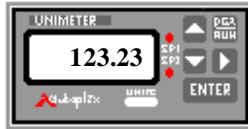


# UniLink Wizard Help File.



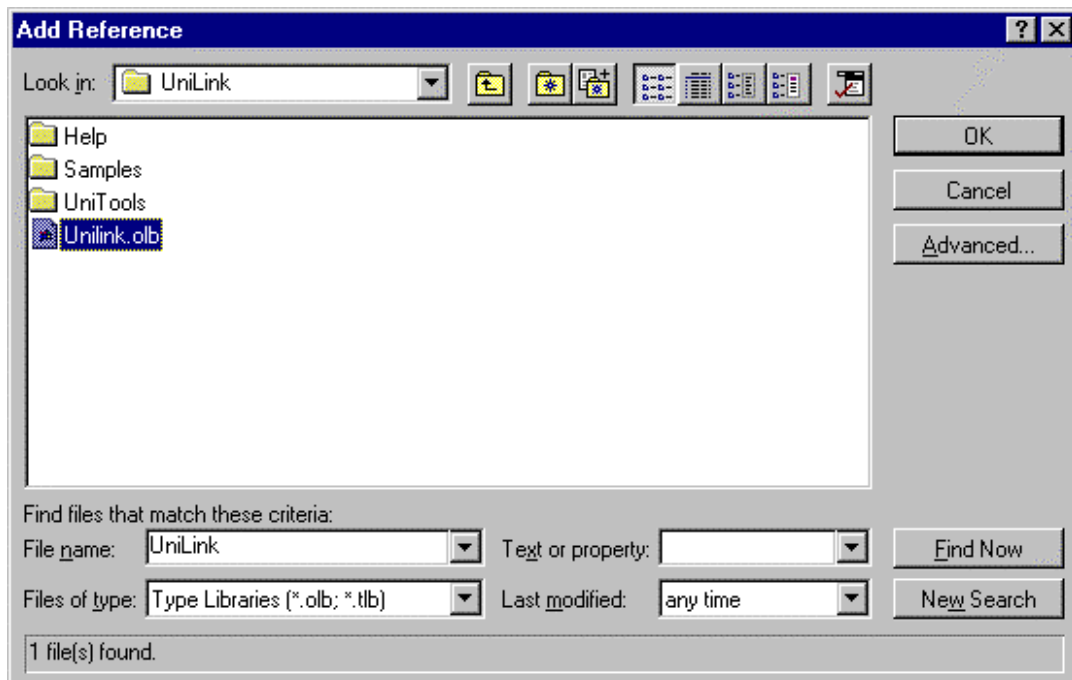
## INITIAL INSTALLATION.

1. Run Setup on the First UniLink Diskette, By clicking on 'Start/Run' and Typing in "A:\Setup", where A is the Letter of the Floppy where You have the UniLink Diskette.
2. Note The Installation Folder that You install the UniLink Program to.  
**(We Strongly Advise You to Install to C:\UniLink ).**
3. Before Running the UniLink Program, Check the AS4000 Adaptor is in RS485 Mode, and Connect it to the Comms Port You wish to use for UniLink. Connect the Power Supply. UniLink will Look for this adaptor as it Runs.
4. Run UniLink. This will register it in Windows 95 registry. If You have use a Comms Port other than 2, UniLink will prompt You for the Comms Port number that You connected the AS4000 to. (You can run UniLink in 'Demo Mode' instead of using the AS4000 if You like. To change UniLink from 'Demo Mode' after the AS4000 is connected, select 'Setup/Comms' and click on the Comms Port that You have connected the AS4000 to).

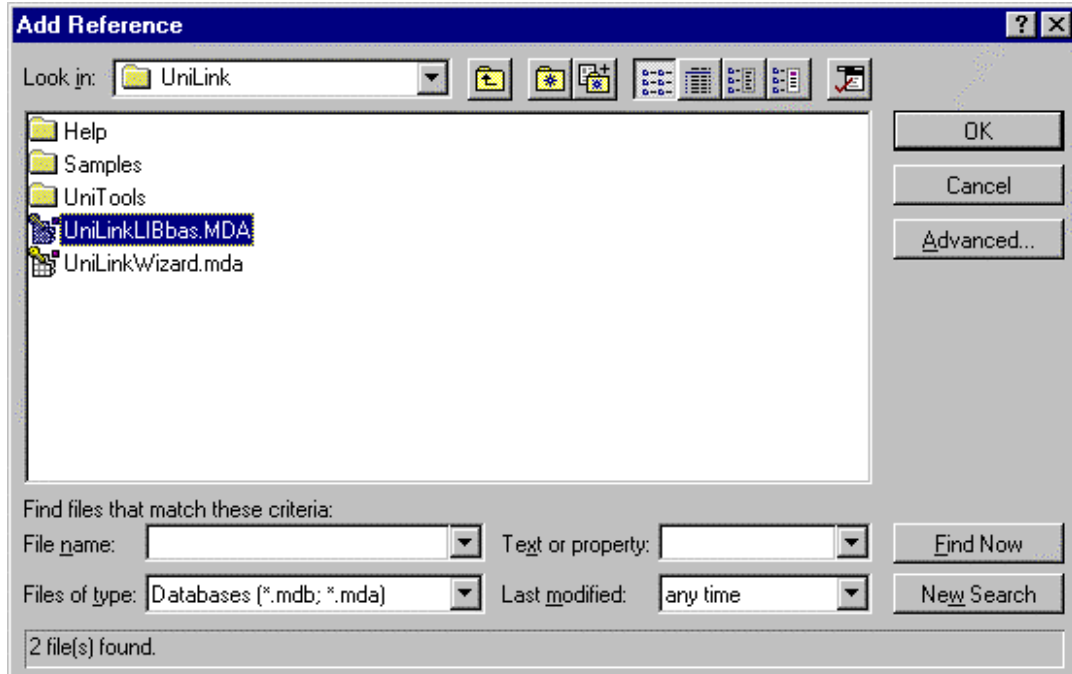
## MS ACCESS 7: LIBRARIES INSTALLATION & UPDATE

This is to install the 2 necessary UniLink reference Libraries. This must be done once for each new database, and may be required after the installation of an UPGRADED UNILINK.EXE see appendix B.

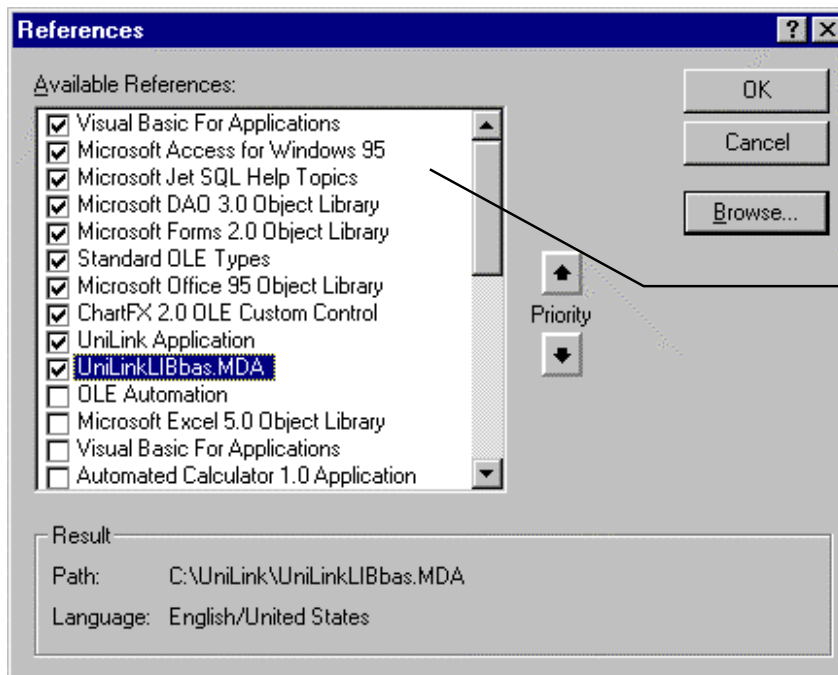
1. Run MS Access V7.
2. Open a new Database.
3. Select the MODULES Tab
4. Click on NEW. (This step Only enables the Tools / References menu Item - You will not need this module again once You are finished adding references ).
5. Select the Menu item 'Tools/References'.
6. Click on 'Browse' (to install the 'Type Library which exposes the UniLink OLE2 functions).
7. Select Your UniLink folder (eg: C:\UniLink).



1. Make Sure the 'Files Of Type:' is set to "Type Libraries", select **UniLink.olb** and click on OK. (Note that in this help file the file extensions are shown enabled. This may not be the case on Your system).
2. Click on 'Browse' Again (this time to install the UniLink Visual Basic code library).
3. Select Your UniLink folder (eg: C:\UniLink).



1. Make Sure the 'Files of Type:' selection is set to "Databases". Select **UniLinkLIBbas.MDA** file and click on OK. This will Return you to the 'References' Dialog Box.



Not all these references are always needed, it depends on what Your database is to be used for. The most important are:  
 UniLink Application,  
 UniLinkLIBbas.MDA,  
 Microsoft Access for Windows 95,  
 Microsoft DAO 3.0,

- Click OK. This database now has the references it needs.
- Select the Menu item 'File/Close' to close the code module. (NB: Do not save this module, it was only needed temporarily to enable the 'Tools / References' menu item.

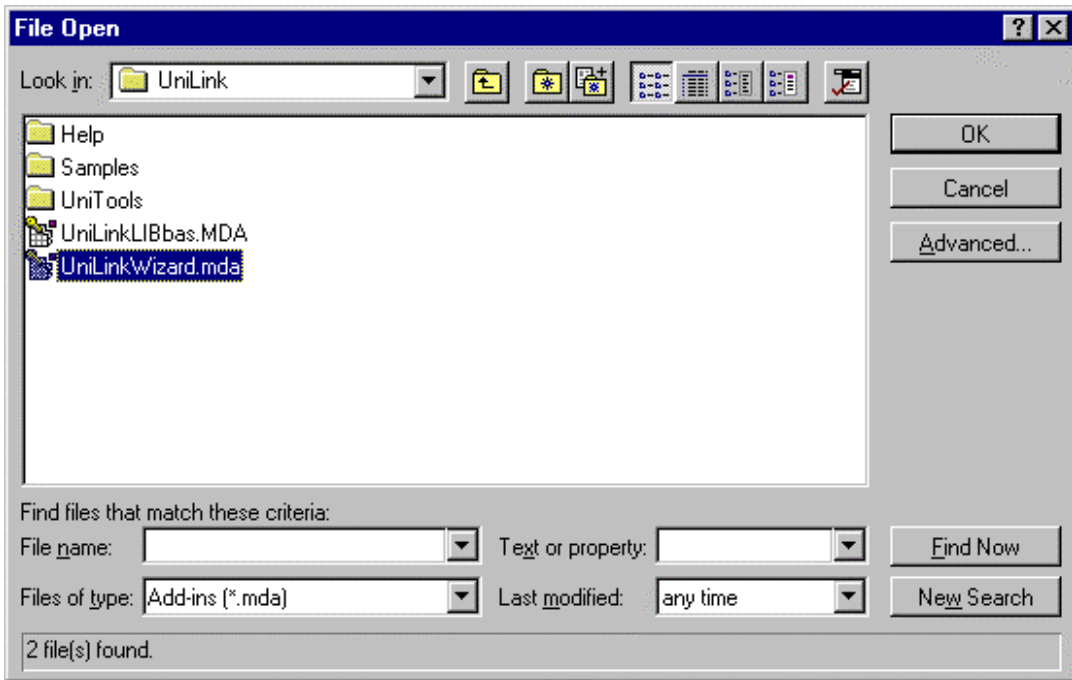
### **MS ACCESS 7: UNILINK WIZARD INSTALLATION**

This is a MS ACCESS once only installation to inform MS Access of the UniLink Wizard.

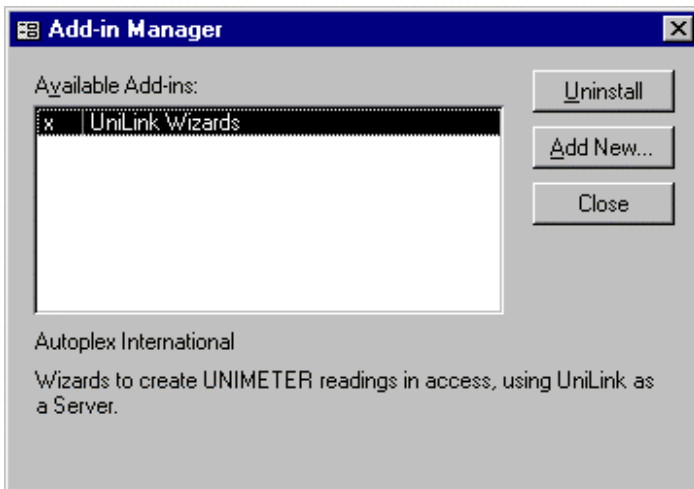
If a new Wizard is supplied with a UniLink UPGRADE, this must be completed again See Appendix B.

For This step You must have installed the Full Access package, including 'Developer's Tools' when You installed MS Access (See Appendix A). If this next step informs You that this is required, You can run Access Setup again to install these tools.

- Select the Menu item 'Tools/Add-ins/Add-in Manager'. This will display the following Dialog Box.
- Click on Add New.
- Select Your UniLink Folder (eg: C:\UniLink).



- Make Sure the 'Files of Type:' is set to "Add-ins".
- Select **UniLinkWizard.mda**. (NOT the LIBbas installed previously).
- Click OK.



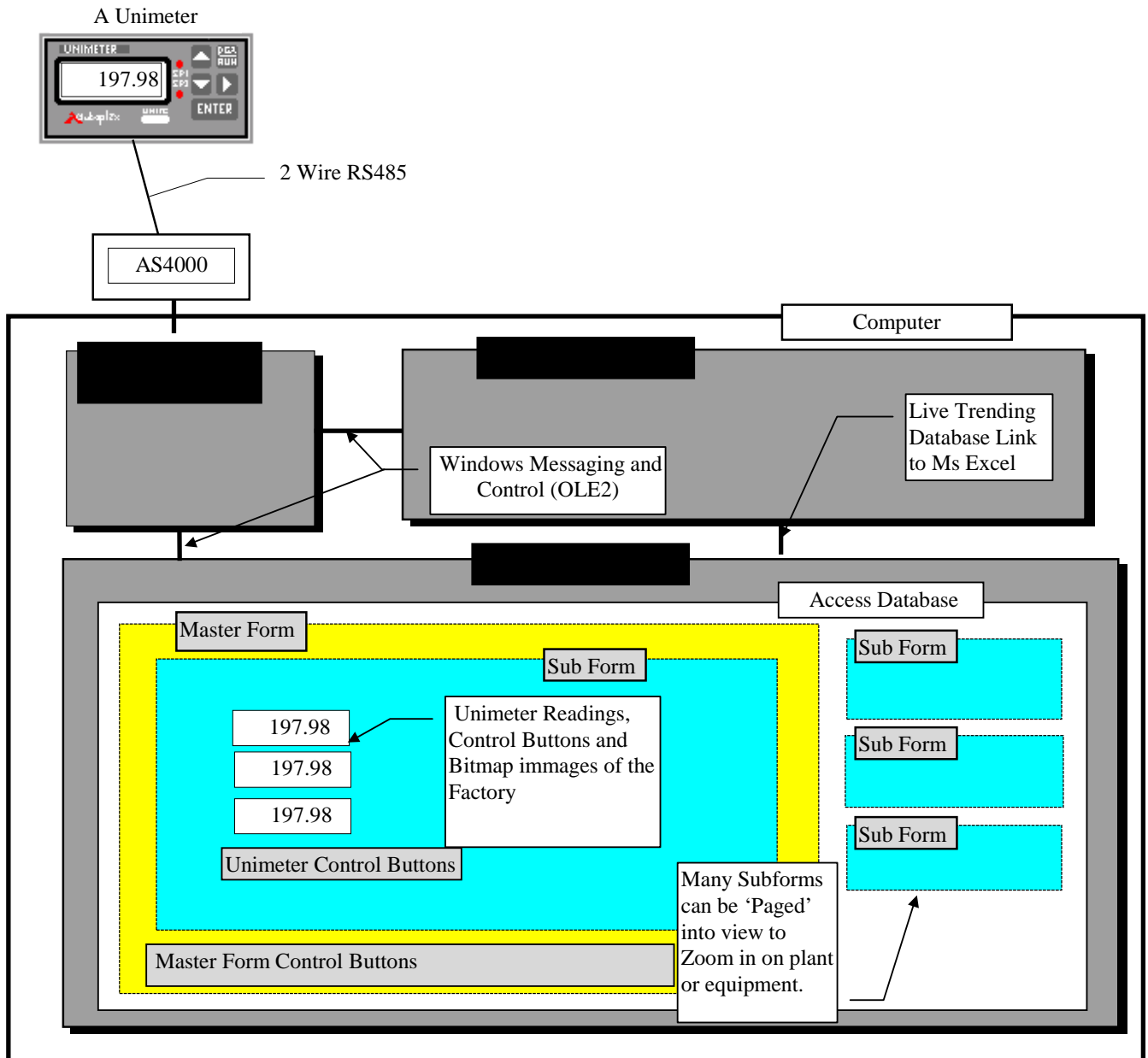
- Click Close
- You are now ready to build Your Windows SCADA system using the UniLink Wizards.

## MS ACCESS 7: Windows SCADA SYSTEM Overview

UniLink is an 'OLE2 Automation Server'. This means that it is a program, or application, that can be accessed from other applications which are running in Windows 95.

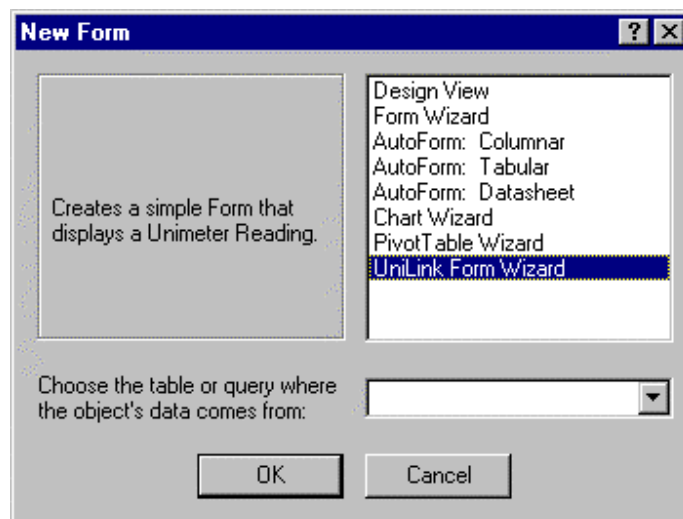
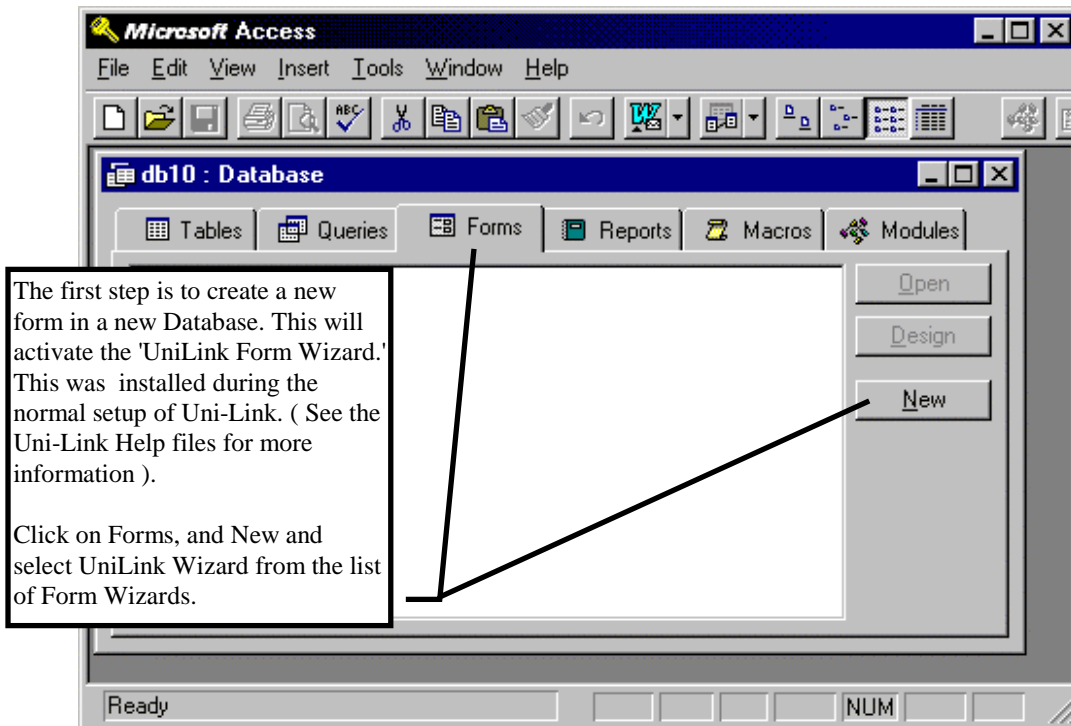
The Speciality of UniLink is to connect to 'Unimeter' devices. Using these devices, UniLink can obtain analog readings (Eg: -10 to 10 Volts or 4-20mA) or Digital states (On/Off) from some plant or equipment, or it can Control some plant or equipment via a 'Unimeter Device', using Analog voltage settings or Digital Control settings. The actual purpose of each device could be measuring or controlling anything that You can imagine (temperature, humidity, weighing, conveyor speed, PH, counting, voltage, current, speed, frequency, and hundreds more).

Unimeter Devices are connected to the PC Comms Port via an AS4000 serial adaptor. This converts the RS232 (standard Comms Port) protocol into a RS485 (2 Wire industry standard) protocol. The RS485 signal travels up to 10Km on a single pair of wires, and Unimeters can be connected in parallel anywhere along these wires. Up to 63 Unimeter type Devices can be connected to one pair of wires, but a UniMux device can have up to 16 channels (63 \* 16 = 1,008 channels).



**1: Adding forms:**

NB: It may be best to run UniLink in demo mode for this work, (Remove the AS4000 adaptor and run UniLink, and click on Demo Mode if prompted). This will take any possible communications problems out of the way. The names listed in the UniLink.INI configuration file will be the ones listed when selecting the device to insert in the Sub Form. UniLink can be left running at this stage for quicker wizard use, otherwise the wizard will run UniLink automatically when it needs it.



- Using the UniLink Wizard, Create a Master Form, and a Sub Form with a Unimeter reading on it.
- When finished, the Master Form can be opened to show the active reading.

If You are shown the following dialogue box, You need to Reference the Libraries

as described in the steps starting on page 1, Step 3.



**More Sub Forms can be added If You wish to display different areas of Your factory or system, Or You can add more readings or drawings to the existing Sub Form (see below).**

**To add more Sub Forms, select Forms and click on New. The UniLink Wizard will automatically suggest a new name for the next Sub Form.**

## **2: Further Additions to Database Sub Forms:**

- Click on the Forms tab.
- Highlight the Sub Form You wish to Modify (Not the MasterForm).
- Using 'Forms/Design', You can add lines and bitmap drawings to the Sub Form. (Caution - Modifying the size or shape of a bitmap once inserted in Access slows down the redraw response dramatically).
- Using 'Forms/Design', add additional readings to the Sub Form (not the Master Form). Making sure the 'Wizard' button is depressed and click the 'Text Box' tool box button



**Unimeter Device**

Click on the Down Arrow to show a list of installed devices. Click on the name of the Unimeter Device to display.

If the name You want does not appear You must install a new Unimeter Device by running "UniLink".

Further Readings can be added at a later stage using 'Forms/Design' and inserting a new TEXT BOX, Using the 'UniLink Wizard'.

Unimeter Name: test 2

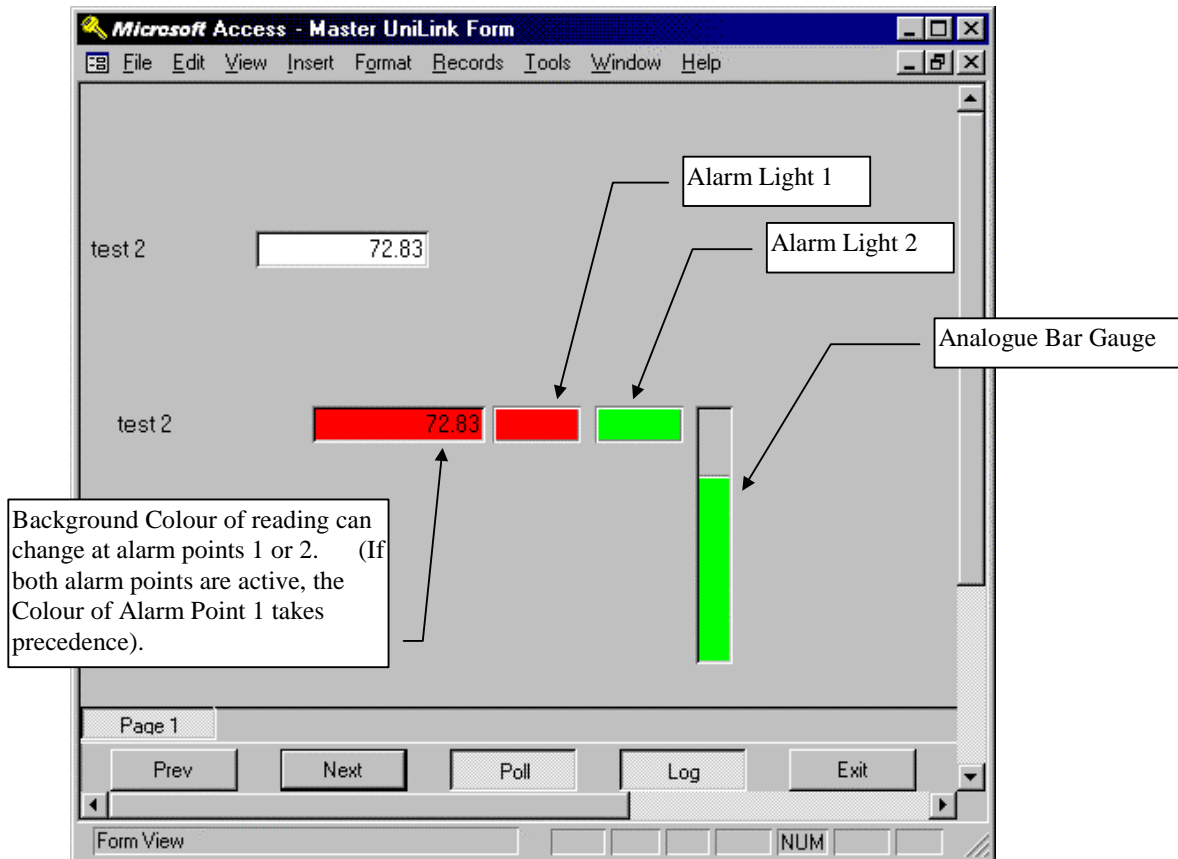
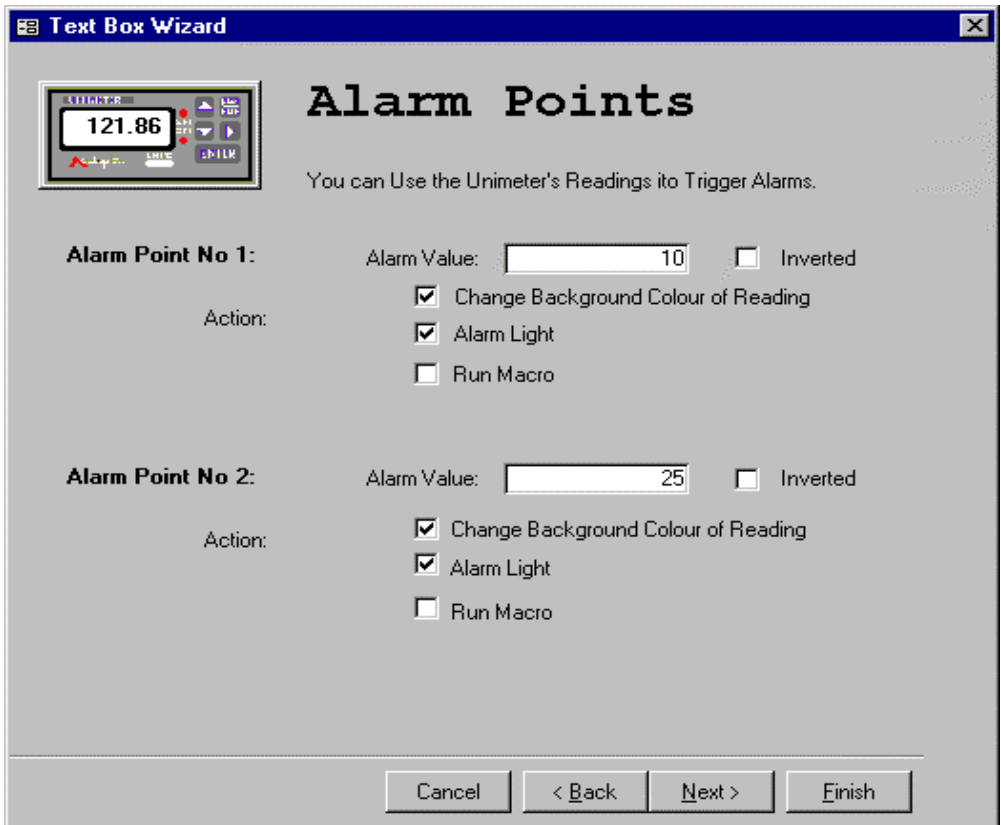
Device Type: Type: Standard Unimeter  
ID: 1  
Status: Unknown

How often do You want to refresh (Poll) the reading:  
Refresh Time: 1 (Seconds)

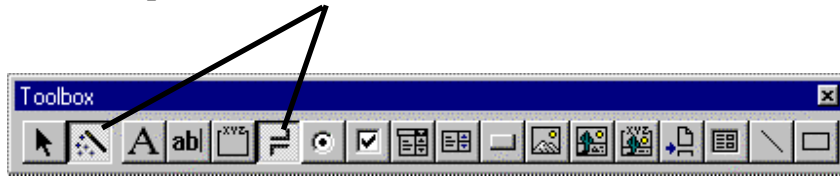
Log Readings?  Click this box if You Wish to Save this Unimeter's Readings in a Database Table.

Gauge:  Add an Analogue Bar Gauge

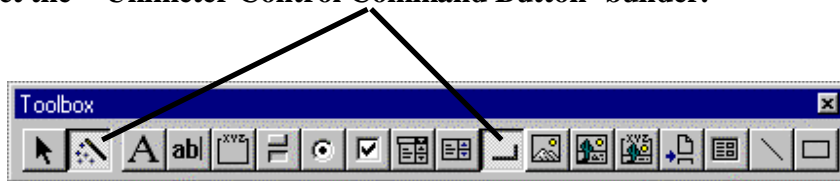
Cancel < Back Next > Finish



- You can add a Setpoint 'Toggle Button' to the sub form, which will toggle the Unimeter's Setpoints on (-19999.0) and off (19999.0).



- You can add a Unimeter Value or Setpoint control button and text box, allowing You to send a value to the Unimeter. Use the 'Command Button' wizard, and select the 'Unimeter Control Command Button' builder.



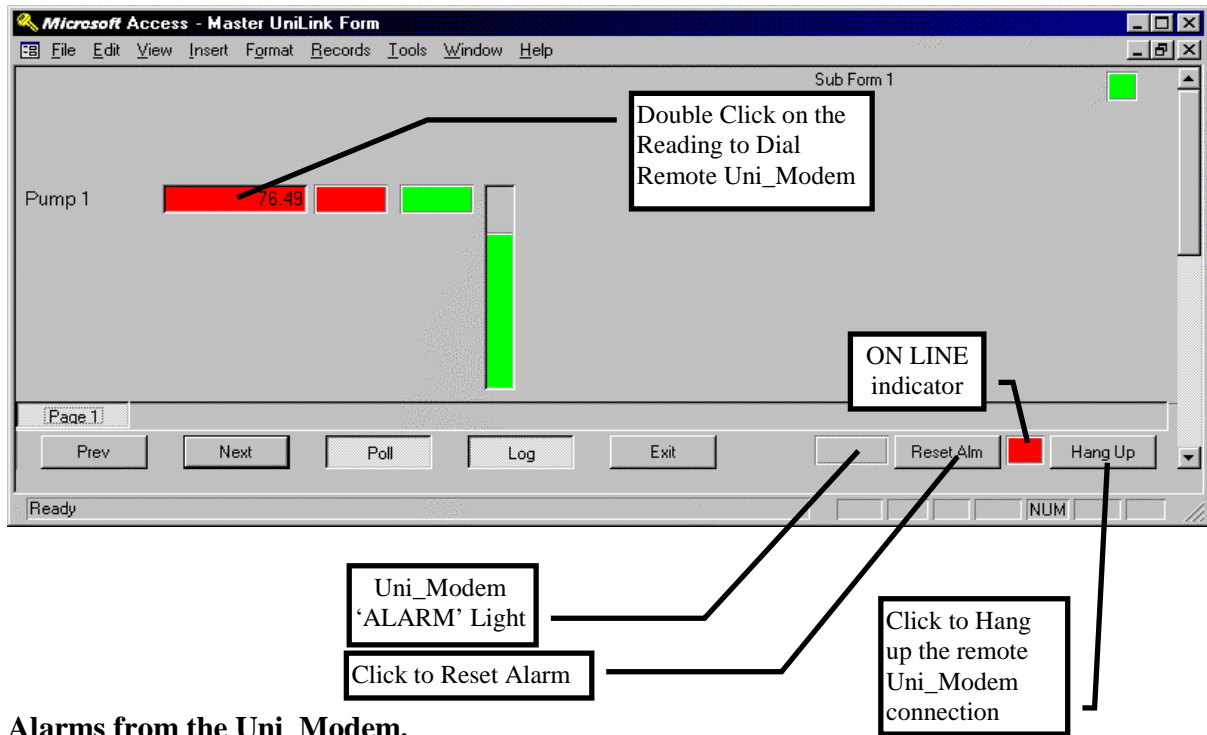
**MS ACCESS 7: USING a UNI MODEM**

Autoplex have developed a UNI\_MODEM which allows remote connection to Unimeter devices anywhere in the world.

If the device You chose from the UniLink wizard ‘Unimeter Device’ page was at a remote site and connected to a Uni\_Modem, the MS Access form will allow You to connect to that device via a modem connected to Your Computer.

To connect, simply double click on the reading. The readings of all devices connected to this Uni\_Modem will start to Update and be Logged.

To disconnect, click on the ‘Hang Up’ Button. The Uni\_Modem will also be disconnected when UniLink stops when You click on the Exit button, or close the MS Access database (Unless You ran UniLink on it’s own before running the MS Access database, in which case the Modem will stay connected until You stop UniLink).



**Alarms from the Uni Modem.**

If the Alarm facility of the Uni\_Modem is used, a red light with the word ALARM will be displayed on the bottom of the Master Form whenever the Currently connected Uni\_Modem has an active Alarm. This light will remain until the Uni\_Modem is no longer connected, or until You click on the ‘Reset Alarm’ button to reset it.

**Form Design Caution:**

When changing the Sub Form’s settings using Forms | Design, be careful to make sure the Reading Text Box and it’s invisible button are both moved / adjusted as one unit, and that the invisible button is always in the foreground of everything else.

## Appendix A: Adding the 'Add-Ins' Dialog Box

If The Add-In Dialog Box was not available, You can install it using MS Office 95 Setup:

- Run **Microsoft Office SETUP** From 'My Computer | Control Panel | Add Remove Programs'
- Select Microsoft Office in the Lower Window and Click the Add/Remove Button
- **OR** Use Explorer to Run MS Access 7 or MS Office 95 **Setup** from Your MS Office 95 Disks or CD (Note that the Access 7 Setup may be separate from the Office 95 Setup depending on Your version of Office 95. Setup is On Disk 1 or the Root Directory of the CD.
- Click on the "Add/Remove" Button
- Select "Developer Tools". Make sure this option is Checked (ticked)
- Click on the "Continue" Button
- After Installation, Continue the UniLink Wizard installation on Page 3.

## Appendix B: UPGRADING from older versions

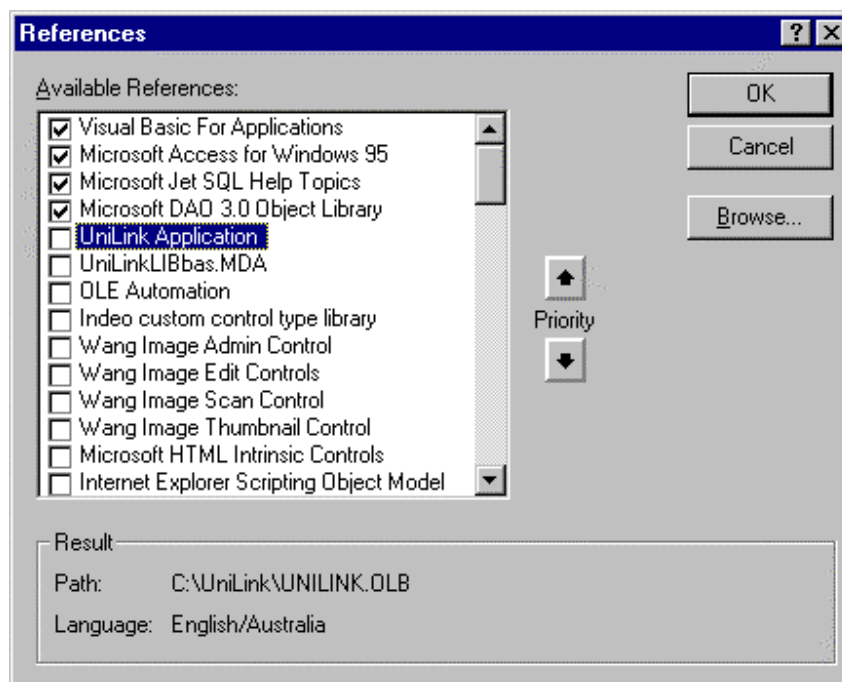
If You are Upgrading from a Demonstration version or Older version of UniLink, then You need to follow the following steps.

- If You still require the DEMO version, Read the notes in Appendix A in the UniLink.doc help Document.
- Follow the steps in Appendix B in the UniLink.doc help Document.

### **UPGRADING LIBRARY REFERENCES:**

For each of Your old Databases (\*.MDB):

- Complete the 'LIBRARIES INSTALLATION & UPDATE' section, but **after step 5**, UNCHECK the two UniLink Application and UniLinkLIBbas.Mda files.



- Click OK to Close the Reference Dialog box
- Restart Library Installation from step 5.
- (Make Sure to choose the UniLink folder, not the backup folder when You browse).

### **UPGRADING UNILINK WIZARD:**

Install the New Wizard Add-In into MS Access (Common to all databases) by following the 'MS ACCESS 7: UNILINK WIZARD INSTALLATION' steps in this document.

Note that if You have a very old database, the new wizard may not work correctly with it. In this case You need to retain Your backed up version of UniLinkWizard.mda, and install this version in Access whenever You add readings etc to the old database, returning to the new wizard for current version databases.