



# Application Note

Application Note Number	G - 0 -17XX – DPU-414 - 0
Revision	Basic
Function	Printing to a DPU-414 Printer
ACES Systems Analyzer	ACES Systems Model 17xx Series Analyzer
Firmware Version	NA
Procedure Cards	NA

## Introduction

This application note describes the equipment and setup configurations for the ACES Systems' Model 17xx Series Analyzers and the Seiko DPU-414 thermal printer. This application defines the specific serial print function, provides a list of required equipment and the installation of the appropriate equipment for the configuration.

## A. Required Equipment

The following ACES Systems' equipment is required.

Item	Quantity	Description	Part Number
1.	1 ea.	Printer, Thermal, DPU-414, Seiko	75-900-0218
2.	1 ea.	ACES Model 17XX Analyzer	10-100-XXXX
3.	1 ea.	Cable, Laplink	75-800-0020
4.	1 ea.	9 Pin Null Modem Adapter	75-900-0226

**Optional Equipment: N/A**

## B. Equipment Installation

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### Printing With ACES Model 17XX Analyzers

The ACES Model 17XX series Analyzer allows you to print balance, rotor track and reports and graphic spectra. Print options are presented throughout the various menus where applicable in a given procedure. Printing can only be accomplished from the 1700 by using an **Epson Compatible Serial, Seiko DPU-414** or **HP LaserJet II (or later) Laser Printer**. An optional serial-to-parallel printer converter may also be used for printing to parallel printers. The converter and lab-tested printers are available from ACES Systems. You may purchase a similar converter from your local electronic dealer, however; because of the numerous variations in design and availability of technical data, ACES customer support can only provide support for the ACES converter and associated printing problems. The communications / printer cable provided with the analyzer is a serial communications cable for transfer of data to a personal computer, serial printer, or serial-to-parallel converter. If using a parallel printer, you will also require a standard printer cable (local purchase) configured for connection of the converter to your parallel printer. This appnote covers only the Serial printing function of the 17XX series analyzers to the Seiko DPU-414 serial input. To print from the Analyzer:

1. Insure you have collected and stored data to print.

#### NOTE

**If your analyzer has been previously setup for your printer application, skip to item 6 below.**

2. On the Analyzer:
  - a. Turn the analyzer ON by pressing the ON/OFF key.
  - b. Press the [SPCL MODES] key.
  - c. Select “1—Configure” and press [ENTER]

```

----- Fri 17Aug2001 15:56 3104Kb
SPECIAL MODES

1--Configure
2--Test System
3--Manage Data
4--Communicate

Select Function, Press Enter.

```

- d. Select “7—Configure Printer” and press [ENTER]

```

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SPECIAL MODES
  Configure
Page 2 of 2
7--Configure Printer

[More]
Select Function, Press Enter.

```

- e. Use the arrow keys to change the settings and move between fields. Configure the screen as follows:

```

----- Fri 17Aug2001 15:56 3104Kb
SPECIAL MODES
Print Configuration
Printer Port      : Serial
Printer Type     : SeikoDPU
Top Margin       : 1.0000
Left Margin      : 0.2500
Print Density    : Lo Density
Character Pitch  : 10 Char/In
Screen Dump Width: Normal
Select Printer Type.

```

- f. When printer is setup, press the [ENTER] key, then the [BACKUP] key to return to the Main Menu screen
- g. Press the [SPCL MODES] key again.
- h. Select “4—Communicate” and press [ENTER].

```

----- Fri 17Aug2001 15:58 3104Kb
SPECIAL MODES
1--Configure
2--Test System
3--Manage Data
4--Communicate
Select Function, Press Enter.

```

- i. Select “1—Configure Serial Interface” and press [ENTER].

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----- Fri 17Aug2001 15:59 3104Kb
COMMUNICATIONS
1--Configure Serial Interface
2--Define Remote Phone Number
3--Dial Remote Computer
4--Load Data from Remote
5--Store Data into Remote
6--Disconnect from Remote
Select communication action.

```

- j. Use the [UP ARROW] and [DOWN ARROW] keys to navigate the screen between fields and change the values in the fields using the [RIGHT ARROW] and [LEFT ARROW] keys to configure the screen as follows:

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----- Fri 17Aug2001 15:59 3104Kb
COMMUNICATIONS
Baud           : 9600
Parity         : none
# Data Bits    : 8 data
# Stop Bits    : 1 stop
Connect Wait   : 20
Station ID     : 1
Meter ID Code  : 1
Select Communications Baud Rate.

```

- k. When the screen is configured as shown above, press [ENTER] then ( for 1700 or 1720– [NOTEPAD], or for 1725 or 1730 [BACKUP]) to return to the operation options menu.





3. At this time, press the “ON LINE” button to continue.
4. The Dip Switch setting is made as follows: Press the ON LINE button for “ON” and the FEED button for “Off”.
5. Set the Dip Switches as follows:
  - 1 (OFF) : Input = Serial
  - 2 (ON) : Printing Speed = High
  - 3 (ON) : Auto Loading = ON
  - 4 (OFF) : Auto LF = OFF
  - 5 (ON) : Setting Command = Enable
  - 6 (OFF) : Printing
  - 7 (ON) : Density
  - 8 (ON) : =100%
6. The printer will again print, “Continue ? : Push ‘On – line SW’  
“Write ? : Push ‘Paper feed SW’
7. Press the “ON LINE” button again and continue to set dip switch 2 as follows:
  - 1 (OFF) : Printing Columns = 80

- 2 (ON) : User Font Back-up = ON
  - 3 (ON) : Character Select = Normal
  - 4 (ON) : Zero = Normal
  - 5 (ON) : International
  - 6 (ON) : Character
  - 7 (ON) : Set
  - 8 (OFF) : = U.S.A.
8. The printer will again print, “Continue ? : Push ‘On – line SW’  
“Write ? : Push ‘Paper feed SW’
9. Press the “ON LINE” button again and continue to set dip switch 3 as follows:
- 1 (ON) : Data Length = 8 bits
  - 2 (ON) : Parity Setting = No
  - 3 (ON) : Parity Condition = Odd
  - 4 (OFF) : Busy Control = XON/XOFF
  - 5 (OFF) : Baud
  - 6 (ON) : Rate
  - 7 (ON) : Select
  - 8 (ON) : =9600 bps
10. The printer will again print, “Continue ? : Push ‘On – line SW’  
“Write ? : Push ‘Paper feed SW’
11. Press the ON LINE button on the printer control panel. The printer will print “DIP SW setting complete!!”
12. Turn the 17XX analyzer ON.
13. Select the function and print from the selected procedures “Review” function or press the PRINT key to print the current screen.

