

**ALLIED ELECTRONICS, INC**

**Technical Guide**

**NeXGen**



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1 Service

**For Technical Assistance Concerning The  
Installation / Programming / or Troubleshooting Procedures**

**Contact**

**Allied Technical Support Group**

**1-800-223-3619 (Outside PA Only)**

**OR**

**(215) 788-4943**

**Visit our website at: [www.alliedelectronics.com](http://www.alliedelectronics.com)**

## 1.1 Technical Tips

### 1.1.1 Memory Clear Procedures

Please Refer to Section 3.3 (Reset NXG) in the **Allied NXG\_DGS Diagnostics Program Manual** for details on performing memory clears on the NXG controller.

### 1.1.2 NeXGen Diagnostic Messages

Please Refer to Appendix C (ANDI NXG Message Descriptions) in the **Allied NXG\_DGS Diagnostics Program Manual** for details on diagnostic messages for NeXGen.

### 1.1.3 Card Reader Diagnostics

When the Card Reader is idle (i.e. scrolling SELECT PAY-INSIDE etc...) use the Card Reader <CLEAR> key to display the Card Reader status. When no error is found the display will show "SYSTEM OK".

Below is the list of possible diagnostic messages on Card Reader display:

- PRINTER PAPER LOW
- PRINTER PAPER JAM
- PRINTER OUT OF PAPER
- PRINTER FAILURE
- BILL JAMMED
- CASSETTE REMOVED
- CASSETTE FULL
- CASH ACCEPTOR ERROR
- CAN'T PROCESS PIN
- DEBIT UNAVAILABLE
- SYSTEM OK

After correcting the problem press <CLEAR> again to check if the problem was fixed. When no error is found the display will show "SYSTEM OK".

**Note:** For printer related error messages you have to press the <CLEAR> key several times to get an updated printer status.

**Note:** The NeXGen may not allow a Cash Acceptor sale to begin when a PRINTER OUT OF PAPER, PRINTER PAPER JAMMED or PRINTER FAILURE condition exists. (This is a programming option).

#### 1.1.4 Tank gauge Diagnostics

The NeXGen will automatically check if it is connected to a DIM card. If not, the NeXGen will not send any Dispenser Interface commands to the TLS. This allows the NEXGEN to use the same software at all stations (TLS-250, TLS-350 and TLS-350R).

To display the tank gauge link status, view the appropriate port status via NXG\_DGS.

CH-2 Link Up- TLS

Once the NeXGen detects it is connected to a TLS DIM board the device name changes to TLS-R

CH-2 Link Up- TLS-R

#### 1.1.5 Upgrading Application Software

Please Refer to Section 2.3.2 (Download Menu) in the ***Allied NXG\_DGS Diagnostics Program Manual*** for details on performing application software downloads to the NXG controller.

## 1.2 Software Cross Reference Charts

### “Software Cross-Reference Charts”

The attached cross-reference charts list the software version requirements for the Allied NEXGEN interface boxes, as well as Gilbarco, Tokheim and Wayne dispensers and in dispenser card readers.

The charts included the most popular dispenser models with a diversity of options. In addition, the chart includes each manufacturer’s part number for the appropriate computer/logic board.

These charts should not be used as an indiscriminate software replacement and or upgrade program. All of the software variations and variables may not be identified in these charts. Service personnel should not “fix” equipment which is trouble free in order to satisfy the software version requirements. Allied strongly recommends that the service personnel contact Allied and/or the appropriate dispenser manufacturer’s Help Desks before replacing software.

The following is a description of the software version names.

Example: “SGN1000N”

S Shell  
G **Gilbarco**  
N Network  
01 Version  
00 Revision  
N **NeXGen**

**1.2.1 Bennett Dispenser and Verifone CAT**

Bennett dispensers (capable of RS485 interface)

**1.2.2 Bennett/Verifone CAT**

### 1.2.3 Gilbarco Dispenser and CRIND Software versions

Gilbarco Dispenser Model		Version Pre-optimized	Version Optimized	Encore 300 (Digital valve)	Encore 300 (Proportional valve)	Encore 500 & Eclipse
H111B, MPD-A3 MPD-1 with Z-80 logic board		10.5 -10.8	N/A	N/A	N/A	N/A
MPD-2		24.0, 25.0, 28.0, 25.2, 28.0	N/A	N/A	N/A	N/A
H111B, MPD-A3 with 8080 logic board		1 & 2, 3, 4 & 5	N/A	N/A	N/A	N/A
H111B, MPD-A3 with Z-80 logic board		10.5 -10.8	N/A	N/A	N/A	N/A
Modular: MPD-1, MPD-3, H111B		53.6, 53.7, 53.5	N/A	N/A	N/A	N/A
Modular: MPD-3		54.3.10	N/A	N/A	N/A	N/A
<b>Advantage:</b> MPD 2 grade MPD 3 grade MPD 4 grade Quad 2 grade Dual 2 grade	<b>Model:</b> B02/B03/B12/B13 B04/B05/B14/B15 B06/B07 B42/B43/B52/B53 B20/B21/B30/B31	70.9.82  70.8.9 (liters only)	30.2.41  30.0.6 (liters only)	20.1.10  20.0.3 (liters only)	10.1.10  10.0.2 (liters only)	01.8.30 * 02.8.30 * <b>02.8.40 *</b>
MPD 1 grade	Ultra Hi	84.3.41		20.1.10		01.8.30 * 02.8.30 * <b>02.8.40 *</b>
<b>1 hose MPD:</b> 3 grade (3+0) 4 grade (4+0)	<b>Model:</b> B84/B85/B94/B95 B86/B87	72.4.30	32.1.01  32.0.6 (liters only)	22.2.14  22.0.7 (liters only)	12.1.20  12.0.1 (liters only)	01.8.30 * 02.8.30 * <b>02.8.40 *</b>
<b>Selectable Blender:</b> 3 gr 1 hs (3+0)  4 gr 2 hs (3+1)	<b>Model:</b> B78/B79/B7A/B7B/B7E/ B7F/B7G/ B7H/B7K/B7L/ B7N/B7O/BAA/ BAE/BAG/BAK B71/B7C/B7D/B7J/B7M/ B7P	75.6.10 75.5.6 (liters only)	35.5.20 35.3.5 (liters only)	25.3.20 25.1.7 (liters only)	15.2.20	01.8.30 * 02.8.30 * <b>02.8.40 *</b>
<b>Fixed Blender:</b> 3 grade, 6 hs	<b>Model:</b> B64/B65	77.4.3 77.4.3 (liters only)	37.1.4 37.1.4 (liters only)	27.1.10 27.0.5 (liters only)	17.1.10 17.0.6 (liters only)	01.8.30 * 02.8.30 * <b>02.8.40 *</b>

Gilbarco CRIND	Version	Features
Generic Modular and Advantage	51.1.6 or 60.4.40	Debit, Cash Acceptor
Generic Advantage and Encore 300	60.9.40 62.5.50	Debit, Cash Acceptor Smartpad
Dual Head Card Reader (Canada Only) Advantage and Encore 300	62.4.60	SmartPAD
Generic Advantage and Encore 300	70.3.30	Debit, Cash Acceptor, TRIND
Encore 500 and Eclipse Advantage and Encore 300	03.2.50 62.6.10	Debit, TRIND, Scanner EPP
Encore 500/500S/Eclipse	03.1.80	EPP & Smartpad

**Notes:** 1. Version 02.8.30 was released in Aug 2011 and is identical to 01.8.30. It has a different flash chip that it's written to in the pump. 01.8.30 will only run on the old style boards (old flash chip), but 02.8.30 will run on either the old boards or the new boards (with new flash chip). Going forward, all new pump releases will be 02.8.40, etc.

2. Gilbarco has recommended that these software versions (or newer) should be used with the corresponding Dispenser and CRIND models



**1.2.4 Tokheim Dispenser and DPT Software versions**

<b>Tokheim Dispenser Model</b>	<b>Software version</b>
262A	FS.03.00.OV
262A (High Volume)	GS.04.10.00
262A (Fleet operation)	LR.01.05.00
333BSA & TCS	FS.03.00.OV
TCSA	IB.02.00.00
Premier B	JN.04.12.00 or QM.01.01.00
Premier B (ATC)	ND.02.00.00
Premier B (International)	MK.04.12.00
Premier C	QQ.03.03.00
Premier C (High Volume)	RA.01.01.00
Premier C (ATC)	QZ.01.00.09
Premier C (International)	QV.01.02.00
Premier IQ / Harmony	1500.01.07

<b>Tokheim DPT</b>	<b>Software version</b>
Standard (Credit only)	JP.02.21.00
Standard w/ TDS (TED)	MT.QD.05.01
Standard w/ TDS Plus	MT.03.03.00
Insight	MT.PQ.06.03

**Note:** *Tokheim Corporation has recommended that these software versions (or newer) should be used with the corresponding Dispenser and DPT models.*

**1.2.5 Wayne Dispenser and CAT Software versions**

Wayne Dispenser Model	Software Version
DL3/390	24, 29 or 30
Standard Vista	50.00
Enhanced Vista	13.00
IGEM	55.00
V3/Ovation	55

Wayne CAT	Software Version
Standard Legacy CAT	15.00
Enhanced Legacy CAT 1 Vista and 2 Vista	66.00
Dual CAT	105.00
Dual CAT BCB	7.00
Dual CAT 3 Vista	105.00
qCAT w/Ovation	208.00
qCAT w/Ovation for Pilot sites w/Alpha Numeric Keypads	210.02
iXPAY US EPP	1.1.28.0 / 1.2.7.0
SPM Full Travel Keypad	1.1.3946.0
iXCAT	2.01
TRSM Tactile Keypad	10.0
iXPAY R2 (Red Board, Single Board which controls both sides. Dual Board, Blue Board Support)	2.2.7.0
SPM Full Travel Keypad	1.1.3946.0
iXPAY EMV (Canada Market) (Red Board, Single Board which controls both sides. Dual Board, Blue Board Support)	2.2.8.0
SPM Full Travel Keypad	1.1.3946.0

Wayne PIB & CPU	Software Version
PIB (1200 or 9600 baud)	37000 or 39000
Hyper PIB	54.00
2400 CPU	49.29 or 49.37

**Notes:**

- 1. Wayne Dresser has recommended that these software versions, (or newer), should be used with the corresponding Dispenser, CAT, PIB and CPU models**
- 2. Per Wayne's instructions, dispenser version 31 should not be used in the V3/Ovation.**
- 3. Per Wayne's instructions, CPU versions 49.32, 49.34 and 49.35 cannot be used. CPU version 49.37 & PIB 39000 must be used for the "Dynamic pricing" feature.**
- 4. Per Wayne's instructions, iX US EPP Version 1.1.7.0 should not be used.**

1.2.6 Schlumberger Dispenser and CardScan Software versions

Dispenser Model	Software Version
All Model #4000 (Including truckstop)	0130.04.15
Centurion	1000.05.04

1.2.7 Gasboy Dispenser and Software versions

Dispenser Model	Software Version
8800K series <sup>(1)</sup>	90.1.23 ( <i>Gilbarco Advantage</i> )
9800K series	01.x, 05.x or 06.x

**Notes:** The model 8800K series (also called Atlas) utilizes the Gilbarco Advantage firmware. It's version 90.1.23 and was released 4/2007. It talks 2-wire or pulse out.

### 1.2.8 NeXGen Software versions

For an up to date list of the NEXGEN software versions, please visit our website at:

[www.AlliedElectronics.com](http://www.AlliedElectronics.com)

Go to: “Technical Info” > “Software Release Notes”

[http://www.alliedelectronics.com/software\\_release\\_notes.htm](http://www.alliedelectronics.com/software_release_notes.htm)

**1.3 Replacement Parts List**

<b><u>Part Number</u></b>	<b><u>Description</u></b>
NGB16D-(8, 12 or 16)	NeXGen - Bennett - up to 16FP with V-CAT (8, 12 or 16)CH
NGB32-(8, 12 or 16)	NeXGen - Bennett - up to 32FP with V-CAT (8, 12 or 16)CH
NGD16D-(8, 12 or 16)	NeXGen-Generic Wayne Direct-up to 16FP w/CR-(8, 12 or 16) CH
NGD32D-(8, 12 or 16)	NeXGen-Generic Wayne Direct-up to 32FP w/CR-(8, 12 or 16) CH
NGG16D-(8, 12 or 16)	NeXGen-Generic Gil-up to 16FP w/CR-(8, 12 or 16) CH
NGG32D-(8, 12 or 16)	NeXGen-Generic Gil-up to 32FP w/CR-(8, 12 or 16) CH
NGS8D-(8, 12 or 16)	NeXGen-Generic Schlum-up to 8FP w/CR-(8, 12 or 16) CH
NGS16D-(8, 12 or 16)	NeXGen-Generic Schlum-up to 16FP w/CR-(8, 12 or 16) CH
NGS24D-(8, 12 or 16)	NeXGen-Generic Schlum-up to 24FP w/CR-(8, 12 or 16) CH
NGS32D-(8, 12 or 16)	NeXGen-Generic Schlum-up to 32FP w/CR-(8, 12 or 16) CH
NGT16D-(8, 12 or 16)	NeXGen-Generic Tokheim-up to 16FP w/CR-(8, 12 or 16) CH
NGT32D-(8, 12 or 16)	NeXGen-Generic Tokheim-up to 32FP w/CR-(8, 12 or 16) CH
NGM24D-(8, 12 or 16)	NeXGen-Generic Mechanical-up to 24FP -(8, 12 or 16) CH
NGW24D-(8, 12 or 16)	NeXGen-Generic Wayne PIB-up to 24FP w/CR-(8, 12 or 16) CH
NHTG32D-12	NeXGen-Husky Tok/Gil-up to 32FP w/CR-12CH
NMD16D-(8, 12 or 16)	NeXGen-ExxonMobil Wayne Direct-up to 12FP w/CR-(8, 12 or 16) CH
NMD32D-(8, 12 or 16)	NeXGen-ExxonMobil Wayne Direct-up to 32FP w/CR-(8, 12 or 16) CH
NMG16D-(8, 12 or 16)	NeXGen-ExxonMobil Gil-up to 16FP w/CR-(8, 12 or 16) CH
NMG32D-(8, 12 or 16)	NeXGen-ExxonMobil Gil-up to 32FP w/CR-(8, 12 or 16) CH
NMT16D-(8, 12 or 16)	NeXGen-ExxonMobil Tokheim-up to 16FP w/CR-(8, 12 or 16) CH
NMT32D-(8, 12 or 16)	NeXGen-ExxonMobil Tokheim-up to 32FP w/CR-(8, 12 or 16) CH
NMM24D-(8, 12 or 16)	NeXGen-ExxonMobil Mechanical-up to 24FP -(8, 12 or 16) CH
NMW24D-(8, 12 or 16)	NeXGen-ExxonMobil Wayne PIB-up to 24FP w/CR-(8, 12 or 16) CH
NOSD16D-(8, 12 or 16)	NeXGen-CK Shell Wayne Direct-up to 16FP w/CR-(8, 12 or 16) CH
NOSD32D-(8, 12 or 16)	NeXGen-CK Shell Wayne Direct-up to 32FP w/CR-(8, 12 or 16) CH
NOSG16D-(8, 12 or 16)	NeXGen-CK Shell Gilbarco-up to 16FP w/CR-(8, 12 or 16) CH
NOSG32D-(8, 12 or 16)	NeXGen-CK Shell Gilbarco-up to 32FP w/CR-(8, 12 or 16) CH
NPD32-12	NeXGen-Pilot Wayne Direct-up to 32FP w/CR-12CH
NPG32-12	NeXGen-Pilot Gilbarco-up to 32FP w/CR-12CH
NPT32-12	NeXGen-Pilot Tokheim-up to 32FP w/CR-12CH
NTB32D-(8, 12 or 16)	NeXGen-Travel Plaza Bennett-up to 32FP w/CR-(8, 12 or 16) CH
NTG16D-(8, 12 or 16)	NeXGen-Travel Plaza Gil-up to 16FP w/CR-(8, 12 or 16) CH
NTG32D-(8, 12 or 16)	NeXGen-Travel Plaza Gil-up to 32FP w/CR-(8, 12 or 16) CH
NTT16D-(8, 12 or 16)	NeXGen-Travel Plaza Tokheim-up to 16FP w/CR-(8, 12 or 16) CH
NTT32D-(8, 12 or 16)	NeXGen-Travel Plaza Tokheim-up to 32FP w/CR-(8, 12 or 16) CH
N9359-ADP	RJ/45 adapter - NeXGen to POS w/DB-9
N9325-ADP	RJ/45 adapter - NeXGen to POS w/DB-25
N9323B-ADP	RJ/45 adapter - NeXGen to Gil pump w/DB9
N9323C-ADP	RJ/45 adapter - NeXGen to Gil CRIND w/DB9
N9330-ADP	RJ/45 adapter - NeXGen to GSM
N9303-ADP	RJ45 adapter - NeXGen to Tokheim Pump
N9301-ADP	RJ45 adapter - NeXGen to Tokheim DPT
N9301B-ADP	RJ45 adapter - NeXGen to Bennett Pump
N9301V-ADP	RJ45 adapter - NeXGen to Verifone CAT
N9393-ADP	RJ45 adapter - NeXGen to Wayne Direct via the Wayne "D box

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<b>Part Number</b>	<b>Description</b>
N9393I-ADP	RJ45 adapter - NeXGen to Mechanical via the ICB box
N9323W-ADP	RJ45 adapter - NeXGen to Wayne Direct via the Gilbarco "D box (DB9)
N9338-ADP	RJ/45 adapter - NeXGen to Veeder Root TLS 250/350
N9445-ADP	RJ/45 adapter - NeXGen to Veeder Root TLS 450
N9339-ADP	RJ45 adapter - NeXGen to Wayne PIB
N9382-ADP	RJ45 adapters - NeXGen to Wayne Direct TRAC
N9383-ADP	RJ45 adapters - NeXGen to ExxonMobil VSAT
N9389-ADP	RJ/45 adapter - NeXGen to Incon Tank Sentinel
N9396-ADP	RJ/45 adapter - NeXGen to EECO Tank Gauge
N9399-ADP	RJ45 Adapter - NeXGen to Wayne CAT / OrPak
N9344-ADP	RJ/45 adapter - NeXGen to Ryko IV and Unitec POS 4000
N9348-ADP	RJ/45 adapter - NeXGen to Ryko III and Kesseltronics Standard
N9352-ADP	RJ/45 adapter - NeXGen to Unitec Enterlink
N9405-ADP	RJ/45 adapter - NeXGen to Kesseltronics Advanced Dual Bay (DB9)
N9409-ADP	RJ45 adapter - NeXGen to OPW OPT
N9411-ADP	RJ45 adapter - NeXGen to Future Media Displays Fuel Price Sign
N9428-ADP	RJ45 adapter - NeXGen to PWM Fuel Price Sign
N9441-ADP	RJ/45 Adapter - NeXGen to Wayne CAT/CAT IF
N9442-ADP	RJ45 adapters - NeXGen to Wayne PIB TRAC
N9443-ADP	RJ45 adapter - NeXGen to Daktronics Fuel Price Sign
N9445-ADP	RJ/45 adapter - NeXGen to VR450 TLS
N9446-ADP	RJ/45 adapter-NeXGen to Skyline Price sign