ADEMCO INSTALLATION INSTRUCTIONS

No. 695-50 PROGRAM CARTRIDGE

(for No. 699 Intelligent Programmer to program No. 4150V3 or 660PG Control/Communicator)

I. INTRODUCTION

The No. 695-50 Program Cartridge provides formatted display questions and responses so as to permit a user to program all of the installer variable PROM features of the No. 4150V3 Control/ Communicator, using either its full feature No. 696 PROM or its slightly lesser feature No. 691 PROM (of the 660PG using the 696 PROM). The cartridge plugs into the PRODUCT CARTRIDGE connector of the No. 699 and that product's keypad is used for the programming function. The following is a brief explanation of: 1) Keys and their function, 2) Special Displays, 3) Standby Power, 4) Displays and Responses.

A. Keypad Entries

All programming questions are responded to by the entry of a decimal or hexadecimal number or by positioning the display pointer next to a multiple choice selection.

POWER

This key is used to turn the unit On or Off.

ENTER

Depressing this key will command the programmer to accept your number entry or selection. It also automatically advances the display to the next question.

ESC

Depressing this key will command the programmer to Escape from the current screen (or operation). The programmer will terminate its current activity and will revert to the previous display level.

$\rightarrow$ $\leftarrow$ $\uparrow$ $\downarrow$

Moving the display pointer sideways is accomplished by using either $\rightarrow$ or $\leftarrow$ keys. When these keys are used, the current choice selection will be erased when the pointer passes through the data field.

If there are more multiple choice selections than can be displayed at any time, "...more" will be displayed and the display pointer should be moved to this selection to display these additional selections.

Moving from the current question to the next question is accomplished by using $\downarrow$ key.

Moving from the current question to the previous question is accomplished by using $\uparrow$ key.

SHIFT

Upper case letters and some special characters are entered by simultaneously depressing the Shift key and the corresponding keys.

SELECT/SPACE

This key is used to select one (or more if applicable) of the multiple choice selections. Entering this key once more for an already selected choice de-selects the item.

B. Special Displays

In the detailed descriptions to follow, a few special symbols will be used adjacent to some of the displays. These are:

"*" indicates the Default Values selected by Ademco.

"-" indicates a value is not selected yet (e.g. telco number)

C. Standby Power

Your 699 Intelligent programmer is capable of operation with AC power (all system functions available) or without AC power (PROM programming and printing are disabled). However, in either case, the unit can be used to enter or modify the end-user data.

The 699 employs two batteries to maintain the entered data and/or to enable some limited operation.

A rechargeable 9 Volt-75 maH NiCad battery (Ademco Part #N2215) provides power for all system operations except for PROM programming and for printing, for which a connection to AC is mandatory. This battery, when fully charged, is capable of powering the 699 for approximately 45 minutes of operation without AC connection (the unit will automatically shut down after 5 minutes of inactivity). The full charge is achieved after the unit is connected to AC power for at least 18 hours. Under normal use, the life of this battery will be in excess of three years.

IMPORTANT: NiCad batteries require complete charge-discharge cycling in order to achieve the stated battery capacity. Hence, occasionally (e.g., once every two or three months) allow the 699 to operate under battery power until the unit is shut-down with a "low-battery" indication.

The 699 also has a non-rechargeable 3V-60 maH Lithium battery (Ademco Part #N2225) which maintains the entered data even when the power from both the AC and the NiCad Battery is unavailable. Under normal circumstances (NiCad battery is always kept charged), the lifetime for this battery will be in excess of 6 years.

D. Replacing Batteries

Both batteries must only be replaced with the part numbers cited above. This can be accomplished by removing the six screws on the underside of the base of the unit and by removing the 699 from its plastic carrying case. Observe polarity, especially for the Lithium battery.

II. USAGE OF THE CARTRIDGE

When the cartridge is plugged into the PROGRAM CARTRIDGE socket and the POWER key is pressed, the Product Type Selection Display is presented.

```
Select Product Type. Use  → ←
4150V3          660PG
```
Move the display pointer to select the product for which the PROM is being programmed. If 660PG is selected and ENTER is pressed, skip the next question. If 4150V3 is selected, press ENTER to obtain:

```
Select 4150V3 Prom Type(Rev 1.3)
*GREEN (696)      BLUE/RED (691)
```
Move the display pointer to select the PROM being used. Press ENTER to obtain the Main Function Selection Display. Blue/Red is selected if the reduced function operation of the 4150V3 (fixed zones) is being used and Green is selected if expanded functionality (programmable zones) is being used. The Modified data created is lost when you change from one PROM TYPE to the other.

```
Select 4150V3 Operation Blue/Red (or Green)
 LOAD MODIFY SAVE PRINT
```
The display pointer is moved to the left of the function desired and that function is selected by keying ENTER.

Functions	Description
LOAD	Selects the source of the predefined data to be used in the programming of the control.
MODIFY	Select this mode when the predefined PROM data loaded requires modification. Default table is automatically loaded on power up.
SAVE	Save PROM data on a master Blue/Red (No. 691) or Green (No. 696 PROM) in Socket B(A) for later copying into similar products yet to be programmed or on a PROM directly being used in a control.
PRINT	Used to make a printed record of the PROM data entered if optional printer is connected.

A. LOAD

When the LOAD function is selected, the following display appears:

```
Select Data Source To LOAD
 No   ADEMCO-Defaults  External
```

Move the display pointer to the source desired and select it by depressing ENTER.

Source	Description
ADEMCO-Defaults	Factory defined defaults that are stored in the Program Cartridge. When selected, the display returns to the initial display.
External	Previously saved PROM data can be read into the programmer by inserting a Blue/Red or Green (660PG or dependent upon earlier selection) Master PROM into Socket B or A. When selected, the following display appears:

```
Insert Prom In Socket B (A)
 Hit ENTER To Start, ESC To Abort
```

After the PROM is inserted, press ENTER. The display "Load Successful" followed by the display "Remove Prom, Enter When Ready" appears. To proceed, the PROM has to be removed.

Press ENTER to return to the main display. If ENTER is pressed prior to the PROM being inserted, the following display appears:

```
Prom Not Inserted
Insert New Prom, and Hit ENTER.
```

B. MODIFY

When the MODIFY function is selected, the following display appears:

```
Customer Name :          [1
-
```
Key the end user's name (30 chars., max) and press ENTER to obtain thefollowing display:

```
Street (line 1) :        [2
-
```
Key the street address of the end user (30 chars., max) and press ENTER to obtain the following display:

```
Street (line 2) :        [3
-
```
Key the supplemental street address information (30 chars., max) and press ENTER to obtain the following display:

```
City/State/Zip           [4
-
```
Key the end user's town/state/zip code (30 chars., max) and press ENTER to obtain the following display:

```
Auxiliary information     [5
-
```
Key customer account number or other miscellaneous information about the account (30 chars., max) and press ENTER to obtain the following display:

If GREEN (696) PROM is being used for 4150V3:

```
ZONE# For Type Selection(2-7) [6
-
```
Enter the 1 digit number of the zone being programmed (4-6 are N.O./N.C. Zones, 2 is a N.O. zone, 3 is a N.C. zone, and 7 is the keypad activated zone) and press ENTER to obtain:

```
Select TYPE For Zone #ØN
*NO A/PAN S/PAN E/E PER INT
```

NO =   Zone Inactive/Not Used   E/E =   Entry/Exit Burglary
A/PAN =   Audible 24 Hour   PER =   Perimeter Burglary
S/PAN =   Silent 24 Hour   INT =   Interior Burglary

Position the pointer to the left of the zone type selected and press ENTER to acknowledge your selection and to return to question 6 for entry of the number of the next zone being programmed. Repeat the above procedure for each of the 6 programmable zones (zone 1 is preset for fire and is not changeable). When the last zone has been programmed, press ENTER without keying any zone number, when question 6 is again reached, to obtain:

```
Enter MASTER ACCESS CODE     [7
Master Access Code :ØØØØ
```
Enter the 4 digit (Ø-9) code desired as the master keypad arm/disarm code and press ENTER to obtain:

```
PRIMARY Subscriber ID CODE     [8
PRIMARY Subs ID Code: ----
```
Enter either a 3 or a 4 digit hexadecimal (Ø-9, B-F), account ID code for the reports to be transmitted to the primary phone number and press ENTER to obtain:

```
Select DIAL Tone Wait        [9
*7 Secs          25 Secs
```
Position the pointer to select the time that will be waited, attempting to detect the external (telco) dial tone, before the control will attempt to dial anyway (assuming that the dial tone was present by then but undetectable) and press ENTER to obtain:

```
Enter PABX Phone Number        [1Ø
PABX: ---   (3 digits)
```
If the control is connected to a phone line within a PABX system, enter up to 3 numeric (Ø-9) digits to allow access to an external telco line (no entry required if PABX is not present) and press ENTER to obtain:

```
Enter PRIMARY Phone Number     [11
------------   (Ø to 9)
```
Enter up to 12 numeric (Ø-9) digits for the primary phone number being called and press ENTER to obtain:

```
PRIMARY Report Xmit Format     [12
*ADEMCO   Radionics/Sescoa
```
Position pointer to select report transmission format being used for primary telephone number and press ENTER to obtain:

```
SECONDARY Subscriber ID CODE [13
SECONDARY Subs ID Code: ----
```
Enter either the same or a different 3 or 4 digit hexadecimal (Ø-9, B-F) account ID Code for the reports being transmitted to the secondary phone number (if only one phone number is involved, this account ID should be the same as the primary ID code) and press ENTER to obtain:

```
Enter SECONDARY Phone Number [14
----------- (Ø to 9)
```
Enter up to 12 numeric (Ø-9) digits for the secondary phone number being called (**this number should be the same as the primary number if only one number is being used**), and press ENTER to obtain:

```
SECONDARY Report Xmit Format [15
*ADEMCO      Radionics/Sescoa
```
Position pointer to select report transmission format being used for secondary telephone number and press ENTER to obtain:

```
ENTRY Delay (ØØØ-12Ø Secs)  [16
*Ø32
```
Enter 3 digit (leading zeroes required) numeric (Ø-9) time duration (in 8 sec. increments, or No. 699 will round off to next **lowest** multiple of 8) for entry delay period desired and press ENTER to obtain:

```
EXIT Delay (ØØØ-12Ø Secs)   [17
*Ø32
```
Enter 3 digit (leading zeroes required) number (Ø-9) time duration (in 8 sec. increments, or No. 699 will round off to next **lowest** multiple of 8) for the exit delay period and press ENTER to obtain:

```
Sounder Duration (Ø1-15 Min)  [18
*Ø4
```
Enter the 2 digit (leading zero required) numeric (Ø-9) time duration (in minutes) for the sounding of burglary, audible 24 hour and fire alarms and press ENTER to obtain:

```
Sounder time-out for FIRE     [19
*YES           NO
```
Position the pointer to select whether fire alarm sounding will automatically turn off after the programmed period or sound indefinitely until silenced by the user turning off the system and press ENTER to obtain:

```
Enable CONSOLE FIRE Keys      [20
*YES           NO
```
Position the pointer to select whether the FIRE PANIC keys on the keypad will be enabled or disabled and press ENTER to obtain:

```
POWER-UP ARMING State         [21
ARMED        *DISARMED
```
Position the pointer to select whether the 4150V3 should come up armed or disarmed after a sustained power outage ends that has drained the standby battery to an inoperative level and press ENTER to obtain:

```
Audible Burglary Alarm        [23
*YES           NO
```
Position the pointer to select whether audible or silent burglary will be utilized and press ENTER to obtain:

```
Delay Burglary Report(15 sec) [24
*YES           NO
```
Position the pointer to select whether or not burglary report transmissions will be delayed by 15 seconds after alarm sounding begins and press ENTER to obtain:

```
Automatic Test Report         [25
Enabled      *Disabled
```
Position the pointer to select whether or not the control will transmit automatic test reports every 24 hours and press ENTER to obtain:

```
PRIMARY Report Format         [26
*Standard      Expanded
```
Position the pointer to select whether or not the control will transmit with expanded reporting capabilities (open/close by user, restoral by alarm/trouble) to the primary telephone number and press ENTER to obtain:

```
SECONDARY Report Format       [27
*Standard      Expanded
```
Position the pointer to select whether or not the control will transmit with expanded reporting capabilities to the secondary telephone number and press ENTER to obtain:

```
ZONE# for Code to CS(1-7)     [28
-
```
Enter the 1 digit number of the zone whose report is to be programmed and press ENTER to obtain:

```
CODE Report to CS For Zone# ØN
CODE:*Ø (1-F,A=Ø,Ø=NoReport)
```
Enter 1 hexadecimal digit that you desire to be reported for an alarm condition from the zone selected and press ENTER to return to question 28 for entry of the number of the next zone having its report programmed. Repeat the above procedure for each of the zones programmed previously at question 6 and for the fire zone (if used). When the last zone report has been programmed, press ENTER without keying any zone number, when question 28 is again reached, to obtain:

```
CODE Report to CS for CANCEL    [29]
CODE:*∅ (1-F,A=∅,∅=NoReport)
```
Enter 1 hexadecimal digit that you desire to be reported when an in-process alarm is shut off by disarm code entry and press ENTER to obtain:

```
CODE Report to CS for CLOSE    [30]
CODE:∅ (1-F,A=∅,∅=NoReport)
```
Enter 1 hexadecimal digit that you desire to be reported as a closing signal and press ENTER to obtain:

```
CODE Report to CS for OPEN    [31]
CODE:*∅ (1-F,A=∅,∅=NoReport)
```
Enter 1 hexadecimal digit that you desire to be reported as an opening signal and press ENTER to obtain:

```
CODE Report to CS for TROUBLE [32]
CODE:*∅ (1-F,A=∅,∅=NoReport)
```
Enter 1 hexadecimal digit that you desire to be reported as a trouble code (for fire zone trouble or as an indication that an attempt to arm was being made with a faulted 24 hour zone) and press ENTER to obtain:

```
CODE Report to CS for TEST    [33]
CODE:*∅ (1-F,A=∅,∅=NoReport)
```
Enter 1 hexadecimal digit that you desire to be reported as a communication test signal and press ENTER to obtain:

```
CODE Report to CS for RESTORE [34]
CODE:*∅ (1-F,A=∅,∅=NoReport)
```
Enter 1 hexadecimal digit that you desire to be reported as a restore signal and press ENTER to obtain:

```
CODE Report to CS for LOW BAT [35]
CODE:*∅ (1-F,A=∅,∅=NoReport)
```
Enter 1 hexadecimal digit that you desire to be reported as a low battery indication and press ENTER to obtain:

```
CODE Report to CS for BYPASS  [36]
CODE:*∅ (1-F,A=∅,∅=NoReport)
```
Enter 1 hexadecimal digit that you desire to be reported when the system is armed with a burglary zone bypassed and press ENTER. If both the primary and secondary telephone numbers were programmed with the same number, the programmer will skip over Questions 37-40 to Question 41. If the primary and secondary telephone numbers are different, the display obtained will be:

```
DUAL REPORT Selection for    [37]
*Z1 Z2 Z3 Z4 .... more
```
Position the pointer to the left of each zone report for which transmission is desired to both phone numbers and make each selection by pressing the SPACE bar key. After all selections are made, press ENTER to obtain:

```
DUAL REPORT Selection for    [38]
Z5 Z6 Z7 CANCEL.... more
```
Position the pointer to the left of each report for which transmission is desired to both phone numbers and make each selection by pressing the SPACE bar key. After all selections are made, press ENTER to obtain:

```
DUAL REPORT Selection for    [39]
OP CL RES L/BAT .... more
```
Position the pointer to the left of each report for which transmission is desired to both phone numbers and make each selection by pressing the SPACE bar key. After all selections are made, press ENTER to obtain:

```
DUAL REPORT Selection for    [40]
BYPASS  TROUBLE  TEST
```
Position the pointer to the left of each report for which transmission is desired to both phone numbers and make each selection by pressing the SPACE bar key. After all selections are made, press ENTER to obtain:

```
Manufacturer of Rcvr(Phone#1) [41]
SESCOA        *Other
```
Position the pointer to select the receiver manufacturer and press ENTER. **If Other is selected,** skip the next question. **If SESCOA is selected,** the next question presented will be:

```
SESCOA Receiver Model Used    [42]
*After 1981    1981 and Earlier
```
Select the appropriate age of your SESCOA receiver and press ENTER to obtain:

```
Manufacturer of Rcvr(Phone#2) [43]
SESCOA        *Other
```
Position the pointer to select the receiver manufacturer and press ENTER. **If Other is selected,** skip the next question. **If SESCOA is selected,** the next question printed will be:

```
SESCOA Receiver Model Used    [44]
*After 1981    1981 and Earlier
```
Select the appropriate age of your SESCOA receiver and press ENTER to obtain:

> Review the Modified Data?
> Yes   No

If 'YES' is selected, it will bring you back to the beginning (Question 1). If 'NO' is selected, it will return to the Main Function Selection Display.

If BLUE/RED (691) PROM is being used for 4150V3:

The programming sequence is the same as for the GREEN PROM with the following changes:

1. The display sequence starts at question 7 (question 6 in the Green PROM Sequence is skipped).
2. Subsequent to making the selection in question 21 and pressing ENTER, the following added question appears:

> Audible Panic   [22
> *YES   NO

Position the pointer to select whether the 4150V3's one panic zone will produce an audible or a silent alarm and press ENTER to move to question 23 in the GREEN PROM display sequence.

3. In question 28, the allowable zone number entries that can be programmed to report to the central station is limited to 6. Zone 7 for keypad panic is no longer a separate zone and its report is common to that from the control's one wired emergency zone.
4. There is no question 36 for the BLUE/RED PROM programming as the configuration does not support a separate BYPASS report (a Trouble Report is transmitted instead for a bypass, see question 32 and item 6 below).
5. Several of the dual report selections are not displayed since Z7 (Question 38) and BYPASS (Question 40) reports are not supported in the BLUE/RED PROM configuration.
6. Subsequent to making the selection in question 42 and pressing ENTER, the following added question appears:

> Send TROUBLE Code for BYPASS [45
> *YES   NO

Position the pointer to select whether or not a Trouble Report will be transmitted when the system is armed with a zone bypassed (if NO is selected, a bypass indication report will not be transmitted) and press ENTER to move to the next question in the GREEN PROM display sequence.

If 660PG PROM is being programmed:

The programming sequence is the same as for the 4150V3 GREEN PROM with the following changes:

1. The display provided for Zone Type selection in response to a zone number entry in Question 6 is:

> Select TYPE For Zone # ØN
> *NO A/P S/P E/E PER INT AU

NO =	Zone Inactive/Not Used	E/E =	Entry/Exit Burglary
A/P =	Audible 24 Hour	PER =	Perimeter Burglary
S/P =	Silent 24 Hour	INT =	Interior Burglary
AU =	24 Hour Auxiliary/Personal Emergency (Keypad Audible)		

In order to obtain the proper Keypad LED display, the following zone assignments are mandatory:

Zone 4 = E/E, Zone 5 = PER, Zone 6 = INT

Zones 2 and 7 can be selected from A/P, S/P, or AU

Zone 3 can be selected from E/E, PER, or INT

Zone 1 is preassigned to fire usage and cannot be selected.

2. The display provided for PABX number entry in Question 10 is:

> ENTER PABX Phone Number   [10
> PABX: ---- (4 digits)

This 4 digit field will now permit entry of 1170 to suppress call waiting for the duration of the call (if that service is present and the suppression option has been obtained from the telco).

3. If only a single phone number is used, no entry is required in Questions 13 and 14. Use the ↓ key to advance through these questions.
4. Questions 20 and 21 are not displayed. There are no preassigned Fire Panic keys on the keypad and the system always powers up disarmed.
5. Question 29 requests an entry for a unique DURESS report code (there is no CANCEL code report for the 660PG):

> CODE Report to CS for DURESS [29
> CODE: Ø (1-F,A=Ø, Ø = NoReport)

6

6. Question 38 requests a dual report selection for DURESS instead of CANCEL.
7. Three new programming questions are asked after Question 44:

```
Audible Auxiliary Alarm        [46
YES              *NO
```
Position the pointer to select whether the auxiliary/personal emergency alarm is keypad audible or is silent and press ENTER to obtain:

```
PRIMARY XMIT VERIFICATION    [47
*2 MSGE          CHKSUM
```
Position the pointer to select whether the message transmission verification for reports to the primary phone number is a double message (both having to match) or a single message verified by a check sum digit transmitted at the end of the message and press ENTER to obtain:

```
SECONDARY XMIT VERIFICATION [48
*2 MSGE          CHKSUM
```
Position the pointer to make the same selection as in Question 47 for message transmission to the secondary phone number and press ENTER to reach the "Review Modified Data?" display.

C. **SAVE**

When the SAVE function is selected, the following display appears if the BLUE/RED PROM Type was selected earlier:

```
Select Type of Prom.  Use ➡ ⬅
*Blue Prom        Red Prom
```
If the GREEN PROM Type was selected earlier, the above question is skipped.

Make your selection, dependent upon the color of the PROM label and then press ENTER to obtain the following display:

```
Insert Blue (Red) PROM in Socket B
Hit ENTER To Start, ESC To Abort
```
OR
```
Insert Green PROM In Socket A
Hit ENTER To Start, ESC To Abort
```
Insert a blank 32 x 8 No. 691 PROM (BLUE or RED LABEL) in Socket B or a blank 256 x 4 No. 696 PROM (GREEN LABEL) in socket A and then press ENTER.

If no PROM is inserted, then the following message appears:

```
Prom NOT Inserted
Insert New Prom and Hit ENTER
```
If a non-blank PROM is inserted, then the following message appears:

```
NON BLANK *Will be Modified*
ESC to abort, ENTER to continue
```
If you key ENTER, the system will continue and overwrite the PROM. It will then perform a verification pass. If the verification fails, the following message appears:

```
Prom Inserted Is Defective
Insert New Prom and Hit ENTER
```
If you hit ESC, the system will start from the beginning of the SAVE.

Remove the first PROM and replace it by a known blank PROM and then press the ENTER key.

If a blank PROM is inserted, the system programs the PROM and then verifies the data programmed versus the original data held in the programmer. If the verification fails, the following message appears:

```
PROM Inserted Is Defective
Insert New PROM and Hit ENTER
```
Repeat the replacement procedure described above and program a new PROM. If the verification is successful, the following message appears briefly (for 3 seconds) before the system returns the user to the Main Function Selection Display: **"SAVE successful"** followed by **"Remove Prom, Enter when ready"**. After removing the Prom, press ENTER to return to the main display.

D. **PRINT**

When the PRINT function is selected, the following display appears: (no initial values for time and date are provided)

```
Enter Current Time        (HH:MM)
        00:00
```
Key the correct time using the military time format (e.g. 18:00 = 6:00 PM) and press ENTER to obtain:

```
Enter Current Date        (MM/DD/YY)
        00/00/00
```

Key the correct date and press ENTER to obtain:

```
CONNECT PRINTER CABLE TO 699
ESC to Abort, ENTER when ready
```

The 699 will not proceed until printer cable is connected and the printer is ready/selected. Plug the interconnect cable into the telephone jack in the 699 and into the printer and then press ENTER to obtain:

```
PRINTING 4150V3 BLUE/RED PROM DATA
```
or
```
PRINTING 4150V3 (or 660PG) GREEN PROM DATA
```

If the printer gets deselected at this point in time or is not connected, the following display will appear within a short time:

```
PRINTER TIME OUT
ENTER to Retry,  ESC to Exit.
```

If printing is successful, the PROM parameters will be printed.

If printing is to be stopped while in process, press ESC. The printing will stop and the following display appears:

```
* * * PRINT ABORTED * * *
ENTER to Retry.  ESC to Exit
```

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