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SAFETY PRECAUTIONS AVOID INJURY

Safeguards are designed into this application equipment to protect operators and maintenance personnel from most hazards during equipment operation. However, certain safety precautions must be taken by the operator and repair personnel to avoid personal injury, as well as damage to the equipment. For best results, application equipment must be operated in a dry, dust-free environment. Do not operate equipment in a gaseous or hazardous environment.

- Carefully observe the following safety precautions before and during operation of the equipment:
- ALWAYS wear appropriate ear protection.
- ALWAYS wear approved eye protection when operating powered equipment.
- ALWAYS keep guard(s) in place during normal operation.
- ALWAYS insert power plug into a properly grounded receptacle to avoid electrical shock.
- ALWAYS turn off the main power switch and disconnect electrical cord from the power source when performing maintenance on the equipment.
- NEVER wear loose clothing or jewelry that may catch in moving parts of the application equipment.
- NEVER insert hands into installed application equipment.
- NEVER alter, modify, or misuse the application equipment.

TOOLING ASSISTANCE CENTER

CALL TOLL FREE 1-800-722-1111 (CONTINENTAL UNITED STATES AND PUERTO RICO ONLY)

The Tooling Assistance Center offers a means of providing technical assistance when required.

In addition, Field Service Specialists are available to provide assistance in the adjustment or repair of the application equipment when problems arise which your maintenance personnel are unable to correct.

INFORMATION REQUIRED WHEN CONTACTING THE TOOLING ASSISTANCE CENTER

When calling the Tooling Assistance Center regarding service to equipment, it is suggested that a person familiar with the device be present with a copy of the manual (and drawings) to receive instructions. Many difficulties can be avoided in this manner.

When calling the Tooling Assistance Center, be ready with the following information:

- 1. Customer name
- 2. Customer address
- 3. Person to contact (name, title, telephone number, and extension)
- 4. Person calling
- 5. Equipment number (and serial number if applicable)
- 6. Product part number (and serial number if applicable)
- 7. Urgency of request
- 8. Nature of problem
- 9. Description of inoperative component(s)
- 10. Additional information/comments that may be helpful



1. INTRODUCTION

The Electronic Applicator Counter Software can be used to transfer applicator maintenance data to and from an Electronic Applicator Counter mounted on a TE or compatible applicator. The data is transferred using a wireless infrared connection between your personal computer and the Electronic Applicator Counter. The Electronic Applicator Counter implements the IrDA Standards (Infrared Data Association Standards) for communication.

The software allows you to program the Electronic Applicator Counter. The Electronic Applicator Counter can be programmed to operate as ten individual alarm counters. One of these alarm counters is assigned to the applicator. The other nine would typically be set up to track the wearable tooling in the applicator. These alarm counters can also be assigned to an action such as inspection or lubrication.

A target count can be set for each one of the alarm counters. When the alarm counter's count exceeds the target count, an alarm icon is displayed on the Electronic Applicator Counter's display and an alarm message box is displayed on the computer screen when the maintenance data is retrieved.

The alarm counters can be used to determine when to perform an inspection on the applicator, when to replace tooling, and when to perform routine maintenance.

All the maintenance data is written to a history file on the computer every time information is retrieved from or saved to the Electronic Applicator Counter. This history file can be imported into a variety of spreadsheet and database applications.

For operation, installation and maintenance of the Electronic Applicator Counter 1804300-1, refer to 408-8980.

1.1. The Instructions (The Manual)

These instructions cover the installation and operation of the Electronic Applicator Counter Software. The instructions contain the installation of the software included with the FIR-USB adapter.



Reason for revision can be found in Section 9, REVISION SUMMARY.

1.2. Part Number Descriptions

TE PART NUMBER	DESCRIPTION	CONTENTS
1804400-1	Electronic Applicator Counter Software Kit	FIR-USB Adapter (Only)
1804400-2	Electronic Applicator Counter Software Kit	Software Installation CD and Instructions
1804400-3	Electronic Applicator Counter Software Kit	Software Installation CD, Instructions and FIR-USB Adapter

Figure 1

1.3. System Requirements

- Microsoft Windows 2000 Operating System or Microsoft Windows XP Operating System
- CD drive
- Infrared Port or FIR-USB adapter
- If the adapter is used, an unoccupied enabled USB port is required.)
- Minimum Screen Resolution of 600 x 800



2. INSTALLATION

2.1. Infrared Adapter Driver Installation for Microsoft Windows 2000 Operating System

1. Plug the infrared adapter into an available USB port.

2. If the computer attempts to automatically find a driver for this adaptor, using the "Found New Hardware Wizard", select "CANCEL."



Because the CD has the latest drivers available, you do not want to use the native Windows drivers.

3. Insert the ACTiSYS Driver/Utility/Manual CD into your computer's CD drive. The application installation program should start automatically. If it does not, select:

START > RUN > BROWSE > LOOK IN > ACTISYS CD > AUTORUN.EXE.

4. Select the IR READY button. On the next screen, select "Installation Driver Software". Next, select "ACT-IR2000UL" under the IrDA USB Adaptor. This will start up an "InstallShield Wizard" which will guide you through the rest of the installation.

5. You may need to restart your computer to activate the driver.



After the installation of the infrared adapter driver, you will notice that the green LED on the adapter will rapidly blink every couple of seconds. The adaptor is attempting to establish communication to another infrared device. This is normal and indicates that the driver installation was successful.

2.2. Infrared Adapter Driver Installation for Microsoft Windows XP Operating System

1. Insert the ACTiSYS Driver/Utility/Manual CD into your computer's CD drive. The application installation program should start automatically. If not, select:

START > RUN > BROWSE > LOOK IN > ACTISYS CD > AUTORUN.EXE.

2. Next select the **IR READY** button. On the next screen, select "Installation Driver Software". Next, select "ACT-IR2000UL" under the IrDA USB Adaptor. This will start up an "Install Shield Wizard" which will guide you through the rest of the installation.

3. If a screen comes up saying that this software has not passed Windows testing, select "Continue Anyway". The next screen prompts you to plug the ActiSys ACT-IR2000UL Infrared Adapter into an available USB Port. Select "Finish" and plug the adapter into the computer's USB port.

4. The "Found New Hardware Wizard" should start. The message "Can Windows connect to Windows Update to search for software?" is displayed. Select the option "No, not at this time" then select "NEXT".

5. Select the "Install the software automatically" option. Take the ACTiSYS Driver/Utility/Manual CD out of the CD drive. Select "NEXT".

6. Another screen will come up saying that this software has not passed Windows testing. Select "Continue Anyway".

7. Follow the prompts to complete the installation.

8. You may need to restart your computer before the driver becomes active.



After the installation of the infrared adapter driver you will notice that the green LED on the adapter will rapidly blink every couple of seconds. The adaptor is attempting to establish communication to another infrared device. This is normal and indicates that the driver installation was successful.



2.3. Microsoft .Net Framework Installation



1. Insert the Electronic Applicator Counter Software Installation CD into your computer's CD drive.

2. Run the installation program by selecting:

START > RUN > BROWSE > LOOK IN > (your CD drive letter) > DistributionCD > DotNetFramework > DOTNETFX.EXE.

Microsoft.Net Framework must be installed before installing the Electronic Applicator Counter Software.

- 3. A dialog box will ask, "Would you like to install the .NET Framework 1.1?"
- 4. Answer with "Yes."

Wait for the installation process to complete. When it is completed a window will appear that will indicate that the installation is completed.

2.4. Electronic Applicator Counter Software Installation



Microsoft.Net Framework must be installed before installing the Electronic Applicator Counter Software.

1. Insert the Electronic Applicator Counter Software Installation CD into your computer's CD drive.

2. Run the installation program by selecting:

START > RUN > BROWSE > LOOK IN > (your CD drive letter) > DistributionCD > InstallerApplication > SETUP.EXE.

3. When the **Welcome to the Electronic Applicator Counter Software Setup Wizard** screen comes up, select "Next."

4. Select "Next" on the **Select Installation Folder** screen. This chooses the default installation folder (C:\Program Files \ApplicatorCounter).

- 5. Select "Next" on the Confirm Installation screen.
- 6. Read and act on the license agreement.
 - a. Either select "I agree" to accept the agreement, or
 - b. Select "I do not agree" if you do not accept the agreement.
- 7. Select "Next."
- 8. On the Installation Complete screen, select the Close button.

After installation, a shortcut will be created (located on the desktop) that will run the Electronic Applicator Counter Software application when selected.



3. OPERATION

The Electronic Applicator Counter Software is divided into five main panels. A panel is selected by selecting the corresponding tab.

- Counter Panel See Paragraph 3.1.
- Initialize Counter Panel See Paragraph 3.2.
- History Panel See Paragraph 3.3.
- Manual Panel See Paragraph 3.4.
- About Panel- See Paragraph 3.5.

3.1. Counter Panel

The Counter Panel is used to retrieve, view, edit, and save the maintenance data stored in the Electronic Applicator counter. There are three sub-panels on the Counter Panel. A sub-panel is displayed by selecting the "Maintenance", the "Account", or "View Data" tab. After the maintenance data is retrieved from an Electronic Applicator Counter, it is displayed on the Counter Panel and sub-panels.



The Electronic Applicator Counter must be initialized with a serial number before maintenance data can be viewed, edited, and saved on the Counter Panel.

The **Retrieve Data** button is used to retrieve the maintenance data from the Electronic Applicator Counter. The Electronic Applicator Counter must be put in the IrDA mode and placed between two to 18 inches facing the infrared transceiver. If the retrieve is cancelled, the fields on the Counter Panel and the sub-panels are blanked. An "Alarm" message box is displayed if, after a retrieve, one of the alarm counter's count exceeds its target count.

The Applicator Name field contains the name that was programmed into the Electronic Applicator Counter. The name is also displayed in the maintenance sub-panel.

The Applicator Part Number field contains the part number that was programmed into the Electronic Applicator Counter. The part number is also displayed in the Maintenance sub-panel.

The Applicator Serial Number field contains the serial number that was assigned when the Electronic Applicator Counter was initialized.

The Total Count field contains the total number of cycles recorded by the Electronic Applicator Counter. This count cannot be reset.

A. Maintenance Sub-Panel

The Maintenance Panel displays the settings for the Electronic Applicator Counter's ten alarm counters. The applicator alarm counter settings and the nine tooling alarm counter settings are displayed. These settings include the applicator or tool name, a part number, count, target count, and service date. The service date indicates the last time the alarm counter was reset. If the target count for an alarm counter has been exceeded, it will be highlighted after data has been retrieved from the Electronic Applicator Counter.

The low battery icon is displayed in the lower right hand corner of the Maintenance Panel when an Electronic Applicator Counter indicates that its battery is low.



The battery is not replaceable -- the Electronic Applicator Counter will need to be replaced.

The **Edit** button is used to display the "Edit" box to edit an alarm counter's name, part number or target count. The alarm counter must be selected (highlighted) to edit it.

On the "Edit" box, changes can be made to the alarm counter's name, part number or target count. Blanking out the alarm counter name will turn off the counter with the exception of the applicator alarm counter. It cannot be turned off. Setting the target count to "0" will turn off the alarm for that counter. After changes are completed, use the **Save To Counter** button to save the changes to the Electronic Applicator Counter.



When the **Save To Counter** button is selected, the "Confirm" box will be displayed allowing the option to enter a technician name and comment. The technician name and comment will be included in the history file. The Electronic Applicator Counter must be put in the IrDA mode.

The **Service** button is used to reset an alarm counter's count to 0. This would usually be done when a part has been replaced, or an action has been completed. The alarm counter must be selected (highlighted). When the Service button is selected, the "Confirm" box will be displayed allowing the option to enter a technician name and comment. The technician name and comment will be included in the history file. The Electronic Applicator Counter must be put in the IrDA mode.

B. Account Sub-Panel

The Account Panel is used to enter the customer's account number and information. The data entered here can be saved to the Electronic Applicator Counter. The customer information may include the customer's name, address and a contact name and phone number.

The Clear button is used to clear the account number field and the account data field. It does not clear the information in the Electronic Applicator Counter.

The **Save** button is used to save the information currently entered in the Account Number field and the Account Data field to the Electronic Applicator Counter. When the Save button is selected, the "Confirm" box will be displayed allowing the option to enter a technician name and comment. The technician name and comment will be included in the history file. The Electronic Applicator Counter must be put in the IrDA mode.

C. View Data Sub-Panel

All the maintenance data that was last retrieved from the Electronic Applicator Counter can be viewed on this panel. The **Print** button is used to print the data to the computer's default printer.

3.2. Initialize Counter Panel

The Initialize Counter Panel is used to program an Electronic Applicator Counter with a unique applicator serial number and the applicator's part number. This serial number allows maintenance data, which is retrieved and put in the history file, to be identified with a particular applicator.

At the same time the applicator serial number and part number are programmed an applicator name can be entered. The applicator name and part number will be assigned to one of the ten alarm counters that can be setup in the Electronic Applicator Counter. Tool names and part numbers, representing the wearable tooling used in the applicator, can also be entered for the other nine alarm counters. The template sub-panel is on the Initialize Counter Panel.

Up to eight digits can be entered for the applicator's serial number. The serial number must be unique. No two Electronic Applicator Counters should be assigned the same serial number. The serial number is used to uniquely identify the Electronic Applicator Counter and the applicator on which it is installed.



The serial number cannot be changed after it has been saved to the Electronic Applicator Counter.

Up to sixteen characters can be entered for the applicator's name. The applicator name is just another way to identify the applicator. The name can be changed on the Counter Panel.

Up to eleven characters can be entered for the applicator's part number. The part number can be changed on the Counter Panel.

The names and part numbers for the wearable tooling used in the applicator can be also entered on this panel. Tool names are limited to sixteen characters. Tool part numbers are limited to eleven characters. The tool names and part numbers will be assigned to the alarm counters in the Electronic Applicator Counter. Actions, such as inspection and lubrication, can be entered instead of a tool name. The activity will be assigned to the corresponding alarm counter.

The **Initialize** button is used to save the data that is entered on the Initialize Counter Panel to the Electronic Applicator Counter. When the **Initialize** button is selected, the Confirm box will be displayed allowing the option to enter a technician name and comment. The technician name and comment will be included in the history file. The Electronic Applicator Counter must be put in the IrDA mode.



The Clear button is used to blank all the Applicator and Tool input fields.

On the template sub-panel, the fields and buttons can be used to save and recall settings for the applicator name, the applicator part number, tool names and the tool part numbers. A group of settings is saved as a template and is given a name. Up to 30 characters can be entered for the name. Use the **Template File** button to list all the templates that have been created. After the list has been loaded, you can quickly locate a template name by typing in the beginning characters of its name in the Template Name input field. Use the **Load Template** button to load the settings of the template that is selected (highlighted) in the list. Use the **Save Template** button to create a new template that will contain the settings that are currently entered in the Applicator and Tool input fields. Enter the new template name in the Template Name input field.

3.3. History Panel

The History Panel (screen) allows you to view the data stored in the history file that has been created on your computer. When data is retrieved from or saved to an Electronic Applicator Counter, an entry is added to the history file. The entry includes all the maintenance data retrieved from and saved to the Electronic Applicator Counter. Each entry includes the time and date the entry was made. An "Entry Code" is added to each entry. The "Entry Code" describes the operation that was performed on the Electronic Applicator Counter. The entries can be sorted by category by selecting the title blocks at the top of each category column.

Only a portion of each entry is displayed. To view all the information for an entry, select any part of that entry. All the information in the entry will appear in a viewer box. A **Print** button and a **Close View** button will appear. Use the Print button to print the information for the entry displayed in the viewer box. Use the **Close View** button panel to close the viewer box.

3.4. Manual Panel

The Manual Panel is used to enter maintenance information for applicators that do not have an Electronic Applicator Counter installed. After the information is entered it can be saved to the history file. Use the **Clear** button to clear all the information entered in the entry fields. Use the **Save to History File** button to save the information entered to the history file. After the information has been saved, the entry fields will be cleared.

3.5. About Panel

The About Panel displays important information concerning the Electronic Applicator Counter Software, allows you to change the language used on the panels, and allows you to display the customer manual. Select the **Change Language** button to display the "Select Language" box. Select the **Help** button to display the customer manual.



4. COMMUNICATION (INFRARED COMMUNICATION)

The computer communicates with the Electronic Applicator Counter using a wireless infrared signal. The signal is of short duration and is harmless. The computer continuously looks for another infrared device to talk to. If the Electronic Applicator Counter is put in the IrDA mode and is seen by the computer, a communication link is established. The infrared transceiver on the Electronic Applicator Counter is located above the upper right corner of the display.

When the software wants to communicate with the Electronic Applicator Counter, a message box is displayed. The message is "Waiting for Counter. Communication will start when the counter is detected." At this time the Electronic Applicator Counter should be put in the IrDA mode and placed between two to 18 inches facing the computer's infrared port. The message box is removed after a communication link is established and the Electronic Applicator Counter is identified. A progress bar box will be displayed as data is being retrieved from or save to the Electronic Applicator Counter. To conserve it's battery power, the Electronic Applicator Counter will turn off its infrared port and exit the IrDA mode and enter its Sleep mode when the data transfer is complete.



When the computer and the Electronic Applicator Counter establish a communication link, an icon will be displayed in the Windows task bar.

If you have difficulty communicating with an Electronic Applicator Counter, check for the presence of other infrared devices. The Electronic Applicator Counter is a secondary device. Other types of secondary devices should not pose a problem. A secondary device does not establish a communication link. Only a primary device or host can establish a link. Other hosts such as a laptop computer with an infrared port or PDA may try to established communications with the Electronic Applicator Counter at the same time as the intended host. This condition will lead to interruptions in communication.

To verify that the intended host is communicating with an Electronic Applicator Counter, place the counter in the IrDA mode and place it between two to18 inches facing the computer's infrared port. On the host computer, in the task bar by the clock, there should appear an infrared icon. This is a grey box with a red bump and some green lines. If this icon appears, place the mouse pointer over the icon and the name of the counter should appear. The name is MCP 2140. If this icon is always present, check if there are multiple infrared devices trying to use the same port.

Sometimes it appears that Windows XP does not shutdown the infrared link properly when the counter goes into sleep mode. This situation seems to be worse when a laptop's internal infrared port is being used. If this problem occurs, try to install and use the FIR-USB adapter.

When the operating system detects the counter for the first time it will try to load a device driver. It should automatically select a "Standard Modem over IR link". This driver is already in the operating system.

If the led on the FIR-USB adapter stops blinking every few seconds, then the device driver may have stopped. In this case, unplug the adapter then plug it in again. This will restart the device driver. The other option is to reboot the computer.

5. HISTORY FILE

Every time data is retrieved from or saved to an Electronic Applicator Counter an entry is added to a history file. The file name is CounterHistory.txt. This file is located in the C:\Program Files\ApplicatorCounter folder. The entry includes all the maintenance data retrieved from the Electronic Applicator Counter and information entered on the various panels. Each entry includes the time and date the entry was made. An "Entry Code" is added to each entry. The entry code describes the operation that was performed on the Electronic Applicator Counter. The data contained in the history file in a comma delimited text format. The CounterHistory.txt file can be imported into a variety of spreadsheet and database applications.

6. REVISION SUMMARY

Since the previous release, the logo has been changed and the format has been updated.