

# CaptionMaker<sup>®</sup>

## Tutorial

*Windows 98/2000/XP/NT Version*

For the complete manual, visit

<http://www.cpcweb.com/TechSupport/CapMaker/CaptionMakerManual.pdf>

### **CPC-600**

*Captioning and Subtitling Software*

### **CPC-700, 700DV, 700NLE & CPC-710**

*Captioning and Subtitling Software with Time Code*

**CPC-700NLE includes patented [#6,895,166] software engine**

**Version 3.02**

**August 2006**



*Computer Prompting & Captioning Co.*

The Industry Leader Since 1985





---


1010 Rockville Pike, Suite 306  
Rockville, MD 20852  
USA

info@cpcweb.com  
www.cpcweb.com

voice (301) 738-8487  
fax (301) 738-8488  
TTY (301) 738-8489

# Table of Contents

<b>TABLE OF CONTENTS .....</b>	<b>1</b>
<b>TABLE OF CONTENTS .....</b>	<b>2</b>
<b>NOTE TO SUBTITLING USERS.....</b>	<b>5</b>
<b>SCREEN LAYOUT.....</b>	<b>5</b>
Visible Columns.....	5
Computer Display Screen Resolution.....	6
<b>FULL VIEW OR VIEW WITH PREVIEW WINDOW .....</b>	<b>6</b>
<b>THE CAPTIONING PROCESS .....</b>	<b>7</b>
Caption Display Modes.....	7
Transcribing Digital Video .....	8
Transcribe using VPedal with Windows Media Player .....	9
Configuring vPedal Media Player Plug-In.....	9
Transcribing in your Word Processor.....	10
QuickTime, RealOne Videos.....	10
Playing Video.....	10
Reading Timcode .....	10
<b>ROLL-UP CAPTIONING NOT USING TIME CODE .....</b>	<b>10</b>
Method I: CPC-600/700 Manual Captioning.....	11
Transcribing the video .....	11
Notes on Roll-Up Captioning .....	16
<b>POP-ON, PAINT-ON AND BLOCK-ROLL-UP CAPTIONING .....</b>	<b>18</b>
Method II: CPC-600/700 Manual Captioning .....	18
Method III: CPC-700 AutoSync Captioning with Time Code .....	18
Method IV: CPC-600/700 AutoSync Captioning with PC System Timer .....	18
<b>STEP 1: TRANSCRIBING AND IMPORTING SCRIPT.....</b>	<b>19</b>
Import Dialog Box .....	19
The Demo.txt File .....	21
The Demo1.cap File.....	21
<b>STEP 2: REFINING TEXT INTO CAPTIONS.....</b>	<b>23</b>
General Guidelines.....	23
Operations Center: Row Operations .....	23
 Insert Row .....	24
 Delete Row .....	24
 Merge Cells .....	24
 Split Cell .....	24
Highlighting Multiple Rows and Cells .....	24
Work Area Icons.....	25
▲ Pull First Word (U).....	25

▼ Push Last Word (D) .....	25
⏏ Compress Text (C) .....	26
⏏ Expand Text (E).....	26
↔ Alternate Break (A) .....	27
Working with the File Demo1.cap:.....	27
The Demo2.cap File.....	28
STEP 3: CAPTION POSITION AND ATTRIBUTES .....	29
Positioning of Captions on the Screen .....	29
 Justification.....	30
Vertical Position: .....	31
Attributes: Choosing Italics, Underline and Color .....	31
Working with Demo2.cap.....	32
Lines 1-3: Left Position .....	32
Lines 4 and 5: Right Position.....	32
Lines 6-8: Italics .....	33
Lines 9-11: Top Positioning .....	33
Lines 12-13: No Need to Do Anything.....	34
Lines 14-16: Paint-On Mode .....	34
Lines 17-22: Roll-Up Mode.....	34
Lines 23 and 24: No Need to Do Anything .....	35
Lines 25 to the End: Multiple Captions on the Same Screen .....	35
The Demo3.cap File.....	35
Clearing Captions.....	37
STEP 4: MANUAL CAPTIONING WITH AND WITHOUT TIME STAMPS .....	37
Step 4a: Manual Captioning (CPC-600 or CPC-700).....	37
Step 4b: Captioning with Time Code Reader (CPC-700).....	38
Step-by-Step Procedure to Capture Time Codes .....	39
Correcting Time Code Mistakes .....	39
Step 4c: Captioning with PC System Timer (CPC-600 or CPC-700) .....	40
Step-by-Step Procedure to Capture PC System Time.....	41
Correcting Time Code Mistakes .....	42
STEP 5: AUTO SYNC CAPTIONING WITH TIME STAMP (CPC-600/700).....	42
Step 5a: AutoSync Captioning with Time Code (CPC-700 only) .....	43
Step 5b: AutoSync Captioning with PC System Timer (CPC-600 and CPC-700)..	43
Two Captions Appearing Simultaneously .....	44
Captioning Two Languages on the Same Video.....	44
With ITV-Injector/DV-2000/DV-3000.....	44
With Other Encoders.....	45
Using one computer .....	45
Using two computers .....	45
AutoSync Error Checking.....	46
ERROR CHECKING.....	47
Final Checking.....	47
Timing Errors Settings.....	47
FIND SHOT CHANGES.....	48
DIGITAL VIDEO: CPC-700NL/700NLE.....	48

Capturing Video on a Hard Drive.....	49
Open Video File in CPC-700NL/700NLE.....	51
Digital Video Time Code.....	52
Video File Automatic Shuttling.....	53
Drop Frame vs. Non-Drop Frame Time Code.....	53
Video File Time Code Offset.....	53
Going Back to Videotape Format for Reference.....	54
Matching A/V Time Code to Videotape Time Code.....	54
Drop Frame vs. Non-Drop Frame.....	55
The Final Step.....	55
Captioning a Videotape with Drop-Frame Time Code.....	55
Captioning a Videotape with Non Drop-Frame Time Code.....	55
Encoding Videotape Using a Time Code Reader and an Encoder.....	55
Caption/Subtitle a DVD.....	56
Caption a Video Using an NLE System With CCaption.....	56
Caption a Video Using an NLE System With 700NLE.....	57
Caption a Video for Webcast.....	57
CAPTION TIPS.....	57
Suggestions for Breaking Lines.....	57
Suggested Caption Styles from CMP & WGBH.....	59

# Note to Subtitling Users

*In the interest of efficiency, we have combined the captioning and subtitling tutorials into a single chapter because they share many common procedures. When we refer to captioning, we mean captioning and subtitling unless otherwise noted.*

*If you are planning to subtitle (where positioning is normally only at the bottom of the screen), you need to go through the tutorial in this chapter only in order to understand the basics of formatting, positioning and time coding. For features associated with the specific subtitling devices (Chyron Codi, DVD, DV2000, or MagniCoder Pro), please consult the relevant sections of Chapter 5 of the complete CaptionMaker manual.*

## Screen Layout

There are five major regions of the CaptionMaker screen. (See screenshot on next page.)

1. At the top of the screen, there is a *menu bar* (File, Edit, View, and so on).
2. Below the menu bar is the optional *edit toolbar* (with buttons for file operations, text positioning, justification, attributes, and so forth).
3. At the top left side of the screen is a window that is initially (before a video signal is sent to the computer) a blue rectangle. This is called the *Video Preview Window*, or simply the *Preview Window*.
4. In the top right corner, the *Operations Center*, there are four rows of buttons, subdivided into regions for Preview Window Operations, Row Operations, VTR Control, Miscellaneous Controls and Time code.
5. At the bottom of the screen is a section called the *Work Area*. You can navigate through this as you would in a spreadsheet, using the mouse and arrow keys.

## Visible Columns

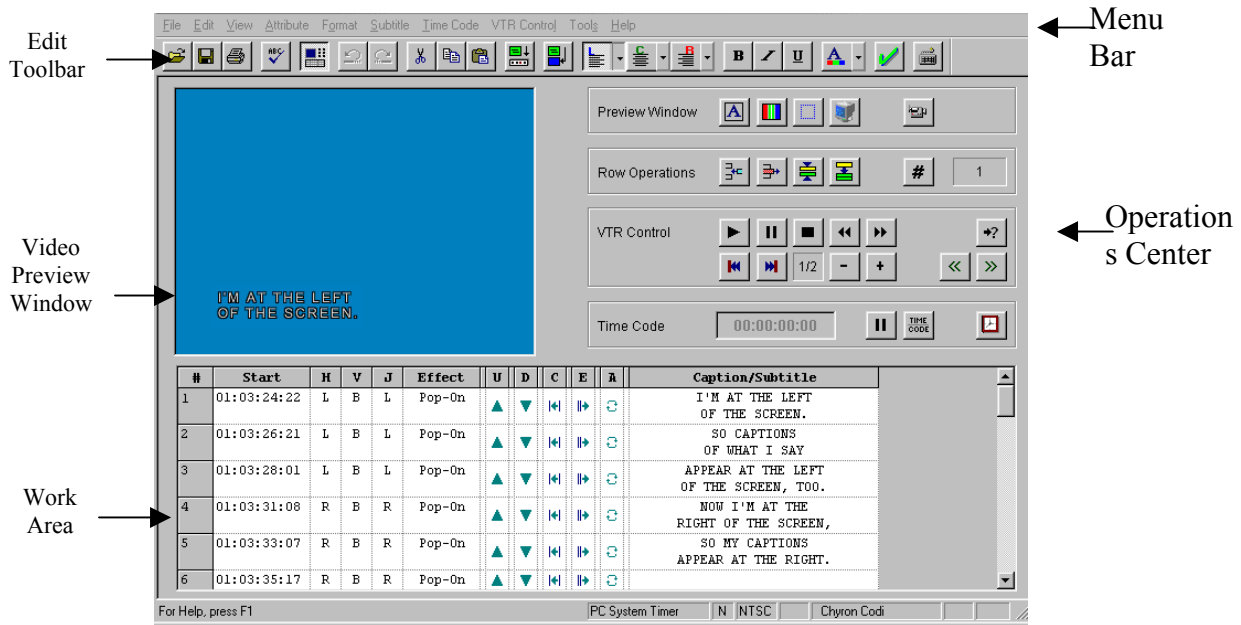
Make sure that all the columns shown on the following screen are visible on your computer screen. If they are not all visible, click on the View menu and check the appropriate boxes. You can add additional columns like

- Stop time
- Time code Duration
- Words per minute
- Codi Fonts

Etc. to suit your needs.

## Computer Display Screen Resolution

The CaptionMaker works at screen resolutions of 800 x 600 or higher. If your computer monitor display is below that, go to *Start* → *Settings* → *Control Panel* → *Display* and change the screen resolution under the *Settings* tab to at least 800 x 600.




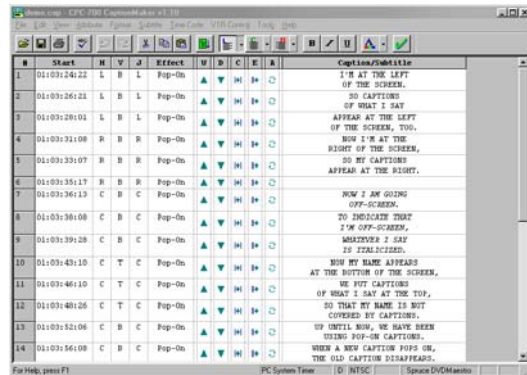
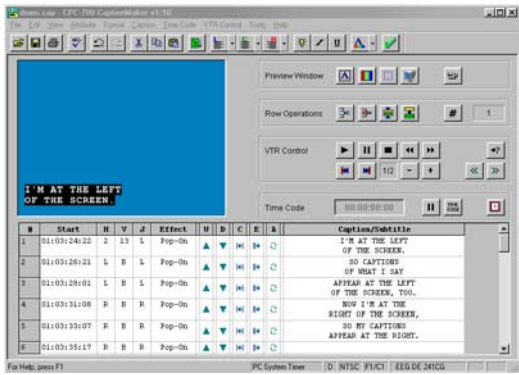
CaptionMaker Screen

## Full View or View with Preview Window

You may switch between two different views of the CaptionMaker screen:


- ◆ Preview video screen with a few lines of caption/subtitle text, or
- ◆ Full view of Caption/Subtitle text with no video screen.

To access these two views, click on the *View* → *Full Screen Spreadsheet* from the *View* menu, or you may click on the Preview Window Switch icon: 



When you need to watch the video on the computer screen and place the caption/subtitle at the appropriate position on the video, use the option *Preview Window*. When you would like to do a large amount of editing and need to see as much text as possible, turn off the *Preview Window* option.

---

**Repositioning Preview Window** If you would like to see the full-screen text view and the video at the same time, you may click on the Pop-Up Preview Window icon  to open up the Preview Window on top of the full screen view and position the video screen anywhere you like by simply dragging the window with the mouse.

---

## The Captioning Process

This chapter concentrates on formatting, positioning and associating time codes with text in the context of captioning a video. We also discuss the four display modes for captioning: Pop-On, Paint-On, Roll-Up, and Block Roll-Up.

An exhaustive, detailed explanation of all captioning and subtitling capabilities plus an explanation of all the menu items and toolbar icons can be found in Chapters 8 and 9.

## Caption Display Modes

There are four display modes for closed captions: Pop-On, Paint-On, Roll-Up, and Block Roll-Up. The first tutorial in this chapter will concentrate exclusively on Roll-Up captioning, which is the easiest to learn. Plus it takes less time to caption a video in the Roll-Up mode than in the Pop-On or Paint-On modes. You can choose one or multiple cell under the *Display* column, and right click to change the display mode to your choice.

Roll-Up captions are typically used for television news, live events and videos involving one person on the screen – typically a classroom lecture or training video. The Pop-On

mode is normally used for movies and sit-coms. The Paint-On mode is rarely used. It is similar to the Roll-Up mode. Block Roll-Up is a style coined by CPC. All four styles can be used within the same captioning job. (See details in this chapter.)

The captioning process can be described in a few steps. Note that the CPC-600 does not use time code, and the CPC-700 series does. When time code is discussed in this manual, we are referring to use of the CPC-700.

---

**Working with Digital Videos** If you are using CPC-700NL/700NLE, please refer to the section *Working with Digital Videos* near the end of this chapter on how to handle a digital video. The following section describes the complete captioning process using a videotape as opposed to digital video. All processes are exactly the same except handling the digital video and video from a videotape is slightly different.

---

## Entering the Script

If you do not have a script of the video, you can get the script in many ways, such as:

- ◆ If you use a digital video, you can use foot pedal controller vPedal to transcribe the video. For details check the page: [www.cpcweb.com/Captioning/VPedal-AllAbout.pdf](http://www.cpcweb.com/Captioning/VPedal-AllAbout.pdf)
- ◆ Train a speech recognition software such as Naturally Speaking or ViaVoice ([www.nuance.com](http://www.nuance.com)) for a few hours. Then listen to the videotape and repeat the dialogue into the microphone. At the beginning, you are going to get lot of errors. But you can teach the software to fix the errors and down the road you can expect to get about 95% accuracy. For details check this page: [www.cpcweb.com/Captioning/cap\\_via\\_voice.htm](http://www.cpcweb.com/Captioning/cap_via_voice.htm)
- ◆ Dubbing the audio onto a tape and use a Dictaphone® machine can speed up this process.
- ◆ Use a professional transcription service. This is the most expensive way to generate the script.

The CaptionMaker can import scripts from a text file and most word processors (such as WordPerfect and Microsoft Word) files.

## Transcribing Digital Video

We do not recommend transcribing your videos from within CaptionMaker. It is much better to transcribe the video using WMP with your Word Processor or with the free shareware software Express Scribe.

We designed CaptionMaker in a way to make it most efficient to import a free form text file and break them into individual captions using some simple conditions like:

1. Maximum caption length (like 28 characters)
2. Maximum number of lines in each caption (like 2 lines)
3. Break at punctuation points.

With these types of conditions, CaptionMaker can break a transcript for an hour-long video into nice looking captions in a few seconds.

We do not recommend breaking the text into individual captions while you transcribe. Let CaptionMaker handle this for you to save you a lot of time.

---

**Transcription Mode** If you must transcribe the video within CaptionMaker, there is a transcription mode under File menu. Also added an indicator in the status bar to indicate when transcription mode is enabled. Transcription mode can be enabled/disabled by clicking on this indicator with the mouse.

When transcription mode is enabled, pressing “Enter” will cause the cursor to move down to the next caption cell. If you have the time code stamp active, time code is automatically read as the cursor moves to the next cell.

---

## Transcribe using VPedal with Windows Media Player

Download and install the Windows Media Player plug-in (free) at:  
<http://www.vPedal.com/wmp9.php>

### Configuring vPedal Media Player Plug-In

- After you’ve installed it, go to *Start >> Programs >> vPedal Media Player Plug-In >> Direct Launch Plug-In*
- It will open up a tiny Windows Media Player window
- To begin playing the video simply go to *Options >> Open File* and change the pull-down tab to “All Files” to play the video you wish to transcribe
- There are no settings or configurations you need to setup. The vPedal will operate the play, pause, forward, and rewind functions of the video
- When you hit pause, and then resume again, the video will skip back 1 second so you do not have to rewind
- To change this skip time to something longer than the 1 second default, go to *Options >> Settings* and change the value in the *Release Back Seconds* field
- To change how fast the video plays, go to *Options >> Settings* and adjust the percentage in the *Speed* field
-

## Transcribing in your Word Processor

- To begin transcribing, simply open your Word Processor and begin typing. The vPedal will still control the video even if it is not on top.
- If you want to see the video while transcribing, re-size your word processor to give the video enough space to stay on screen while you type.

## QuickTime, RealOne Videos

vPedal cannot control the Quicktime or RealOne videos in Windows. To use VPedal with Quicktime or realOne videos, you need to download the codecs that allow you to play Quicktime and RealOne videos in Windows Media Player.

RealPlayer: [http://www.free-codecs.com/download/Real\\_Alternative.htm](http://www.free-codecs.com/download/Real_Alternative.htm)


Quicktime: [http://www.free-codecs.com/download/QuickTime\\_Alternative.htm](http://www.free-codecs.com/download/QuickTime_Alternative.htm)

VPedal has plug-ins to work with iTunes, RealOne, Winamp, and FTR player. To view a full list of the plug-ins available for use with VPedal visit


<http://www.vPedal.com/support.htm>

## Playing Video

It makes it very convenient to play video inside CaptionMaker window. You can play video coming from a videotape or a digital video (like avi, qt, mpeg, wmv etc.). To play video coming from a videotape you would need a video display device like Dazzle DVC-80. If you use DVC-80, connect the video from the VCR to the yellow jack of DVC-80. Connect audio to the sound card, not to the white and red connector on the DVC-80.

Click on the camcorder icon  on the right side of the preview window. Check the box Enable *External video from a tape*.

## Reading Timcode

If you are using timecode (not available with CPC-600), you need to select the proper timecode option. Click on the *Timecode >> Timecode Reader Properties* or, click on the  button and choose the appropriate option. If you are using a video tape, choose an external timecode reader. If you are using a digital video, choose *Vide Playback*.

## Roll-Up Captioning Not Using Time Code

We will start with Roll-Up captioning without time code. Roll-Up captioning is a good starting point because it is the easiest method to learn and use. Because you do not need time code, you can even use a VHS tape without time code to caption. In other words,

with minimal time, effort and equipment, you can get your feet wet and actually do some real captioning.

## Method I: CPC-600/700 Manual Captioning

1. Transcribe the text from the video.
2. Import a raw text file. The Import menu offers many formatting features to help you break raw text into individual captions.
3. Manually further refine the imported text into individual captions
4. Place the captions at a desired screen location and decide if the text is to be italicized, underlined or otherwise formatted (requires viewing the video).
5. Manually send captions to the caption device (**Step 4a** later in this chapter).

## Transcribing the video

If you do not have a script of the video, you can get the script in many ways, see the section *Entering the Script* above.

We do not recommend transcribing your videos within CaptionMaker. It is much better to transcribe the video first and then import the script into CaptionMaker.

We designed CaptionMaker in a way to make it most efficient to import a free form text file and break them into individual captions using some simple conditions like:

1. Maximum caption length
2. Maximum number of lines in each caption
3. Break at punctuation points.

With these types of conditions, CaptionMaker can break a transcript for an hour-long video into nice looking captions in a few seconds. We do not recommend breaking the text into individual captions while you transcribe. Let CaptionMaker handle this for you to save you a lot of time. Importing the script

The CaptionMaker can import scripts from a text file and most word processors (such as WordPerfect and Microsoft Word) files.

In Roll-Up captioning, each row in the Work Area equals one caption line of up to 32 characters. The easiest and most efficient way to begin the process of Roll-Up captioning is to enter the dialogue that is on the video into Word (or almost any other word processor), and let the computer automatically format each line as you import your script.

See the beginning of the section, “Transcribing and Importing Script” under the “Pop-On, Paint-On and Block-Roll-Up Captioning” section later in this chapter to find out how to transcribe your text.

Assume that you initially entered the text to be captioned into any word processor like MS Word. To speed the text entry into Word, the only formatting you need to do in Word is to enter periods, commas, semicolons, etc. You do not need to break the text up into paragraphs, and certainly do not need to break the text up into individual captions. After entering all of the text, you would end up with one giant paragraph, with the text broken up into sentences within that paragraph.

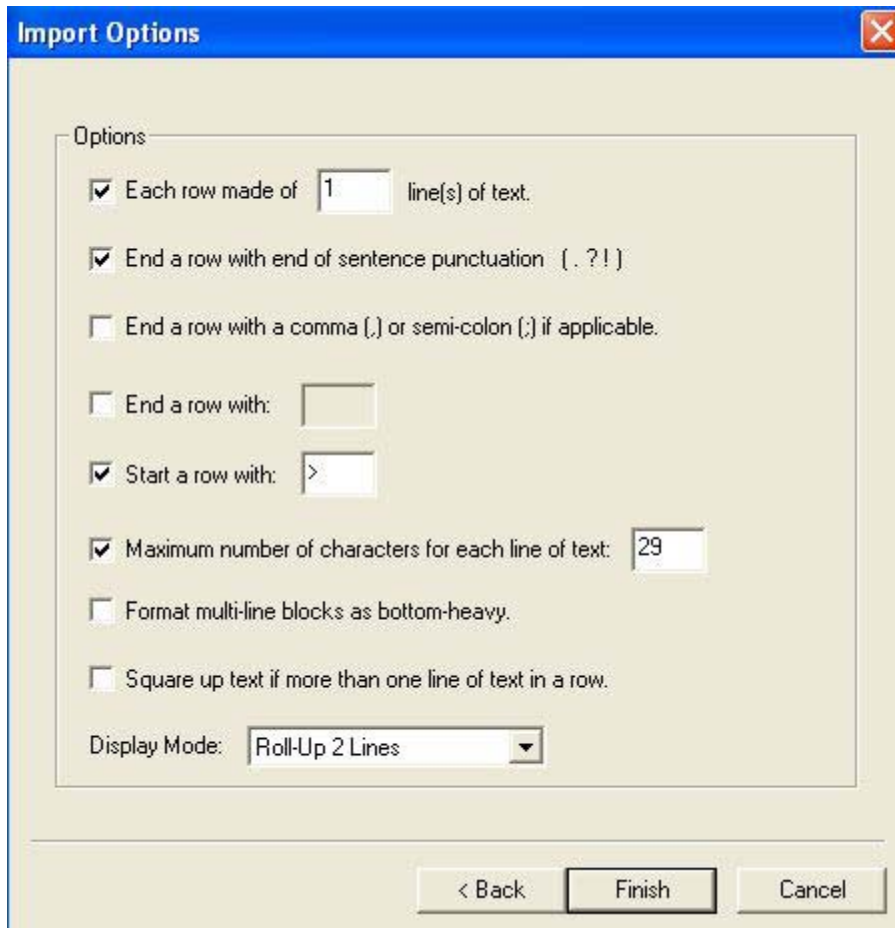
Next we will show how the CaptionMaker breaks the text into individual captions at sentence punctuations (.?! ) automatically.

To illustrate this, we will start with our demo.txt file, which is found on the *C:\Program Files\CPC\CaptionMaker\Samples* folder. After you select the option *File* → *Import* and choose the file type ASCII text file from the *Samples* folder and click on the *Browse* button, the computer will prompt you to choose the import file format. Choose the Free Form format as shown below and then click on Next.

Free Form

- Import file where caption/subtitle rows are composed by breaking the text into sections based on punctuation (“end-of-sentence”) markers or paragraph breaks.

The following dialog box will open.



Check the appropriate boxes as shown below and fill-in the necessary boxes.

*Start a row with* is a custom character function. This allows you to let CaptionMaker start a new row whenever it encounters a particular character while importing text. Note that CaptionMaker also properly handles multiple consecutive instances of the character. For example, if you select the “>” character, CaptionMaker will start a new row when it sees “>”, or “>>”, or “>>>”, etc.

Make sure you break the script into individual captions with the following conditions:

1. Each row made of: 1 line of text
2. Start of new record: End of sentence punctuation points
3. Max characters per line: 29

---

**Note on “Each row made of”** The selection of *Each Row made of [1] line(s) of text* is extremely important. You **must** always select 1 line per row (cell) when captioning in the Roll-Up mode, or else the captions will not roll up properly. (The other selections can be changed to meet your specific formatting needs.)

---

The above choices will result in:

1. Each row of text will contain only one line.
2. Put as many words as possible into each caption cell, until the number of characters in the words reaches a maximum of 28. Once that limit is reached, the next word becomes the first word of the following caption.
3. The only exception to the above occurs at the end of a sentence. The first word of a new sentence will always become the first word of a caption. The reason for this is that captions typically correspond to naturally occurring pauses in speech. And at the end of a sentence there is always a pause.

In the example that follows, the second caption consists of only one word, “SCREEN.” The reason of course is that it is the last word of the first sentence.

Up to this point text has been entered into a word processor and then imported into the CaptionMaker, and we have a text file automatically broken up into individual captions.

The *Import Option* choices will format the text as follows.

Row	H	V	J	Display	Caption/Subtitle
1	5	B	C	Roll-Up 3	I'M AT THE LEFT OF THE
2	5	B	C	Roll-Up 3	SCREEN.
3	5	B	C	Roll-Up 3	SO CAPTIONS OF WHAT I SAY
4	5	B	C	Roll-Up 3	APPEAR AT THE LEFT OF THE
5	5	B	C	Roll-Up 3	SCREEN, TOO.
6	5	B	C	Roll-Up 3	NOW I'M AT THE RIGHT OF THE
7	5	B	C	Roll-Up 3	SCREEN, SO MY CAPTIONS
8	5	B	C	Roll-Up 3	APPEAR AT THE RIGHT.
9	5	B	C	Roll-Up 3	NOW I AM GOING OFF-SCREEN.
10	5	B	C	Roll-Up 3	TO INDICATE THAT I'M
11	5	B	C	Roll-Up 3	OFF-SCREEN, WHATEVER I SAY
12	5	B	C	Roll-Up 3	IS ITALICIZED.
13	5	B	C	Roll-Up 3	NOW MY NAME APPEARS AT THE
14	5	B	C	Roll-Up 3	BOTTOM OF THE SCREEN, WE
15	5	B	C	Roll-Up 3	PUT CAPTIONS OF WHAT I SAY
16	5	B	C	Roll-Up 3	AT THE TOP, SO THAT MY NAME
17	5	B	C	Roll-Up 3	IS NOT COVERED BY CAPTIONS.
18	5	B	C	Roll-Up 3	UP UNTIL NOW, WE HAVE BEEN
19	5	B	C	Roll-Up 3	USING POP-ON CAPTIONS.
20	5	B	C	Roll-Up 3	WHEN A NEW CAPTION POPS ON,
21	5	B	C	Roll-Up 3	THE OLD CAPTION DISAPPEARS.
22	5	B	C	Roll-Up 3	THIS IS A PAINT-ON CAPTION.
23	5	B	C	Roll-Up 3	ONE CAPTION BLOCK IS
24	5	B	C	Roll-Up 3	PAINTED ON THE SCREEN, FROM
25	5	B	C	Roll-Up 3	LEFT TO RIGHT, ONE
26	5	B	C	Roll-Up 3	CHARACTER AT A TIME.
27	5	B	C	Roll-Up 3	NOW THE ROLL-UP MODE.
28	5	B	C	Roll-Up 3	THIS MODE IS NORMALLY USED
29	5	B	C	Roll-Up 3	FOR TV NEWS PROGRAMS.
30	5	B	C	Roll-Up 3	CAPTION LINES ROLL UP FROM
31	5	B	C	Roll-Up 3	THE SCREEN BOTTOM ONE LINE
32	5	B	C	Roll-Up 3	AT A TIME.

33	5	B	C	Roll-Up 3	Captions can appear in
34	5	B	C	Roll-Up 3	lower case, and also in
35	5	B	C	Roll-Up 3	Spanish: ¿Dónde está el
36	5	B	C	Roll-Up 3	niño?
37	5	B	C	Roll-Up 3	Está en la casa.
38	5	B	C	Roll-Up 3	And in French: Parlez-vous
39	5	B	C	Roll-Up 3	français?
40	5	B	C	Roll-Up 3	Répétez, s'il vous plaît.
41	5	B	C	Roll-Up 3	THE FOLLOWING SPECIAL
42	5	B	C	Roll-Up 3	CHARACTERS ARE ALSO
43	5	B	C	Roll-Up 3	AVAILABLE.
44	5	B	C	Roll-Up 3	á é í ó ú à è ì ò ù ä ë ì ö
45	5	B	C	Roll-Up 3	ü â ê î ô û THEY INCLUDE
46	5	B	C	Roll-Up 3	THE MUSIC SYMBOL AND
47	5	B	C	Roll-Up 3	ACCENTED CHARACTERS.
48	5	B	C	Roll-Up 3	ç ã ñ õ à ç ì í ç £ ¥ © ® ™ °
49	5	B	C	Roll-Up 3	ß Š

For instructive purposes, we purposely inserted two sections in which the text should be further refined to improve the appearance of the captions. In the CaptionMaker directory, there is a file called *Demo-R.cap*. Open this file into the CaptionMaker using the *Open* option under the File menu as opposed to the *Import* option. This file is slightly different from the file shown above. We further refined the lines 35 through 49 using Push and Pull functions (See “Step 2: Refining Text into Captions” later in this chapter.)

35	5	B	C	Roll-Up 3	Spanish:
36	5	B	C	Roll-Up 3	¿Dónde está el niño?
37	5	B	C	Roll-Up 3	Está en la casa.
38	5	B	C	Roll-Up 3	And in French:
39	5	B	C	Roll-Up 3	Parlez-vous français?
40	5	B	C	Roll-Up 3	Répétez, s'il vous plaît.
41	5	B	C	Roll-Up 3	THE FOLLOWING SPECIAL
42	5	B	C	Roll-Up 3	CHARACTERS ARE ALSO
43	5	B	C	Roll-Up 3	AVAILABLE.
44	5	B	C	Roll-Up 3	á é í ó ú à è ì ò ù
45	5	B	C	Roll-Up 3	ä ë ì ö ü â ê î ô û
46	5	B	C	Roll-Up 3	THEY INCLUDE THE MUSIC SYMBOL
47	5	B	C	Roll-Up 3	AND ACCENTED CHARACTERS.
48	5	B	C	Roll-Up 3	ç ã ñ õ à ç ì í ç £
49	5	B	C	Roll-Up 3	¥ © ® ™ ° ß Š

Also notice the Horizontal (**H**) and **Display** columns. We also changed all the cells under the Horizontal column to 5. This is done by left-clicking on the header **H** of the Horizontal column and right-clicking on any cell under **H** and choosing 5 from the option *Other*. This gives us a left indentation of 4 characters: the captions start at the fifth column. Remember we chose 28 characters as the maximum caption length. Added to the indentation of 4 characters, this makes a total length of 32, which is the maximum allowable length from the left side of the screen to the right.

We also need to change the Display Mode to *Roll-Up*. Left-click on the header **Display**. Now right-click on any cell under **Display** and choose *Roll-Up 3 Lines*. This will change

all the cells to *Roll-Up 3*. This selection will display a maximum of 3 lines of captions on the video at any given time.

Finally, to see captions on the video screen for the text above, we have provided a videotape to be used with this tutorial. This tutorial text starts at about 3.5 minutes from the beginning of the video right after this screen:

**Now we will show you  
how the CaptionMaker  
software works.**

As you view the segment starting at burn-in time code 00:19:55:04 on the top left corner of the video, you will see our narrator Valerie on the left of the screen. Ignore the different positions of the narrator. Positioning captions on the screen above or below the person is used for Pop-On and Paint-On caption modes.

For the rest of the captioning job, follow Step 4a for non-time code captioning later in the manual. Steps 4b and 5 are used for time code-based captioning.

## Notes on Roll-Up Captioning

1. Pop-On and Paint-On captions can be placed in any of 15 rows on the video screen and can have a maximum of 32 characters. But Roll-Up captions can be placed in only the first 4 rows and last 4 rows on the video screen. To place Roll-Up captions anywhere within these allowable rows, you need to right-click on the cell under the **V** Column and choose from the choices *Top*, *Bottom*, *Other* (Not *Center*). If you choose *Other*, you may choose 1, 2, 3, 4 or 12, 13, 14 and 15. The first row is same as **T** (Top) and the 15th row is same as **B** (Bottom). You may highlight a number of cells under the **V** column and right-click on it to change the row position for a number of rows in one stroke.
2. Roll-Up captioning is available for 2, 3 or 4 lines of captioning. When you choose any one of these modes, you will see a maximum of 2, 3 or 4 lines of text on the video monitor. Make a note that *Preview Window* will still show only one line of text.
3. When you press the [+] key to send the captions one line at a time, the text starts to appear on the video screen immediately, one character at a time. This makes it feasible to caption a video on the fly. You can work without time code if you wish. On the other hand, if you choose *Pop-On* mode, you will notice that there is a delay of a second or so for the caption to appear after you press the [+] key. It is not possible to use Pop-On caption mode without time code. Use of time code fixes the delay problem internally as will be explained later.
4. You may use the Block-Roll-Up captioning mode to give the same feel as the Pop-On or Paint-On caption mode. Captions go out on the fly immediately as you press the [+] key. You can also position the captions to the left, center and right.

To use Block-Roll-Up mode, you must have more than one line of text in one row under the **Caption/Subtitle** column. (See section under “Pop-On, Paint-On Block-Roll-Up Captioning” later in the manual.)

5. If there is more than one person on the video screen, to distinguish the speakers, you need to use the following technique. Use the symbol
  - > for the first person and
  - >> for the second person
  - > for the third person (if exists) or for the first person.

The use of > and >> alternatively distinguishes one speaker from the other.

> Speaker one talking
Speaker one still talking
Speaker one still talking
Speak one still talking
>> Speaker two talking
Speaker two still talking
> Back to speaker one
Speaker one still talking
>> Speaker three talking

6. Keep in mind that the maximum number of characters you can fit in one line is 32. So if you have an indentation of 4 characters (horizontal position H = 5), and like to put one or two > symbols for change of speakers, you should import the original text file with no more than 25 (= 32 – 4 – 3) characters per row.
7. To clear captioning from the screen when there is no one speaking for more than 3 seconds or so, you can clear the captions by inserting blank row.

---

**Reformatting Captions** After you import a file and work on it for Pop-on or Roll-up display modes, if you change your mind, you may use 3 reformat functions from the Format menu to change the file for Pop-On or Roll-Up modes. See the section *Reformat Rows* in Chapter 8: Menus for details.

---

# Pop-on, Paint-On and Block-Roll-Up Captioning

## Method II: CPC-600/700 Manual Captioning

1. Import a raw text file. The Import menu offers many formatting features to help you break raw text into individual captions.
2. Manually further refine the imported text into individual captions
3. Place the captions at a desired screen location and decide if the text is to be italicized, underlined or otherwise formatted (requires viewing the video).
4. Manually send captions to the caption device (**Step 4a**).

## Method III: CPC-700 AutoSync Captioning with Time Code

CPC-700 offers all of the functionality of CPC-600, so you can use Method I, II, III or IV.

1. Import a raw text file. The Import menu offers many formatting features to help you break raw text into individual captions.
2. Manually further refine the imported text into individual captions.
3. Place the captions at the desired screen location and decide if the text is to be italicized, underlined or otherwise formatted.
4. Associate time code on the video with each caption (Step 4b).
5. AutoSync captions with the video using time code (Step 5a).

## Method IV: CPC-600/700 AutoSync Captioning with PC System Timer

1. Import a raw text file with special formatting. The Import menu offers many formatting features to help you break raw text into individual captions.
2. Manually further refine the imported text into individual captions
3. Place the captions at the desired screen location and decide if the text is to be italicized, underlined or otherwise modified.
4. Manually associate PC System Timer time stamps with captions (Step 4c).
5. AutoSync captions with the video using time stamps. (Step 5b).

Sample text files are included with CPC software for use in the tutorial. These files will help illustrate how you will go through each step to create the final formatted file with time code from a raw text file. These files are located in the home directory of the

CaptionMaker (usually *C:\Program Files\CPC\CaptionMaker*). The caption script files supplied are:

Filename	Description
Demo.txt	Raw text (ASCII text).
Demo1.cap	After opening Demo.txt in the CaptionMaker, the file looks like this. (Step 1)
Demo2.cap	After breaking up text into individual captions (Step 2).
Demo3.cap	After positioning captions on the screen (Step 3).
Demo.cap	After associating time codes with each caption (Step 5).
Demo-R.cap	Demo text formatted for Roll-up captions.

## Step 1: Transcribing and Importing Script

If you do not have a transcript of the video, read the section *Entering the Script* at the beginning of this chapter.

For this tutorial you have a file *Demo.txt* in the folder *C:\Program Files\CPC\CaptionMaker\Samples* folder, so you do not need to transcribe it. Import the file by using *File* → *Import* option. Choose *Files of Type* as *ASCII Text Files (\*.txt)* and the make sure that *Look In folder* is *C:\Program Files\CPC\CaptionMaker\Samples* in order to have the icon for *Demo.txt* appear. Double-click on the *Demo.txt* icon.

*See Chapter 3 for details on importing various kinds of word processor files.*

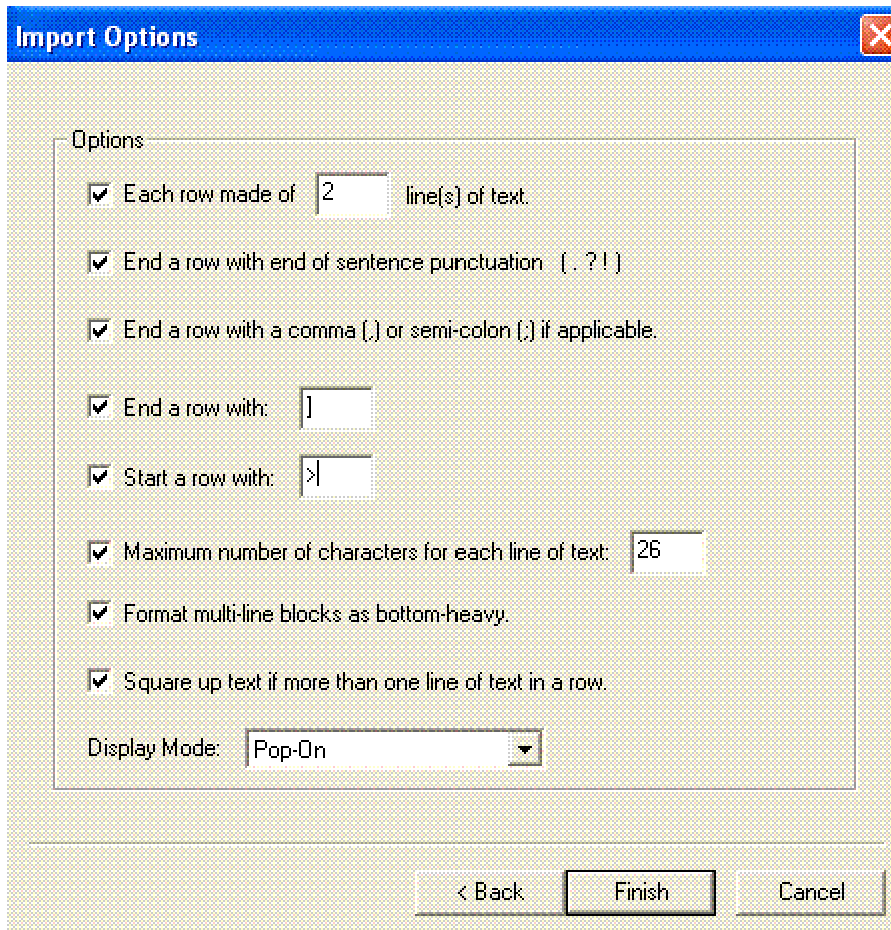
### Import Dialog Box

The *Import ASCII File* dialog box will appear, which gives you several options (see graphic on next page).

1. Select the first option, *Free Form*.
2. Under *Options*, choose the end-of-sentence punctuation option (radio button).
3. Under *Options*, choose the default settings for the maximum characters per line (default is 26) and the maximum number of lines per cell (default is 2). The CaptionMaker will use these last two factors to break the text into different cells.
4. Make sure the *Square-up text* box is checked. Press the OK button.

#### Free Form

- Import file where caption/subtitle rows are composed by breaking the text into sections based on punctuation (“end-of-sentence”) markers or paragraph breaks.



Check the appropriate boxes as shown below and fill-in the necessary boxes.

*Start a row with* is a custom character function. This allows you to let CaptionMaker start a new row whenever it encounters a particular character while importing text. Note that CaptionMaker also properly handles multiple consecutive instances of the character. For example, if you select the “>” character, CaptionMaker will start a new row when it sees “>”, or “>>”, or “>>>”, etc.

*End a row with* is a custom character function. This allows you to let CaptionMaker end the current row whenever it encounters a particular character while importing text. For example a new caption starts after the phrase [applause].

---

**Tip** Even though one caption line can hold a maximum of 32 characters, it is customary to limit captions to around 26, which is the default used in this program. If you play with numbers between 24 and 32 you will see how the appearance can vary.

---

## The Demo.txt File

If you were to examine the file (in Notepad, for example) before import, it would look like this

```
I'M AT THE LEFT OF THE SCREEN. SO CAPTIONS OF WHAT I SAY APPEAR AT
THE LEFT OF THE SCREEN, TOO. NOW I'M AT THE RIGHT OF THE SCREEN,
SO MY CAPTIONS APPEAR AT THE RIGHT. NOW I AM GOING OFF-SCREEN. TO
INDICATE THAT I'M OFF-SCREEN, WHATEVER I SAY IS ITALICIZED. NOW MY
NAME APPEARS AT THE BOTTOM OF THE SCREEN, WE PUT CAPTIONS OF WHAT
I SAY AT THE TOP, SO THAT MY NAME IS NOT COVERED BY CAPTIONS. UP
UNTIL NOW, WE HAVE BEEN USING POP-ON CAPTIONS. WHEN A NEW CAPTION
POPS ON, THE OLD CAPTION DISAPPEARS. THIS IS A PAINT-ON CAPTION.
ONE CAPTION BLOCK IS PAINTED ON THE SCREEN, FROM LEFT TO RIGHT,
ONE CHARACTER AT A TIME. NOW THE ROLL-UP MODE. THIS MODE IS
NORMALLY USED FOR TV NEWS PROGRAMS. CAPTION LINES ROLL UP FROM THE
SCREEN BOTTOM ONE LINE AT A TIME. Captions can appear in lower
case, and also in Spanish: ¿Dónde está el niño? Está en la casa.
And in French: Parlez-vous français? Répétez, s'il vous plaît. THE
FOLLOWING SPECIAL CHARACTERS ARE ALSO AVAILABLE. á é í ó ú à è ì ò
ù ä ë ì ö ü â ê î ô û THEY INCLUDE THE MUSIC SYMBOL AND ACCENTED
CHARACTERS. ç ã ñ õ å ¿ ¡¢ £ ¥ © ® ™ ° ß §
```

## The Demo1.cap File

After importing the file, the computer screen should look like this. If it doesn't, check to make sure you imported the correct file.

Row	H	V	Caption/Subtitle
1	B	C	I'M AT THE LEFT OF THE SCREEN.
2	B	C	SO CAPTIONS OF WHAT I SAY APPEAR AT THE LEFT OF THE
3	B	C	SCREEN, TOO.
4	B	C	NOW I'M AT THE RIGHT OF THE SCREEN, SO MY
5	B	C	CAPTIONS APPEAR AT THE RIGHT.
6	B	C	NOW I AM GOING OFF-SCREEN.
7	B	C	TO INDICATE THAT I'M OFF-SCREEN, WHATEVER I
8	B	C	SAY IS ITALICIZED.
9	B	C	NOW MY NAME APPEARS AT THE BOTTOM OF THE SCREEN,
10	B	C	WE PUT CAPTIONS OF WHAT I SAY AT THE TOP, SO THAT
11	B	C	MY NAME IS NOT COVERED BY CAPTIONS.
12	B	C	UP UNTIL NOW, WE HAVE BEEN USING POP-ON
13	B	C	CAPTIONS.
14	B	C	WHEN A NEW CAPTION POPS ON, THE OLD CAPTION

15	B	C	DISAPPEARS.
16	B	C	THIS IS A PAINT-ON CAPTION.
17	B	C	ONE CAPTION BLOCK IS PAINTED ON THE SCREEN,
18	B	C	FROM LEFT TO RIGHT, ONE CHARACTER AT A TIME.
19	B	C	NOW THE ROLL-UP MODE.
20	B	C	THIS MODE IS NORMALLY USED FOR TV NEWS PROGRAMS.
21	B	C	CAPTION LINES ROLL UP FROM THE SCREEN BOTTOM
22	B	C	ONE LINE AT A TIME.
23	B	C	Captions can appear in lower case, and also in
24	B	C	Spanish: ¿Dónde está el niño?
25	B	C	Está en la casa.
26	B	C	And in French: Parlez-vous français?
27	B	C	Répétez, s'il vous plaît.
28	B	C	THE FOLLOWING SPECIAL CHARACTERS ARE ALSO
29	B	C	AVAILABLE.
30	B	C	á é í ó ú à è ì ò ù ä ë ì ö ü â ê î ô û THEY
31	B	C	INCLUDE THE MUSIC SYMBOL AND ACCENTED CHARACTERS.
32	B	C	ç ã ñ õ ä ç ì ç £ ¥ © ® ™ ° ß \$

---

**TIP FOR FORMER DOS CAPTIONMAKER USERS: BREAKING LINES** In previous DOS versions of the CaptionMaker, you had a “break lines” feature and used the **Enter** key to send captions out. The Windows version is different. The work of the “break lines” feature is done automatically when the text is imported into the CaptionMaker, and moving text between captions is performed by clicking on a variety of buttons when a row of the Work Area is selected, not by using the **Enter** key (though use of it will not harm existing formatting). There is no longer any special meaning to the backslash ( \ ) key.

---

To scroll through text, use the scroll bar on the right side of the screen. Don't worry if you can't see all of the text in a cell. If you click inside the cell and press the down arrow, it should appear.

## Step 2: Refining Text Into Captions

### General Guidelines

You should now have the *Demo.txt* file loaded into the CaptionMaker. The *Demo.cap* file has the same information as the *Demo.txt* file, except now it is broken up into different cells.

Next you will further format the script into individual captions. An individual caption contains the text that will be sent to the screen when that row is selected, either by manual synchronization or by AutoSync. One row of cells in the Work Area corresponds to a caption. Make sure that you have set the computer for captioning. To do this, go to *Caption* → *Device*.

---

**Note** A caption can accommodate up to 4 lines of text with up to 32 characters on each line. When the menu bar indicates that the program is configured to Caption, the computer will enforce this requirement. The restrictions for subtitling are less stringent.

---

The process of conversion of the raw script into captions uses the four Row Operations buttons, and the five Processing icons (U, D, C, E, A) in the Work Area. To use a button, click on the row of text in the Work Area you would like to work on, and then click the formatting button that you would like to use.

---

**TIP FOR FORMER DOS CAPTIONMAKER USERS: Preview and Edit Mode** The Windows software does not have separate Preview and Edit modes, as used in the DOS software. With the Windows software, you select both the words that will appear in a caption and how many lines each caption will contain all at once.

---

### Operations Center: Row Operations

Helps you manipulate the number of captions in your captioning job. The *Demo.txt* file initially has 22 captions in it; when we are done with the Row Operations we will have 30.



## **Insert Row**

This button will insert a row above the currently selected row. *Hint:* If you need to insert a row at the very bottom, click at the very end of the last cell and use the Split Cell button.

## **Delete Row**

This button will remove the currently selected row (the row where the cursor is).

## **Merge Cells**

This button will merge all selected cells into a single cell. (More than one cell needs to be selected for this feature to work.)

## **Split Cell**

The Split Cell button will split the currently selected cell into two cells at the point where the cursor blinks.

## **Highlighting Multiple Rows and Cells**

You may highlight a number of rows or cells to change attributes, such as Horizontal Position, Justification or Display Mode for the selected multiple rows or cell. The highlighting of multiple rows or cells can be accomplished in a number of ways. Here are a few examples.

To highlight all the cells under column H and change the Horizontal position of rows to L (left).	Click on the Heading <b>H</b> and then right-click and choose <b>L</b>
To highlight rows 2 through 5 and change the Display to Paint-On.	Click on 2 under the heading #. Hold the <b>Shift</b> key and click on 5. This will highlight all 4 rows 2 through 5. Now right-click on any cell under the heading <i>Display</i> and choose <i>Paint-On</i> with a left-click.
To selectively highlight rows 2, 4 and 7 and change the Vertical position to Top.	Click on 2 under the heading #. Hold the <b>Ctrl</b> key and click on 4, then 7. This will highlight all 3 rows 2, 4 and 7. Now right-click on any of the three highlighted cells under the heading <b>V</b> and choose <b>T</b> for Top position.
To highlight 3 text cells (rows 2 through 4) under the heading Caption/Subtitle and change text to italics.	Click the mouse somewhere other than cell 1. Now click the mouse on cell 1 and without releasing the button, drag the mouse downward to cell 4. This will highlight 3 text cells (rows 2 through 4). Now Click on the Italics tool button.
To highlight text within cell 4 under the heading Caption/Subtitle and change the text to underline.	Click the mouse on cell 4. Click again on the starting point of the text area you would like to highlight and without releasing the button, move the mouse to cover the text you would like to highlight. Then click on the Underline tool button.

## Work Area Icons

The icons in the Work Area to the left of the text include, in order, *Pull next Cell's First Word Up* ▲, *Push Last Word Down* ▼, *Compress Text* |←|, *Expand Text* ||→, and *Alternate Break* ↻. Each icon, when clicked, will change the text in the row that the cursor is on.

Pull First Word and Push Last Word work between two cells. Changes occur at the end of the text in the current cell and at the beginning of the following cell.

On the other hand, Compress Text, Expand Text, and Alternate Break operate *within a cell*.

U	D	C	E	A
▲	▼	←	→	↻
▲	▼	←	→	↻
▲	▼	←	→	↻
▲	▼	←	→	↻
▲	▼	←	→	↻

### ▲ Pull First Word (U)

The Pull First Word icons are under the column heading **U**. This will take the first word from the cell below and move it up to the end of the cell with the cursor. If the cursor is on the first cell:

I 'M AT THE LEFT OF THE SCREEN.

and you click on the ▲ icon, the first word of the next row will be pulled up:

I 'M AT THE LEFT OF THE SCREEN. SO

### ▼ Push Last Word (D)

The Push Last Word icon is under the column heading **D**. This will take the last word from the cell the cursor is on, and move it down to the beginning of the next cell. If the cursor is on the first cell,

I 'M AT THE LEFT OF THE SCREEN. SO

and you click on the ▼ icon, the last word will be moved down to the next line, changing the cell to this:

I 'M AT THE LEFT OF THE SCREEN.

---

**Note** If you push all the text out of a cell it will be blank, and should then be deleted using the Delete Row button, which can be found in the Row Operations section of the Operations Center.

---

### 🔍 Compress Text (C)

The Compress Text icon reduces the left and right margins of the cell the cursor is on to squeeze the text into a smaller area. If you click on the Compress Text icon on the first cell, you will get:

I'M AT THE LEFT OF THE  
SCREEN.

Clicking the Compress Text icon a second time, you will get:

I'M AT THE LEFT OF  
THE SCREEN.

If you click the icon 4 more times, the cell will reach its maximum compression of 4 lines:

I'M AT  
THE LEFT  
OF THE  
SCREEN.

If you click the icon 🔍 again, nothing further will happen. You cannot have more than 4 lines per caption.

### 🔍 Expand Text (E)

The Expand Text icon increases the margins within a cell and decreases the number of lines. It is the reverse of the Compress Text function. If you click on this icon on the first cell, which looks like the previous box above, you will get:

I'M AT THE  
LEFT OF  
THE  
SCREEN.

If you click the icon 🔍 4 more times you will get:

I'M AT THE LEFT OF THE  
SCREEN.

Nothing further will happen when you click the icon again.

## **Alternate Break (A)**

Clicking on the Alternate Break icon results in changing the way that text is stacked within a cell, by alternating whether the top or the bottom line should display more text. Suppose the first cell looks like this:

I'M AT THE LEFT OF THE SCREEN.
-----------------------------------

When you click on the Alternate Break icon, the cell will look like this:

I'M AT THE LEFT OF THE SCREEN.
-----------------------------------

If you click on the icon twice more, the text will square up:

I'M AT THE LEFT OF THE SCREEN.
-----------------------------------

---

**TIP FOR FORMER DOS CAPTIONMAKER USERS: Deleting a Line** Using CaptionMaker for DOS, if you deleted all of the information on a line, and hit delete one more time, you could completely eliminate a line. You cannot do this in the Windows version. In order delete a line, you must use the Delete Row button in the Operations Center.

---

## **Working with the File Demo1.cap:**

Let's work on the first three cells that look like this:

1	I'M AT THE LEFT OF THE SCREEN.
2	SO CAPTIONS OF WHAT I SAY APPEAR AT THE LEFT OF THE
3	SCREEN, TOO.

And suppose we would like the cells to look like this:

1	I'M AT THE LEFT
---	-----------------

	OF THE SCREEN.
2	SO CAPTIONS OF WHAT I SAY
3	APPEAR AT THE LEFT OF THE SCREEN, TOO.

First click 6 times on the Row 2 Push Last Word icon so that 6 words from the end of Row 2 move to the beginning of Row 3. Then click on the Compress icon on each row several times until you see the cells look like the above table. If you make a mistake, click on the appropriate icon to fix the mistake. Manipulating text using the Work Area icons will quickly become second nature.

In the process of breaking the text into different cells, you may need to create new rows and delete blank rows. If you need to create a new row above a row, click the mouse on that row and click the Insert Row(s) button in the Operations Center. If you need to delete a blank row, click on the Delete Row(s) button next to it.

## The Demo2.cap File

After working with all the cells you will create a file, which should look like this:

Row	H	V	Caption/Subtitle
1	B	C	I'M AT THE LEFT OF THE SCREEN.
2	B	C	SO CAPTIONS OF WHAT I SAY
3	B	C	APPEAR AT THE LEFT OF THE SCREEN, TOO.
4	B	C	NOW I'M AT THE RIGHT OF THE SCREEN,
5	B	C	SO MY CAPTIONS APPEAR AT THE RIGHT.
6	B	C	NOW I AM GOING OFF-SCREEN.
7	B	C	TO INDICATE THAT I'M OFF-SCREEN,
8	B	C	WHATEVER I SAY IS ITALICIZED.
9	B	C	NOW MY NAME APPEARS AT THE BOTTOM OF THE SCREEN,
10	B	C	WE PUT CAPTIONS OF WHAT I SAY AT THE TOP,
11	B	C	SO THAT MY NAME IS NOT COVERED BY CAPTIONS.
12	B	C	UP UNTIL NOW, WE HAVE BEEN USING POP-ON CAPTIONS.
13	B	C	WHEN A NEW CAPTION POPS ON, THE OLD CAPTION DISAPPEARS.
14	B	C	THIS IS A PAINT-ON CAPTION.

15	B	C	ONE CAPTION BLOCK IS PAINTED ON THE SCREEN,
16	B	C	FROM LEFT TO RIGHT, ONE CHARACTER AT A TIME.
17	B	C	NOW THE ROLL-UP MODE.
18	B	C	THIS MODE IS NORMALLY
19	B	C	USED FOR TV NEWS PROGRAMS.
20	B	C	CAPTION LINES ROLL UP
21	B	C	FROM THE SCREEN BOTTOM.
22	B	C	ONE LINE AT A TIME.
23	B	C	Captions can appear in lower case,
24	B	C	and also in Spanish:
25	B	C	¿Dónde está el niño?
26	B	C	Está en la casa.
27	B	C	And in French:
28	B	C	Parlez-vous français?
29	B	C	Répétez, s'il vous plaît.
30	B	C	THE FOLLOWING SPECIAL CHARACTERS ARE ALSO AVAILABLE.
31	B	C	á é í ó ú à è ì ò ù ä ë ì ö ü â ê î ô û
32	B	C	THEY INCLUDE THE MUSIC SYMBOL AND ACCENTED CHARACTERS.
33	B	C	ç ã ñ õ å ¿ ¡ ¢ £ ¥ © ® ™ ° ß §

## Step 3: Caption Position and Attributes

During this step, you will be watching the video to see where the speakers are on the screen. We must also decide two things.

1. We must decide *where* on the screen the caption should go. Should the caption be at the top of the screen or the bottom of the screen? The left of the screen, or the right of the screen? Simultaneously, we will select the *justification* of the text on the screen, from among the choices of left, center and right.
2. Finally, some text should be underlined and other text should be italicized. (Italicized typically indicates an off-screen narrator.) You can apply these *attributes* to the text at this point in the process.

## Positioning of Captions on the Screen

In order to accurately position captions on the screen, you need to be aware of what the computer screen is telling you about the caption positions.

The Preview Window accurately portrays the way captions will appear on your final video. This is in contrast to a cell in the Work Area, which cannot represent the vertical




location of a caption on the TV screen – it is one-dimensional, and the TV screen is two-dimensional.

If you have enabled the *Horizontal Position* and *Vertical Position* in the *Visible Columns* dialog box (View menu), you can figure out the position on the screen by looking at the numbers. The top of the screen starts at 1 (vertical position), and the left of the screen starts at 1 (horizontal position). The maximum number of lines is determined when you choose subtitling or captioning. Basic left/center/right and position can be set along with justification by clicking a single button, as explained below under “Justification”. You can also set position (not justification) of a single caption by clicking and dragging the caption inside of the Preview Window with the mouse.



### Justification

You will note that the buttons on the toolbar for left, center and right, have a blue L, a green C, and a red R at the top of the button. By default, these buttons do the following:

Icons	Preview Window Result
(Left Position, Left Justification) 	SO CAPTIONS OF WHAT I SAY
(Center Position, Center Justification) 	SO CAPTIONS OF WHAT I SAY
(Right Position, Right Justification) 	SO CAPTIONS OF WHAT I SAY

The Preview Window (shown on the right) shows relative position of different captions.

#	H	V	J	Caption/Subtitle
2	L	B	L	SO CAPTIONS OF WHAT I SAY
2	C	B	C	SO CAPTIONS OF WHAT I SAY
2	R	B	R	SO CAPTIONS OF

				WHAT I SAY
--	--	--	--	------------

The Work Area shows how rows within each caption appear in relation to each other. The other positioning data, Horizontal (H), Vertical (V) and Justification (J) data are displayed in their respective columns.

You will note that each of the justification buttons do two different things to the text:

1. They set text at a horizontal position on the screen –left, center and right. (The colored letter on the button (L, C or R) indicates this information, and they always stay in the order L, C, R on the toolbar.)
2. Each of the three buttons also set the appropriate justification of the lines (in other words, whether lines are flushed left, centered or flushed right), regardless of the lines’ horizontal location.

By default, the three buttons will produce the justifications that shown on the previous table: The Left button, for instance, will left justify the text, such that if you have two lines, both of them will start flush left. However, you can change these defaults. For more information, see “Chapter 8: Menus”.

### Vertical Position:

In captioning, there are only 15 possible vertical positions, which are numbered 1 through 15. To change a vertical position you can:

1. Use the mouse to move the caption in the Preview Window. The caption will snap to the nearest valid screen position.
2. Type in a number from 1 to 15 in the Vertical Position column in the appropriate row. The computer will not let you enter an invalid number.
3. Right-click on the Vertical Position cell on the appropriate row. Select the general position or other numeric value for the vertical position.

If you would like to change multiple vertical positions, you can select multiple cells by using **Shift** + click or **Ctrl** + click, and performing the right-click operation on a Vertical Position cell in the selected group.

### Attributes: Choosing Italics, Underline and Color

Select text within a cell by using the mouse, and then click the Italic or the Underline button on the toolbar. The text in that cell will change and can be displayed as *italicized* or underlined on the screen.

You may also apply the following color and other attributes to emphasize a single word or the whole caption (See details in Chapter 8: Menus.)

- ◆ Normal: On-screen speakers

- ◆ Italics: Off-screen narrators
- ◆ Underline: Emphasis

## Working with Demo2.cap

We have provided a videotape to be used with this tutorial. This tutorial text starts at about 3.5 minutes from the beginning of the video right after this screen (as of August 2002):


**Now we will show you  
how the CaptionMaker  
software works.**

As you view the segment starting at burn-in time code 00:19:55:04, you will see our narrator, Valerie on the left of the screen speaking. Our narrator speaks slowly and distinctly on this tape. This is not the case for most captioning jobs. You should place this caption on the left margin under her so it is clear to the viewer that she is speaking.

### Lines 1-3: Left Position

Let's work on the first three cells that look like this:

#	H	V	J	Caption/Subtitle
1	L	B	L	I'M AT THE LEFT OF THE SCREEN.
2	L	B	L	SO CAPTIONS OF WHAT I SAY
3	L	B	L	APPEAR AT THE LEFT OF THE SCREEN, TOO.

Watching the video, we know that these 3 captions are to be placed on the left side of the screen. Click on the text area of Row 1 and then click on the Left position button  on the toolbar. The text will move to the left side on the Preview Window. Nothing will change on the Work Area screen. You can also click on the caption inside the Preview Window and drag the caption to any location you prefer.

You may also change the position of all three rows by first highlighting the three rows. Click on the row number 1 in the far left column; then hold the **Shift** key and click on the row number 3. This operation will highlight rows 1-3. Now click on the Left position button on the toolbar. This will position text of all three rows on the left side of the screen.

### Lines 4 and 5: Right Position

Now Valerie is on the right side of the screen, so you need to place the caption under her at the right.

Click on the row number 4, then hold the **Shift** key and click on the row number 5. This will highlight rows 4 and 5. Now click on the Right position button on the toolbar. This will position text of both rows 4 and 5 on the right side of the screen. Note the horizontal position under the column H has changed from C (center) to actual numbers.

#	H	V	J	Caption/Subtitle
4	R	B	R	NOW I'M AT THE RIGHT OF THE SCREEN,
5	R	B	R	SO MY CAPTIONS APPEAR AT THE RIGHT.

### Lines 6-8: Italics

Now Valerie is off-screen. Captions of an off-screen narrator are displayed in italics.

Click on the row number 6 in the far left column, then hold the **Shift** key and click on the button number 8. This operation will highlight three cells: 6, 7 and 8.

Now click the Italic button on the toolbar. The text in both the Work Area and the Video Preview Window should change to italic. In general, captioning style dictates that an off-screen narrator's captions appear in italic. But in cases where the narrator goes on and off the screen, you could get by without using italic attributes.

6	C	B	C	<i>NOW I AM GOING OFF-SCREEN.</i>
7	C	B	C	<i>TO INDICATE THAT I'M OFF-SCREEN</i>
8	C	B	C	<i>WHATEVER I SAY IS ITALICIZED.</i>

---

**Clearing the Screen of Captions** A blank row clears (erases) existing captions on the video screen. This is the only way CaptionMaker can clear the screen. The start time of the blank row is the time at which the screen will be cleared.

---

### Lines 9-11: Top Positioning

Captions 9 through 11 should be at the top of the screen because Valerie's name appears at the bottom of the screen. You should also use the normal font since she is visible.

Click on the row number 9 in the far left column, then hold the **Shift** key and click on the number 11. This operation will highlight three cells: 9, 10 and 11. Now right-click on any one of the three cells under the heading **V** (Vertical position) and choose *Top*.

## Lines 12-13: No Need to Do Anything

## Lines 14-16: Paint-On Mode

You may have programs where you can mix caption display modes. Lines 14 through 16 are to be displayed in the Paint-On mode.

Highlight these three cells and right-click on the **Display** column of any one of the three rows and left-click on *Paint-On*. The cells under **Display** column should now show “Paint-On” as shown below.

14	C	B	C	Paint-On	THIS IS A PAINT-ON CAPTION.
15	C	B	C	Paint-On	ONE CAPTION BLOCK IS PAINTED ON THE SCREEN,
16	C	B	C	Paint-On	FROM LEFT TO RIGHT,

---

**TIP FOR FORMER DOS CAPTIONMAKER USERS: Changing Modes** In the DOS software, you would change from Pop-On to Paint-On mode by having a special control character sitting by itself on a line (such as ^T). In the Windows version on the row where you would like the change to take place, go to *Attribute* → *Display Mode* and select the display mode for that row only, or right-click on the Display column in the Work Area and pick from the pull-down menu.

---

## Lines 17-22: Roll-Up Mode

Captions 17 through 22 have already been formatted for the Roll-Up mode. Note that for the Roll-Up mode, each cell should contain only one line.

Highlight these six rows and right-click on the **Display** column of any one of the six rows and left-click on *Roll-Up*.

Again highlight these six rows and right-click on the Horizontal column of any of the six rows and left-click on *Other* to choose 4. The captions will be indented 4 characters from the left. Remember you can put a maximum of 32 characters on a caption line. For example, if you use 4 characters left indentation, you can have only 28 characters on that line.

While the six rows are highlighted, right-click on the *Justification* column in any one of them and left-click on *Left Justify*.

The cells under the Horizontal, Justification and Display columns should reflect all the changes you have made as shown below.

17	5	B	L	Roll-Up	NOW THE ROLL-UP MODE.
18	5	B	L	Roll-Up	THIS MODE IS NORMALLY
19	5	B	L	Roll-Up	USED FOR TV NEWS PROGRAMS.
20	5	B	L	Roll-Up	CAPTION LINES ROLL UP
21	5	B	L	Roll-Up	FROM THE SCREEN BOTTOM
22	5	B	L	Roll-Up	ONE LINE AT A TIME.

### Lines 23 and 24: No Need to Do Anything

### Lines 25 to the End: Multiple Captions on the Same Screen

We would like to place the captions of lines 25 and 26 on the same screen--one on the left and the other on the right, and at two vertical positions. We will do the same for the captions in cells 28/29 and also for 30/31 and 32/33.

We will show you how you can place two captions on the same screen. You need to place the desired two captions at different locations on the screen. At the time of sending the captions, we will show you how to send both captions at the same time.

Click on the row number 25 and while holding the **Ctrl** key click on the number 28 which will highlight both rows 25 and 28. Now click on the Left Position/Left Justify button on the tool bar.

*You may also accomplish the same result by doing the following: Right-click on any of the two cells under the heading H and choose Left position. Now right-click on any of the two cells under the Heading J and choose Left Justify.*

25	L	13	C	Pop-On	¿Dónde está el niño?
26	R	B	C	Pop-On	Está en la casa.

Finally, do the same operation on row numbers 30 and 32. This time simply change the vertical position by right-clicking on any one of the 2 cells under the Vertical Position "V" and choosing *Other position 1*.

When you are all done with the script, compare your work with *Demo3.cap*. It shows you the formatted text with placement and attribute information. When you are satisfied with your work, you are ready to actually caption your tape.


## The Demo3.cap File

After working with all the cells you will create a file, which should look like this:

Row	H	V	J	Display	Caption/Subtitle
1	L	B	L	Pop-On	I'M AT THE LEFT OFF THE SCREEN
2	L	B	L	Pop-On	SO CAPTIONS OF WHAT I SAY

3	L	B	L	Pop-On	APPEAR AT THE LEFT OF THE SCREEN, TOO.
4	R	B	R	Pop-On	NOW I'M AT THE RIGHT OF THE SCREEN,
5	R	B	R	Pop-On	SO MY CAPTIONS APPEAR AT THE RIGHT.
6	C	B	C	Pop-On	NOW I AM GOING OFF-SCREEN
7	C	B	C	Pop-On	TO INDICATE THAT I'M OFF-SCREEN,
8	C	B	C	Pop-On	WHATEVER I SAY IS ITALICIZED.
9	C	B	C	Pop-On	NOW MY NAME APPEARS AT THE BOTTOM OF THE SCREEN,
10	C	B	C	Pop-On	WE PUT CAPTIONS OF WHAT I SAY AT THE TOP,
11	C	B	C	Pop-On	SO THAT MY NAME IS NOT COVERED BY CAPTIONS.
12	C	B	C	Pop-On	UP UNTIL NOW, WE HAVE BEEN USING POP-ON CAPTIONS.
13	C	B	C	Pop-On	WHEN A NEW CAPTION POPS ON, THE OLD CAPTION DISAPPEARS.
14	C	B	C	Paint-On	THIS IS A PAINT-ON CAPTION.
15	C	B	C	Paint-On	ONE CAPTION BLOCK IS PAINTED ON THE SCREEN,
16	C	B	C	Paint-On	FROM LEFT TO RIGHT, ONE CHARACTER AT A TIME.
17	5	B	L	Roll-Up	NOW THE ROLL-UP MODE.
18	5	B	L	Roll-Up	THIS MODE IS NORMALLY
19	5	B	L	Roll-Up	USED FOR TV NEWS PROGRAMS.
20	5	B	L	Roll-Up	CAPTION LINES ROLL UP
21	5	B	L	Roll-Up	FROM THE SCREEN BOTTOM
22	5	B	L	Roll-Up	ONE LINE AT A TIME.
23	C	B	L	Pop-On	Captions can appear in lower case,
24	C	B	C	Pop-On	and also in Spanish:
25	L	13	C	Pop-On	¿Dónde está el niño?
26	R	B	C	Pop-On	Está en la casa.
27	C	B	C	Pop-On	And in French:
28	L	13	C	Pop-On	Parlez-vous français?
29	R	B	C	Pop-On	Répétez, s'il vous plaît.
30	C	T	C	Pop-On	THE FOLLOWING SPECIAL CHARACTERS ARE ALSO AVAILABLE.
31	C	B	C	Pop-On	á é í ó ú à è ì ò ù ä é ì ö ü â ê î ô û
32	C	T	C	Pop-On	THEY INCLUDE THE MUSIC SYMBOL AND ACCENTED CHARACTERS.
33	C	B	C	Pop-On	ç ã ñ õ å ¿ ¡ ¢ £ ¥ © ® ™ ° ß §

## Clearing Captions

If you check the video, you will see a little pause (about a second) in the dialog between row 8 and row 9. We will create a blank row to clear the caption on row 8 for a second or so. Click the cursor on row 9 and then click on the button  to create a blank row between row 8 and row 9.

8	C	B	C	Pop-On	<i>WHATEVER I SAY IS ITALICIZED.</i>
9	C	B	C	Pop-On	NOW MY NAME APPEARS AT THE BOTTOM OF THE SCREEN,

This will create a blank row between rows 8 and 9 as below

8	C	B	C	Pop-On	<i>WHATEVER I SAY IS ITALICIZED.</i>
9					
10	C	B	C	Pop-On	NOW MY NAME APPEARS AT THE BOTTOM OF THE SCREEN,

## Step 4: Manual Captioning With and Without Time Stamps

We have provided a videotape to be used with this tutorial. This tutorial text starts at about 3.5 minutes from the beginning of the video right after this screen:


**Now we will show you  
how CaptionMaker  
software works.**

As you view the segment starting at burn-in time code 00:19:55:04, you will see Valerie on the left of the screen speaking. We will caption the segment using the following three different methods.

### Step 4a: Manual Captioning (CPC-600 or CPC-700)

Using this method, you can send captions to the recording VCR or broadcast out directly.



1. Make sure the  button on the Time code section (shown below) of the Work Area is **not** in the down position.

2. Put the cursor on the row where you would like to begin captioning.
3. Run the playback and the record VCRs.
4. When you hear the first word of each cell of text spoken, press the **[+]** key. The caption should appear on the video screen and in the Preview Window

No time stamps will appear in the **Start** column. Keep on pressing the **[+]** key for each and every row in the same fashion. Captions will go out and will be recorded in real time. You cannot stop in the middle of the video.

If you make a mistake, you do not have the advantage of adjusting time stamps to correct it. The tapes must both be rewound and the process must begin again unless you are using a video editing system, which can stop both tapes at the same time and restart the tapes and resume back to sending captions from that point on.

---

**Drop Frame NTSC/PAL** If the time code formats on your work tape and master tape are different, you may convert them between NTSC and PAL and also between drop frame and non-drop frame. See Convert Time Code in “Chapter 8: Menus” for details. To convert time codes from one to another (PAL and NTSC or drop to non-drop) highlight the time codes you would like to convert and use this option to convert them from one to another.

---

## **Step 4b: Captioning with Time Code Reader (CPC-700)**

Using this method, you can assign a time code (using the time code from the video) to each caption, and then use Step 5a to do the final captioning.

This is the most professional way to caption. Press the **[+]** key when the first word of each cell of text is spoken in order to capture the time code associated with this word (from the Source VCR). It is impossible for a caption to appear at the wrong time, provided that you pressed the **[+]** key at the proper time. If you did not press the **[+]** key at the proper time, it is easy to use time code to correct mistakes. For example, if you are captioning and make a timing mistake at 00:02:30:45, you would rewind the tape to a point before that time (typically 5-6 seconds) and then play the tape. When the tape reaches the point where you made the timing mistake, you would press **[+]** on the row with the caption, which had the incorrect time. Assuming you pressed **[+]** at the right time, your timing mistake would be corrected and you could continue on with time stamping the rest of the tape.

Don't worry about trying to compensate for the amount of time it takes you to react (the time between hearing a word and pressing the **[+]** key). Relax and work at an unhurried,


even pace. This time lag can be easily compensated for at a later time, as long as your reaction time lag is consistent (e.g., always .5 second late).

There is a file on the disk, *Demo.cap* that has time codes already associated with the text. You can compare your file with this one to check whether you are on the right track.

## Step-by-Step Procedure to Capture Time Codes

From *Time code* → *Properties* → *Reader* menu select your time code reader. If you have never installed the software to communicate with the time code reader, the appropriate installation routine will walk you through the process at this point. For details see Chapter 2.



1. Make sure the  button on the Time Code section of the Work Area is in the down position so that you can to read time code.
2. Play the Source VCR.
3. When you hear the first word of each cell spoken, press the **[+]** key on the far right side of the keyboard in order to capture the time code to the Start column. The time code at which you press **[+]** appears in the Time Code Start column
4. As you press **[+]**, the cursor will move down to the next caption. Press **[+]** in order to send a caption and get the time code for the next caption. Keep on pressing the **[+]** key for the rest of the file in the same fashion.

---

**Fine tuning of time codes** If you need to change a time code by small amount, click the cursor on the time code cell and press **Ctrl+** or **Ctrl-**. This operation with change the time code value by 1 frame.

---

## Correcting Time Code Mistakes

If you make a mistake with time code, or if you spot a formatting error or typo, you can stop pressing the **[+]** key and fix the formatting, positioning or typographical error. If you need to fix the time code, follow the steps below.

1. Rewind the tape to a point just prior to the mistake.
2. Move the cursor to the place in the text where the error occurred.
3. Follow Steps 2 to 4 above and continue recording the time codes for the rest of the file.

---

**Calculate send time for Pop-On** This feature is very important when you caption a short commercial. In a commercial, if you add a Pop-On caption at the very beginning of the video, you may lose the caption. Since Pop-On captions need build-up time to be displayed on a particular frame of the video, you have to make sure that the onset of the caption is within the first frame of the video. Right click on the first time code under the Start Time column and make sure the send time of the first caption is well inside the beginning of the video.

---

## Step 4c: Captioning with PC System Timer (CPC-600 or CPC-700)

Using this method, you can assign a time stamp to each caption using the computer system timer and then use Step 5b to do the final captioning. The PC System Timer emulates time code – but since it is only an emulation, it is not as effective or efficient as using real time code.

The PC System Timer method uses the clock inside the computer as a timing mechanism. The work of synchronizing the computer's clock to the script, however, must be done manually, by choosing a reference point on the video before the first caption. The reference point could be the beginning of bars and tones or the beginning of theme music or something that you can easily identify as a specific point on the video.

Please read Step 4b for time code for a better understanding of PC System Timer even if you are not using time code. Working with time code is much *simpler* than working with the PC timer. Time code has a one-to-one correspondence with each frame of the video. When using time code method, you do not need a reference point because the time code moves forward and backward along with the tape. You can stop time coding any time and resume time coding from that point on at any time later. But with PC timer, you need to reset the PC timer any time you stop time stamping. When using the PC Timer, you are working in real time, which does not move backward with the tape. It moves forward only. It never stops. But you can reset the PC System Timer to match the time stamp in your caption script at any time using a PC timer reset technique. The reference point should appear a row before your first caption.

We are going to use our demo video and use the screen with the following title as our reference point.

**Now we will show you  
how CaptionMaker  
software works.**

This title appears at 00:19:55:04 time code and about 10 seconds before Valerie appears on the left of the screen and starts saying:

**I AM AT THE LEFT OF THE SCREEN**


Create a blank row at the beginning of the file and use the time code associated with this line as the reference point.

So the first few lines of our demo3.cap file now look like this.

1	C	B	C	Pop-On	Caption/Subtitle
2	L	B	L	Pop-On	I'M AT THE LEFT OFF THE SCREEN
3	L	B	L	Pop-On	SO CAPTIONS OF WHAT I SAY
4	L	B	L	Pop-On	APPEAR AT THE LEFT OF THE SCREEN, TOO.
5	R	B	R	Pop-On	NOW I'M AT THE RIGHT OF THE SCREEN,
6	R	B	R	Pop-On	SO MY CAPTIONS APPEAR AT THE RIGHT.

## Step-by-Step Procedure to Capture PC System Time

From *Time code* → *Properties* → *Reader* menu select *PC System Timer*.

1. Make sure the  button on the Time Code section of the Work Area is in the down position.
2. Choose a reference point on the videotape that begins at least 5 to 10 seconds before your first caption. Referring to the example in the box above, there is more than a 5-second gap between the reference point and the first caption. That means during auto-captioning later, you will have enough time to set the reference point and then start the AutoSync. If you are a quick typist, five seconds is sufficient.
3. Run the Source VCR.
4. When you reach the predetermined reference point on the tape (with the cursor on the reference point row in your script), press the **[+]** key when you see or hear the reference point.
5. Continue to the first row of captions. When you hear the first word of each row of text spoken, press the **[+]** key. Timing information will appear under the Start column corresponding to the row you just sent out as a caption. As you press **[+]**, the cursor moves down to the next caption. Press **[+]** again to send the next caption and get the timing information for it.

## Correcting Time Code Mistakes

If you make a mistake, or if you would like to stop time-stamping and take a break, you *do not* have to go back to the initial reference point in order to continue captioning.

1. Rewind the playback tape to a location a few seconds before the point you would like to resume time-stamping.
2. Bring the cursor to the last row you time stamped correctly.
3. Right-click on the time code cell of that line. A small window will open up. Click on the *Reset PC Timer to the time code*. The PC Timer will be ready to reset the clock to the same time as the time stamp on that row.
4. Run the Playback VCR.
5. As soon as you hear the first word of that row spoken, press the [+] key to time stamp the caption on that row. This action will actually reset the clock to that time. Now keep on pressing the [+] key for rest of the file.

---

**Fine-Tuning AutoSync** If the captions appear too early, press [Alt] + [-] to slow them by one-third of a second. Press it again to slow the display of captions by another third, and so on. If captions appear too late, speed them up with the [Alt] + [+] key; the same rates apply. The only sure way to synchronize the time code and program is to use time codes on the tape along with the CPC-700.

---

## Step 5: AutoSync Captioning with Time Stamp (CPC-600/700)


In this step the computer will read the time code or the PC System Timer and send the captions automatically, according to the time stamp associated with every caption row. To use this step you previously had to perform either Steps 4b or 4c.

---

**Tip** Although Windows is a multitasking operating system, performing other tasks (such as checking email) during the AutoSync process is not recommended. This is because individual captions might be sent late to the recording VCR if too much computing power is being used on tasks other than captioning.

---

## Step 5a: AutoSync Captioning with Time Code (CPC-700 only)

1. Make sure the  button on the Time Code section of the Work Area is in the down position.
2. Rewind the playback tape to the beginning.
3. Run the playback tape and the recording tapes.
4. Click on the *Caption* → *AutoSync* menu option or on the AutoSync button in the toolbar to start automatic captioning.


The word AutoSync in the status bar will start flashing. Editing features of the program will not be accessible until the AutoSync task is finished. Click again on the AutoSync button to stop the job.

---

**Adjusting Time Cue to Correct Human Reaction Time** When you press the [+] key to record the time stamp, there is always a possibility of an error of few frames. The source of the error is the reaction time from the time you hear the first word spoken until the time you press the [+] key. Assuming it is always a consistent error, you can change the time stamp of all the rows by a few frames using the *Ripple time code* option. Left-click on the Start column header to highlight all the time cues, and then right-click on the time code cell of the very first row and choose *Ripple time code*. Now you can enter the new time cue (a few frames more or less than the time cue of the first row) to replace the time cue of the first row and ripple the time cues for the whole file.

---

## Step 5b: AutoSync Captioning with PC System Timer (CPC-600 and CPC-700)

1. Make sure the  button on the Time code section of the Work Area is in the down position.
2. Rewind the playback tape to the beginning.
3. Right-click on the time code cell of the row with the reference point. A small window will open up. Click on *Set System Timer to Current Start Time*. The PC Timer will reset to the same time as the time stamp on that row
4. Run both playback and record VCRs.
5. As soon as you see the Reference point on the video, click on the AutoSync button or *Caption*>*AutoSync* menu in the toolbar to start automatic captioning.

The word “AutoSync” will display in the middle of the status bar. You cannot access any of the editing features of the program until AutoSync is finished. Click again on the AutoSync button to stop. The system will then automatically insert captions into your tape.

Note that VCR motors do not always run at exactly the same speed. A consequence of this is that captions *may* become slightly out of sync with the dialog on a long video when using AutoSync.

---

**TIP FOR FORMER DOS CAPTIONMAKER USERS: Final AutoSync** Former DOS users will note that the cursor no longer needs to be on a specific place in the text in order to start AutoSync. In fact, if you rewind or fast-forward the VCR while AutoSync is on, the CaptionMaker will read the time code and pick up AutoSync from any place in the file.

---

## Two Captions Appearing Simultaneously

You may wish to have two or more captions appear on the screen at once, but in different positions (the top and bottom of the screen, for example). The need for this may arise in a program where two people say different things at the same time. If you have two captions with the same Start Times, both will appear on the screen simultaneously. The easiest way to do this is to skip over one of the rows while assigning time code, and later cut and paste the Start Time from the row where you did assign time code to the row that you did not assign a time code to. Of course, you should assign different positions to these captions so they will both be visible.

---

**Tip** You may use the function *Same Start Time* to assign same time code to multiple rows. Highlight multiple rows with time code, right-click on any highlighted row and then click on *Same Start Time*.

---

## Captioning Two Languages on the Same Video

CaptionMaker can be used to caption two languages on the same video in a limited way.

### With ITV-Injector/DV-2000/DV-3000

CPC distribution CD contains a utility software CaptionMerge. First create two CaptionMaker .cap files for two languages. Then export two files to Ultech DV2000/DV3000/ITVInjector (\*.ult) file format.

Now run CaptionMerge software and do the following:

- ◆ Choose the first file for CC1 and
- ◆ Choose the second file for CC2 to CC3
- ◆ Choose CC2 or CC3 for the second language
- ◆ Choose the final Destination (merge) ULT file
- ◆ Finally, click on the Merge File button

Use this final .utl with the DV2000/ItvInjector.

*Make sure you have DV2000/ItvInjector software version 3.5 or higher.*

---

**Note:** Channel 1 and Channel 2 occupy the same space inside the Field 1. The same is true for Channel 3 and Channel 4. When you caption two channels in the same field, there is always fight with the space between CC1 and CC2. CC1 has the first priority. Whatever space is left, is used by CC2. It is good idea to paraphrase the text and make it short in both languages when you do CC1 and CC2 caption simultaneously.

---

## With Other Encoders

### Using one computer

You can caption in CC1 or CC2 (Field 1) in one pass and then run the captioned video through the encoder and caption CC3 or CC4 (Field 2) in the second pass. Make sure the option *Allow existing field 1 data pass through untouched* under the *Caption > Caption Properties > Control* menu is checked.

### Using two computers

You can caption a video in CC1 or CC2 (Field 1) and CC3 or CC4 (Field 2) at the same time.

The encoder must be connected to two computers via

1. a serial cable or a modem,
2. 2 serial cables, or
3. 2 modems

Invoke the *Caption → Device → Properties* option.

You have to make sure that you set the following items properly.

1. Channel (C1, C2, C3 or C4)
2. Allow existing field 1 (or 2) data to pass through untouched.
3. *Send caption data if available* box is checked.
4. *Caption 2 or more channels – send init code for each line* box is checked.

In the previous dialog box, CPC is set to caption in Channel 3 (field 2) under one of the following two situations:

1. caption data is sent to the encoder in channel 1 simultaneously via a modem or a serial cable or,
2. the video is already captioned in channel 1

A few important points to note:

You can have either of the following situations:

1. Both computers running CaptionMaker software or
2. One computer running CaptionMaker and the other computer running another captioning software.

You may mix and match any of the two methods of captioning:

1. Live or Realtime or,
2. Live Display or,
3. Post Caption.

In *Live Realtime* method, you can use either a steno machine or a Speech Recognition software to send the caption live.

In *Live Display* method, you have to have the text prepared already. Then you can send the captions by pressing the (+) key in real time by listening to the dialog.

If you have access to the time code of the video, you may use the *Post Caption* method. You must have a already prepared time stamped file. Then you can invoke the AutoSync function and captions will go automatically synchronized with the video.

---

**Note:** You cannot caption Channel 1 and Channel 2 simultaneously using this technique since both Channel 1 and Channel 2 occupy the same space inside the Field 1. The same is true for Channel 3 and Channel 4.

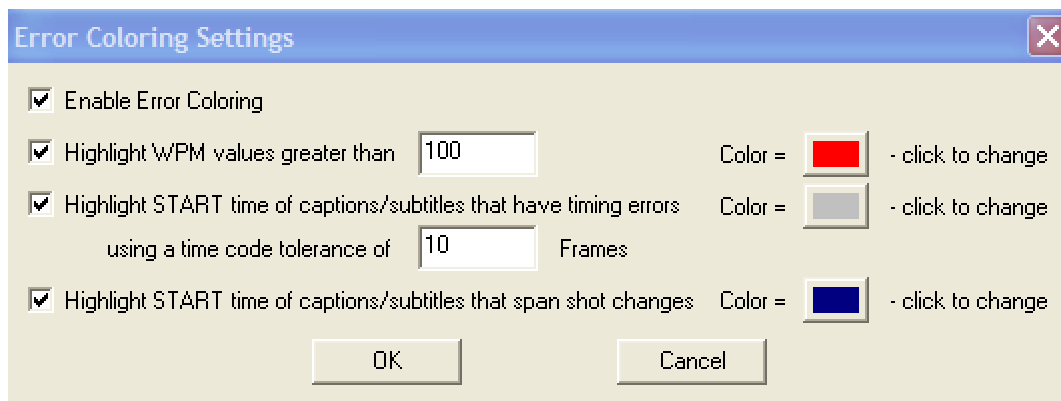
---

## AutoSync Error Checking


If this option *Caption > AutoSync Error Checking* is checked, CaptionMaker will go through the whole file and make sure there is no missing time codes or the time codes not in ascending order before starting AutoSync. It is a good idea to have this option checked. That way for a long video you do not have to wait for long time until the error is caught and AutoSync stops at that point.

## Error Checking

If this option *Caption > AutoSync Error Checking* is checked, CaptionMaker will go through the whole file and make sure there is no missing time codes or the time codes not in ascending order before starting AutoSync. It is a good idea to have this option checked. That way for a long video you do not have to wait for long time until the error is caught and AutoSync stops at that point.



## Final Checking

This is a very important function to check all timing and formatting errors before you do the final encoding. The option is available under *Caption > Final Checking* menu and also can be accessed by clicking on the  icon at the top left corner of the screen. You can set your favorite parameters on the following window and check for errors after preparing a caption file and before using that file for encoding or any other purposes.

When you invoke this option you will see a dialog box below where you may choose options related to time code tolerance, reading speed of captions, maximum characters per line, unacceptable characters for captioning, etc.

## Timing Errors Settings

When you caption a video, it is very important that you conform to maximum WPM for caption, depending on your audience. Similarly, it is customary not to have a Pop-on caption covering a shot change. And finally, if you do not give enough time for a Pop-on caption to build-up, the caption would not appear at the desired time you assigned. For Pop-on captions, it takes about a second for every 50 characters of text. If the difference of time codes of the previous caption and this caption is less than 1 second for a caption of 50 characters, the caption will appear little later than the assigned time code. To check all these errors on the fly, you can invoke the option under *Caption > Timing Error*

*Settings menu.* You can check any one of the following items and assign different colors for each error in the following dialog box.



## Find Shot Changes

You can find the shot changes in any video (wmv, avi, mov, mpeg, m2v etc.). It is a good idea not to have a shot change inside the duration of any caption in Pop-on mode. Try to place the caption after a shot change or finish displaying a caption before a shot change occur. It is more for esthetic purpose.

After you open caption file with the appropriate video file, to find the shot changes, click on *Tool > Find Shot Changes*.

It will take a while depending on the length of the video to find the locations of all the shot changes. When you save the caption file, the shot change information will be saved in the .cap file. So when you open the .cap file again later, you do not need to find shot changes again.

After finding the shot changes, when you play the video, the next shot change indicator appears right below the Time code display in HH:MM:SS:FF format. Next shot change display color becomes RED when it is less than 10 seconds from the next shot change.

You can also click the two buttons ( ) next to the time code display area to move to the previous and next shot change locations.

## Digital Video: CPC-700NL/700NLE

The CPC-700NL/700NLE comes with all the features of the CPC-700, plus additional exciting features that make it easy to caption a video from your hard drive. This section will guide you through the process of captioning a video from your hard drive.

---

**VTR Control with VPedal inside CaptionMaker** You can control (play, pause, fast forward, rewind etc.) a digital video file using vPedal foot pedal controller ([www.vPedal.com](http://www.vPedal.com)). One interesting feature of the vPedal foot controller is the "release back" function which is available under VTR Control >> vPedal menu option. Release back time is user selectable.



Once the Play button on the VTR Control) is first clicked, you will be able to use the Pause function on the pedal to toggle between Play and Pause but the first time you play the video, you must start it manually by clicking the mouse on the Play button.

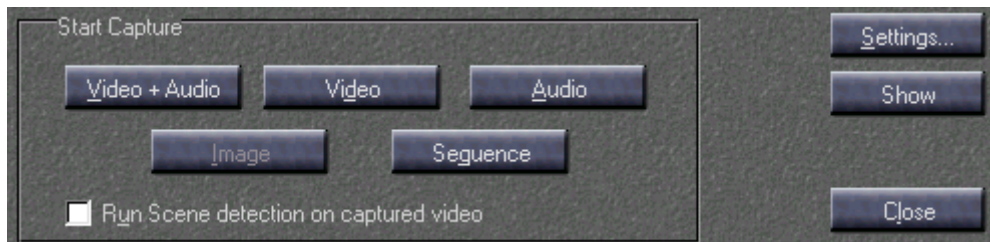
---

## Capturing Video on a Hard Drive

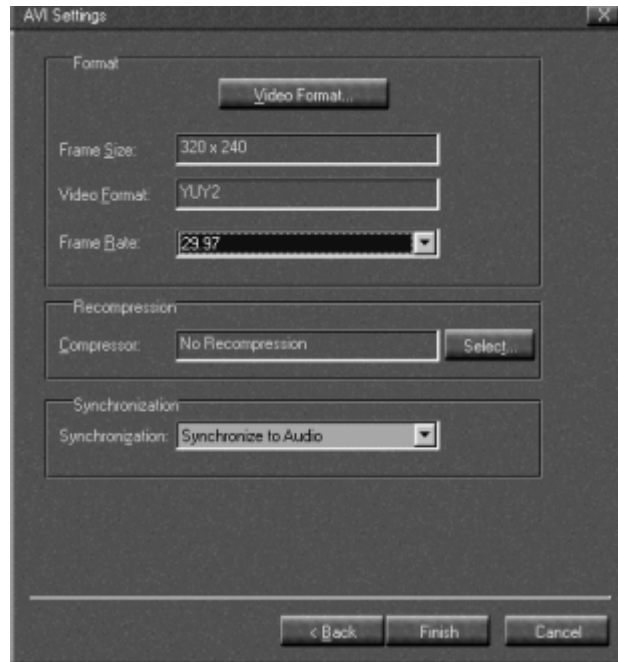
If you are planning only to caption a videotape, bringing your video from the tape to the hard drive and then back may not be necessary. However, if you would like to do a webcast or make a DVD, or if you just don't want to put all that back-and-forth strain on an expensive VCR, then it is a good idea to bring your video from tape to the hard drive.

Unless you have your own video capture device, you may use a device like Dazzle DVC-80 to capture video from a videotape. DVC-80 comes with the MGI VideoWave software. The following instructions apply to the MGI VideoWave software, which also works with the ATI All-In-Wonder and the Osprey100.

1. Connect all the cables from the VCR to the Dazzle DVC 80. For audio, connect the Left Audio channel.
2. Start MGI VideoWave 4.0 by double-clicking on the shortcut icon on your desktop or from *Start* → *Programs* → *MGI VideoWave 4* → *MGI VideoWave 4*.
3. Press *File* → *New* or click on the *New Production* icon  on the top left corner.
4. Press the *Capture* icon  on the left to see the video playing from the VCR.
5. Press the *Settings...* option next to the Start Capture box



6. If you are using a video capture device other than the Dazzle, change the Capture Device fields to your brand of capture device. Choose Video Composite as Video Input and NTSC or PAL video of your choice.
7. Go to the Video Template tab and click on the Create button.
8. Enter avi with Mpeg2 or Mpeg4 compression to reduce the size of the video and press *Next*.
9. Next choose 29.97 fps. It is important to use 29.97 frames per second because the CaptionMaker's *Video Playback* time code uses drop-frame time code.



10. Now choose CD quality for the audio and press OK.

11. Click on the *Video + Audio* button on the bottom of the screen to start capturing the video. When you click on Stop, a dialog box will open up, asking you the name of the file you just captured. Enter a name and specify a folder to finish the capture process.


You may want to convert the .avi file into an .rm file, a .wmv file, or a .mov file. This is only necessary to decrease the file size if you are planning to webcast the file, and the .wmv or .rm file will not play in the CaptionMaker software. Detailed instructions are given in the webcasting section of this manual as to how to convert the files to the desired file type.

The following test was run with External Dazzle DVC80 using the accompanying software MGI VideoWave 4 on Pentium II 450MHz with 512MB SDRAM:

<b>Video Length</b>	<b>Compressed Avi</b>	<b>.avi</b>	<b>.rm</b>
1 minute	9MB	272MB	0.6MB

As you can see, the one-minute video's compressed .avi file is 1/30th the size of the uncompressed avi file. A compressed .avi is ideal for captioning. Its size is small enough to be used on a personal PC, but it still maintains a high quality and plays at 29.97 frames per second. CPC-700NL/700NLE can play wmv, avi, mpeg, mpeg2 and mov files.

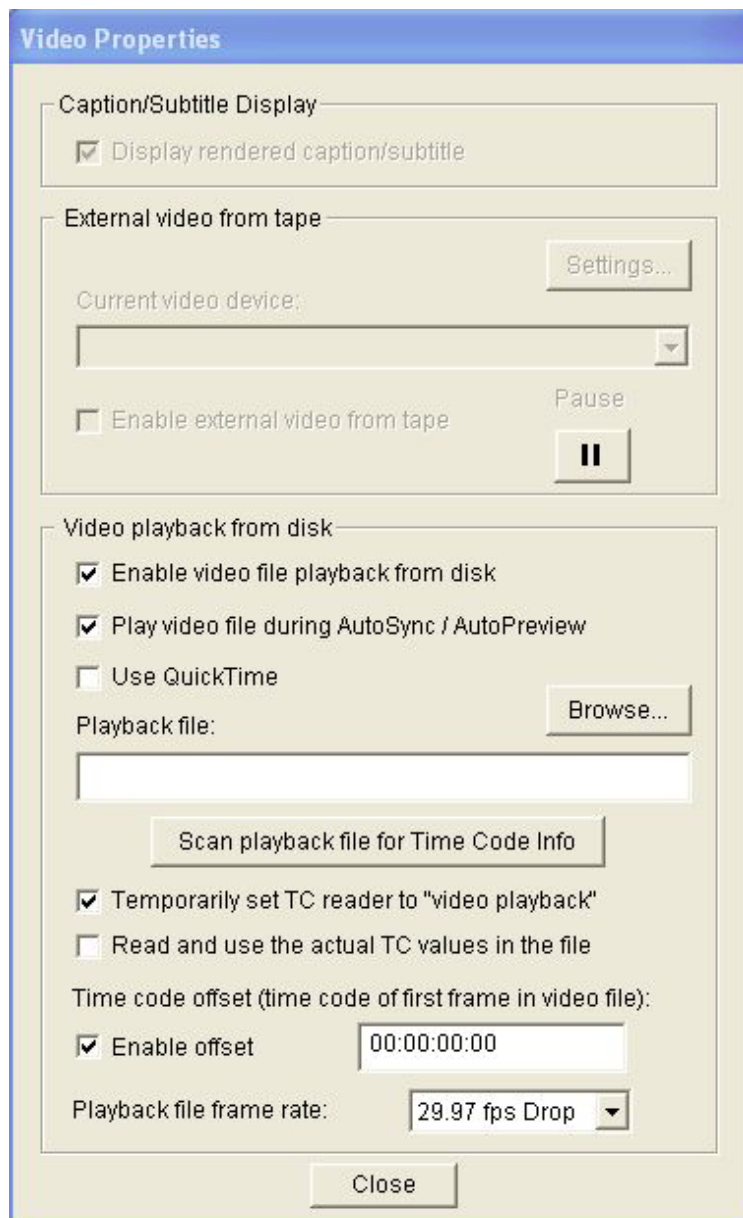
## Open Video File in CPC-700NL/700NLE

Click on the  Video Camcorder icon located in the Preview Window area. A dialog box like the one below will open.

---

**RealOne video** CaptionMaker relies on Windows engine to play all video files. At the time writing this manual, WMP does not play rm files. As a result, CaptionMaker can't play RM, or *Real Media* files. To open a .RM file, you may install a third party software which allows WMP play a .RM videos and then you can open a RM file in CPC. You may download the software from [www.free-codecs.com/download/Real\\_Alternative.htm](http://www.free-codecs.com/download/Real_Alternative.htm).

---



Make sure that you unselect the *Enable external video from tape* button, but leave *Display rendered caption/subtitle* selected. Select *Enable video file playback from disk* and make sure *Play video file during AutoSync/AutoPreview* is selected (unless you are planning to use a video feed from a USB device for AutoSync only). Click the Browse button. Find the video file on your hard drive, and then click Close.

---

**QuickTime Movie:** CaptionMaker made a special effort to play QuickTime mov even though WMP can't play MOV files. You have to check the box for QuickTime files when you open the video.

---

### **Read and use actual TC values in the file**

Checking this box will read the actual TC from a digital video (Mpeg and DV), if and only if the digital video was recorded with TC in special TC area of the video file. Normally digital videos do not have internal timecode.

Unless CaptionMaker reads internal time code of a digital (Mpeg & DV) video, it assigns 00:00:00:00 to the first frame of the video and then counts the frames and assigns timecodes to any frame according to drop frame (29.97 fps) or Non-drop frames (30 fps).

### **Temporarily set TC reader to “Video Playback”**

If you normally use a timecode reader to read timecode from a video tape, you can check this box to read timecode for a video file. This way, later on when you choose to play video tape, you will fall back to your choice of timecode reader.


### **Video file frame rate**

Most digital videos are created at 29.97 frames/second (drop-frame). Unless you know that the video was created at a different frame rate, use 29.97 fps for the Video file frame rate.

### **Enable Offset**

Checking this box and assigning a desired timecode value, you can match the burn in timecodes of a digital video when you playback the video. Adding an offset will add the offset value to the timecode when it is displayed.

## **Digital Video Time Code**

Go to *Time Code* → *Time Code Reader Properties* menu or simply click on the  icon in the Time Code bar to open up the Time Code Reader Properties. Once there, select *Video Playback* from the drop-down menu. Now you can assign time code to the captions. See *Step 4b: Captioning with Time Code Reader (CPC-700)* earlier in this chapter to learn how to break the script into individual captions and time stamp the script to synchronize the captions with the audio.

CaptionMaker counts the frames of digital video and convert them to SMTE time codes. If you use a Mpeg2 video, CaptionMaker can read embedded time codes in Mpeg2 video too. To read time codes directly from the video you need to click on *Scan Playback File for Time Code Info*.

## Video File Automatic Shuttling

You can automatically shuttle the video file to the time code of the selected row. When enabled and you click on a row, the video file quickly moves to the start time code of the row you clicked on.

This feature is only enabled under the following conditions:

- ◆ When the “mark time codes on send lines” feature is enabled (via the “time code” menu or the icon in the “time code” display section of the program).
- ◆ When a video file is loaded and enabled during editing, and it is stopped (not playing and not paused).

---

**Note:** If you do not like this feature and like to turn it off, you may uncheck the item Enable Video Auto Shutting from the Time Code menu.

---

## Drop Frame vs. Non-Drop Frame Time Code

There is no time code track on the A/V file. CPC keeps track of the video frames starting with 00:00:00:00 time code for the first frame of the video and keeps a frames counter that counts 29.97 frames per second (on average). The exact counting mechanism is bit more complex. This is exactly the same way drop frame time code is used for videotape format. That’s why the time code from the Video Playback acts in the same way as the drop-frame time code does for a videotape format. If you have a video file on the hard drive that is exactly one hour long according to the clock on your wall, the very first time code of the first frame of the video is 00:00:00:00 and the time code of the very last frame of the video is exactly 01:00:00:00. On the other hand, the time code of the very last frame will be 00:59:56:12 for Non-Drop frames. There is difference of 00:0:03:18 frames.

## Video File Time Code Offset

This option allows you to specify the time code value for the first frame of a video file selected for play back. If you have a digital video with burn-in time code, you can adjust the time code offset matched with the time code of the first caption. This way, the time code displayed in the time code display window and time codes for the captions will match with the burn-in time code.

## Going Back to Videotape Format for Reference

There are number of reasons you may *need* to go back to the videotape format from which the video on the hard drive has been created. They include the following:

- ◆ Captioning a videotape using a closed caption encoder or subtitling using a character generator
- ◆ Captioning/Subtitling a DVD

There are two issues when you need to go back to videotape format after the time-stamped file has been created using video from the hard drive.

1. Matching the time code from the video on hard drive to time code on the videotape
2. Drop frame vs. non-drop frame

If you are going to do the following, you *do not need* to go back to the videotape format

- ◆ Captioning/Subtitling a video for webcast
- ◆ Captioning video residing on a NLE system

## Matching A/V Time Code to Videotape Time Code

When you work with the video on the Hard Drive, the start time code is always 00:00:00:00. On a videotape, it is very unlikely that the starting time code will be 00:00:00:00. So it is necessary to “match” the time code from the videotape with the time code from the video on the hard drive.

There are two preferred methods for doing this.

1. The easiest way is to originally put visible burnt-on time code (at the top left corner) onto the videotape before converting the A/V to an A/V file. Then matching the time code of the A/V file and the actual time code from the videotape format is very simple. You can simply move through the video on the hard drive slowly, frame-by-frame until you find the burnt-on time-code for the very first caption.
2. The other method is slightly more complicated. It involves finding the actual time code of the first caption directly from the videotape. Some tape decks have digital time code readouts. You may get the time code for the first audio, which is captioned from the readout display by playing the tape and pausing the tape at the onset of the first audio. Or you may use the CaptionMaker software to get the time code from the videotape as long as you have a time code reader in the computer running CaptionMaker software.

After noting the time code of the first caption from the videotape, you are ready to match the time codes on the file you created from the video on the hard drive.

1. Highlight the time code column by clicking on the **Start** header of the time code column
2. Right-click on the first caption and select *Ripple Time Code*.
3. Enter the burnt on time-code shown in the preview window.

This will ripple all the time codes starting with the true time code of the videotape.

## **Drop Frame vs. Non-Drop Frame**

If you have to go back to the videotape format with non-drop frame time code, you need to convert all the time codes to non-drop frame time codes. Go to *Time Code* → *Convert Time Code* menu. Choose the option to convert from drop frame to non-drop frame.

## **The Final Step**

Once you have prepared the script with time code for the video on the hard drive, you have a number of different options, depending on the type of media you would like for your final product. Here are a few examples, which are described in details for different media.

### **Captioning a Videotape with Drop-Frame Time Code**

You would like to caption a videotape that uses drop-frame time code. In this case the only thing you need to do is to “match” the time code from the videotape with the time code from the video on the hard drive by following the procedure above. Now you are ready to use the file you have prepared to encode the captions onto the videotape. Follow the steps in the section below, “Encoding Videotape Using a Time Code Reader and an Encoder”.



### **Captioning a Videotape with Non Drop-Frame Time Code**

If you would like to caption a videotape that uses non-drop frame time code, you need to first “match” the time code from the videotape with the time code from the video on the hard drive by following the procedure above.

Then you have to convert the drop frame time code to non-drop frame time code. Go to *Time Code* → *Convert Time Code* menu. After converting from drop frame to non-drop frame, you are ready to use the file you have prepared to encode the captions onto the videotape following the steps in the next section.

### **Encoding Videotape Using a Time Code Reader and an Encoder**

To switch back to see the video from the tape format and to choose the appropriate time code card and encoder, follow these steps:

1. Click on the  Video Camcorder icon located in the Preview Window.
2. Unselect *Enable Video file playback from disk* and *Play video file during AutoSync*.
3. Select *Enable external video from tape*.
4. Click on *Caption* → *Device* and choose the appropriate closed caption encoder.
5. Finally, click on the  icon in the Time Code bar to open up the *Time Code Reader Properties* dialog box and select your original time code reader card from the drop-down menu.

You are ready to AutoSync and caption the videotape using a time code card and a closed caption encoder as done by the CPC-700 CaptionMaker software.

## Caption/Subtitle a DVD

For a DVD, the process is the same as the process described above. You must “match” the time code (from the videotape you will use to make a DVD) to the time code you prepared using the video from the hard drive. You should also make sure the time code on the video is drop frame, otherwise you must convert the time code to non-drop frame following the steps described earlier. Once you have done this, you are ready to export DVD caption or subtitle files for your DVD authoring system.

For captioning, click on *Caption* → *Device*, choose *Generic Encoder*. Then click on *File* → *Export*, choose the group *Caption Formatted* and then select your DVD authoring system.

For subtitling, click on *Subtitle* → *Device* and select your DVD Authoring System. Using the font icon in the Preview Window toolbar, choose the desired font attributes and then click OK. Then go to *File* → *Export* and select the group *DVD/DVD2000/Webcast Subtitle* radio button. Choose your DVD Authoring System and continue. Once you are done, import the exported CPC files into your authoring system for subtitles.

Please consult the *Subtitling Chapter* for a detailed step-by-step tutorial to caption and subtitle DVDs.

## Caption a Video Using an NLE System With CCaption

Go to *File* → *Export* and choose the *Caption Formatted* radio button, then select *CPC/Leapfrog CCaption (\*.onl)* or *CPC-715 Online Caption (\*.onl)* from the drop-down menu. Enter a file name and click on Finish. Now you must import this file into CCaption-NLE. The instructions differ depending on which NLE you have, so it is best to consult the CCaption manual at this point.

## Caption a Video Using an NLE System With 700NLE

To caption/subtitle digital video using CPC-700NLE, check the chapter on CPC-700NLE for details.

## Caption a Video for Webcast

For this process you must first choose the type of online media player you would like to use (RealPlayer, Windows Media Player, or QuickTime).

- Once you have chosen a media player and you have a compatible file for it, go to *File* → *Export* and select the *DVD/DV2000/Webcast* radio button.
- Then choose the desired file type from the drop-down menu.
- Name the file and click on Next. The dialog box will offer different options depending on the selected media player.

Please consult the *Webcasting section of this Manual* for detailed step-by-step instructions.

## Caption Tips

### Suggestions for Breaking Lines

Watching captioned programs on television will show you how professional captioning is done, including breaking text into individual captions, positioning the captions and use of time sequencing. You will notice that many times professional captioners adjust the timing of the captions to give uniform readability.

Various signs indicate that text needs to be broken into separate captions.

1. End a caption at the end of a sentence. The import file option can make these breaks automatically (“.”, “?”, and “!”)
2. End captions at commas and semicolons if they come at a natural pause in the dialog and conclude a phase. The import file option can make these breaks automatically as well, but there are many commas in English that are NOT good places to break text.

However, when you break text into individual captions, they should make grammatical sense. Here is an example:

**Unformatted, Raw Text:**

On the way to the airport, I got caught in traffic and ended up being late for my flight. I had to wait around for five hours to catch the next available flight.

**A poor way to caption it:**

On the way to the airport, I got caught in
traffic and ended up being late for my flight. I had to wait
around for five hours to catch the next available flight.

**A good way to caption it:**

On the way to the airport, I got caught in traffic
and ended up being late for my flight.
I had to wait around for five hours
to catch the next available flight.

We will go over some basic captioning guidelines. The first basic convention concerns the difference between how you represent on-screen and off-screen speakers. The words spoken by off-screen speakers (commonly narrators) appear in italics (but italics can be skipped if the speaker comes in and out of view). The words of on-screen speakers appear in the normal (roman) font.

The next convention concerns centering and non-centering. Captions indicate the location of the speaker, and should appear under the speaker. However, if centering the caption interferes with a graphic and/or important on-screen visual information, then the caption should be moved to another location.

The main objective is to have each caption represent a single thought. There is no single right way to caption a video, but a few additional guidelines may help:

1. Your captioning style should be consistent throughout the video.
2. Whenever possible, you should break captions into logical phrases. Captions randomly broken up may convey a different meaning than intended.
3. Captions can indicate the location of the speaker. For instance, a caption on the left side of the screen will indicate the speaker is on the left, while a centered caption shows that only one person is speaking throughout a scene.
4. Words can be emphasized with underlining.

5. Use *Attribute* → *Insert Music Symbol* to place a musical note at the beginning and end of musical lyrics. Never paraphrase lyrics. Use the title of the song when possible.
6. Indicate sound effects in parentheses in lower case: (boom), (applause).

## **Suggested Caption Styles from CMP & WGBH**

Caption Media Program (National Association of Deaf) has created a style guide, which is available from [www.cpcweb.com/download/CaptionKey2005.pdf](http://www.cpcweb.com/download/CaptionKey2005.pdf). This is a very helpful guide to understand the styles and conventions used to caption a video. We strongly encourage you to read this document before producing captioned video.

The Media access group at WGBH Boston publishes a guide called “Suggested Styles and Conventions for Closed Captioning.” It is available from:

Media Access Group at WGBH  
125 Western Avenue  
Boston, MA 02134  
(617) 300-3600 V/TTY

<http://main.wgbh.org/wgbh/pages/captioncenter/cstyles.html>