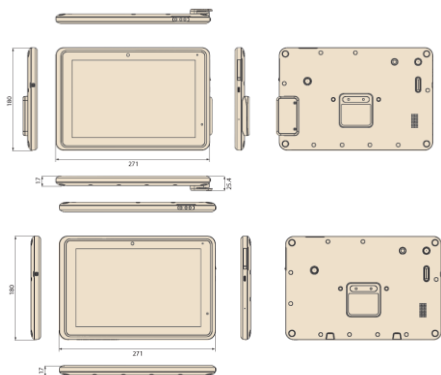


Tablet PC

AIM-77S Series

Startup Manual

AIM-77S Appearance



Up: AIM-77S (MSR SKU) Down: AIM-77S (non-MSR SKU)

Left: Front View

Right: Rear View

For more information on this and other Advantech products, please visit our website at:

<http://www.advantech.com>

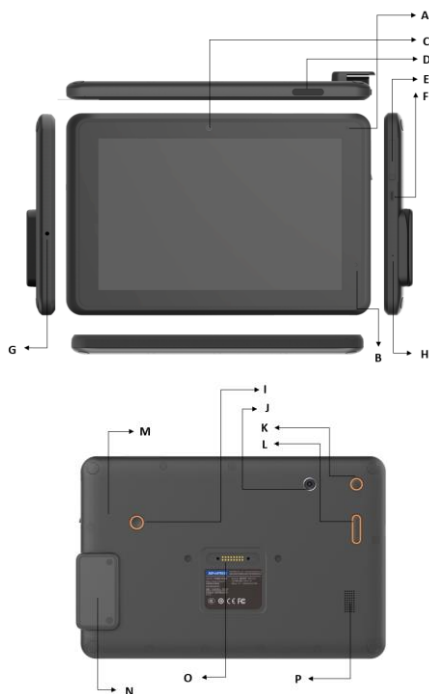
For technical support and service, please visit our support website at:

<http://support.advantech.com>

This manual is for AIM-77S Series

First Edition
March 2025

Description of Parts



- A: Power Indicator & Hall Sensor
- B: Ambient Light Sensor
- C: 5MP Front Camera (FF)
- D: Barcode Scanner (optional)
- E: microSD Slot
- F: USB Type C (USB3.0 & 45W PD3.0)
- G: Audio Combo Jack (CTIA)
- H: Microphone
- I: Barcode Trigger Button
- J: 8MP Rear Camera (AF)
- K: Power Button
- L: Volume Key (up & down)
- M: NFC (optional)
- N: MSR (optional)
- O: Pogo pin for Peripherals
- P: Speaker

Easy Setup

Power on Computer

1. Model: AIM-77S Rating
From Type C: 15 Vdc / 3 A
From Pogo Pin (Docking): 12 Vdc / 3.75A
2. This product is intended to be supplied by a UL Listed Power Adapter (FSP / FSP045-A2BR3, 15Vdc/3A output, Tmax: 40°C, Altitude: 2000 meters) for model AIM-77S. Please contact Advantech for further information and assistance.
3. When you power on the AIM-77S for the first time, please charge the computer's embedded battery via the Type C adapter or Docking to release the battery shipping mode. Then push the Power button ("K" on description of parts.) for 2~3 seconds to start the computer.
4. The product is equipped with a 10.1" Capacitive Touch Panel. Use finger to touch the Active Area to operate the computer.
5. The product is equipped with two LED indicator for power status and barcode scanning status.
Power LED:
 - a) The RED LED blinks when internal battery capacity is below 10% to warn the user to charge.
 - b) The Blue LED lights up when internal battery is being charged.
 - c) The Green LED lights up when internal battery is full.
 - d) When the computer is turned on and the battery capacity is above 81%, after the user inserts the Type C Power adapter to charge, the green LED lights up and remains in the non-charging state.
 - e) When the computer is turned on and the battery capacity is above 81%, after the user put the computer on thermal printer docking or magnet cradle to charge, the green LED lights up and remains in the non-charging state. Then in docking mode, the green LED light will turn off after 5 minutes.Barcode LED: When built-in barcode scan successfully, BCR LED will flash red color.
6. When the computer is running, pressing and holding the power button for 1 second will turn off the LCD backlight to save power. Pressing the power button again will re-enable the backlight; holding the power button for 10 seconds while the computer is running will reset(reboot) the system.
7. Environment:
 - Operating Temperature: -0°C ~ +40°C
 - Humidity: 90% at 40°C (non-condensing)
 - Storage/Transportation Temperature: -10°C ~ +60°C.

If you encounter any system failure or serious incident related to the equipment, please report it to the manufacturer or local agent.

Battery Caution

CAUTION!

AIM-77S is designed with built-in non-replaceable battery. Please do not replace the battery by yourself. Please contact a qualified technician or your retailer for help. There is a danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacturer

(1) Leaving AIM-77S and its Battery in an extremely high temperature surrounding environment that can result in an EXPLOSION or the leakage of flammable liquid or gases.

(2) If AIM-77S and its Battery are subject to extremely low air pressure, it may result in explosion or leakage of flammable liquids or gases.

Only qualified personnel should replace the battery. Please consult local authorities for disposal instructions. Do not dispose of batteries in fire.

Battery Charging Notice

It is important to consider the environment temperature whenever you are charging the Li-ion battery pack. The process is more efficient at normal room temperature (22°C ~28°C) or slightly cooler. It is essential that you charge batteries within the stated range of 0°C to 40°C. Charging batteries outside of the specified range could damage the batteries and shorten their charging life cycle.

Storage and Safety Notice

the battery capacity may be depleted due to the accumulation of internal resistance. If this happens, Must be recharged before use.

Lithium-ion batteries can be stored in an environment of -10°C ~ +60°C, but if they are close to the upper or lower limit of this temperature range, the power will be consumed faster.

It is recommended to store AIM-77S within normal room temperature ranges.

Wireless Network Settings

1. While using Wi-Fi 6GHz bands, please connect to your router with AX or AX mixed mode.
2. When connecting a Bluetooth device, please avoid interference from other 2.4GHz devices.

Image Update

1. The shipping image can be updated by OTA via DeviceOn (Avantech MDM tool) or by USB drive or by another PC.
2. Calibration: It is suggested to be carried out by manufacturer authorized and trained personnel.

Battery Caution

ATTENTION !

L'AIM-77S est conçu avec une batterie intégrée non remplaçable. Ne remplacez pas la batterie vous-même. Veuillez contacter un technicien qualifié ou votre revendeur pour obtenir de l'aide. Un remplacement incorrect de la batterie présente un risque d'explosion. Remplacez-la uniquement par un modèle identique ou équivalent recommandé par le fabricant.

(1) Laisser l'AIM-77S et sa batterie dans un environnement à température extrêmement élevée peut provoquer une EXPLOSION ou une fuite de liquides ou de gaz inflammables.

(2) Si l'AIM-77S et sa batterie sont soumis à une pression d'air extrêmement basse, cela peut provoquer une explosion ou une fuite de liquides ou de gaz inflammables.

Seul un personnel qualifié doit remplacer la batterie. Veuillez consulter les autorités locales pour connaître les instructions de mise au rebut. Ne jetez pas les batteries au feu.

Avis sur la charge de la batterie

Il est important de tenir compte de la température ambiante lors de la charge de la batterie Li-ion. Le processus est plus efficace à température ambiante normale (22 °C à 28 °C) ou légèrement plus fraîche. Il est essentiel de charger les batteries dans la plage de températures indiquée, comprise entre 0 °C et 40 °C. Charger les batteries en dehors de cette plage pourrait les endommager et réduire leur durée de vie.

Conseils de stockage et de sécurité

La capacité de la batterie peut être réduite en raison de l'accumulation de résistance interne. Dans ce cas, elle doit être rechargée avant utilisation.

Les batteries lithium-ion peuvent être stockées dans un environnement entre -10 °C et +60 °C, mais si la température est proche de la limite supérieure ou inférieure de cette plage, la consommation d'énergie sera plus rapide.

Il est recommandé de stocker l'AIM-77S à une température ambiante normale.

Safety Instructions

Veuillez lire attentivement ces consignes de sécurité et suivre ces instructions d'utilisation. La réparation de l'appareil ne doit être effectuée que par un personnel qualifié. Advantech recommande de contacter le service après-vente Advantech et de confier toutes les réparations à ce dernier ; dans le cas contraire, le bon fonctionnement de l'appareil pourrait être compromis.

AVERTISSEMENT ! En raison du risque de choc électrique, ne retirez jamais le couvercle d'un appareil en fonctionnement ou branché sur une prise secteur.

Si l'une des situations suivantes se présente, faites vérifier l'appareil par un technicien :

- Le cordon d'alimentation ou la fiche est endommagé.
- Du liquide a pénétré dans l'appareil.
- L'appareil a été exposé à l'humidité.
- L'appareil ne fonctionne pas correctement ou vous ne pouvez pas le faire fonctionner conformément au manuel d'utilisation.
- L'appareil est tombé et a été endommagé.
- L'appareil présente des signes évidents de casse.

ATTENTION ! Pour éviter les courts-circuits et tout dommage à l'appareil, ne laissez aucun liquide pénétrer à l'intérieur. En cas de déversement accidentel de liquide sur l'appareil, mettez l'appareil concerné hors service dès que possible et contactez le personnel de maintenance afin de vérifier que la sécurité du patient n'est pas compromise.

Nettoyage et désinfection

Éteignez l'AIM-77S et débranchez-le de toute prise secteur avant de le nettoyer.

Utilisez un chiffon humide. N'utilisez pas de détergents liquides ou en aérosol pour le nettoyage et conservez cet appareil à l'abri de l'humidité.

N'utilisez pas de désinfectants contenant du phénol.

N'immergez pas et ne rincez pas la tablette AIM-77S ni ses périphériques.

Ne nettoyez pas la tablette AIM-77S ni ses périphériques à l'autoclave avec des solvants aromatiques, chlorés, cétoniques, éthers ou à base d'éther, des outils tranchants ou des abrasifs.

Safety Instructions

Please read these safety instructions carefully and follow these instructions for use. Repair of the device may only be carried by trained service personnel. Advantech recommends that a service contact be obtained with Advantech service and that all repairs also be carried out by them; otherwise the correct functioning of the device may be compromised.

WARNING! Because of the danger of electrical shock, never remove the cover of a device while it is in operation or connected to a power outlet.

If one of the following situations arises, have the equipment checked by service personnel:

- The power cord or plug is damaged.
- Liquid has penetrated the equipment.
- The equipment has been exposed to moisture.
- The equipment does not work well, or you cannot get it to work according to the user manual.
- The equipment has been dropped and damaged.
- The equipment has obvious signs of breakage.

CAUTION! To avoid short-circuits and otherwise damaging the device, do not allow fluids to come inside of the device. If fluids are accidentally spilled on the equipment, remove the affected unit from service as soon as possible and contact service personnel to verify that patient safety is not compromised.

Cleaning and Disinfecting

Turn off the AIM-77S and Disconnect this equipment from any AC outlet before cleaning.

Use a damp cloth. Do not use liquid or spray detergents for cleaning and keep this equipment away from humidity.

Do not use disinfectants containing phenol.

Do not immerse or rinse the AIM-77S tablet or its peripherals.

Do not autoclave or clean the AIM-77S Tablet or its peripherals with strong aromatic, chlorinated, ketone, ether, or other solvents, sharp tools or abrasives.

Tablet Specifications

Processor	Rockchip RK3568 (Quad-core Cortex-A55 up to 2.0GHz)
Memory	4GB LPDDR4x (Optional: 8GB)
OS	Android 12
iMMC	64GB eMMC5.1 (Optional: 128GB)
microSD	Support (Up to 1TB)
Type	10.1" IPS TFT LCD Panel
Resolution	WGA, 1280x800
Brightness	350nits (LCM Typical)
Touch	10-point multi-touch P-CAP touch control
Glass Type	Corning Gorilla Glass 3
WLAN	Wi-Fi 6E, IEEE 802.11 a/b/g/n/ac/ax
Bluetooth	Bluetooth® v5.3
NFC (Optional)	13.56 MHz, compatible with ISO15693, ISO14443A, ISO 14443B, FeliCa
Standard I/O	1 x USB 3.0 Type C (for Charging and Data)
Docking	1 x USB 3.0 16-pin PoP Connector (for Charging and Data)
Speaker	1 x Internal Speaker (2W)
Audio Jack	1 x Audio combo jack (combines stereo audio output and mono microphone input)
Microphone	1 x Digital-Microphone
Front	5.0-megapixel fixed-focus camera
Rear	8.0-megapixel auto-focus camera
Sensors	Ambient Light Sensor, G-sensor, Gyroscope + e-Compass, Hall Sensor
Barcode Scanner (Optional)	Embedded 1D/2D Barcode Reader
MSR (Optional)	Embedded 3 track MSR module
Power/Battery/LED	1 x Power button, 1 x Volume key (Up & Down)
	1 x programmable function key (default: Barcode Scanner trigger)
Input Voltage	System Off: 100% (Green), Charging (Blue)
	System On: ≥ 81% (Green), Charging (Blue), ≤ 10% (Blinking Red)
Battery	USB Type C: 45W PD3.0 15V/3A
	Docking (16pin PoP): 45W 12V/3.75A
	Embedded Li-Ion Polymer battery: 2512 7.7V, 4440mAh (34.10Wh)
	Operating time: up to 8 hours (depending on user scenario)
	Charging time: 30mins to 50%, 2.5hrs to 100%
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)
Storage Temperature	-10°C ~ 60°C (14°F ~ 140°F)
Humidity	90% at 40°C (non-condensing)
Drop Protection	75cm (with Plugged case, up to 120cm onto plywood)
Dimension (W x D x H)	271 x 180 x 17 (mm)
Weight	885g (non-MSR), 910g (MSR)

Power Cord

Please select a power cord that has been certified locally. (For example, use a UL-certified power cord in the United States)

The equipment power cord shall be connected to a socket-outlet with earthing connection.

Disposing of Old Products

Within the European Union



EU-wide legislation, as implemented in each member state, requires that waste electrical and electronic products carrying the mark shown at left must be disposed of separately from normal household waste. This includes

monitors and electrical accessories, such as signal cables or power cords. When you need to dis-pose of your display products, please follow the guidance of your local authority, or ask the shop where you purchased the product, or if applicable, follow any agreements made between you and the provider.

The mark on electrical and electronic products only applies to the current European Union Member States.

Declaration of Conformity

CE Conformity Statement

Radio products with the CE alert marking comply with the RED Directive (2014/53/EU) issued by the Commission of the European Community. Compliance with this directive implies conformity to the following European Norms (in brackets are the equivalent international standards).

- EN 62368-1 (IEC62368-1) - Product Safety
 - ETSI EN 300 328 Technical requirement for radio equipment
 - ETSI EN 301 893 Technical requirement for radio equipment
 - ETSI EN 300 330 Short Range Devices (SRD)
 - ETSI EN 300 440 Short Range Devices (SRD)
 - ETSI EN 303 687 6GHz WAS/RLAN
 - ETSI EN 301 489 General EMC requirements for radio equipment
- Products that contain the radio transmitter are labeled with CE alert marking and may also carry the CE logo.

The full text of the EU declaration of conformity is available at the following internet address:
<https://www.advantech.com>

The device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range. This device is intended for indoor use only when operating in the frequency range (5945–6425 MHz) which is applicable in countries that support WiFi 6E.

The Power adapter shall be installed near the equipment and shall be easily accessible.

Caution - Risk of explosion if battery is replaced by an incorrect type.
Dispose of used batteries according to the instructions.

The transmission of radio equipment is indoors use only
SW version: 18.42

Maximum Power Output ^⓪	
(2400 - 2483.5 MHz) IEEE802.11 b/g/n/ax mode Bluetooth ^⓪	20dBm EIRP max (100mW) ^⓪
(2400 - 2483.5 MHz) ^⓪ BLE ^⓪	10dBm EIRP max (10mW) ^⓪
(5150 - 5725 MHz) ^⓪ IEEE802.11 a/n/ac/ax mode ^⓪	23dBm EIRP max (200mW) ^⓪ The low band 5.15 - 5.35 GHz is for indoor use only ^⓪
(5725 - 5875 MHz) ^⓪ IEEE802.11 a/n/ac/ax mode ^⓪	13.98 dBm EIRP Max (25mW) ^⓪ For the standard EN 300 440, the device operating in 5.8 GHz is considered a category 2 receiver ^⓪



This system contains the wireless module: AP6611S

	AT	BE	BG	HR	CY	CZ	DK
	EE	FI	FR	DE	EL	HU	IE
	IT	LV	LT	LU	MT	NL	PL
	PT	RO	SK	SI	ES	SE	UK

No.1, Alley 20, Lane 26, Rueiguang Road,
Neihu District, Taipei 114519, Taiwan.

CE RF Exposure warning

This device meets the EU requirements (2014/53/EU) on the limitation of exposure of the public to electromagnetic fields by way of health protection. The limits are part of extensive recommendations for the protection of the public. These recommendations have been developed and checked by independent scientific organizations through regular and thorough evaluations of scientific studies. The unit of measurement for the European Council's recommended limit for mobile devices is the "Specific Absorption Rate" (SAR), and the SAR limit is 2.0 W/Kg averaged over 10 grams of body tissue. It meets the requirements of the International Commission on Non-Ionizing Radiation Protection (ICNIRP).

For next-to-body operation, this device has been tested and meets the ICNRP exposure guidelines and the European Standard EN 62209-2. SAR is measured with the device directly contacted to the body while transmitting at the highest certified output power level in all frequency bands of the mobile device.

FCC Compliance Statement

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, 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.

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example: use only shielded interface cables when connecting to computer or peripheral devices).

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference, and
- 2) This device must accept any interference received, including interference that may cause undesired operation.

15.21

Any changes or modifications not expressly approved by

the party responsible for compliance could void the authority to operate equipment.

This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance. For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

This device is slave equipment, the device is not radar detection and not ad-hoc operation in the DFS band.

Operation of transmitters in the 5.925-7.125 GHz band is prohibited for control of or communications with unmanned aircraft systems.

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment for body-worn configuration in direct contact to the phantom.

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The portable device is designed to meet the requirements for exposure to radio waves established by the Federal Communications Commission (USA). These requirements set a SAR limit of 1.6 W/kg averaged over one gram of tissue. The highest SAR value reported under this standard during product certification for use when properly worn on the body

The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this device is on file with the FCC and can be found under the Display Grant section of <https://apps.fcc.gov/oetcf/eas/reports/GenericSearch.cfm> after searching on FCC ID: M82-AIM77S

IC warning statement

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le

fonctionnement.

This radio transmitter has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance are strictly prohibited for use with this device.

Le présent émetteur radio a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

(i) the device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems; (For devices installed in vehicles point i. is not required.)

Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

(i) l'appareil pour fonctionner dans la bande 5150-5250 MHz est réservé à une utilisation en intérieur afin de réduire les risques d'interférences nuisibles à la co-canal systèmes mobiles par satellite;

Devraient également être informés les utilisateurs que les radars à haute puissance sont désignés comme utilisateurs principaux (c.-à-d. utilisateurs prioritaires) des bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient provoquer des interférences et / ou endommager les appareils LE-LAN.

Devices shall not be used for control of or communications with unmanned aircraft systems.

Les appareils ne doivent pas être utilisés pour contrôler ou communiquer avec des systèmes d'aéronefs sans pilote.

IC Radiation Exposure Statement

This EUT is compliance with SAR for general population/uncontrolled exposure limits in IC RSS-102. This equipment should be installed and operated with minimum distance 0 cm between the radiator & your body.

Cet EUT est la conforme avec SAR pour la population générale / les limites d'exposition incontrolées dans IC RSS-102. Cet équipement doit être installé et utilisé à une distance minimale de 0 cm entre le radiateur et votre corps.

This equipment complies with ICSED radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The portable device is designed to meet the

requirements for exposure to radio waves established by the ISED. These requirements set a SAR limit of 1.6 W/kg averaged over one gram of tissue. The highest SAR value reported under this standard during product certification for use when properly worn on the body. Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. L'utilisateur final doit suivre les instructions spécifiques pour satisfaire les normes. Cet émetteur ne doit pas être co-implanté ou fonctionner en conjonction avec toute autre antenne ou transmetteur.

BSMI

注意事項標示：

- 使用過度恐傷害視力
- 使用 30 分鐘請休息10 分鐘。
- 未滿 2 歲幼兒不看螢幕・2 歲以上每天看螢幕不要超過1 小時。
- 報驗義務人相關聯絡資訊：

申請商: 研華股份有限公司

地址: 台北市內湖區瑞光路26巷20弄1號

電話: 02-2792-7818 / 02-7732-3399

Additional Information and Assistance

Contact your distributor, sales representative, or Advantech's customer service center for technical support if you need additional assistance. Please have the following information ready before you call:

- Product name and serial number
- Description of your peripheral attachments
- Description of your software (operating system, version, application software, etc.)
- A complete description of the problem
- The exact wording of any error messages
- This equipment is a source of electromagnetic waves. Before use please, make sure that there are not EMI sensitive devices in its surrounding which may malfunction therefore.

Environmental protection

- Follow national requirements to dispose of unit.

Manufacturer:

Advantech Co., Ltd.
No.1, Alley 20, Lane 26, Rueiguang Road Neihu District,
Taipei, Taiwan 114, R.O.C.
TEL: (02) 7732-3399

Distributed in Europe by:

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Visit the Advantech websites at www.advantech.com or www.advantech.com.tw if you need more information.

ADVANTECH

平板電腦 AIM-77S 系列 快速入門手冊