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# 17XX Procedure Loader **User Manual**

ACES Systems/TEC Aviation Division

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# Chapter 1

## General Information

### 1.1 – Introduction

17XX Procedure Downloader software, which you install on your PC, allows your PC to transfer Procedures directly to your analyzer via serial communications cable. ACES analyzers already allow you to transfer Procedures to the analyzer from memory cards, called Procedure Cards, via the Procedure card slot. The 17XX Procedure Downloader software provides enhanced download capabilities, as well as management tools that save you time increase your productivity.

One benefit of using the 17XX Procedure Loader software is you can receive procedures from ACES Systems by regular mail, on a floppy disk, or by E-mail. With just a few clicks of your mouse, you can then load these procedures directly to your ACES 1700 series analyzer. There is no longer a need to purchase additional memory cards or send your cards to TEC for upgrade or additional procedures.

#### NOTE

**If you are currently using ACES AvTrend Silver, the full functions of 17XX Procedure Loader are available in that software. You may choose to use either of these two software packages to transfer Procedures to you analyzer with the same results.**

### 1.3 – System Requirements

**1.3.1 PC.** Your PC should be running Windows® 95, 98, NT, or 2000 with at least 3,500Kbytes of free disk space.

**1.3.2. Analyzer.** You may use 17XX Procedure Loader with any ACES 1700 series analyzer (1700, 1720, 1725, or 1730) operating with version 2.07C firmware. You may confirm the firmware version of your analyzer by conducting the following steps.

- a. With the analyzer OFF, press and hold down the “7” key.
- b. Continue to hold the “7” key and turn the analyzer ON.
- c. When the ACES logo screen is displayed, continue to hold the “7” key and read the analyzer information below the ACES logo “Model 17XX vX.XX”.

## 1.4 – Additional Analyzer Requirements

1.4.1 With firmware version 2.07C or greater firmware installed, you must also have a standard null modem or lap link serial communications cable according to the analyzer you are using. Your analyzer was shipped with one of these cables as additional equipment. If you do not have the required cable, you may purchase one locally or contact ACES Systems.

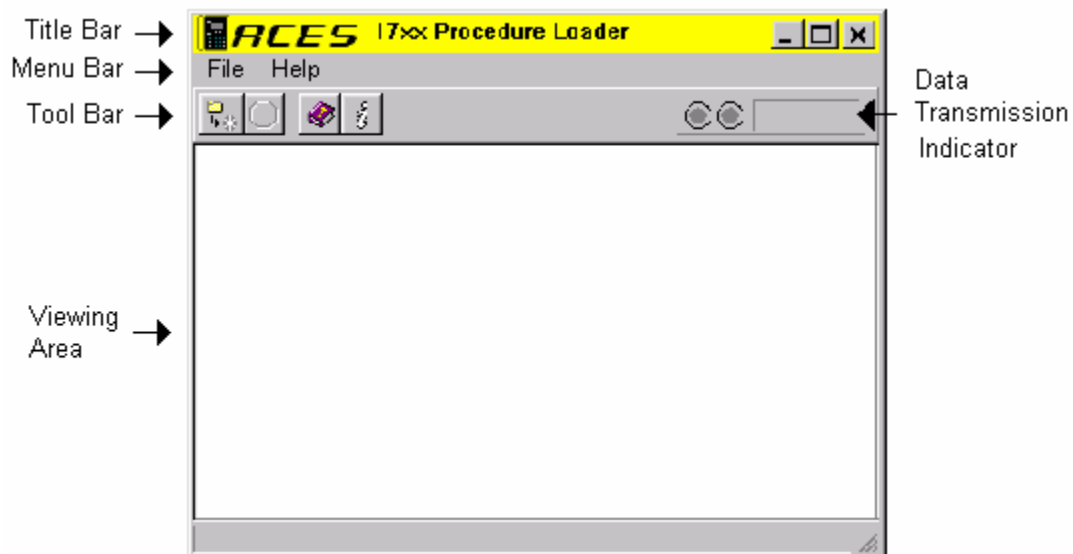
1.4.2 The analyzer does not require additional memory to use 17XX Procedure Loader, however, the basic analyzer may require additional memory to run certain procedures or to load and store multiple large file procedures. If you experience error messages or difficulties loading procedures into your analyzer, contact ACES Support.

## 1.5 – Installation

To install the 17XX Procedure Loader:

- a. Place the CD in your CD drive.
- b. Select START, RUN from the startup menu button.
- c. When the RUN box is displayed, type the CD drive letter followed by :\\Setup and press Enter.
- d. Follow instructions on screen for the remainder of the setup.

## 1.6 – 17XX Procedure Loader Main Window



The 17XX Procedure Loader Main Window, shown above, contains five main sections, the Title Bar, Menu Bar, Tool Bar, Data Transmission Indicator, and Viewing Area.

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## 1.6.1 Title Bar

The title bar contains the ACES logo and identifying name of the software. It also contains the standard Minimize, Maximize, and close buttons.

## 1.6.2 – Menu Bar

The menu bar contains two drop down menus, File and Help.

1.6.2.1 The File menu contains three items in its drop down, Send 1700 Procedure, Serial Port Settings, and Exit.

1.6.2.2 The Help menu contains four items in its drop down; Contents and Index, Search for Help On, How to use Help and About.

## 1.6.3 – Tool Bar

The Tool Bar contains four tool buttons, the Close Data File Button, Stop Communications Button, Help Contents Button, and the About Button.

1.6.3.1 The Send Procedure button is used to select a .cxe file for transfer and begin the communication process to send a procedure to the analyzer. Left mouse click the button one time to send a procedure to the analyzer.



1.6.3.2. The Stop Communications tool is used to terminate an in progress communications action between the PC and the Analyzer. The button will be gray when no communications are taking place and red when communications actions are active. To Stop the communications, left mouse click the button one time.

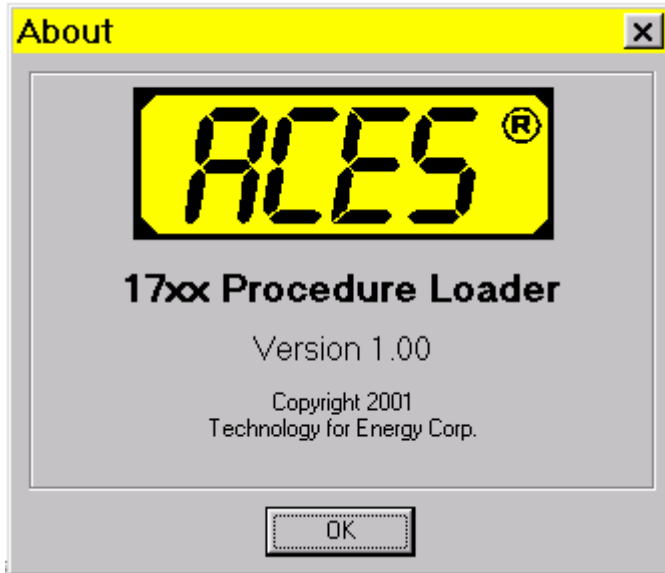


1.6.3.3. The Help Contents tool opens an alphabetical listing of all available help items. To activate the listing, left mouse click the Help Contents button.



1.6.3.4. The Information Tool opens a new About window with the ACES logo, software title, version number and Copyright date as shown below. Left mouse click on the Information tool button. To close the About window, mouse click the “OK” button.





### 1.6.4 – Data Transmission Indicator

When a procedure is actually being transmitted to the analyzer, the Data Transmission Indicator will show the progress of the transfer in a percentage (%) complete of the total transfer. There are also two small indicator lights, one green and one red, to indicate that a transfer is in progress. The green indicator is active when the p.c. receives data from the analyzer. The red indicator is active when data is sent from the p.c. to the analyzer.

### 1.6.5 – Viewing Area

The viewing area is where the status of data transfer will be displayed. This information is a read only text display and cannot be altered in any way by the user.

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# Chapter 2

## Using 17XX Procedure Loader

### 2.1 – Starting 17XX Procedure Loader

When the installation program is completed, you will have an ICON for the Loader program on your desktop. Double click the ICON to start the program.

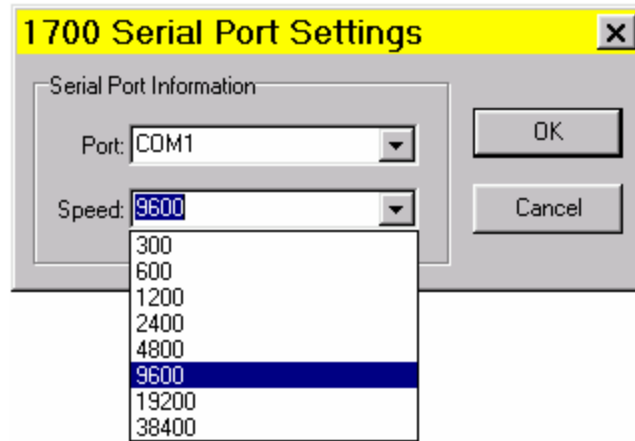
### 2.2– Transferring a Procedure to your 1700 Series Analyzer.

**2.2.1 Connections.** Connect the null modem or lap link cable between the serial port you intend to use on your PC and the COMM port (serial port) of your analyzer. If your analyzer is a 1700, this will be a 25 pin DB connector at the back of the analyzer. The 1720 analyzer has a six pin MS type COMM connection while both the 1725 and 1730 have 9 pin DB connectors. Connect the communications cable to the analyzer.

**2.2.2 Analyzer Settings.** The baud rate determines how fast the data will be transferred from your PC to the analyzer. The baud rate must be set at the same speed in both the analyzer and the PC. If you already have your analyzer baud rate set for other communications or printing functions, you may wish to set the rate in the Loader program to match that rate since this will most likely be an infrequent task. The baud rate can be set between 300 and 38,400 in both the analyzer and the Loader software. Set the baud rates as follows:

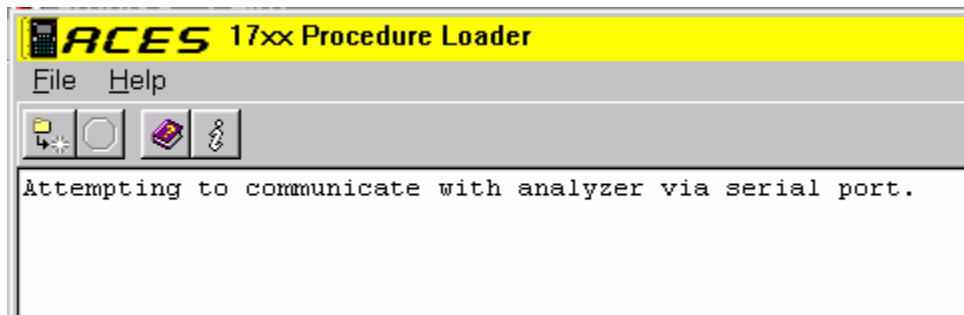
**2.2.2.1 In the Analyzer.** Turn the analyzer ON. When the main menu is displayed on screen, press the [SPCL MODES] key. From the special modes menu, select “4—Communicate” and press [ENTER]. From the communications menu, select “1—Configure Serial Interface” and press [ENTER]. If the dark highlight bar is not on the Baud field, use the [DOWN ARROW] key to move it there. With the highlight bar on the Baud field, press the [RIGHT ARROW] key to change the baud rate. The remaining fields should not be changed. When the baud rate is selected, press [ENTER].

**2.2.2.2 On your PC.** Double click the 17XX Procedure Loader ICON to open the program. When the main screen is displayed, left mouse click File from the Menu Bar. When the menu bar drops down, left mouse click on the Set Serial Port Settings item. When the “1700 Serial Port Settings” box is displayed, left mouse click on the “Port” selection button. From the drop down menu, select COM1 or COM2 as appropriate for your application. . Next, left mouse click on the “Speed” selection button. From the drop down list, left mouse click on the baud rate you wish to set, then left mouse click the OK button.

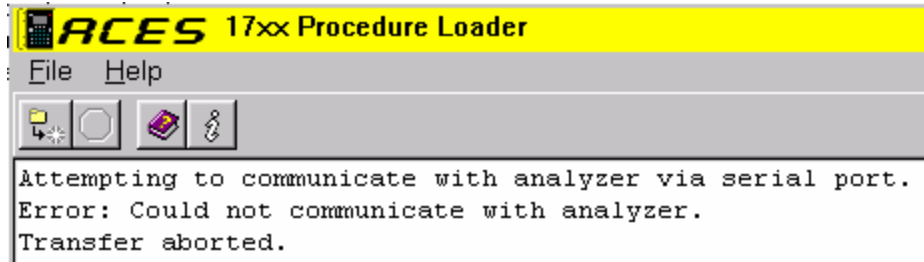


**2.2.3 Initiating the transfer.** Verify serial connections are made per the instructions above. Ensure the analyzer is ON. If the procedure you are downloading is on a floppy disk, place the disk in your drive. From the main window of 17xx Procedure Loader, click on File. From the drop down click “Send 1700 Procedure”. The “Send Procedure To Instrument” box will be displayed. Click the selection button of the “Look In:” field and select the .cxe file location.

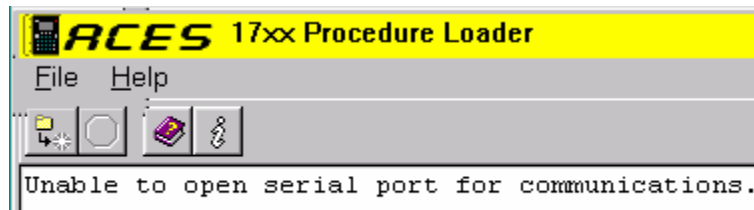
**2.2.4 Transfer Indications.** The main window will display the message “Attempting to communicate with analyzer via serial port” in the viewing area. The analyzer screen will also display a header “Procedure Loader” and a screen message “Please Stand By” when the communications attempt is being made.



If the attempt is not successful for any reason, the window will display an Error message in the viewing area and abort the communications attempt. If this occurs, recheck the baud rate and serial port selections. The analyzer will also display an Error message if the attempt fails.



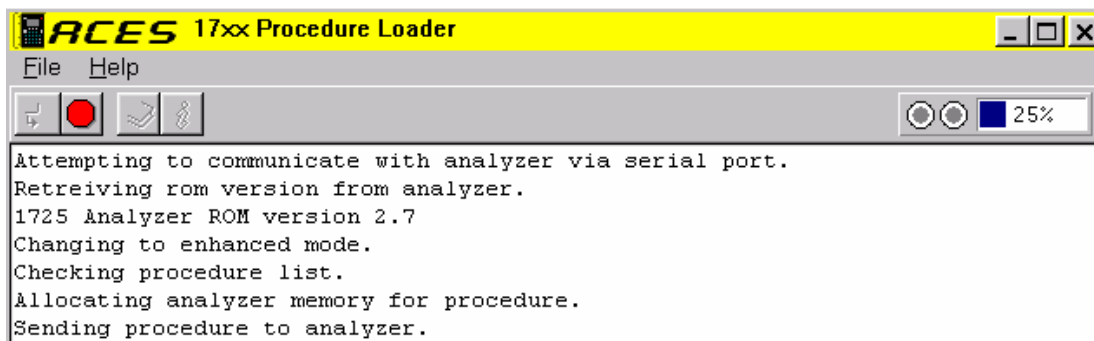
The main window of your PC will display the message below in the viewing area if the specified serial port cannot be opened.



You may also see this error message on the analyzer screen if communication attempts fail.



If communications are successfully established, the data transfer will begin automatically and the progression will be shown in the data transmission indicator.



When data transfer is complete, close the 17xx Procedure Loader program, turn the analyzer off, and disconnect the serial communications cable from the analyzer. Turn the analyzer back ON. When the Operation Options menu is displayed, check to insure the desired procedure is loaded.