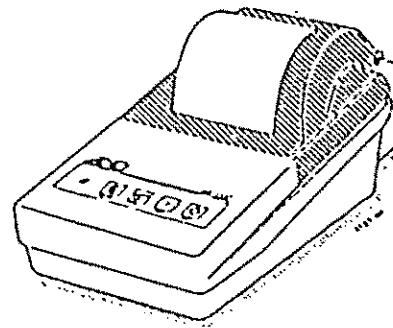


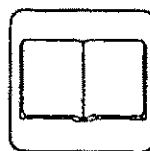
AD-1131 Printer

Basic Printer

Instruction Manual



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AD
A&D INSTRUMENTS



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FCC Rules

This equipment has been tested and found to comply with the limits for a class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, this equipment may cause interference to radio communications.

- Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his or her own expense. If this equipment does cause interference to radio or television reception, which may be determined by turning the equipment on and off, the user is encouraged to try to correct the interference by one of the following measures:
 - Reorient or relocate the receiving ariel.
 - Increase the separation between the equipment and the receiver.
 - If the equipment is mains powered, connect to an outlet on a different circuit to that on which the receiver is connected.
 - Consult your supplier or an experienced radio/TV technician for advice.



Shielded cables must be used with this unit to ensure compliance with Class A FCC limits.

(FCC = Federal Communications Commission in the U.S.A.)



Introduction

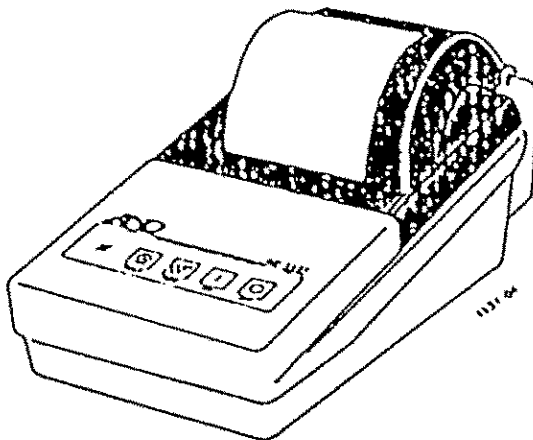
*Thank You For Your **A&D** Purchase*

This is an Instruction Manual for the AD-1131 Printer. The AD-1131 is a product of years of research, design, development and in-field testing. It incorporates the latest advances in electronic and mechanical engineering and offers increased features and functions at a reduced cost. Every care has been taken during the manufacturing process of this printer to ensure that it will perform accurately and reliably for many years.

This manual will try to tell you in simple language how this printer works and how to get the most out of it in terms of performance.



Features



The AD-1131 printer is designed to connect to any A&D scale or balance, as well as a variety of other equipment, via an RS-232C Serial Interface.

- Two emulation modes are available: A&D and standard. The A&D emulation mode provides a formatted printout by interpreting the data string as it is received from A&D equipment. The standard emulation mode allows the AD-1131 to simply print any data as received and can be used with a variety of equipment, such as a personal computer.
- The AD-1131 printer is powered by internally rechargeable batteries - an AC Adaptor/Battery Charger is provided. It takes approximately 14 hours to fully recharge the batteries. However, the printer can, after a short initial charge, be used with the AC Adaptor/ Battery Charger connected. The batteries will continue to charge at a slower rate.
- A battery saving power timer can be used to preserve battery power and extend the time between charges.
- The printer has a selection of languages available, via software parameter settings.



Unpacking Your AD-1131 Printer

Unpack the printer carefully and keep the packing material if you are likely to transport the printer again in the future. Inside the packaging you should find this manual plus:

- the Printer
- the AC Adaptor/Battery Charger
- RS-232C connection cable
- a roll of printer paper
- a printer ribbon (already installed)
- a warranty card.

Please take a moment to complete the warranty card and return it to us as the information enables us to serve you better in the future.



Best Conditions



To ensure that you get the most from your printer, please try to meet the following "Best Conditions" as closely as possible.

- Foreign matter in the printer may cause paper jams and other problems. Therefore, install your AD-1131 in an area where it will not be subjected to dirt, dust, water, or oil - and where it will not be exposed to direct sunlight, high temperatures or high humidity.
- Be sure to connect or disconnect cables and plugs only when the power is OFF.
- Only use the specified printer paper and AC Adapter/Battery Charger.
- Do not attempt to disassemble your AD-1131. Return it to your A&D dealer if any repair is needed.



Printout Example

The AD-1131 can handle the output from any A&D Balance or Scale, and print the results in a number of selectable languages.

*English
Example*

Weight	135.26	g
Net	42.01	g
Gross	177.26	g
Count	356	Pcs
Tare	42.01	g

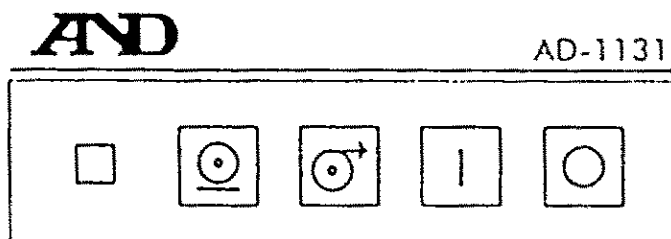
Peso	135.26	g
Neto	42.01	g
Bruto	177.26	g
Contaje	356	Pcs
Tara	42.01	g

*Spanish
Example
Please see
page 8 for
language
settings*



The Keyboard

There are four push button keys and a Power ON light. The keys provide control of all operations of the printer, though actual printing can be controlled via the RS-232C Serial Interface.



PRINT

The PRINT Key

The PRINT key allows the weight readings from a connected device that is 'streaming' data to be printed. The PRINT key can be disabled via the Parameter Setting Mode.

In the Parameter Setting Mode, the PRINT key is used with the ON key to access the Parameter Setting Mode, to change the value of the selected parameters, and, with the FEED key, to store the parameter settings.



FEED

The FEED Key

The FEED key advances the Printer Paper one line. Hold down the FEED key to continuously advance the Printer Paper.

The FEED key is used with the ON key to begin a Self Print Test. In the Parameter Setting Mode, the FEED key is used to move through the available parameters, and, with the PRINT key, to store the parameter settings.



ON

The ON Key

The ON key switches the printer ON. When the ON key is pressed, the printer mechanism will be reset and the Power ON light will come on.

The ON key is used with the PRINT key to access the Parameter Setting Mode, and with the FEED key to begin a Self Print Test.



OFF

The OFF Key

The OFF key is used to turn the printer OFF.



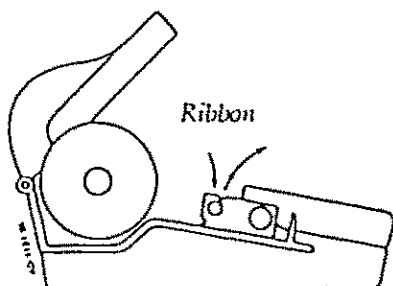
Installing and Replacing the Printer Ribbon & Paper



Upon unpacking your AD-1131, the Printer Ribbon should already be securely fastened. To check, open the lid of the printer. The ribbon cassette should be clipped in and the ribbon itself should be wound taught. If the ribbon is slack, wind the knob to take up the slack. If the ribbon cassette is not installed correctly, follow the procedure for replacing the Printer Ribbon.

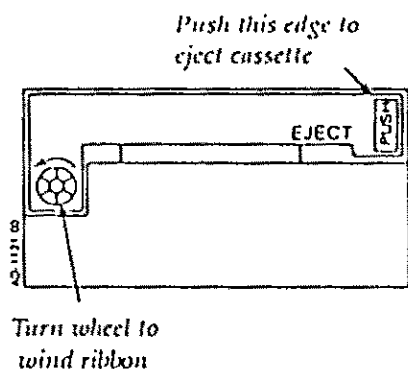


Replacing the Printer Ribbon



Step 1. Open the lid of the printer to gain access to the ribbon.

Step 2. The ribbon cassette will clip off on one side by pushing down on the edge, and then lifting the ribbon clear of the printing mechanism.

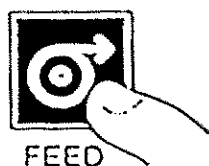


Step 3. If you are installing a new Printer Ribbon, take the new ribbon from its packet. Make sure the ribbon is taught, wind the knob to take up any slack.

Step 4. Clip the ribbon into position, making sure that the paper will feed correctly between the ribbon and the cassette body.

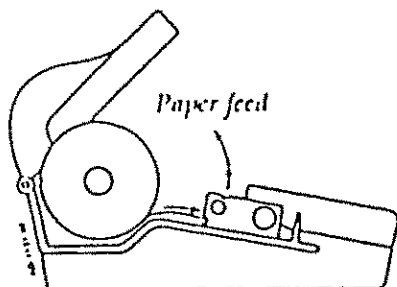
Step 5. Wind the knob to take up any slack and close the lid, ensuring that the paper exits via the slot in the lid.

Installing and Replacing the Paper Roll



Step 1. Open the lid of the printer. If the paper roll needs replacing, remove the remaining paper by pressing the FEED key.

- Do not manually pull the paper back out of the printing mechanism.



Step 2. Cut the leading edge of the Paper Roll at a right angle to the feeding direction and remove wrinkles and folds from the paper if there are any.

Step 3. Set the new roll in the paper well with the paper emerging from the bottom of the roll.



Step 4. Make sure that the printer is switched ON and offer the cut end of the paper into the rear of the printing mechanism while pressing and holding the FEED key.

- The paper should begin feeding itself through the printing mechanism.
- Keep the FEED key pressed until enough paper is fed through the printing mechanism to pass through the exit slot in the lid.

Step 5. Feed the paper through the exit slot and close the lid of the printer.



The Parameter Setting Mode



The Parameter Setting Mode allows the parameters of the AD-1131 to be changed to satisfy the various user needs. The following list of parameters are available for selection:

Serial Data Interface

Data Bits	
7*	8

The number of data bits can be set to 7 or 8.

Parity		
None	Even*	Odd

The parity can be selected from None, Even or Odd parity.

Baud Rate						
300	600	1200	2400*	4800	9600	19200

The baud rate can be selected from 300, 600, 1200, 2400, 4800, 9600 or 19200 baud.

DTR	
Normal	Inverted

The DTR signal can be selected as normal or inverted.

Country

U.K.*	Spain	France	Germany
Weight	Peso	Poids	Gewicht
Count	Contaje	Compte	Zählung
Net	Neto	Net	Netto
Gross	Bruto	Brut	Brutto
Tare	Tara	Tare	Tara

The country languages can be selected from U.K. (English), Spain, France or Germany and will, in A&D emulation mode, print as shown in the table. The weight unit print out is determined by the data string from the A&D balance or scale.

Print Mode

Print Mode	
Data	Text*

In Data Print mode the print characters are inverted so that the printed weights, when removed from the printer, will be in time sequence from the top of the print out. In Text Print mode the printed characters are not inverted.

* Default setup

Auto-Off

Auto-Off		
1 Minute	5 Minutes	Off

The Auto-Off function automatically powers off the printer when it is not in use. It is recommended that the Auto-Off function be set to active (1 or 5 minutes) with the AC Adaptor/Battery Charger connected.

Emulation

Emulation	
A&D*	Standard

The A&D emulation mode provides a formatted printout by interpreting the data string as it is received from A&D equipment. The Standard emulation mode allows the AD-1131 to simply print any data as received and can be used with a variety of equipment, such as a personal computer.

Approved

Approved	
Yes	No*

A setting of 'Yes' is used when the printer is operating in a trade approved system which has a differentiated digit. In this mode, the AD-1131 will print the least significant digit in a differentiated form to meet the trading standard requirements.

PRINT Key

PRT-key	
Enabled	Disabled*

Activate, or 'Enable', the PRINT key when the printer is connected to a device that is continually 'streaming' data to the printer. Each time you press the PRINT key a line of data will be printed. If you 'Disable' the PRINT key, it will have no effect in normal printing mode.

* Default setup



Setting the Parameters

Press and Hold



Step 1. With the printer OFF, press and hold the PRINT key, and then switch the printer on by pressing the ON key.

- The Power ON light will flash and the printer will print a heading, 'PROGRAMME-MODE', a list of current parameter settings, and then the first parameter, 'Data Bits' with the choices '7' or '8'.
- The Parameters are described in full in the preceding section.



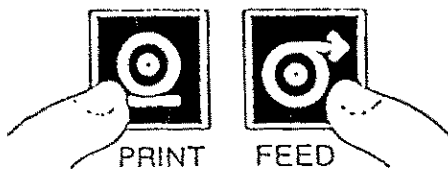
Step 2. Press the FEED key if you do not want to change the current parameter setting.

- If you do want to change the parameter setting, press the PRINT key to step through the available parameter values (for 'Data Bits' those values will be '7' or '8'). When the preferred setting is printed, press the FEED key to select.
- Once you press the FEED key, the 'Parity' parameter and its current setting will be printed.

Step 3. Continue to set the parameter setting by repeating the step #2 procedure for all the parameter settings.

To exit the Parameter Setting Mode without storing your parameter changes, press the OFF key.

Press together



Step 4. To store your parameter settings, press the PRINT key and the FEED key at the same time.

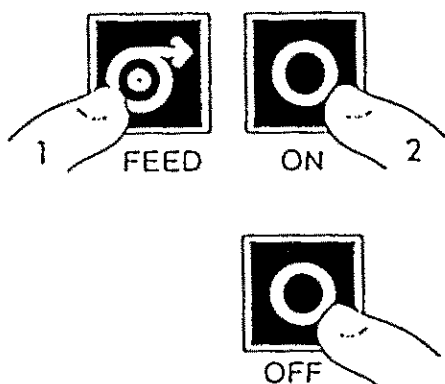


The Self Print Test



The AD-1131 printer includes a Self Print Test that allows you to check that all characters can be printed and that there is no problem with the printing mechanism or the Printer Ribbon.

Press and Hold



Step 1. With the printer OFF, press and hold the FEED key, and then switch the printer on by pressing the ON key.

○ A heading of 'S260E' will be printed, followed by a print out of every possible character, and then a list of the parameter settings.

Step 2. Printing will continue until the OFF key is pressed - ending the Self Print Test.

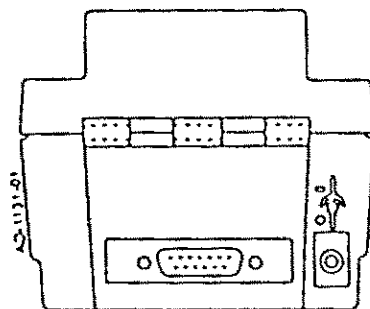


RS-232C Serial Interface Connections



The RS-232C Serial Interface connection is made via a 25 pin 'D' connector on the back of the printer. The following pins are used on this connector:

FUNCTION	PIN	DIRECTION
TX	2	OUT
RX	3	IN
CTS	5	IN
GND	7	-
DTR	20	OUT



9V Power
Supply

Data connector



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