



Application Note

Application Note Number	G-0-2020-DPU-414 - 0
Revision	Basic
Function	Printing to a DPU-414 Printer
ACES Systems Analyzer	ACES Systems' Model 2020 ProBalancer Analyzer
Firmware Version	NA
Procedure Cards	NA

Introduction

This application note describes the equipment and setup configurations for the ACES Model 2020 ProBalancer Analyzer 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 2020 ProBalancer Analyzer	10-100-2020
3.	1 ea.	Cable, Serial/Com Print, 3 ft.	10-320-0157
4.	1 ea.	9 Pin Null Modem Adapter	75-900-0226

Optional Equipment: N/A

B. Equipment Installation

Printing With the ACES Model 2020 ProBalancer Analyzer

The ACES Model 2020 ProBalancer Analyzer allows you to print propeller balance, rotor track and balance reports and graphic spectra. Print options are presented throughout the various menus where applicable. Printing can only be accomplished from these menu selections. Printing directly from the analyzer can only be accomplished 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 2020 analyzer to the Seiko DPU-414 serial input. To print from the 2020 ProBalancer Analyzer:

1. Insure you have collected and stored data to print or entered Setup information in the analyzer.

NOTE

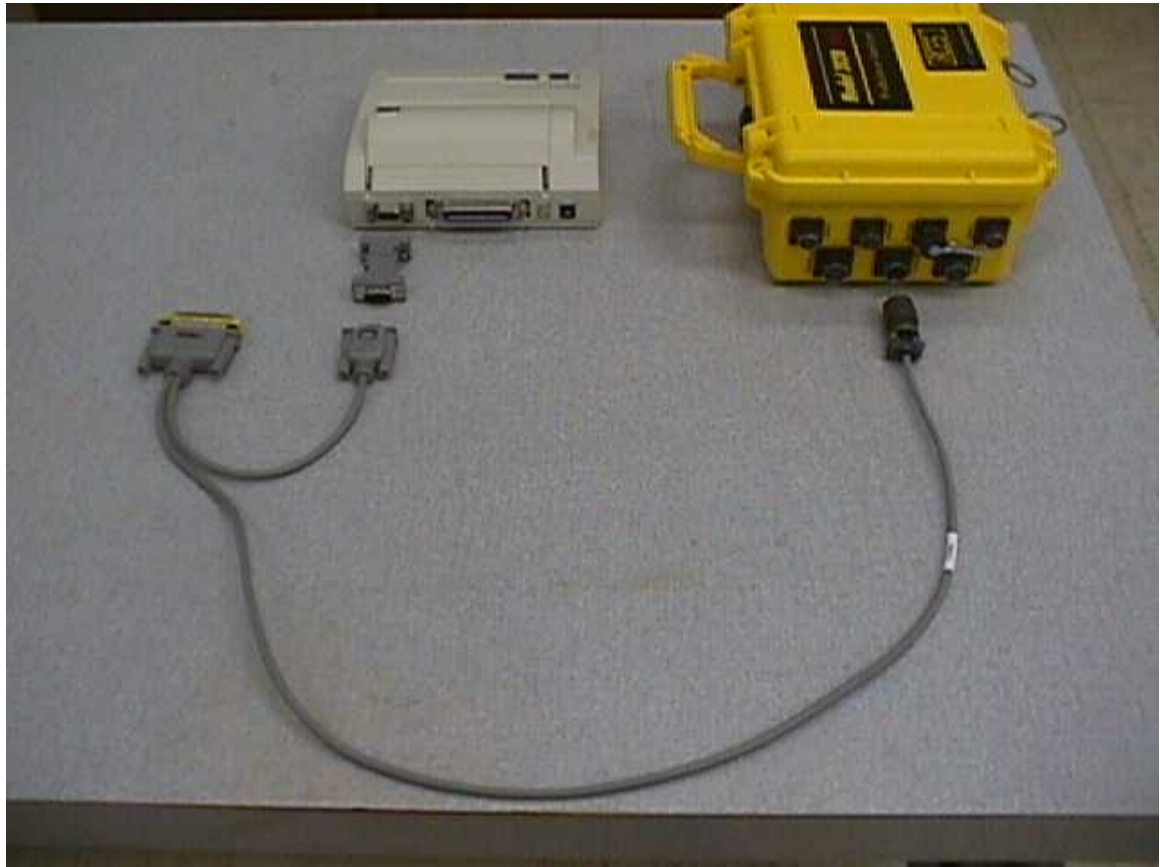
If your analyzer has been previously setup for your printer application, skip to item 6 below.

2. Select “Miscellaneous Items” from the “Options” menus.
3. Select “Setup Printers” from the “Miscellaneous Items” menu.
4. Set up the printer information screen as follows:

Model 2020 ProBalancer		
Setup Printers		
Printer:	Seiko (DPU-414)	
Quality:	Low (Fastest)	
	Horiz	Vert
Pg Margin:	0.0	0.0
Pg Size:	5.3	0.0

5. When printer is setup, press the “[BACKUP]” key twice to return to the Main Menu screen

Equipment Installation Diagram

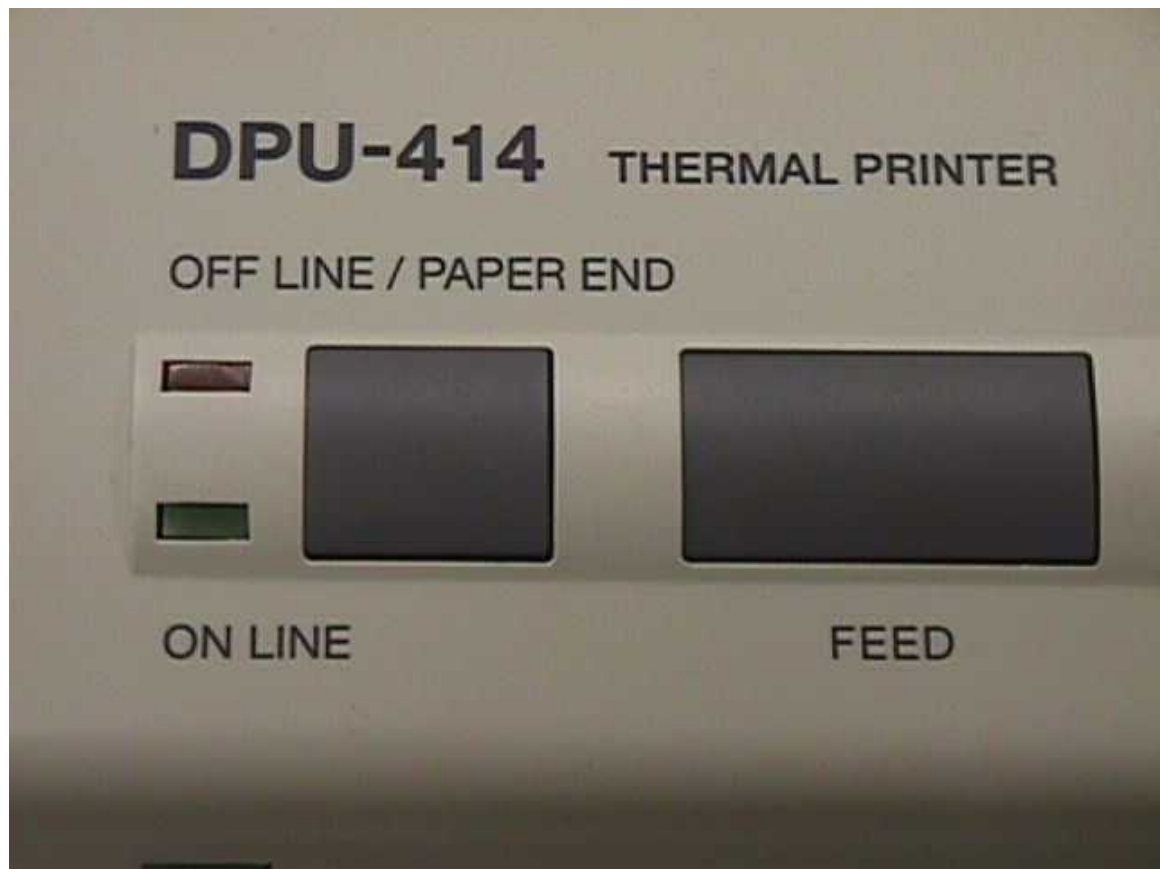


Equipment Set up

1. Connect the 9 pin null modem adapter, item 4, to the 9 pin input of the printer, item 1.
2. Connect the 9 pin end of your 2020 communications cable, item 3, to the 9 pin null modem adapter, item 4, which you installed in step 1.
3. Connect the 6 pin MS connector end of the 2020 communications cable, item 3, to the AUX/COMM port of the 2020, item 2.
4. You may use the supplied power adapter or operate the printer on battery power. Use the adapter whenever possible to conserve battery life.

Setting up the DPU-414 Printer

1. With the power off, press the ON LINE button, shown in the diagram below while turning the printer on. Continue holding the ON LINE button until the printer begins to print, then release.
2. The print will state “Continue ? : Push ‘On – line SW’
“Write ? : Push ‘Paper feed SW’



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 2020 ON.
13. Select the function and print from the “Manage Jobs” selection of any function.



Application Note

Model 2020 ProBalancer

Printing with a DPU 414 Printer

Part Number: 11-200-0081

AppNote Number: g-0-2020-pf-dpu414-0

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