

Zoo Keeper II®

Dialer Maintenance Program

User Manual

Issue 3.3 – 04/04

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***Zoo Keeper II* ? : Dialer Maintenance Program User Guide**

Zoo Keeper II is a dialer maintenance software program developed by Telcom Research to interface with the AXS, EAL, Fone Display, LP Series, TR4 and M-AXS dialers. It is a self-extracting program that can be installed on to computers using, Windows NT, Windows 95,98, 2000 or XP. Once the program has been loaded into the computer, all the dialer programming, including Search Tables, Programs and Parameters, can be configured, stored in a database file and recalled whenever required for Uploading. Development of the programming has been simplified with the use of option check boxes and Drop Down Lists. The dialer parameters have been grouped on separate index cards. *Zoo Keeper II* also provides an interface for the maintenance of the dialers, both locally and remotely.


Installing *Zoo Keeper II*

1. Insert the CD into the CD Drive.
2. Double click 'MY COMPUTER' on the Desktop.
3. Double click the CD drive.
4. Double click the *Zoo Keeper II* Setup exe file.
5. Windows will provide dialogue boxes that will guide you through the remainder of the installation.


Customer Name List and Customer Info Index Card

Customer List - This is a list of Customers within the database. Each name that appears on the list has associated **Customer Info, Site, Program Profiles, Port Profiles** and **User/Client** index cards. These components contain all the programming information for the dialers installed at the customer site.

Adding a Record to the Customer List:

1. In the toolbar at the top of this page there is a panel of function buttons. Click the **+** button.
2. An empty box is created and highlighted on the list. The Customer Info card is selected automatically and the cursor is moved to the Company Name field, to the right of the list. Type in the customer name you wish to add to the list.
3. Once the name is entered in the Company Name field, press the tab key to move the cursor to the Address fields. The cursor can be moved to the Address field with the mouse as well. If it is not desirable to enter any information other than the name you can click the  button. This action saves, and sorts alphabetically, the new name on the Customer List.
4. Pressing the tab key will move the cursor from top to bottom, left to right, through the remaining fields. Once information has been entered into a field, and the cursor moved to another field, the information is automatically saved.

Copying a Record from the list of Customers:

1. Highlight the name on the Customer List that you wish to copy.
2. Click the **X2** button from the group of function keys on the toolbar at the top of the page.
3. 'A COPY of (Selected Name)' appears on the list.
4. Highlight this name and change it to the desired name. Complete the remaining information on the Customer Info screen if it is different from the copied record. Click the  button when all the desired information has been entered. All the Parameters, the Table Set and Program Set will be the copied to the new customer.

Deleting a Record from the list of Customers:

1. Select the name of the record you wish to delete on the list.
2. Click the **-** button from the group of function keys on the toolbar at the top of the page.
3. A confirmation dialogue box appears. Click **Yes** to delete the record or **No** to leave the name on the list.

Finding a name on the list of Customers:

There are three methods for finding a record within the list.

1. Use the Up and Down scroll buttons to the right of the list.
2. Use the four arrow keys from the second group of function keys on the toolbar at the top of the page. The inside two buttons will step you through the list one name at a time. The first arrow key goes to the first entry in the list, while the fourth arrow takes you to the last entry in the list.
3. Select the **Search** button above the Customer List. A dialogue box will appear on the screen. Enter the name of the record you are searching for in the 'Search Text' box. Click 'OK'.

Site

This card allows you to record information about the installation site. There is an Information Field that will allow you to record the type of dialer installed. The number of dialers (ports) can also be displayed on this screen. The Number of Ports box is an information box only. The number of ports must be changed on the **Port Profiles** card.

There is also an information box that gives the date that the dialer was last updated.

Dialer Type allows for the selection of the type of dialer that the database record is being created for. *Zoo Keeper II* determines which parameters are available for modification in the database according to the type of dialer selected. The type selected here is also displayed on the Upload screen and determines the format of the Upload sent to the dialer.

Connection Type is used in conjunction with the upload feature.

Local - This is selected if the dialer being programmed is in the same location as the PC and a direct connection between the PC and dialer is being used.

Remote Fax - This is selected when a remote dialer connected to a fax machine is being accessed for remote programming. When selected, this feature dials the phone number in the Phone Number box that is associated with the Port ID box on the Port Profiles card. When the Connect icon on the Upload screen is clicked the local AXS/EAL dialer is put into Programmer Mode and the remote dialer is called. Once the remote fax has answered *Zoo Keeper II* waits for the fax tone to disappear from the line and then sends the Program Mode access code to the remote site automatically.

Remote Auto-Dial - This is selected when a remote dialer is to be accessed for remote programming. When selected, this feature dials the phone number in the Phone Number box that is associated with the Port ID box on the Port Profiles card. When the Connect icon on the Upload screen is clicked the local AXS/EAL dialer is put into Programmer Mode, the remote dialer is called and then put into Program Mode automatically.

Remote Manual Dial - This is selected when a remote dialer is to be accessed for remote programming. When selected this feature puts the local AXS/EAL into Programmer Mode and sends the programming access code to the remote dialer when the 'Connect' icon is clicked. The person that wishes to do the programming must place the call to the remote site and wait for an answer.

Whichever Connection Type is selected it appears on the Upload screen. The Connection Type can be temporarily changed on the Upload screen.

Program Profile

This is where a set of Tables, Programs and the System Wide Parameters can be selected and /or modified.

Table Set

This allows the selection of a set of tables, which include the Primary Search Table, Secondary Search Table and Pulse Metering Tables. Additions and changes to the tables cannot be made here. Any changes must be done with the **Table Editor**.

Selection of a Table Set:

1. Click the arrow, which appears to the right of the Table Set name field. A Drop Down List of the available Table Sets appears.
2. Search for the name of the Table Set that is to be used for this customer by using the Up and Down arrow keys. Once the proper name is found select it by clicking the right mouse button.
3. To save the new Table Set as part of the database record click the button from the group of function keys on the toolbar at the top of the page.

Program Set

This allows the selection of a set of programs. Additions and changes cannot be made to the programs here. Any changes must be done with the **Program Editor**.

Selection of a Program Set:

1. Click the arrow, which appears to the right of the Program Set name field. A Drop Down List of the available Program Sets appears.
2. Search for the name of the Program Set that is to be used for this customer by using the Up and Down arrow keys. Once the proper name is found select it by clicking the right mouse button.
3. To save the new Program Set as part of the database record click the button from the group of function keys on the toolbar at the top of the page.

Site Bins

General Purpose Bins 1-10 can be programmed here. When programming a M-AXS the bins that appear are the ones that are common to all the ports.

To add a number to the bins:

1. You can use the Up and Down arrow keys to scroll to the required bin. Move the cursor to the bin you wish to program by using the mouse

Enter the desired number into the bin. Once a number has been entered into the number field click the button from the group of function keys on the toolbar at the top of the page to save the changes to the database.

Parameters

Clicking the Parameters button will allow System Wide parameters to be modified. The parameters have been broken down into the following categories and shown on the following cards;

General

Programming Password	(AXS, EAL, Fone Display, LP Series, TR4, M-AXS)
Bin Only Programming Password	(AXS, EAL, Fone Display, M-AXS)
Left Port Baud Rate – (Programming/SMDR Port)	(AXS, TR4, M-AXS)
Right Port Baud Rate – (X.25 Port)	(M-AXS)
Dialer ID	(AXS, EAL, Fone Display, TR4, M-AXS)
Programming Time Out	(AXS, TR4, M-AXS)
Failure Retries	(AXS, EAL, LP Series, TR4, M-AXS)
Message Volume	(TR4, M-AXS)
Call Home Mode	(AXS, EAL, LP Series, TR4, M-AXS)
Call Home Retries	(TR4, M-AXS)
Call Home Retry Interval	(TR4, M-AXS)
Automatic Call Home	(AXS, EAL, LP Series, TR4, M-AXS)
Bin Copy	(LP Series)
Ring Detection Frequency	(TR4, M-AXS)
Ring Detect Sensitivity	(AXS, M-AXS)
Ignore Ring High Frequency Limit	(AXS, TR4, M-AXS)

Timers

When a value is entered into a field, the program will calculate and display the value of the timer.

Release / Reseize Timer	(AXS, EAL, Fone Display, LP Series, TR4, M-AXS)
Ring Detect Cadence	(AXS, EAL, Fone Display, LP Series, TR4, M-AXS)
Off Hook Recognition Timer	(AXS, EAL, Fone Display, LP Series, TR4, M-AXS)
Digit Refusal Timer	(AXS, EAL, Fone Display, TR4, M-AXS)
Initial Interdigit Timer	(AXS, EAL, Fone Display, LP Series, TR4, M-AXS)
Interdigit Timer	(AXS, EAL, Fone Display, LP Series, TR4, M-AXS)
On Hook Recognition Timer	(AXS, EAL, Fone Display, TR4, M-AXS)
Initial User/Client Interdigit Timer	(AXS, EAL, Fone Display, M-AXS)
X.25 Keep Alive Interval	(M-AXS)

Access Codes

Speed Dial Prefix	(AXS, M-AXS)
Force Program (Override) Code	(AXS, M-AXS)
End of Destination Number Digit	(AXS, EAL, Fone Display, LP Series, TR4, M-AXS)
Speed Dial Programming Prefix	(AXS, M-AXS)
New Call Scan Digit	(AXS, M-AXS)

Dialing

DTMF Dialing Level	(TR4, M-AXS)
DTMF Boost Level	(TR4, M-AXS)
Pulse Meter Frequency	(TR4, M-AXS)
Pulse Meter Surcharge Pause	(TR4, M-AXS)
Pulse Meter Duration	(TR4, M-AXS)
Pulse Meter Extended Pause	(TR4, M-AXS)
Generated Dial Tone Frequency	(AXS, M-AXS)
Progress Tone Frequency	(AXS, M-AXS)
Beep Tone Frequency	(AXS, TR4, M-AXS)

Speed Dialing

Speed Dial Bins (AXS, M-AXS)

Network

Network Address (M-AXS)

SMDR Address (M-AXS)

Primary X.25 Address (M-AXS)

Secondary X.25 Address (M-AXS)

Fone Display

Currency (Fone Display)

Decimal Places (Fone Display)

Language (Fone Display)

Precharge (Fone Display)

Billing Start Digit (Fone Display)

Time Slice (Fone Display)

Restricted Mode (Fone Display)

Display Time (Fone Display)

Display Cost (Fone Display)

Update per Second (Fone Display)

Join/Split at Power Down (Fone Display)

Note: Changes can be made on any of the different cards but to save them you must click the 'Apply' button when exiting the parameters database to save the changes.

Port Profiles

This index card is where the remaining parameters (Port Specific) and (Port Specific) General Purpose Bins 11-20 are programmed. The number of ports (dialers), and the phone numbers of the lines the dialers are installed on, associated with the name on the Customer List can be entered here.

Port ID and Phone Number

This field allows you to enter the number of ports (dialers) at a site and the associated phone numbers. The phone numbers may be different from the contact number for the customer. The number of ports programmed here is displayed on the Site card in the Number of Ports field. The programming of the different ports (dialers) is done through the selection of the port to be programmed via the Drop Down List. Zoo Keeper II uses the phone number entered here when Remote Auto-dial or Remote Fax have been selected as the Connection Type on the Upload screen.

To add Port ID's

1. Click the 'ADD' button below the Port ID box.
2. The dialogue box 'New Record' appears. Enter the new port ID and click 'OK'. The new port number is added to the Drop Down List, which is available through the arrow button next to the Port ID field.
3. Once the new port has been added select which set of parameters will be used, **Site Default** or **Port Specific**. If Port Specific Parameters is selected then you must click the Parameters button and click Save, whether any parameter changes were required or not.


To delete Port ID's

1. Click the 'DELETE' button below the Port ID box.
2. A confirmation dialogue box appears. Click 'YES' to delete the port or 'CANCEL'.

Port Bins

General Purpose Bins 11-20, for the AXS, TR4 and M-AXS can be programmed here. General Purpose Bins 11-15 for the EAL can be programmed here. When programming a M-AXS? the bins that appear are the ones that are port specific.

To add a number to the bins:

1. You can use the Up and Down arrow keys to scroll to the required bin. Move the cursor to the bin you wish to program by using the mouse.
2. Enter the desired number into the bin. Once a number has been entered into the number field click the  button from the group of function keys on the toolbar at the top of the page to save the changes to the database.

Parameters

General

Idle State	(AXS, EAL, Fone Display, TR4, M-AXS)
Drop Program	(M-AXS)
Ring Program	(M-AXS)

Dialing

When a value is entered into a field the program will calculate and display the value of the timer.

Dialing Type (outgoing)	(AXS, EAL, Fone Display, LP Series, TR4, M-AXS)
Pulse Dialing Speed	(AXS, EAL, Fone Display, TR4, M-AXS)
Pulse Dial Interdigit Timer	(AXS, EAL, Fone Display, TR4, M-AXS)
DTMF On Time	(AXS, EAL, Fone Display, LP Series, TR4, M-AXS)
DTMF Off Time (Interdigit)	(AXS, EAL, Fone Display, LP Series, TR4, M-AXS)
Dial Shunt	(AXS, M-AXS)

User Dialing

Incoming Dial Type Recognition	(AXS, EAL, Fone Display, LP Series, TR4, M-AXS)
Centrex / PBX Compatibility	(AXS, EAL, LP Series, TR4, M-AXS)
PBX Access Codes	(AXS, EAL, LP Series, TR4, M-AXS)

Detected Frequency

Dial Tone Frequency	(AXS, EAL, Fone Display, LP Series, TR4, M-AXS)
Ringback Frequency	(AXS, TR4, M-AXS)
Busy Tone Frequency	(AXS, TR4, M-AXS)
Tone Burst Frequency	(AXS, EAL, Fone Display, LP Series, TR4, M-AXS)
Tone 1 Cadence	(AXS, EAL, LP Series, TR4, M-AXS)
Tone 2 Cadence	(AXS, EAL, LP Series, TR4, M-AXS)

Note: Changes can be made on any of the different cards but to save them you must click the 'Apply' button when exiting the parameters database to save the changes.

User / Client

This index card allows the creation and editing of the User and Client Code Tables used by the AXS, EAL and M-AXS. These two tables are used when verification is required for authorization codes and/or PIN codes.

To add entries to the **User/Client** tables:

1. Click the down arrow and a list of table entry choices will appear User, Client and All. Select the Table you wish to program. Selecting 'ALL' will allow the both tables to be programmed.
2. Click the 'Add' button. If 'ALL' has been selected, as the table entry type, a dialogue box appears. Choose the table that you wish to edit. Once selected, the table letter appears in the 'Entry Type' data field (U = User C = Client). If you select a specific table to program and not 'ALL' the program will automatically enter the proper table designation into the 'Entry Type' column when the 'ADD' button is selected.
3. Move the cursor into the 'Entry' field. Enter the number to be entered into the table. This is the number that the dialer will use to verify the User/Client Code entered by the user.
4. Press the tab key and the '**Action**' field is highlighted. Enter the 2 digit security level.
5. Press the tab key twice and repeat steps 2-4.
6. When all the entries have been made into the table(s) click the '**UPDATE**' button.

To edit an existing entry.

1. Click the down arrow to select the table that you wish to modify from the Drop down list.
2. Move the cursor to the correct data field of the entry you wish to modify and click the left mouse button.
3. Enter the new data in the field. When finished press '**UPDATE**'.

To delete an entry.

1. Click the down arrow to select the table that you wish to modify from the Drop down list.
2. Select the entry you wish to delete.
3. Click the '**DELETE**' button. A confirmation dialogue box appears click '**YES**' to delete or '**No**' to cancel the deletion.

Table Editor/Program Editor

Password

Entry into the Program Editor or Table Editor requires that a Password be entered before gaining access to the Editors. The software is shipped with a default password of **'zebra'**. The default password can be changed if needed.

1. Click 'EDIT' from the main menu.
2. Click 'PASSWORD'. A dialogue box, "Enter Password", appears on the screen. Enter the current password. Click **'OK'**.
3. A dialogue box appears on the screen. Enter the desired password in the 'New Password' box and in the 'Verify Password' box. Click **'OK'**. Click **'Cancel'** if you do not want to change the password.

The password has now been changed and must be entered to access the Program and Table Editor. Once entered the password does not have to be re-entered during a program session. However, at times it may be desirable to reset the program to require a password during a program session.

1. Click 'EDIT' from the main menu.
2. Click 'REFRESH'. The password must now be entered to gain access to the Editors.

Using the Table Editor

The **'Table Editor'** allows the creation, deletion and modification of all the tables, and their entries, used by AXS, EAL, Fone Display, LP301, TR4 and M-AXS. These tables include the Primary Search Table, Secondary Search Table, Pulse Metering Search Table, Pulse Meter Frequency/Surcharge Table and Pricing Table. All the tables are saved in the database under one name and can be viewed and/or modified within the editor.

Entering the 'Table Editor'

1. There are two methods for entering the 'Table Editor'. Click the 'Table Editor' icon on the toolbar or select 'EDIT', 'TABLE EDITOR' from the main menu.
2. A 'PASSWORD' dialogue box appears. Enter the password (default = zebra), click the **'OK'** button.
3. The 'Table Editor' screen appears. On the left side of this screen is a list of table sets within the database labeled **'Table Name'**. On the right side of this screen is the interface where the actual table entries are made.

Adding a new **'Table Name'** and database record to the list:

1. Click the **'ADD'** button on the panel of function buttons at the bottom of the 'Table Name' list. A dialogue box will appear with a check box to select the new entry as a **'MATRIX'** type entry. This would be used in conjunction to the special version of LP Series firmware 423XXX. If the table to be created is not a MATRIX version then click 'OK'. If it is to be a MATRIX version select the checkbox and then 'OK'. An empty data field will be created. Enter the new name you wish to add to the list.
2. Once the correct name has been entered in the field click the **'UPDATE'** button on the panel of function keys. The name of the new record will be added to the list, sorted alphabetically. If MATRIX was selected then a check mark will appear in the MATRIX column. The new name

will be selected automatically and a new page where the programs are built will be presented on the right side.

3. Select **'Search Table'** to program the Primary, Secondary and Pulse Metering Search Tables. Select **'Metering Rate'** to program the Pulse Meter Frequency/Surcharge Table. Select **'Pricing'** to program the Pricing Table

'Search Table' index card selected

- a) Using the mouse move the cursor to the 'Entry Type' drop down box. Click the down arrow and a list of table entry choices will appear Primary, Secondary, Metering and All. Select the Search Table you wish to program. Selecting 'ALL' will allow the three tables to be programmed.
- b) If you are preparing the programming for the Fone Display click the Use Pricing checkbox. This will change the Search Table into the proper format. An additional field, **Pricing**, is added so that the Pricing Table entry to be used for each set of digits can be programmed.
- c) Click the **'ADD'** button at the bottom of the Table fields. If 'ALL' has been selected the 'Table Type Selection' dialogue box appears. Select the type of entry you wish to make. Once selected, the table letter appears in the 'Entry Type' data field (P = Primary, S = Secondary, M = Metering). If you select a specific table to program and not 'ALL' the program will automatically enter the proper table designation into the 'Entry Type' column.
- d) Enter the 1-15 digit number to be entered into the Search Table. This is the number that the dialer will use to determine which program or pulse meter frequency/surcharge entry to execute.
- e) If the 'Use Pricing' checkbox has been checked, press the tab key and the 'Pricing' field will be highlighted. Enter the 2-digit Pricing Table entry that will be used to calculate the cost of the call.
- f) Press the tab key and the 'Action' field is highlighted. Enter the 2-digit program number or pulse meter frequency/surcharge entry number that will be executed upon the Search Table match.
- g) Repeat step c-f to add additional entries.
- h) When all the entries have been made into the table click the **'UPDATE'** button.

'Metering Rate' index card selected

- a) Click the **'ADD'** button at the bottom of the Table fields.
- b) Enter the 2-digit (01-99) Table Entry Number in the 'Rate' field.
- c) Press the tab key to highlight the 'Surcharge' data field. Enter the 2-digit number (00-99), indicating the number of meter pulses to be out pulsed as the surcharge when the metering begins.
- d) Press the tab key to highlight the 'Interpulse x 10 ms' data field. Enter the 5-digit number indicating the time in between the metering pulses (frequency).
- e) Press the tab key to highlight the Extended Pause data field. This field is only active if the Extended Pulse Meter Pause option has been selected in the parameters. Enter the 3-digit number (000-999) for the number of seconds before the metering pulses start.
- f) Repeat step a-e to add additional entries.
- g) When all the entries have been made into the table click the **'UPDATE'** button.

'Pricing' index card selected

- a) Using the mouse move the cursor to the 'Delay' field of the entry you wish to program (01-50). Enter the 2-digit (00-99 seconds) delay before the call begins to be costed.
- b) Press the tab key to highlight the 'Cost' data field. Enter the 4-digit number (0000-9999), indicating the unit cost of the call.

- c) Press the tab key to highlight the 'Duration' data field. Enter the 2-digit number (01-99) indicating the duration in seconds of one unit.
- d) Press the tab key to highlight the 'Connection' data field. Enter the 3-digit number (000-999) for the cost of the call at connection.
- e) Repeat step a-d to add additional entries
- f) When all the entries have been made into the table click the '**UPDATE**' button.

Editing an existing **Table Set**:

1. Select the name of the database record you wish to edit from the '**Table Name**' list. The selected name will be highlighted.
2. Select the proper index card for the table you wish to edit.

'**Tables**' index card selected

- a) **To modify an existing entry.** Select the table that you wish to modify by moving the cursor to the 'Entry Type' drop down box. Move the cursor to the correct data field of the entry you wish to modify and click the left mouse button. Enter the new data in the field. When finished press '**UPDATE**'.
- b) **To add an entry.** Select the table that you wish to add to by moving the cursor to the 'Entry Type' drop down box. Click the '**ADD**' button. A new highlighted line will be added to the table. If the 'Entry Type' selected is 'ALL' the 'Table Type Selection' dialogue box appears and the table you wish to add to must be selected. If a specific table is selected in the 'Entry Type' field the proper letter is automatically inserted into the 'Entry Type' when the 'ADD' button is clicked. Enter the new data. If 'Use Pricing' is selected press the tab key and enter the Pricing Table entry. Press the tab key and enter the action code. When finished press '**UPDATE**'.
- c) **To delete an entry.** Select the table that you wish to modify by moving the cursor to the 'Entry Type' drop down box. Select the entry you wish to delete. Click the '**DELETE**' button. No deletion confirmation dialogue box appears so it is important that the correct entry is highlighted before the 'DELETE' button is clicked.

'**Metering Rate**' index card selected

- a) **To modify an existing entry.** Move the cursor to the correct data field of the entry you wish to modify and click the left mouse button. The entry will be highlighted. Enter the new data in the field. When finished press '**UPDATE**'.
- b) **To add an entry.** Click the '**ADD**' button. A new line will be added to the table. Move the cursor to the 'Rate' field and enter the 2-digit number. Press the tab key and enter the 2-digit number into the 'Surcharge' field. Press the tab key and enter the 5-digit number into the 'Duration ms' field. Press the tab key and enter the 3 digits into the 'Extended Pause' field if the Pulse Meter Extended Pause has been selected in the parameters. When finished press '**UPDATE**'.
- c) **To delete an entry.** Select the entry you wish to delete. Click the '**DELETE**' button. No deletion confirmation dialogue box appears so it is important that the correct entry is highlighted before the 'DELETE' button is clicked.

'**Pricing**' index card selected

- a) **To modify an existing entry.** Move the cursor to the correct data field of the entry you wish to modify and click the left mouse button. The entry will be highlighted. Enter the new data in the field. When finished press '**UPDATE**'.

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- b) **To add an entry.** Click the 'ADD' button. A new line will be added to the table. Enter the 2-digit number for the Delay. Press the tab key and enter the 4-digit number into the 'Cost' field. Press the tab key and enter the 2-digit number into the 'Duration' field. Press the tab key and enter the 3 digits into the 'Connection' field. When finished press **'UPDATE'**.
 - c) **To delete an entry.** Select the entry you wish to delete. Click the 'DELETE' button. No deletion confirmation dialogue box appears so it is important that the correct entry is highlighted before the 'DELETE' button is clicked.

Deleting a Table Set Record:

1. Highlight the name on the Table Name list that you wish to delete.
2. Click the 'Delete' button on the panel of function buttons at the bottom of the 'Table Name' list. No deletion confirmation dialogue box appears so it is important that the correct entry is highlighted before the 'DELETE' button is clicked.

To exit from the **'Table Editor'** click the 'EXIT' icon.

Using the Program Editor

The '**Program Editor**' allows the creation, deletion and modification of the program strings used by AXS, EAL, Fone Display, LP301 TR4 and M-AXS. All the programs are saved in the database under one name and can be viewed and/or modified within the editor.

Entering the '**Program Editor**'

1. There are two methods for entering the 'Program Editor'. Click the 'Program Editor' icon on the toolbar or select 'EDIT', PROGRAM EDITOR' from the main menu.
2. A 'PASSWORD' dialogue box appears. Enter the password (default = zebra), click the '**OK**' button.
3. The 'Program Editor' screen appears. On the left side of this screen is a list of program sets within the database labeled 'Program Name'. On the right side of this screen is the interface where the actual program entries are made.

Adding a new '**Program Name**' and database record to the list:

1. Click the '**ADD**' button on the panel of function buttons at the bottom of the 'Program Name' list. An empty data field will be added. Enter the new name you wish to add to the list.
2. Once the correct name has been entered in the field click the '**UPDATE**' button on the panel of function keys. The name of the new record will be added to the list sorted alphabetically and selected automatically so that the programs can be created.
3. Click 'ADD' under the right side window. The first data field in line 1 under the column labeled '**Pgm**' will be highlighted. Enter the 2-digit number of the program you wish to create.
4. Press the tab key to move the cursor to the data field under the column labeled '**1**' or use the mouse to move the cursor and click. The field will be highlighted. There are 3 different methods that can be used to enter the program strings required.
 - I. Enter the desired Program Instruction into the highlighted box and then use the arrow key, tab key or mouse to move the cursor to the next box. This process is repeated until the entire program string as been entered.
 - II. Move the cursor to the 'Edit' window above the program string table. Enter the required program instructions, including spaces, in the window. The instructions will automatically be entered into the individual boxes in the table.
 - III. Using the mouse select the down arrow on the box labeled 'Action'. This will display a Drop Down List of valid instructions, with brief descriptions. Highlight the desired program instruction by using the mouse or up and down arrow keys on the keyboard. Once the proper instruction is highlighted press the right mouse button or the enter key. The instruction will be automatically entered into the individual boxes in the table. Depending on the instruction chosen, you may have to fine-tune it, as the instructions contained on the list are generic. The cursor is moved to each box and this process is repeated until the entire program string as been entered.
6. When all the entries have been made into the table click the '**UPDATE**' button.

Editing an existing Program Set:

1. Select the name of the database record you wish to edit from the **'Program Name'** list. The selection will be highlighted.
2. **To modify an existing program string:** Select the box in the program string, that you wish to modify, it will be highlighted. Enter the new data in the field using any of the three methods described earlier. When finished click the **'UPDATE'** button.
 - I) You may wish to delete the selected instruction rather than change it. Once the instruction box is selected, highlight the program instruction. Click the 'Delete' button on the keyboard. No confirmation dialogue box appears. However, the change is not permanent until the **'UPDATE'** button is clicked. Once it is clicked all of the remaining program instructions will be shifted to fill in the empty spaces.
 - II) If an additional program instruction is required to be added to the string, double click the line number box on the left and the entire string will be displayed in the Edit window at the top. Move the cursor to the spot in the string that the new instruction is to be added and click the mouse. Type the new instruction, including all spaces. The instruction will be automatically added into the correct instruction box above. The change is not permanent until the **'UPDATE'** button is clicked.
3. **To add a program string:** Click the **'ADD'** button from the group of function buttons at the bottom of the program string window. A new line is created. Enter the number of the program string that you wish to add. Enter the new program string data using any of the three methods described earlier. When finished click **'UPDATE'**.
4. **To delete a program string:** Select the program string you wish to delete by clicking on the program number box in the table and click **'DELETE'**. No confirmation dialogue box appears. However, the change is not permanent until the **'UPDATE'** button is clicked.

Deleting a Program Set Record:

1. Highlight the name on the Program Name list that you wish to.
2. Click the 'Delete' button on the panel of function buttons at the bottom of the 'Program Name' list. No deletion confirmation dialogue box appears so it is important that the correct entry is highlighted before the **'DELETE'** button is clicked..

Once a string has been saved, double clicking the Line Number box of the string will display the entire string in the 'Edit' window at the bottom. Double clicking any instruction box will cause the program instruction to be decoded and displayed in the 'Action' box at the top.

To exit from the 'Program Editor' click the **'EXIT'** icon.

Using the Upload Feature

The Upload feature provides the installer with the ability to select a database record stored within Zoo Keeper II and uploads it to one dialer or several dialers. Once the Upload icon is selected from the toolbar, or Upload is selected from the main menu, an upload interface screen appears. This interface allows the selection of different program components to be sent to the dialer simply by clicking check boxes. There is also an information box at the bottom that lets you see the program instructions as they are being sent to the dialer.

The Upload screen provides an interactive interface for on line programming and maintenance work. It is broken down into two Transmission Windows, the upper is the receive window and the lower is the transmit window. A Drop Down List of maintenance commands is provided which can be used to verify the dialer's parameters.

Upload Toolbar Items:

Connect: Selecting this will connect you to a local dialer via the PC com port and the dialers RS232 jack. This icon sends the Programming Mode Access Code, of ***00*#, to the dialer. If you have selected a remote connection, in the Connection Type box, the Programmer Mode Code, of Pmh1, is sent to your local AXS/EAL dialer, and then the Program Mode Access Code, is sent to the remote site dialer.

Disconnect: Selecting this will disconnect you from the local dialer. This icon sends the Disconnect Code, of *#, to the local dialer. If you are connected to a remote dialer, the Disconnect Code of *# is sent to the remote dialer, and then the Programmer Mode Disconnect Code, of P0, is sent to the local AXS/EAL dialer.

Clear: Selecting this clears all data from both of the transmission screens.

Auto Baud: Selecting this will instruct Zoo Keeper II to determine the baud rate of the dialer connected to the PC. Once this is determined the Baud Rate of Zoo Keeper II is set automatically and saved.

Exit: Selecting this exits you out of the Upload screen.

Programming and Maintenance Features

Diagnostic Procedures: This area provides a Drop Down Listing of maintenance commands that can be used. It also provides a box to enter parameter codes when required. The **Debug** check box allows you to select whether or not the program instructions being sent to the dialer are displayed in the bottom transmission screen. This box is not used when a TR4 dialer is being programmed as the dialer automatically echoes back all programming sent to it.

Connection Type: A Drop Down List provides for the selection of the type of dialer connection required.

Local: This is selected if a dialer connected directly to the PC is to be programmed. This is also used if a LP Series dialer is being programmed, even though the connection from the computer is not directly to the LP dialer but to an AXS dialer that is connected to the LP dialer. If the dialer type selected is LP Series then upon clicking 'Connect', the AXS dialer is put into Programmer Mode and the local program mode access code for the LP, ***01*#, is sent out

Remote Fax: This can be selected if the remote dialer to be programmed is connected to a Fax machine. This connection type waits for the carrier tone to disappear from the line before sending the Program Mode Access Code to the remote site. Selecting this item will cause Zoo Keeper II to place the local dialer into Programmer Mode, automatically call the remote site and send the

Program Mode Access Code to the remote site when the Connect icon is selected from the Toolbar. The phone number used is the number in the Port Phone box.

Remote Auto-dial: Selecting this item will cause Zoo Keeper II to place the local dialer into Programmer Mode, automatically call the remote site and send the Program Mode Access Code to the remote site when the Connect icon is selected from the Toolbar. The phone number used is the number in the Port Phone box. The Program Mode Access Code is sent to the far end continuously for 60 seconds.

Remote Manual: A manual call is placed to the remote site using a phone connected to a local dialer. Once the remote end answers, click the Connect icon, the local dialer is put into Programmer Mode and the Program Mode Access Code is sent to the remote site.

Port Phone: This provides a read-only Drop Down List of all the ports/dialers phone numbers associated with the selected name on the Company Name list. The port and phone numbers listed here are entered into the database on the Port Profiles card. If Remote Fax or Remote Auto-dial is selected as the Connection Type the phone number that is called is the one selected here. If an access code must be dialed to get an outside line, a 2 second pause can be entered into the phone number by inserting a comma (,) after the access code.

Upload Options: This is where the different items you wish to be uploaded are selected. Depending on the Dialer Type selected some of the items may be disabled because these items are not part of the selected dialers programming. When all the desired items have been selected, clicking the Upload button will send the programming to the dialer.

Uploading a Program to a local dialer:

1. Select the database record you wish to Upload from the 'Company Name' list.
2. On the main screen, click the Upload icon on the toolbar or Upload from the main menu. The Upload interface screen will appear.
3. If this is the first time that the Upload is going to be used you must configure the program for the communications port it will use, as well as the baud rate. Click 'Port' on the menu at the top, then 'Configure'. The 'Settings' dialogue box appears. Select the proper Com Port and Baud Rate to be used from the drop down list provided. Click 'OK'.
4. Select the connection type as **'Local'**.
5. Select the items you wish to send to the dialer in the 'Upload Options' section. Moving the cursor to the desired item and clicking does selection. Any items that are not available to be Uploaded to the dialer type selected will be greyed out. If you need to Upload all the items click the left mouse button in the Upload Options section, to left of the checkboxes, and a dialogue box appears that provides the option to **'Select All'**. Clicking this will select all the upload items. Clicking the left mouse button a second time will allow the selection **'Deselect All'**.
6. Click the **'Connect'** icon from the toolbar or 'Connection', 'Connect' from the main menu.
7. 'Programming Mode OK' or 'Pgm Mode OK', the dialer version number and serial number appears in the upper half of the transmission window when you have entered programming mode. The dialer version and serial number also appear at the top of the interface on the right side.
8. Click the **'UPLOAD'** button in the bottom right corner of the screen. The first item that was selected in the Uploads options box is greyed. The parameters are displayed in the 'Messages' box below the Transmit Window as they are being sent. As each parameter is sent an 'OK' or

'ERROR' appears in the Receive Window to indicate the status. If the 'Debug' option has been selected each parameter is displayed in the 'Transmit' window as they are sent.

9. When all the selected parameters have been sent 'TX - Done' is displayed in the 'Messages' box.
10. Click the **Disconnect** icon from the toolbar or 'Connection', 'Disconnect' from the main menu.

Uploading a Program to a Remote Dialer

Zoo Keeper II can be used to upload programs to dialers at remote locations. At your office you must have an AXS or EAL dialer, PTT line, telephone set and computer that has the Zoo Keeper II installed on it. Connect the AXS/EAL to the computer via the RS232 jack on the dialer and the com port of the computer with the 8 Pin programming cable. Connect the PTT line and telephone to the AXS/EAL. A modem is not required for remote programming as the AXS/EAL contains a feature called '**Programmer Mode**', which converts the dialer into an ASCII to DTMF/DTMF to ASCII converter. This means that all commands entered on the PC that are to be sent remote end are converted to DTMF signals, and the DTMF responses from the remote end are converted to ASCII text and displayed on the computers screen.

Remote Manual Dial:

1. Select the database record you wish to Upload from the 'Company Name' list.
2. On the main screen, click the Upload icon on the toolbar or Upload from the main menu. The Upload interface screen will appear.
3. If this is the first time that the Upload is going to be used you must configure the program for the communications port it will use, as well as the baud rate. Click 'Port' on the menu at the top, then 'Configure'. The 'Settings' dialogue box appears. Select the proper Com Port and Baud Rate to be used from the drop down list provided. Click 'OK'.
4. Select the connection type as '**Remote Manual**'.
5. Select the items you wish to send to the dialer in the 'Upload Options' section. Moving the cursor to the desired item and clicking does selection. If you need to Upload all the items click the right mouse button in the Upload Options section and a dialogue box appears that provides the option to 'Select All'. Clicking this will select all the upload items. Clicking the right mouse button a second time will allow the selection 'Deselect All'.
6. Place a telephone call to the remote dialer using the telephone connected to the AXS? dialer that is being used to do the programming.
7. When the remote end answers, either automatically or by someone, click the 'Connect' icon from the toolbar or 'Connection', 'Connect' from the main menu.
8. 'Programmer Mode OK' appears in the receive window, when you have entered Programmer Mode on the local dialer.
9. Once the Program Mode access code has been recognized, the line status message changes to 'Line Status: Remote OK Received' and 'D' appears in the Receive Window.
10. Click the '**UPLOAD**' button in the bottom right corner of the screen. The first parameter that was selected in the Uploads options box is greyed. The 'Message' box displays the parameters as they are being sent. As each parameter is sent a 'D' or 'BB' appears in the Receive Window to indicate the status.
11. When all the selected parameters have been sent 'TX - Done' is displayed.
12. Click the 'Disconnect' icon from the toolbar or 'Connection', 'Disconnect' from the main menu.

Note: This is the recommended mode for remote programming.

Remote Auto-dial/Remote Fax:

1. Select the database record you wish to Upload from the 'Company Name' list.
2. On the main screen, click the Upload icon on the toolbar or Upload from the main menu. The Upload interface screen will appear.
3. If this is the first time that the Upload is going to be used you must configure the program for the communications port it will use, as well as the baud rate. Click 'Port' on the menu at the top, then 'Configure'. The 'Settings' dialogue box appears. Select the proper Com Port and Baud Rate to be used from the drop down list provided. Click 'OK'.
4. Select the connection type as '**Remote Auto-dial** or **Remote Fax**'. Remote Fax can be used if the remote dialer is connected to a fax machine.
5. Select the remote number you wish to call from the 'Port and Phone' drop down list.
6. Select the items you wish to send to the dialer in the 'Upload Options' section. Moving the cursor to the desired item and clicking does selection. If you need to Upload all the items click the right mouse button in the Upload Options section and a dialogue box appears that provides the option to 'Select All'. Clicking this will select all the upload items. Clicking the right mouse button a second time will allow the selection 'Deselect All'.
7. Click the 'Connect' icon from the toolbar or 'Connection', 'Connect' from the main menu.
8. 'Programmer Mode OK' appears in the upper half of the transmission window when you have entered programmer mode on the local dialer. 'Line Status: Dialing Remote Site:' appears in the green 'Message' box. The number that is called is the number that appears in the 'Port Phone' box. If Remote Auto-dial was selected as the Connection Type, the Program Mode access code is sent out to the remote dialer continually for 65 seconds. If Remote Fax is selected as the Connection Type, the Program Mode access code will be sent to the remote dialer after the fax carrier tone disappears from the line.
9. Below the Transmit Window is a box indicating the line status. Once the remote end answers and the Program Mode access code has been recognized, the line status message changes to '**Line Status: Remote OK Received**' and 'D' appears in the Receive Window.
10. Click the '**UPLOAD**' button in the bottom right corner of the screen. The first parameter that was selected in the Uploads options box is greyed. The parameters are displayed by the 'Message' box as they are being sent. As each parameter is sent a 'D' or 'BB' appears in the Receive Window to indicate the status.
11. When all the selected parameters have been sent 'TX - Done' is displayed.
12. Click the '**Disconnect**' icon from the toolbar or 'Connection', 'Disconnect' from the main menu.

Note: It is recommended that neither of these modes be used.

Dialer Maintenance

The Upload screen provides an interface for dialer maintenance and programming. The left side of the screen is made up of a split Transmission Window. The upper part is the Receive Window, where the responses from the dialer are displayed, and the bottom part of the screen is the Transmit Window, where the commands being sent to the dialer are displayed.

Diagnostic Procedures Box:

1. Click the 'Connect' icon from the toolbar or 'Connection', 'Connect' from the main menu.
2. Click the down arrow of the box in the upper part of this option box. This action will display a Drop Down List of diagnostic codes that can be selected. Click the code you wish to use. It will be highlighted and entered into the text box.
3. If the code selected contains variables then you must enter the required variable in the box labeled 'Parameters'.
4. Click the 'Check' button.
5. The diagnostic command being sent to the dialer is displayed in the bottom Transmission Window.
6. The response from the dialer is displayed in the upper Receive Window.
7. When finished click the 'Disconnect' icon from the toolbar or 'Connection', 'Disconnect' from the main menu. 'LEAVING PROGRAMMING MODE' appears in the Receive window.

The second way to use the Transmission Windows is as follows:

1. Move the cursor to the bottom Transmission Window, click the left mouse button.
2. Type the desired diagnostic code followed by the Enter key or *#.
3. The response appears in the upper Transmission Window.
4. When finished click the 'Disconnect' icon from the toolbar or 'Connection', 'Disconnect' from the main menu. 'LEAVING PROGRAMMING MODE' appears in the upper portion of the window.

If information that appears in the Receive window is to be copied and pasted into a text document the procedure is as follows. Using the mouse highlight the desired information. Press Control C to copy the information on the screen to the computers clipboard where it can be viewed or pasted to another program such as Notepad.

To exit the Upload screen click the 'Close' icon on the toolbar or 'File' 'Close' on the main menu.

Remote Dialer Maintenance

Zoo Keeper II can be used to update and maintain programs of dialers at remote locations. At your office you must have an AXS/EAL dialer, PTT line, telephone set and computer that has the Zoo Keeper II installed on it. Connect the AXS/EAL to the computer via the RS232 jack on the AXS and the com port of the computer with the 8 Pin programming cable. Connect the PTT line and telephone to the AXS/EAL. A modem is not required for remote programming as the AXS/EAL contains a feature called '**Programmer Mode**', which converts the dialer into an ASCII to DTMF/DTMF to ASCII converter. This means that all commands entered on the PC that are to be sent remote end are converted to DTMF signals, and the DTMF responses from the remote end are converted to ASCII text and displayed on the computers screen.

1. Click the **Upload** icon on the toolbar or Upload from the main menu. The Upload interface screen will appear.
2. If this is the first time that the Upload is going to be used you must configure the program for the communications port it will use, as well as the baud rate. Click 'Port' on the menu at the top, then 'Configure'. The 'Settings' dialogue box appears. Select the proper Com Port and Baud Rate to be used from the drop down list provided. Click 'OK'.
3. Select the connection type as '**Remote Manual**' or '**Remote Fax**' or '**Remote Auto-dial**'.
4. Place a telephone call to the remote dialer using the telephone connected to the AXS/EAL dialer that is being used to do the programming.
5. When the remote end answers, either automatically or by someone, click the 'Connect' icon from the toolbar or 'Connection', 'Connect' from the main menu.
6. 'Programmer Mode OK' appears in the receive window, when you have entered Programmer Mode on the local dialer.
7. Once the Program Mode access code has been recognized, the line status message changes to 'Line Status: Remote OK Received' and 'D' appears in the Receive Window.
8. Once the remote dialer is in Program Mode, the diagnostic procedures are exactly the same as outlined in the previous section.