product Select” is detected, the ANDI does not refresh the DPT display. <b><i>This should be used with Schlumberger dispensers running the latest Schlumberger software.</i></b></li> </ul>
<b>GSA0611S</b>	<b>Released</b> <b>01/05/2006</b>	<p>1. The attached system has the following enhancements:</p> <p>There have been reports that some sites are seeing "Blend Config Error A" or "Blend Config Error B" error messages.</p> <p>Blend Config Error A: A sale was done for a product that is defined as a pure product in the POS. At the end-of-sale, the ANDI received from the dispenser product details that indicate the product is a blended product (non zero values for low grade and high grade volume). The configuration in the dispenser appears to differ from the configuration at the POS.</p> <p>Blend Config Error B: A sale was done for a product that is defined as a blended product in the POS. At the end-of-sale, the ANDI received from the dispenser product details that did not include totals for low grade volume and high grade volume (i.e. dispenser behaved as if it was a pure product). The configuration in the dispenser appears to differ from the configuration at the POS.</p>

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<b>GSA0611S</b>	<b>Released 01/05/2006</b>	<p>At some sites, the dispensers appear to be operating fine yet they continue to get these errors. In Schlumberger/Southwest systems, the <i>Blender Type</i> field in the dispenser configuration was not used. In this system, when the <i>Blender Type</i> field is set to '9' the ANDI will suppress the "Blend Config Error" messages.</p> <ol style="list-style-type: none"> <li>2. Assume the POS programmed the car wash options using the enhanced DPT F command that includes <i>Tax</i>, <i>Discounted Price</i> and <i>Discounted Tax</i> fields for each car wash. <ol style="list-style-type: none"> <li>a. Car Wash discount is enabled in DPT J command.</li> <li>b. The customer selects a carwash before fueling.</li> <li>c. The authorized amount is large enough for the customer to qualify for the car wash discount.</li> </ol> </li> </ol> <p>At this point, the dispenser should be authorized for "Authorized Amount - Discounted Price - Discounted Tax." Instead, it was authorized for "Authorized Amount - Discounted Price – Tax."</p> <p>For most sales, this does not matter; however, for prepaid card transactions, this may result in the customer not being allowed to use the full balance of the card. This has been corrected.</p> <ol style="list-style-type: none"> <li>3. Added support for the DIS "X" (Return Transaction) command.</li> <li>4. Fixed cash acceptor warm start issue.</li> </ol>
<b>GSA0612S Rev 1</b>	<b>Released 6/25/2008</b>	<ol style="list-style-type: none"> <li>1. Following a cold start, DIS D commands would be refused with a completion code of 'B' (busy). This was present in all SW systems but would only be noticed if the DPT 'M' command was used to change the Idle prompt. A side-effect of fixing this causes the "configuring" message to take a little longer to show on the LCD once configuration starts.</li> <li>2. A bug was introduced in May 2005 that causes the SSC 'I' (request config) message to be sent after a warm start even if configuration had been programmed. This has been fixed.</li> </ol>