ADAM

Adam Equipment

AIP PRINTER

Easy Reference:

Serial number of the printer:	
Model of the product linked to this printer:	
Software revision number of the product linked to the printer:	
Serial number of the product linked to the printer:	
Date of Purchase:	
Name of the supplier and place:	

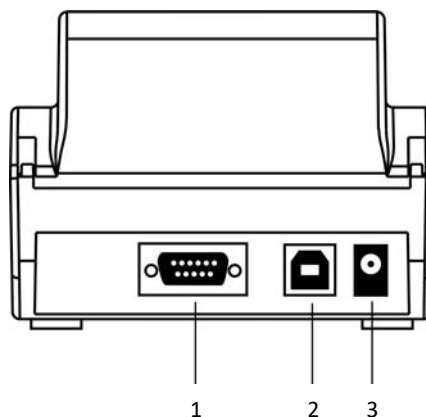# CONTENTS
P.N. 1.12.0.0.14641, Revision A, June 2018

1.0 INTRODUCTION

The high speed AIP printer is a compact and concise dot matrix printer from Adam Equipment that fulfills data printing needs through simple and easy operation.
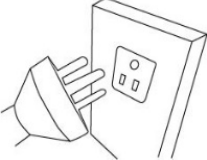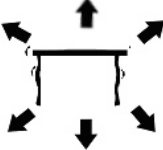
1.1 FEATURES
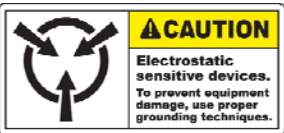
- High-speed impact dot matrix printer with a durable design making it suitable for long-term storage.

- The AIP is easy to use with only an On/Off switch and a paper feed button.

- The AIP is supplied with a power supply adapter, to charge the internal rechargeable battery operation.

- Auto-set: Communication parameters can be detected, identified and set automatically including baud rate, data bits, stop bits, etc.

- Supplied with RS-232 interface and USB port which allows for connection between printer, computer and weighing device to update firmware and set parameters.

- The set-up software provided is compatible with Windows operating systems such as Windows XP, Windows 7, Windows 8 and Windows 10.

- Compatible with Windows virtual keyboard function.

- Supports multiple national languages and can easily be selected.

- Complies with EU RoHS, FCC, UL requirements and CE Certification.

1.2 OVERVIEW

1. RS232 Interface   2.   USB Port   3.   Power jack

2.0 SETTING UP

	Avoid extremes of temperature. Do not place in direct sunlight or near air conditioning vents.
	Make sure both the scale and the printing accessory are located on a strong table and free from vibration.
	Avoid unstable power sources. Do not use near large users of electricity such as welding equipment or large motors. Do not mix batteries and use only the factory approved power adapter supplied with the machine and the printing accessory. Do not use batteries and the DC adapter at the same time.
	Keep free from vibration. Do not place near heavy or vibrating machinery.
	Avoid high humidity that might cause condensation. Keep away from direct contact with water. Do not spray or immerse the scales or the printing accessory in water.
	Do not place near open windows, air-conditioning vents or fans that may cause a draft and unstable readings.
⚠CAUTION Electrostatic sensitive devices. To prevent equipment damage, use proper grounding techniques.	Avoid operating in high static areas, or weighing high static materials, such as plastics or powders, as this may damage electronics and affect measurements. Use grounding mats or bonding straps to reduce potential.

3.0 TECHNICAL SPECIFICATIONS

Model	AIP
Printing method	8 pin shuttle impact dot matrix
Printing speed	1.7 lines/sec (approx)
Printing digits	24 digits / line or 40 digits / line, 5 x 7 dot matrix
Character size	Approx. 1.7 mm (W) x 2.6 mm (H)
Printer paper	Normal paper, 57mm width, 50mm in diameter
Reliability (MCBF)	1,000,000 lines
Operating temperature	5°C to 45°C 41°F to 133°F
Interface	Dsub-9 pin (RS-232C), male
Communication Note: Data bits + Parity + Stop bits must >=9, here: Parity None = 0 Parity Odd = 1 Oarity Even = 1	Baud: 600, 1200, 2400, 4800, 9600, 14.4k, 19,2k, 38.4k, 115.2k Data: 7,8 Parity: None, Odd, Even Stop bits: 1, 2 Delimiter (terminate char): CR, LF, CR+LF Handshake: None, DTR/CTS, Xon/Xoff
Power Supply	DC 12V/1500mA Polarity: – –Ⓒ– + 4 x N:-MH AA1500mAh 1.2V
Printer regulations	CE(LVD+EMC), RoHS, WEEE
AC adapter regulations	CE, GS, UL/CUL, CC, TUV Mark
Keys	1 key
Cables	Two cables: DB9F- DB9F cross, DB9M none-cross

4.0 PACKAGE CONTENTS
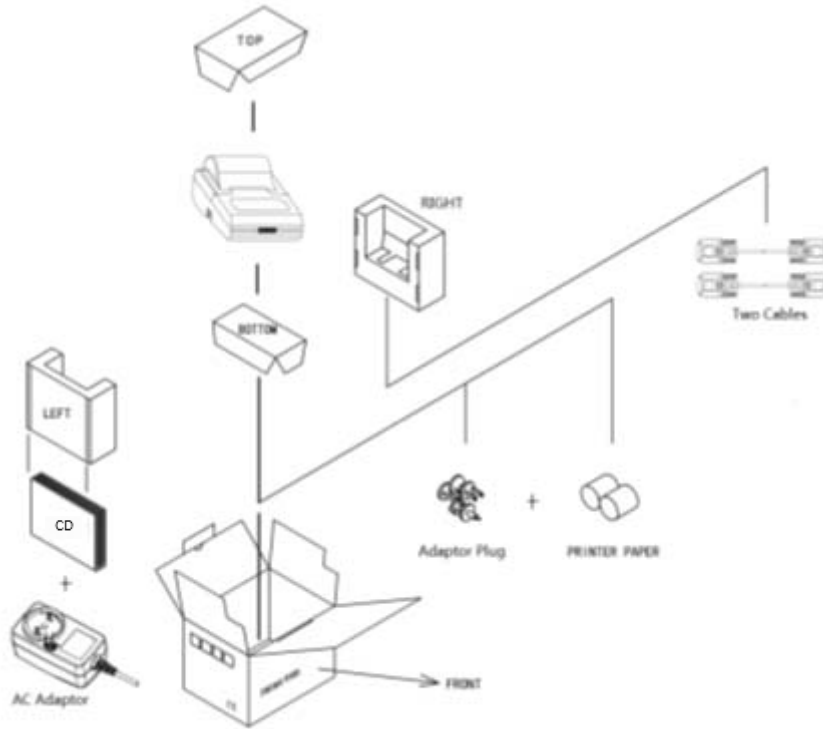
Accessory packing specification

4.1 PACKING LIST

Item	Part Number	Quantity
AIP Printer	1.12.0.0.14641	1
AC adapter (12V, 12.0A)	3.12.4.0.14658	1
Printer roll, 57mm	3.12.6.0.14659	2
Ink ribbon cartridge (installed in printer mechanism)	3.12.6.0.14661	1
USB cable	3.07.4.0.10267	1
RS 232 cable 9 pin, female	3.12.4.0.14662	1
RS 232 cable 9 pin, male	3.12.4.0.14663	1
Instruction manual CD	N/A	1
Software CD	N/A	1

5.0 PRINTER INSTALLATION AND OPERATION

5.1 PRINTER CONNECTION

- Please connect the cable as shown.
- Make sure the AIP and HOST machine are powered off and connect the data communication cable to the SERIAL PORT.
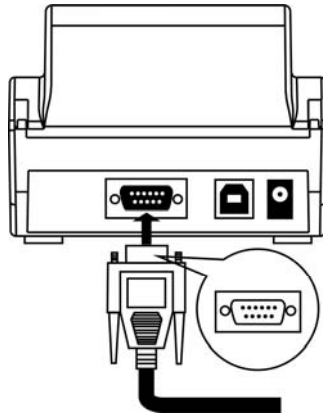
- Connect the power adapter to the AIP and electricity supply.
- Turn on the balance, then turn the AIP on using the ON/OFF switch located on the left-hand side of the printer (Switch in 'I' position)

5.2 INK RIBBON CARTRIDGE INSTALLATION

The ink cartridge is installed as below:
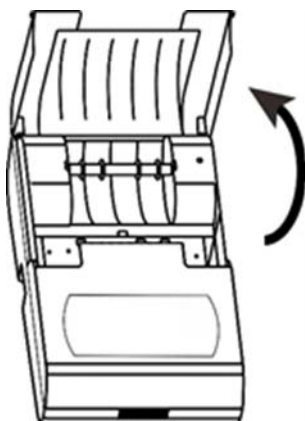
(1) Lift the paper cover as demonstrated.

(2) Place the left side of the ink cartridge on the gear shaft on the left side of the printer mechanism and push the right side down.

(3) Rotate the knob clockwise and press the "LF" button to flatten and tighten the ribbon as and when necessary.

(4) Close the paper cover and the installation is complete

Replace the ink cartridge when printing becomes unclear or faint.

5.3 PAPER ROLL INSTALLATION

The paper is fitted as below:

(1)   Lift the paper cover

(2)   Insert the paper shaft into the center of the paper roll as shown:
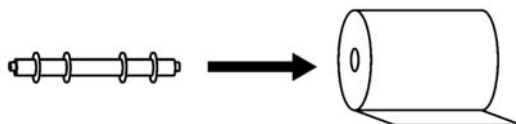
(3)   Place the paper roll into the space provided in the following way:
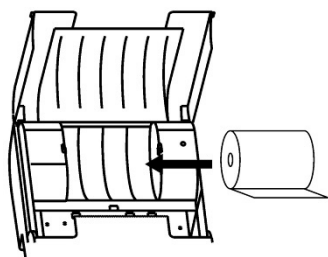
(a) Correct direction   (b) Wrong direction
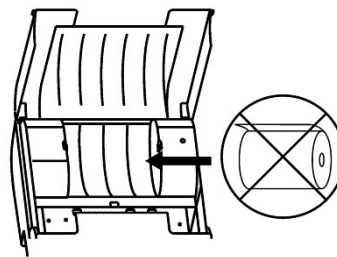
(4)   Insert the end of the printer paper into the printer mechanism as shown:
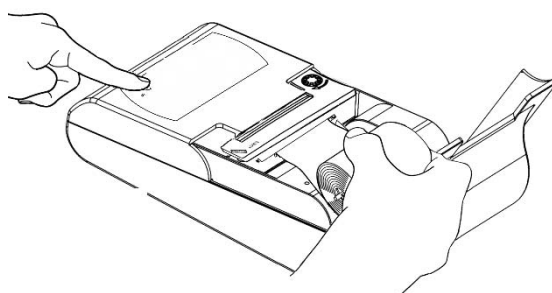
(5)   Press the 'LF' key whilst feeding the paper through the mechanism until the paper comes out.

> ⚠ Damaged or un-specified paper and ribbon should not be used to avoid possible damage of the printer.

6.0 OPERATION

POWER light: Power light to indicate POWER is supplied to the printer

LF key: Hold key to continuously feed paper through

6.1 AUTO-SET

This function will automatically detect and set the communication parameters to make the printer compatible with any balance.

(1) Connect the AIP to your balance using the relevant cable provided

(2) Power ON the AIP whilst holding down the 'LF' key

(3) The following contents should be printed:

```
--------Auto-Set--------
Please send data to pri
nter,the printer will o
utput the results immed
iately,if the printer d
oes not respond,it mean
that printer does not r
eceive data.
-----------------------
```

Once printed release the 'LF' key.

(4) Press the relevant transfer key (e.g PRINT) on balance. Once the dataTransfer is detected analysis will begin automatically and print.

(5) Press the 'LF' key to accept the printed data to return to normal working status

6.2 PARAMETER SETTINGS

Parameters can be set through computer software and can run on most windows operating systems, requirements include:

- Windows XP and above
- More than 1M disk space and
- More than 1M free memory

6.3 OPERATION METHOD

(1)   Disconnect the connection between AIP and AC adapter

(2)   Connect the AIP to your PC using the USB cable provided

(3)   Start up the Easy Setup software
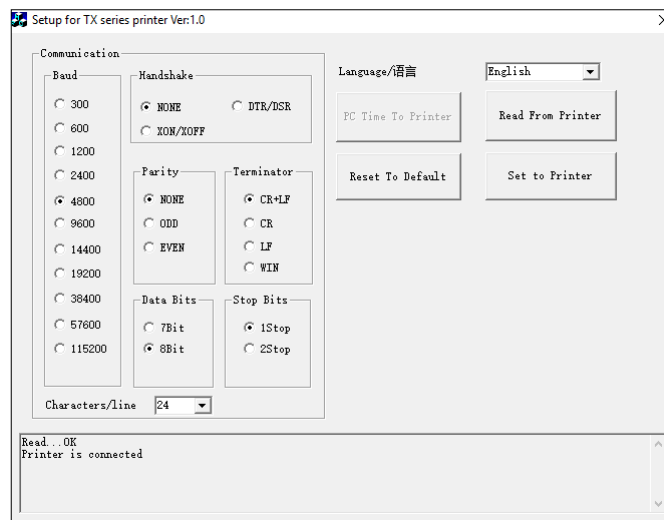
'Read…OK Printer is connected' will be displayed if connection is successful

(4)   Select Baud rate, Data Bits, Parity, Stop Bits, Handshake, Terminator, Language as required and click 'Set to Printer' to confirm settings.

(5)   Close the program and unplug the USB cable.

(6)   A self-check report can be printed in the occasion of any fault in diagnosis. Turn off the printer and turn on the AIP whilst holding down the 'LF' key.

7.0 TROUBLE SHOOTING

Symptom	Cause	Remedy
The power light does not light up when the power switch is turned ON	An incorrect power adapter is being used	Use the correct one as supplied
	AC adapter failure	Replace the adapter or request service.
	Printer failure	Request service.
Letters printed out are even but too light	Ribbon is at the end of its lifetime	Install a new ribbon
Letters printed out are uneven	Incorrectly installed ribbon	Re-install the ribbon
Paper stuck in printer	Paper jam	Carefully remove the paper and re-install
Sounds like it's printing but nothing is printed out	Incorrectly installed ribbon or no ribbon fitted	Re-install the ribbon
Printing is unclear	Paper jam	Refer to above content to solve paper jam
	The printing paper is installed in the wrong direction	Re-install the printing paper referring to the Manual for correct installation details
	Incompatible printing paper is being used	Replace the printing paper with the correct type
	The paper shaft is missing	Install the paper shaft into the paper roll
	Printing mechanism feeder fault	Request service
	Faulty ribbon	Replace the ribbon
	Printing mechanism is damaged, possibly due to an incorrect type of ribbon, or dusty environment.	Request service
Partial content is missed in printing	Ribbon creased	Pull the ribbon out and then turn the gear to wind it back in so that the ribbon is not creased then re-install the ribbon.
Printer does not print when print key is pressed	Incorrect cable connection between printer and balance	Re-install the cable referring to Manual
	Balance is not in transferable status	Set the balance in transferable status
	Incompatible communication parameter	Use "Auto-Set" function in printer to check and set communication parameter
	Printer cannot receive any information using "Auto-Set" function	1. Output interface is disabled: enable it. 2. Cable fault: replace the cable 3. Printer or balance fault: request service.

7.1 MAINTENANCE

- Remove all power cables and data cables before cleaning

- When cleaning the AIP ensure no liquid gets into it

- Use a soft dry cloth to wipe the printer after cleaning

- Keep hands dry before touching the adapter

- Store printer in a dry environment

- Keep the AIP in its packaging when it is not in use for prolonged periods of time.

- To avoid damage, it is strongly recommended to use the ink ribbon and other consumables supplied by Adam Equipment.

- Turn off the AIP power supply after use and remove the adapter if the AIP is not used for a prolonged period of time.

WARRANTY INFORMATION

Adam Equipment offers Limited Warranty (Parts and Labour) for the components failed due to defects in materials or workmanship. Warranty starts from the date of delivery.

During the warranty period, should any repairs be necessary, the purchaser must inform its supplier or Adam Equipment Company. The company or its authorized Technician reserves the right to repair or replace the components at any of its workshops depending on the severity of the problems. However, any freight involved in sending the faulty units or parts to the service center should be borne by the purchaser.

The warranty will cease to operate if the equipment is not returned in the original packaging and with correct documentation for a claim to be processed. All claims are at the sole discretion of Adam Equipment.

This warranty does not cover equipment where defects or poor performance is due to misuse, accidental damage, exposure to radioactive or corrosive materials, negligence, faulty installation, unauthorized modifications or attempted repair or failure to observe the requirements and recommendations as given in this User Manual. Additionally rechargeable batteries (where supplied) are not covered under warranty.

Repairs carried out under the warranty does not extend the warranty period. Components removed during the warranty repairs become the company property.

The statutory right of the purchaser is not affected by this warranty. The terms of this warranty is governed by the UK law. For complete details on Warranty Information, see the terms and conditions of sale available on our web-site.

WEEE 2012/19/EU
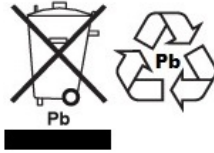
This device may not be disposed of in domestic waste. This also applies to countries outside the EU, per their specific requirements. Disposal of batteries (if fitted) must conform to local laws and restrictions.
Cet appareil ne peut être éliminé avec les déchets ménagers. L'élimination de la batterie doit être effectuée conformément aux lois et restrictions locales.
Dieses Gerät nicht mit dem Hausmüll entsorgt.
Dispositivo no puede ser desechado junto con los residuos domésticos
Dispositivo non può essere smaltito nei rifiuti domestici.

FCC / IC CLASS A DIGITAL DEVICE EMC VERIFICATION STATEMENT

NOTE: 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 and Canadian ICES-003/NMB-003 regulation. 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, may cause harmful 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 own expense.

Adam Equipment products have been tested with, and are always supplied with mains power adapters which meet all legal requirements for the intended country or region of operation, including electrical safety, interference and energy efficiency. As we often update adapter products to meet changing legislation it is not possible to refer to the exact model in this manual. Please contact us if you need specifications or safety information for your particular item. Do not attempt to connect or use an adapter not supplied by us.

ADAM EQUIPMENT is an ISO 9001:2008 certified global company with more than 40 years' experience in the production and sale of electronic weighing equipment.

Adam products are predominantly designed for the Laboratory, Educational, Health and Fitness, Retail and Industrial Segments. The product range can be described as follows:

- Analytical and Precision Laboratory Balances
- Compact and Portable Balances
- High Capacity Balances
- Moisture analysers / balances
- Mechanical Scales
- Counting Scales
- Digital Weighing/Check-weighing Scales
- High performance Platform Scales
- Crane scales
- Mechanical and Digital Electronic Health and Fitness Scales
- Retail Scales for Price computing

For a complete listing of all Adam products visit our website at **www.adamequipment.com**

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