

Mobile Computer

AIM-78H Series

Startup Manual

AIM-78H Appearance



Left: Front View Right: Rear View

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

<http://www.advantech.com>

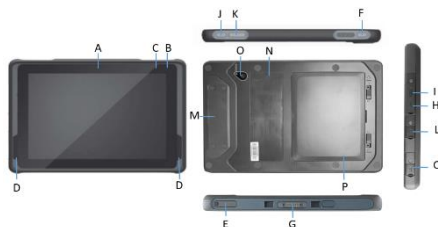
For technical support and service, please visit our support website at:

<http://support.advantech.com>

This manual is for AIM-78H Series

First Edition
October 2021

Description of Parts



- A: Front Camera
- B: Power LED
- C: Light Sensor
- D: Speaker
- E: micro-SIM & micro-SD Card Door
- F: Programmable Key (Default Barcode scanner)
- G: Docking Connector (USB3.0)
- H: USB 2.0 Type A
- I: USB 3.0 Type C
- J: Power Button
- K: Volume Key (Up/Down)
- L: Audio Jack (Headset Combo)
- M: Extension Module
- N: NFC
- O: Rear Camera with LED Flash
- P: Battery Cover
- Q: DC-IN

Easy Setup

Power On Computer

1. Model: AIM-78H Rating 19 Vdc / 3.43A
2. This product is intended to be supplied by a UL Listed Power Adapter (FSP / FSP065-DBCM1) or DC power source, rated 19 Vdc, 3.43A min. for model AIM-78H, and Tma 40 degree C. Please contact Advantech for further information and assistance.
3. The product is equipped with shipping mode for battery protected and power saving, please charge the embedded battery of the computer: Connect the Power adaptor on the AIM-78H computer. ("Q" on the description of parts.) Please charge for at least one hour when you use this computer for the first time.
4. Push the Power button ("J" on description of parts.) for 2~3 seconds to start the computer.
5. The product is equipped with a 10.1" Capacitive Touch Panel. Use finger to touch the following Active Area to operate the computer.
6. The product is equipped with one LED indicator for battery status. The following shows LED status for different power states:
 - a) The orange 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.
7. While the computer is running, push the power button for 1 second will disable LCD backlight for power saving. Push the power button again will enable the backlight again; press the power button for 10 seconds while computer is running, the system will shut down.
8. Environment:
 - Operating Temperature : 0°C ~ +40 °C
 - Operating Humidity : 10% ~ 90%@40°C non-condensed
 - Storage/Transportation Temperature : -20°C ~ +60°C
 - Storage/Transportation Humidity : 10% ~ 95%@40°C non-condensed
 - Humidity consider to 25 °C, 48 hrs
 - Atmospheric pressure : 540-1013 hPa (for operating); 540-1060 hPa (for Storage/Transportation)
 - IP level : IP65
9. There will be "ADVANTECH" logo upside down while first boot up. This scenario will be disappear

after 2nd boot up and won't influence functions and usage.

Intended Use

The AIM-78H is intended for integration with hospital system. It is designed for general purpose for hospital environment.

For data collection and display for reference. It should not be used for life-supporting system.

Intended User Group

The Primary Users of the AIM-78H are professional healthcare personnel and general patient group, It is appropriate for users age is 18 to 65, users weight and health are not relevant.

Maintenance

If encounter any of system failure or serious incident in relation to device, please report to the manufacturer or local agent.

Battery Caution

CAUTION!

Danger of explosion if battery is incorrectly replaced. Replace only with the same type recommended by the manufacturer, discard used batteries according to the manufacturer's instructions.

Attention : Danger d'explosion si la batterie est inexactement remplacée. Remplacez seulement avec la même chose ou le type recommandé par le fabricant, jettent les batteries utilisées instructions de s selon fabricant des'.

Mistreat the battery used in this device may present a risk of fire or chemical burn.

Do not attempt to disassemble the computer or its accessories.

Only qualified personal is allowed to replace the battery. Do not dispose batteries in a fire and check with local authorities for disposal instructions.

AIM-78H can only be equipped with standard battery pack with Getac, AIM-BAT-10, 2300mAH Lithium Ion Battery. Use of another battery may present a risk of fire or explosion.

Battery Charge Notice

It is important to consider the environment temperature whenever you are charging the Lithium-Ion battery pack. The process is more efficient at normal room temperature 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

Although charge Lithium-Ion batteries may be left unused for several months, their capacity may be depleted due to the buildup of internal resistance. If this happens they will require recharging prior to use. Lithium

Ion batteries may be stored at temperatures between -20°C to 60°C, however they may be depleted more rapidly at the high end of this range. It is recommended to store AIM-78H within normal room temperature ranges.

Warnings, Cautions and Notes

Warning!



A **WARNING** statement provides important information about a potentially hazardous situation which, if not avoided, could result in death or serious injury.

Avertissement!



Une déclaration d'AVERTISSEMENT fournit des informations importantes sur une situation potentiellement dangereuse qui, si elle n'est pas évitée, pourrait entraîner la mort ou des blessures graves.

Caution!



A **CAUTION** statement provides important information about a potentially hazardous situation which, if not avoided, may result in minor or moderate injury to the user or patient or in damage to the equipment or other property.

Attention!



Une déclaration de MISE EN GARDE fournit des informations importantes sur une situation potentiellement dangereuse qui, si elle n'est pas évitée, peut entraîner des blessures mineures ou modérées pour l'utilisateur ou le patient ou endommager l'équipement ou d'autres biens.

Note!



A **NOTE** provides additional information intended to

avoid inconveniences.

Details of preparatory treatment or disposal

Installation is only to be carried out by manufacturer authorized and trained personnel.

Calibration the device

- We suggest to send back to supplier for annually check.

Safety Instructions

1. Strictly follow these instructions for use; please read these safety instructions carefully.
2. Keep this user manual for later reference; any use of the product requires full understanding and strict observation of all portions of these instructions. Observe all.
3. Repair of the device may also only be carried out by trained service personnel.
4. Advantech recommends that a service contract 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 electric shock, never remove the box of a device while it is in operation or connected to a power outlet.

Avertissement!



En raison du risque d'électrocution, ne retirez jamais la boîte d'un appareil lorsqu'il est en fonctionnement ou branché à une prise de courant.

5. If one of the following situations arises, get the equipment checked by service personnel:
 - The power cord or plug is damaged.
 - Liquid has penetrated into 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.
6. 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.

Caution!



To avoid short-circuits and otherwise damaging the device, do not allow fluids to come in contact with 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.

Aucune modification de cet équipement n'est autorisée.

Attention!



Pour éviter les courts-circuits et endommager l'appareil, ne laissez pas les liquides entrer en contact avec l'appareil. Si des liquides sont accidentellement répandus sur l'équipement, retirez l'unité concernée du service dès que possible et contactez le personnel de service pour vérifier que la sécurité du patient n'est pas compromise.

7. Put this equipment on a reliable surface during installation. Dropping it or letting it fall may cause damage. For plug-in equipment, the power outlet socket must be located near the equipment and must be easily accessible.

Caution!



Do not leave this equipment in an uncontrolled environment where the Storage temperature is below 0° C or above 45° C. This may damage the equipment.

Attention!



Ne laissez pas cet équipement dans un environnement non contrôlé où la température de stockage est inférieure à 0 ° C ou supérieure à 45 ° C. Ceci pourrait endommager l'équipement.

8. Grounding reliability can only be achieved when the equipment is connected to an equivalent receptacle marked "Hospital Only" or "Hospital Grade".
9. Use a power cord that matches the voltage of the power outlet, which has been approved and complies with the safety standard of your particular country.
10. If the integrity of the protective earth conductor is in doubt. Please turn off the power switch.
11. To disconnect this product from the mains supply disconnects the mains plug from the socket outlet. The power supply is regarded as part of this equipment.
12. Make sure user not to contact SIP/SOPs and the patient at the same time.
13. Do not switch on/off the power switch of the battery system during operation.

Warning!



To avoid risk of electric shock, this equipment must only be connected to a supply mains with protective earth.

Avertissement!



Pour éviter tout risque d'électrocution, cet équipement doit uniquement être raccordé à une alimentation secteur avec terre de protection.

Warning!



No modification of this equipment is allowed.

Avertissement!



14. The power cord for use on the device shall be no less robust than ordinary tough rubber sheathed flexible cord (IEC 60245-1:2003, Annex A, designation 53) or ordinary polyvinyl chloride sheathed flexible cord (IEC 60227-1:1993, Annex A, design. 53. For the US/CA the requirements of the NEC and Canadian code shall be followed (US and CA national differences).

Warning!



Battery system, equipotential pin, metal wiring on equipotential pin, wheels and brake shall be replaced/send back to maintain by the manufacturer every two years, risks of function failure, electrical shock, equipment damage, environment pollution and etc. may occur if not doing so.

Avertissement!



Le système de batterie, la broche équipotentielle, le câblage métallique sur la broche équipotentielle, les roues et le frein doivent être remplacés / renvoyés par le fabricant tous les deux ans, les risques de défaillance de fonctionnement, les chocs électriques, les dommages matériels, etc. Ce faisant.

15. If your computer clock is unable to keep accurate time, please check the battery.

Caution!



When the battery has problem of charging. Please contact a qualified technician or your retailer.

The computer is provided with a battery-powered real-time clock circuit. There is a danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

Lorsque la batterie a un problème de charge. Veuillez contacter un technicien qualifié ou votre revendeur.

L'ordinateur est équipé d'un circuit d'horloge en temps réel alimenté par batterie.

Il y a un risque d'explosion si la batterie est incorrectement remplacée. Remplacez uniquement par le même type ou un type équivalent recommandé par le fabricant.

Jetez les piles usagées conformément aux instructions du fabricant.

Attention!



When servicing the device, always use replacement parts that meet Advantech standards. Advantech Medical cannot warrant or endorse the safe

Caution!



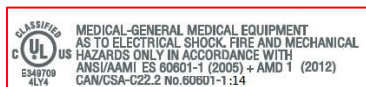
performance of third-party replacement parts for use with our medical device.

Attention!



Lors de la maintenance de l'appareil, utilisez toujours des pièces de rechange conformes aux normes Advantech. Advantech Medical ne peut pas garantir ou endosser les performances sécuritaires des pièces de rechange tierces à utiliser avec notre dispositif médical.

16. Make sure the user does not allow contact between SIP/SOPs and the patient at the same time.
17. When networking with electrical devices, the operator is responsible for ensuring that the resulting system meets the requirements set forth by the following standards:
 - EN 60601-1 (IEC 60601-1)
Medical electrical equipment
Part 1: General requirements for safety
 - EN 60601-1-1 (IEC 60601-1-1)
Medical electrical equipment
Part 1-1: General requirements for safety
Collateral standard: Safety requirements for Medical electrical systems
 - EN 60601-1-2 (IEC 60601-1-2)
Medical electrical equipment
Part 1-2: General requirements for safety
Collateral standard: Electromagnetic compatibility; Requirements and tests
18. Follow national, state or local requirements to dispose of unit.
19. Maintenance: to properly maintain and clean the surfaces, use only the approved products or clean with a dry applicator.
20. Contact information:
No.1, Alley 20, Lane 26, Rueiguang Road
Neihu District, Taipei, Taiwan 114,
R.O.C.
TEL: +886 2-7732-3399
- 21.



22. This equipment shall not be used as a life support system.
23. Accessory equipment connected to analog and digital interfaces must be in compliance with the respective nationally harmonized IEC standards (i.e. IEC 60950 for data processing equipment, IEC 60065 for video equipment, IEC 61010-1 for laboratory equipment, and IEC 60601-1 for medical equipment.) Furthermore all configurations shall comply with the system standard IEC 60601-1-1. Anyone who connects additional equipment to the signal input part or signal output part is configuring a medical system, and is therefore, responsible that the system complies with the requirements of the system standard IEC 60601-1-1. The unit is for exclusive

interconnection with IEC 60601-1 certified equipment in the patient environment and IEC 60XXX certified equipment out-side of the patient environment. If in doubt, consult the technical services department or your local representative.

24. Grounding reliability can only be achieved when the equipment is connected to an equivalent receptacle marked "Hospital Only" or "Hospital Grade".
25. Use a power cord that matches the voltage of the power outlet, which has been approved and complies with the safety standard of your particular country.
26. Do not place the power cord where it is difficult to disconnect and may be stepped by other person

Note!



Environmental protection.
Follow national requirements to dispose of unit.

27. "WARNING - Do not modify this equipment without authorization of the manufacturer."
28. "WARNING – To avoid risk of electric shock, this equipment must only be connected to a supply mains with protective earth.
29. "CAUTION: This adapter FSP / FSP065-DBC1 is a forming part of the medical device."
30. Remove the power cord to fully turn off the device when the battery pack is empty.
31. Classification:
 - 1). Class II
 - 2). No applied part
 - 3). Continuous Operation
32. CAUTION! This product: AIM-78H is used with the Qualified & certificated power adapter: FSP / FSP065-DBC1. Output: Output: 19Vdc, 3.43A max
33. DISCLAIMER: This set of instructions is given according to IEC 704-1. Advantech disclaims all responsibility for the accuracy of any statements contained herein.
34. In case of serious incident that has occurred, please contact the manufacturer and local authorities immediately.

Notice: It is recommended to install the appropriate soft if have any question, please contact the manufacturer for further assistance.
Notice: To prevent unauthorized access, it is recommended to install suitable anti-virus software or do not connect to unsafe external networks

Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 50, dated (Insert date of this guidance.)

CLASS 1 LASER PRODUCT

IEC 60825:2007

Caution - Use of controls or adjustments or performance of procedures other than those specified herein may

result in hazardous radiation exposure

Attention - L'utilisation des commandes ou réglages ou l'exécution des procédures autres que celles spécifiées dans les présents exigences peuvent être la cause d'une exposition à un rayonnement dangereux

Explanation of Graphical Symbols



IEC 60878 and ISO 3864-B.3.6 :
Warning dangerous voltage.



ISO 7000-0434 : Caution, consult
ACCOMPANYING DOCUMENTS.



ISO 7000-1641 : Follow operating
instructions or consult instructions for
use.



IEC 60417-5009 : STAND-BY.



IEC 60417-5032 : Alternating Current.



IEC 60417-5031 : Direct Current.



ISO 7010-M002 : Follow instructions
for use.

Tablet Specifications

	LTE SKU	WiFi SKU
System	Processor Qualcomm® SDM660 Memory 4GB LPDDR4 Operating System Android 10 eMMC 64GB	Qualcomm® SDM660 4GB LPDDR4 Android 10 64GB
Storage	Micro-SD Support (up to 128GB) Type 10.1" FHD LCD Resolution 1920 x 1200 Brightness 900 cd/m²	Support (up to 128GB) 10.1" FHD LCD 1920 x 1200 980 cd/m²
Display	Type 10.1" FHD LCD Resolution 1920 x 1200 Brightness 900 cd/m² Touch Type 10-point multi-touch P-CAP touch control Glass Type Corning® Gorilla® Glass 3 Bluetooth Bluetooth v5.0	10-point multi-touch P-CAP touch control Corning® Gorilla® Glass 3 Bluetooth v5.0
Communication	WiFi IEEE 802.11 a/b/g/n/ac Bluetooth Bluetooth v5.0 NFC ISO 14443A, ISO 14443B, FelCa	IEEE 802.11 a/b/g/n/ac Bluetooth v5.0 N/A N/A
Connectivity	Standard I/O 1 x USB 2.0 1 x USB Type-C (Data transfer only) 1 x combo audio jack 1 x 19 VDC-in jack 1 x SIM card reader 1 x micro SD card reader	1 x USB 2.0 1 x USB Type-C (Data transfer only) 1 x combo audio jack 1 x 19 VDC-in jack 1 x micro SD card reader
Audio	Extended I/O 1 x AIM extension 14-pin pogo connector: 1 x USB 2.0, 1 x 2-wire UART, 5V/1A power 1 x AIM docking 16-pin pogo connector: 1 x USB 3.0, 12V power Speaker 2 x Internal speakers (2 W) Support	1 x AIM extension 14-pin pogo connector: 1 x USB 2.0, 1 x 2-wire UART, 5V/1A power 1 x AIM docking 16-pin pogo connector: 1 x USB 3.0, 12V power 2 x Internal speakers (2 W) Support
Camera	Audio Jack 1 x Audio combo jack (combines stereo audio output and mono microphone input) Front 8.0-megapixel fixed-focus camera Rear 13-megapixel auto-focus camera with LED flash	1 x Audio combo jack (combines stereo audio output and mono microphone input) 8.0-megapixel fixed-focus camera 13-megapixel auto-focus camera with LED flash
Sensors	Ambient light sensor, E-compass, Gyroscopic Accelerometer	Ambient light sensor, E-compass, Gyroscopic Accelerometer
Barcode Scanner	Integrated 1D/2D barcode scanner	Integrated 1D/2D barcode scanner
Control Buttons	1 x Power button 2 x volume keys (up/down) 1 x programmable function key	1 x Power button 2 x volume keys (up/down) 1 x programmable function key
System indicator	Full green (100%); Charging: blue; Low red (≤10%)	Full green (100%); Charging: blue; Low red (≤10%)
Power System	Input Voltage DC jack: 19V/3.43A Docking pogo: 12V/2A Swappable battery with capacity LED indicators; 10.8V, 2400 mAh, 26 Whr Operating time: up to 6 hr (depending on usage scenario) Charging time: < 3 hr Charging temperature: 0 ~ 40°C Discharging temperature: 0 ~ 45°C	DC jack: 19V/3.43A Docking pogo: 12V/2A Swappable battery with capacity LED indicators; 10.8V, 2400 mAh, 26 Whr Operating time: up to 6 hr (depending on usage scenario) Charging time: < 3 hr Charging temperature: 0 ~ 40°C Discharging temperature: 0 ~ 45°C

	Operating	0-40 °C (32-104 °F)	0-40 °C (32-104 °F)
Environment	Storage	-20 ~ 60 °C (-4 ~ 140 °F)	-20 ~ 60 °C (-4 ~ 140 °F)
	IP Rating	IP65	IP65
	Shock	IEC60068-2-27	IEC60068-2-27
	Vibration	IEC60068-2-64	IEC60068-2-64
	Humidity	Operating: 10 ~ 90% @ 40 °C non-condensing Up to 120 cm (4 ft) onto plywood over concrete	Operating: 10 ~ 90% @ 40 °C non-condensing Up to 120 cm (4 ft) onto plywood over concrete
	Drop Tested	Up to 120 cm (4 ft) onto plywood over concrete	Up to 120 cm (4 ft) onto plywood over concrete
Physical Characteristics	Dimension (W x D)	280 x 18.3 x 180.1 mm (11 x 0.7 x 7.1 in)	280 x 18.3 x 180.1 mm (11 x 0.7 x 7.1 in)
	Weight	980 g (2.2 lb)	980 g (2.2 lb)
	Color	Dark Grey	Dark Grey

Optional Accessories

1. Office Docking Station



Specifications

	Advanced Desk Docking Station
I/O	2 x USB 2.0 1 x RS-232 COM 1 x Power jack 1 x HDMI 1 x Battery charging bay
Power	Input Voltage 19V
Mechanical	Dimensions (W x D x H) 196 x 169.44 x 122.12 mm (7.72 x 6.67 x 4.81 in) Weight 0.78 kg (1.68 lb) Operating Temperature -10 ~ 50 °C (-14 ~ 122 °F); 0 ~ 40 °C (32 ~ 104 °F) for charging

Installation instructions:

- Put the AIM-78H tablet onto the office docking station
- Connect power adapter to the docking station to start using it
- You can also put AIM-78H battery pack into the battery bay to charge the battery

2. VESA Docking Station



Specifications

	Advanced VESA Docking Station
I/O	2 x USB 3.0 1 x RS-232 COM 1 x Optical LAN 1 x Power jack
Stand	N/A
Power	Input Voltage 9 ~ 22 V
Mechanical	Dimensions (W x D x H) 159.13 x 75.49 x 227 mm (6.3 x 2.9 x 8.9 in) Weight 0.33 kg (0.72 lb) Operating Temperature -10 ~ 50 °C (-14 ~ 122 °F); 0 ~ 40 °C (32 ~ 104 °F) for charging

Installation instructions:

- Put the AIM-78H tablet onto the VESA docking station
- Connect power adapter to the docking station to start using it

3. Docking Station



Specifications

		Fully Configured Unit
I/O	High-Density Connector	1 x CAN bus (supports raw CAN, J1939, OBD-II/ISO 15765) with configurable firmware
		5 x Digital inputs
		1 x Diode meter (supports dry and wet contact) with configurable and switchable firmware (default wet contact)
		2 x Digital outputs (supports speed pulse)
		1 x RS-232 (4 wire)
GPS	GPS Extended	1 x RS-232/485 (2 wire) (default RS-485, termination enabled)
		1 x USB 2.0
1 x Power input 12 V 1 A		
1 x External GPS antenna		
5 x Programmable function keys		
Anti-theft key lock (they can be removed)		
Supports 12/24 V vehicle power (9 ~ 32 V _{cc} input range)		
Mechanical	Input Voltage	Dimensions (W x D x H)
		226 x 83.08 x 250.24 mm (8.9 x 3.27 x 9.9 in)
		Weight
		0.77 kg (1.70 lb)
Operating Temperature		
-10 ~ 50 °C (14 ~ 122 °F); 0 ~ 40 °C (32 ~ 104 °F) for charging		
Storage Temperature		
-30 ~ 80 °C (-22 ~ 176 °F)		
IP Rating		
IP54		

Installation instructions:

- Put the AIM-78H tablet onto the vehicle docking station
- Connect power adapter to the docking station to charge the tablet

4. Barcode Scanner



Features	• Sensor: 640 x 480 CMOS sensor
	• Illumination & Aiming: White LED illuminator/Red LED dot aimer
	• Frame rate: 30 fps
	• Field of view: Horizontal: 37.8°; Vertical: 28.8°

Installation instructions:

- Remove the add-on cover with the screw uninstalled



- Put barcode scanner on the add-on module area with the screw installed
- Turn on the tablet to use the barcode scanner



Replacing the battery pack

- Turn off the computer and disconnect the AC adapter.
- Carefully place the computer upside down.
- Slide the battery latch to the unlocked position



- Remove the battery pack cover
- Remove the battery pack out of the slot by pulling the pull-tab.



6. Insert the new battery pack all the way into the slot
7. Put the battery pack cover back
8. Slide the battery latch to the locked position

Cleaning and Disinfecting

During normal use of the AIM tablet the device may become dirty and should be regularly cleaned.

Steps:

1. Turn off the AIM-78H and unplug the power cord.
2. Wipe the screen and exterior with a soft, damp cloth moistened only with water. Do not use liquid or aerosol cleaners on the screen, as these will discolor the finish and damage the screen.
3. Clean the LCD display only with a soft cloth dampened with 60% above isopropyl alcohol or 60% above ethyl alcohol each time after use.

Caution!



Attention!



Do not immerse or rinse the AIM tablet or its peripherals. If you accidentally spill liquid on the device, disconnect the unit from the power source. Contact your IT support department regarding the continued safety of the unit before placing it back in operation-Do not spray cleaning agent on the chassis.

Do not use disinfectants that contain phenol.

Do not autoclave or clean the AIM Tablet or its peripherals with strong aromatic, chlorinated, ketone, ether, or ether solvents, sharp tools or abrasives. Never immerse electrical connectors in water or other liquids.

Operating Principle

The device provides input through touch panel, hard keys located at the bottom of it, accessories through USB ports or its LAN/WLAN connections. The device

computes the input data with its processing unit and then output the generated data to LCD panel, accessories or other devices through its I/O ports or through its LAN/WLAN connections. The device is able to store data in its storage, and when the device is turned off, still maintain the data in the memory units of the storage.

Connecting the Power Cord

The AIM tablet can be powered by AC/DC power adapter. Be sure to always handle the power cords by holding the plug ends only.

Follow these procedures in order:

1. Connect the DC plug of the power adapter to AIM tablet product DC in connector. (Step 1)
2. Connect the 2 pin male plug of the power cord to an electrical outlet. (Step 2)

Intended User Profile

Age: 18 to 65

Weight: not relevant

Health: not relevant

Nationality: Global

Patient state: patient will not be the operator.

Part of the body or type of tissue applied to or interacted with: hands and fingers, expected contact time shall be less than 1 min.

Education level: at least 8 years intensive reading experience (school)

Knowledge:

- Minimum – read and understand “westernized Arabic” numerals when written in Arial font
- can distinguish: every parts of body as described in user manual
- trained and authorized by manufacturer only.

To be considered as trained and authorized, they must complete the training course of the manufacturer; see document number AIM-78H_User Manual_Rev 1.0 for qualification method, when considered necessary by the manufacturer, technician shall be called back for retraining and annual training is also considered necessary.

Language understanding: English, whenever other languages are required, professional translation company shall translate and review by the manufacturer, see SOP document number: SOP_Writing_Guidelines-ed.3

Experience: Mentally and physical competent, specific medical training to understand basic knowledge for symbols.

Permissible impairments:

- Mild reading vision impairment or vision corrected to log MAR 0,2 (6/10 or 20/32)
- One arm / hand system capable of guiding and

holding device

- Average degree of aging-related short term memory impairment
- impaired by 40 % resulting in 60 % of normal hearing at 500 Hz to 2 kHz

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 dispose 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 (IEC 62368-1) - Product Safety
- EN 300 328 Technical requirement for radio equipment
- EN 301 893 Technical requirement for radio equipment
- ET S301 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.

FCC Compliance Statement

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV

technician for help.

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.

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

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 present emetteur radio a ete approuve par Industrie Canada pour fonctionner avec les types d'antenne enumeres ci-dessous et ayant un gain admissible maximal et l'impedance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est superieur au gain maximal indique, sont strictement interdits pour l'exploitation de l'emetteur.

(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-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.

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 conformite avec SAR pour la population generale / les limites d'exposition incontrolées dans IC RSS-102. Cet équipement doit être installé et utilise a une distance minimale de 0 cm entre le radiateur et votre corps.

This equipment complies with ISED 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.

ENERGY STAR

An ENERGY STAR qualified computer delivers substantial savings over a conventional computer. Desktop, integrated desktop, and notebook (laptop) computers, workstations, small-scale servers, and thin clients are all eligible to earn the ENERGY STAR, and those that do are now more efficient than ever. It is an honor for Advantech to provide you such products.

What is ENERGY STAR?
ENERGY STAR is a U.S. Environmental Protection Agency (EPA) voluntary program that helps businesses and individuals save money and protect our climate through superior energy efficiency. The ENERGY STAR program was established by EPA in 1992, under the authority of the Clean Air Act Section 103(g). Section103(g) of the Clean Air Act directs the Administrator to "conduct a basic engineering research and technology program to develop, evaluate, and demonstrate non-regulatory strategies and technologies for reducing air pollution."

In 2005, Congress enacted the Energy Policy Act. Section 131 of the Act amends Section 324 (42 USC 6294) of the Energy Policy and Conservation Act, and "established at the Department of Energy and the Environmental Protection Agency a voluntary program to identify and promote energy-efficient products and buildings in order to reduce energy consumption, improve energy security, and reduce pollution through voluntary labeling of or other forms of communication about products and buildings that meet the highest energy efficiency standards."

For more information, please visit www.energystar.gov

AIM-78H is to enter display sleep mode after 4 minutes and computer sleep mode after 10 minutes in default. To wake it from sleep mode, simply press the power button on the back cover, while under sleep mode it allows the device to save 80% or more energy.

Power Management System:

Lists of default power management systems

<i>Balanced (Default)</i>	<i>AIM-78H: Idle 4 mins. closes screen, 10 min. enters sleep mode.</i>
<i>High performance</i>	<i>Never idle and never enters sleep mode.</i>

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:

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