# **User Manual**

# **NB20**



#### CyberMed / iOne NB20

#### **User's Manual**

### **FCC-B Radio Frequency Interference Statement**

CE TO

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.

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. 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. 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 or more of the measures listed below.

- Reorient or relocate the receiving antenna.
- Increase the distance 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/television technician for help.
- Notice 1 The changes or modifications not expressly approved by the party Responsible for compliance could void the user's authority to operate the equipment.
- Notice 2 Shielded interface cables and hospital grade A.C. power cord, if any, must be used in order to comply with the emission limits.

#### **Trademarks**

All trademarks are the properties of their respective owners. Intel® is a registered trademark of Intel Corporation. Windows® 10/8.1/7 are registered trademarks of Microsoft Corporation. AMI is a registered trademark of American Megatrends, Inc. Insyde is a registered trademark of Insyde Software, Inc.

#### Safety Instructions

- 1. Always read the safety instructions carefully.
- 2. Keep this equipment away from humidity.
- 3. Lay this equipment on a reliable flat surface before setting it up.
- 4. The openings on the enclosure are for air convection hence protect the equipment from overheating. DO NOT COVER THE OPENINGS.
- 5. Confirm the voltage of the power source and adjust accordingly to 110/220V before connecting the equipment to the power inlet.
- 6. Place the power cord in such a way that it cannot be stepped on. Do not place anything over the power cord.
- 7. Always unplug the Power Cord before inserting any add-on card or module.
- 8. All cautions and warnings on the equipment should be noted.
- 9. Never pour any liquid into the opening. This will cause damage and/or electrical shock.
- 10. Do not disable the protective grounding pin from the plug. The equipment must be connected to a grounded main socket/outlet.
- 11. If any of the following situations arise, have the equipment checked by authorized service personnel:
  - The power cord or plug is damaged.
  - Liquid has penetrated into the equipment.
  - The equipment has been exposed to moisture.
  - The equipment has not worked well or you cannot get it working according to the User's Guide.
  - The equipment has been dropped and damaged.
  - The equipment has obvious signs of breakage.
- 12. Do not attempt to remove or upgrade any component by yourself, any installation or modification should be conducted by service personnel.
- 13. Warning: Do not modify this equipment without authorization of the manufacturer. Never open the device. For safety reasons, only qualified service personnel should open the equipment. The SIP/SOP of AIO PC must be connected to compliance with IEC standard

"Warning: If this equipment is modified, appropriate inspection and testing must be conducted to ensure continued safe use of equipment".

DO NOT LEAVE THIS EQUIPMENT IN AN UNCONDITIONED ENVIRONMENT WITH OPERATING TEMPERATURE ABOVE 35° C (86°F). ALSO DO NOT CHARGE THE BATTERIES INSIDE THE SYSTEM WHEN OPERATING AS FULL LOAD CPU AT MORE THAN 80% UTILIZATION, IT MAY DAMAGE THE EQUIPMENT AND BATTERIES.

CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer.

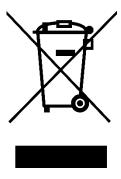
#### **WEEE Statement**

(Waste Electrical and Electronic Equipment)

The WEEE directive places an obligation on EU-based manufacturers, distributors, retailers and importers to take-back electronics products at the end of their useful life. A sister Directive, ROHS (Restriction of Hazardous Substances) compliments the WEEE Directive by banning the presence of specific hazardous substances in the products at the design phase. The WEEE Directive covers products imported into the EU as of August 13, 2005. EU-based manufacturers, distributors, retailers and importers are obliged to finance the costs of recovery from municipal collection points, reuse, and recycling of specified percentages per the WEEE requirements.

#### Instructions for disposal of WEEE by Users in the European Union

The symbol shown below is on the product or on its packaging, which indicates that this product must not be disposed of with other waste and follow the "national" requirement to dispose unit. Instead, it is the user's responsibility to dispose of their waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or where you purchased the product.

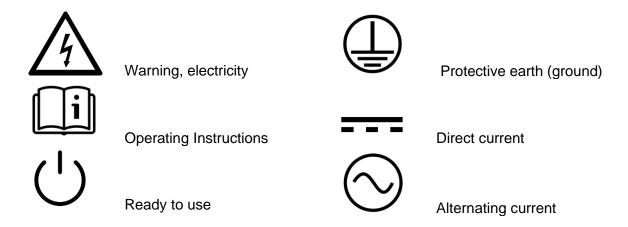




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#### Caution:



#### Getting to know your All in One PC

This manual refers to both the Medical model known as CyberMed NB20 and the Enterprise model known as iOne NB20.

#### Model difference:

- 1) CyberMed: features a white color unit for medical markets with Antigerm and Medical grade certifications.
- 2) iOne and IPC units: features a black color unit for commercial / Industrial markets and Government.
- 3) "NB" units feature two hot-swappable battery packs in a fanless computer.

#### Introduction

Congratulations for purchasing the CyberMed NB20 series & iOne NB20 series. The CyberMed NB20 series & iOne NB20 series are the most advanced medical and commercial grade all in one PCs ever made, with the fantastic appearance and small form factor, it can easily be installed anywhere. The feature packed platform also gives you an exciting user experience.

# CyberMed & iOne NB20 Specifications

Display	LCD panel 19.5" 1600 x 900 250nits
СРИ	Support Intel Skylake/Kabylake platform
	Intel® Core™ i7-6600U/7600U
	Intel® Core™ i5-6300U/7300U
	Intel® Core™ i5-6200U/7200U
	Intel® Celeron® 3955U/3965U
	2 x DDR4 SO-DIMM sockets, up to 32GB combined
Memory	Supports memory data transfer rates of 1866MHz/2133MHz for DDR4, un-buffered non-ECC DDR4 SO-DIMMs
Ctavana	Serial ATA controller facilitates high-speed transfers up to 6Gbps
Storage	Maximum 2 x 2.5" HDD or SSD
Video 9 Crephics	Skylake: Integrated Intel® HD Graphics 520
Video & Graphics	Kabylake: Integrated Intel® HD Graphics 620
	IP65 front panel
Durability	IP54 back cover
	Validated by 3 <sup>rd</sup> party lab and is not part of cUL verification
Audio	Realtek High Definition Audio
Audio	Built-in 2 x 2-watt Mono speakers / Headphone / Microphone
	4 x USB3.0 connector
	1 x Line-out
	1 x Microphone
I/O Ports	1 x HDMI-in
I/O POILS	1 x HDMI-out
	2 x RJ-45 Gigabit (Gbe) LAN
	1 x 4-Pin DIN Power Jack
	1 x COM RS-232/422/485 with 5/12V
Power Innet	19V / 6.32A with FSP, FSP120-ABBN3 for UL60950-1/UL62368
Power Input	19V / 6.31A with EDAC, EM11011M for UL60601-1 3.1 edition
Touch Screen	10F Multi-touch capacitive touch

	Supports Palm rejection
	Supports Stylus / Digitizer Pen
Wireless	Intel AC7265 support IEEE802.11ac + BT4.0 (Optional)
Communications	Intel AC8265 support IEEE802.11ac + BT4.2 (Optional)
Camera	5.0M Web camera (Optional)
Dettem	2 x hot swappable battery with up to 12 hours of runtime
Battery	Charging time: 7 hours, simultaneous battery charging
0	Windows 10 / IoT / Pro
Operating System	Linux
Operating Environment	Ambient Temperature: 0°C ~ 35°C (operating).
Relative Humidity	10% ~ 90% (non-condensing)
Pressure	700 to 1060hPa (0~3000m)
Assallable Oalessee	CyberMed has a white antimicrobial housing
Available Colours	iOne has a black housing
Dimensions	20.3"(L) X 14.3"(W) x 1.9"(D)
Woight	NB20 with two batteries: 13.9lbs
Weight	NB20 without batteries: 11.9lbs
System BIOS	AMI Flash BIOS supports ACPI, API, DMI, Plug & Play, and security password.
BIOS Security	BIOS System POST and BIOS setup password protection. TPM version 1.2 / 2.0 Support.
	FCC Class B / CE
	EN55032 / EN55024 / EN60601-1 / EN60601-1-2 / EN3014 89
Certifications	ANSI/AAMI ES60601-1 (2005) + AMD1 (2012) and CAN/CSA-C22.2 No. 60601-1:14
	UL/IEC60950 / 62368
	REACH / RoHS 3.0 / WEEE

### **Power Information**

FSP120-ABBN3, 120W, Made by FSP TECHNOLOGY INC. for UL60950-1 / 62368

EM11011M, 120W, Made by EDAC Power Electronics Co., Ltd. for ANSI/AAMI ES60601-1 (2005) + AMD1 (2012) and CAN/CSA-C22.2 No. 60601-1:14

#### Intended Usage

The CyberMed NB are designed for general pc application for health care environment. It may be used for Radiology, PACS (Picture Archiving Communication Systems), LIS (Lab Information Systems), COW (Computer on Wheel), and Electronic Medical Record purpose. It shall not be used for life-supporting systems.

#### **Intended User Profile:**

Education: - Completed medical education (study), Department of Medicine or Nursing (or equivalent)

Knowledge: – Read and understand English and Western Arabic numbers – understanding the definition of Class I (basic insulation) and Class II (double insulation) – could recognize the symbols of alternating current (AC), direct current (DC), protective earth (ground), earth (ground), Class II equipment, caution, operating instructions, "ON' (power) and "OFF" (power)

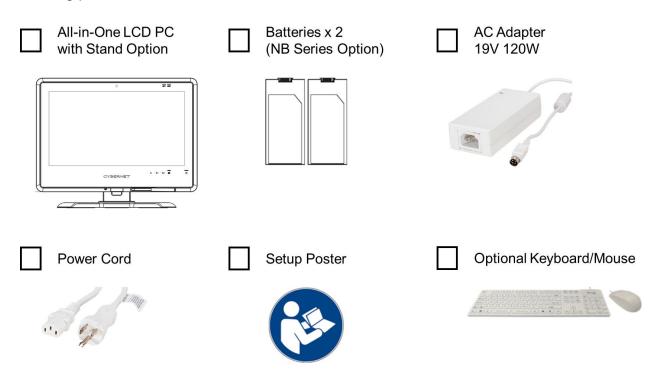
Language Skills: languages as specified in the marketing plan for tablet PC Experience: other: no special experience needed

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

**WARNING:** Critical diagnostic decision must not be based solely on images displayed by this device.

### **Unpacking**

After opening the carton, please check carefully to see if there are any damages or missing parts.



#### **Read the Manual**

Please read this manual carefully and remember to keep this manual for future reference.

#### **Drivers**

Please visit <a href="https://www.cybernetman.com/en/support/downloads">https://www.cybernetman.com/en/support/downloads</a> to download the drivers necessary for installation. Note, all of the INF and CAB driver packages are located under the Driver Packages page.

# **Safety Instructions**

This product has undergone various tests in order to comply with safety standards. Inappropriate use or opening the housing may be dangerous. Please remember to follow the instructions below to ensure your safety during the installation and operating process.

## **Transporting & Placement**

- 1. When moving the unit on a cart, be cautious. Quick stops, excessive forces, and uneven surfaces may cause the cart to overturn, risking the unit to fall.
- 2. If the NB20 does fall to the ground, immediately turn the power off and disconnect cords. Then contact a service technician for repairs. Continual use of the NB20 may result in a fire or electric shock. Also, do not repair the unit on your own.
- 3. Having two or more people transporting and/or installing the NB20 is recommended.
- 4. Before suspending the unit, make sure the material used for suspension is sturdy and stable. If not properly suspended, the NB20 may fall and cause serious injury to people standing nearby as well as to the unit itself.
- 5. If the user wishes to mount the NB20, remember to use only the mounting hardware recommended by the manufacturer.

#### **Electrical and Power Source Related**

- The NB20 can be operated on batteries or through the included external power adapter with AC input between 110V-240V.
- The power cords must not be damaged. Applied pressure, added heat, and tugging may damage the power cord.
- The power cord must be routed properly when setup takes place to prevent workplace hazards and potential damage to the NB20.
- Do not overload the AC outlets or extension cords. Electrical shocks or fires may occur from overloading.
- Do not touch the power source during a thunderstorm.
- If your hands are wet, do not touch the plug.
- Use your thumb and index finger, grip firmly on the power cord to disconnect from the electrical socket. By pulling the power cord, may result in damaging it.
- If the unit is not going to be in use for an extended period of time, remember to disconnect the unit.
- The NB20 uses 19V DC output from an adapter. Connect the unit to a power source with the same numerical value as indicated. Please use only the power cord provided by the dealer to ensure safety and EMC compliance.

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

#### **Disconnect Device**

To fully disengage the power to the unit, please remove all the batteries (for NB series) first before disconnecting the power cord from the AC inlet.

#### **Environmental Factors**

- Operating Temperature: 0°C to 35°C; Non-operating temperature: -20°C to 60°C.
- Operating Humidity (Non-Condensing): 10% to 90%. Non-operating Humidity (Non-condensing): 10% to 90%.
- Pressure: 700 to 1060hPa (0-3000m)
- Do not insert objects into the openings.
- Do not allow liquids to seep into the internal areas of the AIO PC.
- Having liquids seep in or inserting objects into the unit may result in electric shock and/or short circuiting the internal parts.
- Do not place the AIO PC in the presence of high moisture areas.
- Do not install the AIO PC in a wet environment.
- Do not place unit near heat generating sources.
- Do not place the unit in a location where it will come in contact with excessive fumes or steam.
- Remember to keep the AIO PC away from the presence of excessive dust.
- If water has seeped in, immediately disconnect the Power- Then contact a service technician for repairs.

## **Ventilation Spacing**

This unit is sealed and there are no openings on front. The rear I/O area is exposed and may allow liquid ingress, however due to the angle it is unlikely.

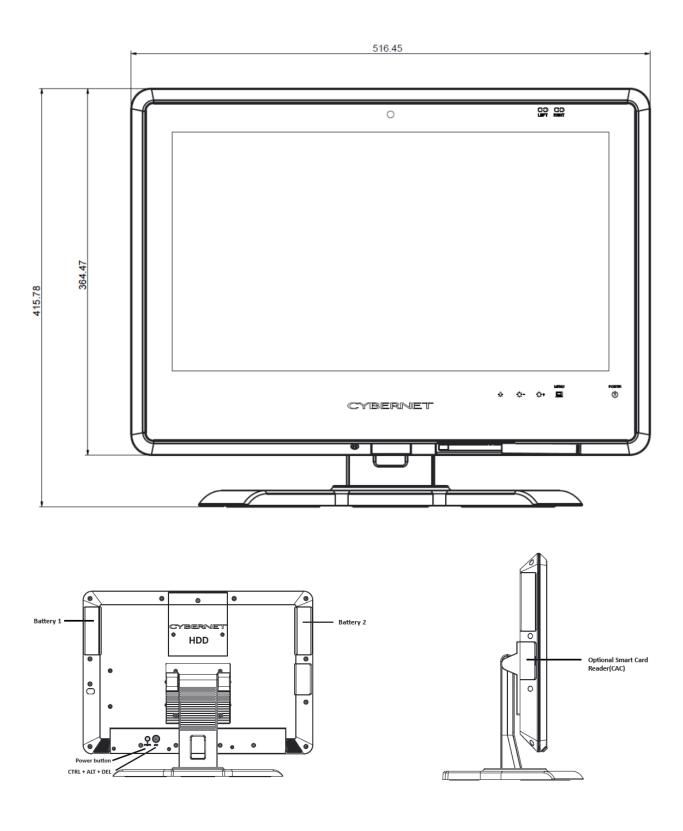
 Unless proper ventilation is present, do not place unit in an enclosed area; such as a built-in shelf. Keep a minimum distance of 10 cm between the unit and wall.

#### Servicing, Repairing, Maintenance & Safety Checks

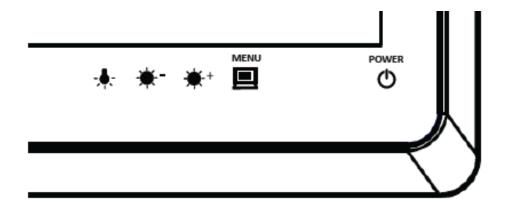
- 1. If the unit is not functioning properly, observe the performance level closely to determine what type of servicing is needed.
- 2. Do not attempt to repair the AIO PC on your own. Disassembling the cover exposes users to high voltages and other dangerous conditions. Notify and request a qualified service technician for servicing the unit.
- 3. To avoid risk of electric shock, this equipment must only be connected to a supply mains with protective earth.
- 4. If any of the following situations occurs turn the power source off and unplug the unit. Then contact a qualified service technician.
  - (a) Liquid was spilled on the unit or objects have fallen into the unit.
  - (b) The unit is dropped or damaged.
  - (c) If smoke or strange odor is flowing out of the operating unit.
  - (d) If the power cord or plug is damaged.
  - (e) If the unit is malfunctioning
- 5. When replacement parts are needed for the AIO PC, make sure service technicians use replacement parts specified by the manufacturer, or those with the same characteristics and performance as the original parts. If unauthorized parts are used it may result in starting a fire, electrical shock and/or other dangers.

$\triangle$	ISO 7000-0434: Caution, consult ACCOMPANYING DOCUMENTS.
Ωi	ISO 7000-1641: Follow operating instructions or Consult instructions for use.
	IEC 60417 -5009: ready to use.
	IEC 60417-5031: Direct current.
	EU-wide legislation, as implemented in each Member State, requires that waste electrical and electronic products carrying the mark (left) must be disposed of separately from normal house hold waste and follow the "national" requirement to dispose unit. This includes monitors and electrical accessories, such as signal cables or power cords. When you need to dispose of your medical panel PC 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 yourself. The mark on electrical and electronic products only applies to the current European Union Member States.

# CyberMed & iOne NB20 Series Overview



# **On Screen Display Buttons**



There are five buttons on the lower bezel as per above. From right to left:











Reading Light

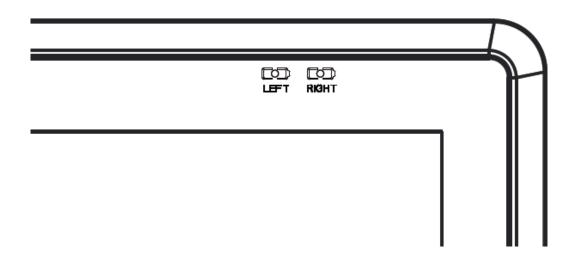
Brightness / - Brightness / +

MENU

Ready to use power button

OSD Key	Response Time	Function
Power button	Delay 1.5 sec	Main power ON/OFF button.
Menu button	Immediately	Enter the On-screen display (OSD) menu. Once in the menu, it is used to confirm the selection.
		When not in the OSD menu, double pressing this button will enable privacy mode and turn off the LCD and Touchscreen.
		To exit privacy mode, press the button again to turn on the LCD and Touchscreen.
Brightness / +	Immediately	Increase LCD brightness one level from a momentary touch.
		In the OSD menu, press to move right or increase value.
	Press and hold	Press and holding the button will increase LCD brightness until reaching maximum brightness.
	Immediately	Decrease LCD brightness one level from a momentary touch.
Brightness / -		In the OSD menu, press to move left or decrease value.
	Press and hold	Press and holding the button will decrease LCD brightness until reaching minimum brightness.
Reading Light	Immediately	Power ON/OFF button for the reading light

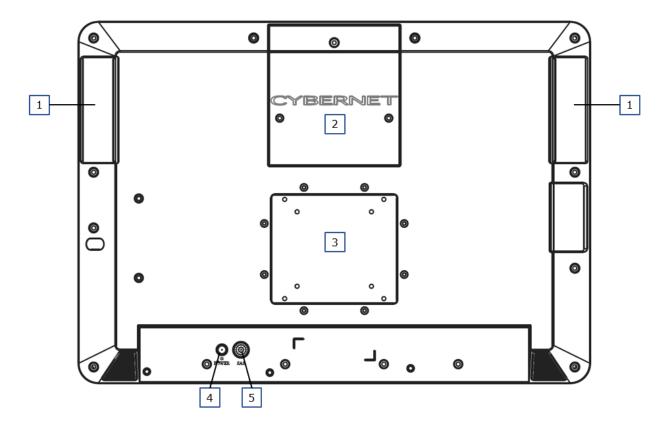
# On Screen Battery Status LED Icons (NB Series)



There are two battery LED icons on the top bezel to designate the left and right battery statuses.

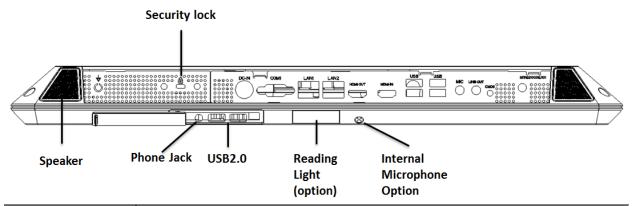
Icon	<b>Battery Location</b>	LED Color
Right	Battery 1	Green: Solid green for battery capacity ≥ 15%
Left		Orange: Solid orange for battery capacity < 15% Off: No battery in the slot or defective battery

# **Back View**



No.	Item	Description	
1	Battery Door	Battery access door to add/remove batteries. (NB Model)	
2	HDD door	Easy access storage bay.	
2 \/\(\(\Gamma\)	Supports 75 x 75 and 100 x 100 VESA mount using M4		
	3 VESA mount hole	screws*4 (4.0mm x 12.0mm).	
4	Secondary Power	Secondary power on button in applications where the	
button		front power button is disabled.	
		In Win7 it will input "CTRL + ALT + DEL".	
5	SAS KEY	In Win8.1/10 it will be the "Start button". Hold for 3	
		seconds to input "CTRL + ALT + DEL".	

# **Bottom View**



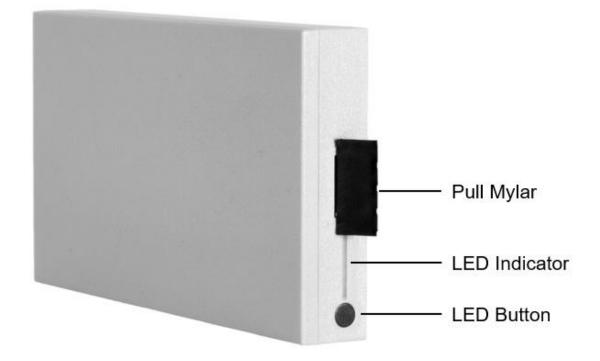
Item	Description
DC-IN	19V input with 120/150Watt adapter.
COM1	RS232/RS422/RS485 is selectable at pin 9.
CONT	5V/12V is selectable in the BIOS menu (100mA max).
	Intel I219LM 10/100/Gigabit LAN, supports Wake on LAN, PXE
LAN1	boot and vPro technology.
LAN2	Realtek RTL8111 10/100/Gigabit LAN, supports Wake on LAN and
LANZ	PXE boot.
HDMI-out	Supports HDMI output, maximum resolution 4096x2160@24Hz
LIDMI :	HDMI input support for monitor mode. This mode can be enabled
HDMI-in	in the OSD menu of the unit.
	4 x USB 3.0 interfaces supported with 5Gbit/s transfer rate / 900mA
USB3.0	output current and compatible with USB2.0 and USB1.1.
	Supported. Azalia Audio interface support. Configurations can be
Microphone	selected through the Realtek Audio Manager once the external
	audio devices are plugged in.
	Supported. Azalia Audio interface support. Configurations can be
LINE-out	selected through the Realtek Audio Manager once the external
	audio devices are plugged in.
CMOS	Clear CMOS button.
Speaker	Dual 2-watt speakers
Security Lock	Security lock slot. Test load: 25kg
Phone Jack	Support CTIA type ear phone.
USB2.0	2 x USB 2.0 interface with 480Mbit/s transfer rate. 500mA output

	current and compatible with USB1.1.	
Reading light	LED reading light feature. Controlled via front LED light button	
(Option)	near OSD.	

### **Battery Information**

Each Battery provides a multi-level blue LED indicator, allowing the user to press the LED button for real-time battery capacity levels. LED indicator guide:

```
1x LED ON – 1~20% charge remaining
2x LED ON – 21~40% charge remaining
3x LED ON – 41~60% charge remaining
4x LED ON – 61~80% charge remaining
5x LED ON – 81~100% charge remaining
```



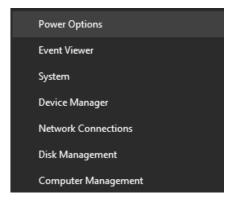
### **Power Management**

Power management has the potential to save significant amounts of electricity as well as deliver environmental benefits.

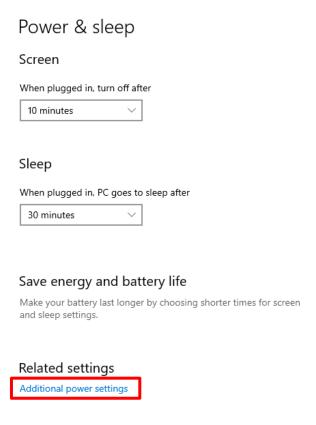
To be energy efficient, turn off your display or set the AIO PC to sleep mode after a period of user inactivity.

### **Power Management in Windows OS**

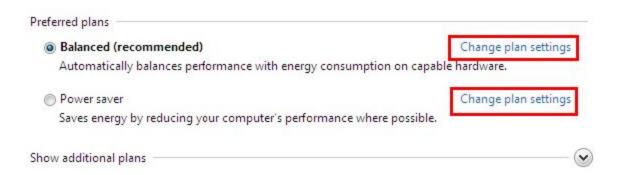
Right click the start button, and select [Power Options].



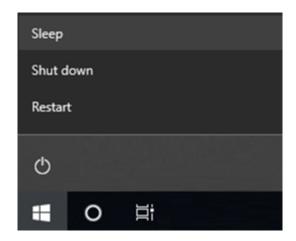
Then click [Additional power settings].



Select a power plan that suits your personal needs. You may also fine-tune the settings by clicking [Change plan settings].



The Shut Down Menu presents the options of Sleep (S3) & Shut Down (S5) for rapid and easy management of your system power.



Power Management through ENERGY STAR qualified Monitors (Not supplied with the AIO PC)

The power management feature allows the AIO PC to initiate a low-power or "Sleep" mode after a period of user inactivity. When used with an external ENERGY STAR qualified Monitor, this feature also supports similar power management features of the monitor. To take advantage of these potential energy savings, the power management feature can be set to behave in the following ways when the system is operating on AC power:

- Turn off the display after 15 minutes.
- Initiate Sleep after 30 minutes.

# Waking the System Up

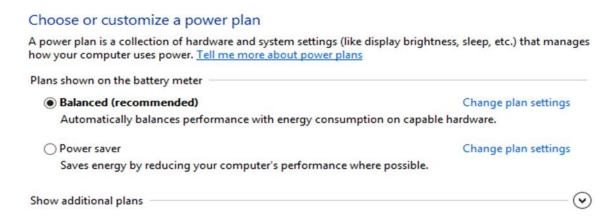
The AIO PC shall be able to wake up from power saving mode in response to a command from any of the following:

- the power button,
- the network (Wake on LAN),
- the mouse
- the keyboard

#### **Power Save Settings for Windows**

Under Control panel → System and Security → Power Options

Change from "Balanced" mode to "Power saver" mode



Once power saver is enabled, the following icon will appear in Windows 10:



The battery saver feature helps conserve power when a system is running on its battery. When battery saver mode is on, some Windows features may be disabled or behave differently.

Please follow the link for detailed information:

https://docs.microsoft.com/en-us/windows-hardware/design/component-guidelines/battery-saver

#### **BIOS Setup**

The AMI BIOS provides a Setup utility program for specifying the system configurations and settings. The BIOS ROM of the system stores the Setup utility. When you turn on the computer, the AMI BIOS is immediately activated. Pressing the <DEL> key allows you to enter the Setup utility. If you are a little bit late pressing the <DEL> key, POST (Power On Self-Test) will continue with its test routines, thus preventing you from invoking the Setup. If you still wish to enter Setup, restart the system by pressing the "Reset" button or simultaneously pressing the <Ctrl>, <Alt> and <Delete> keys. You can also restart by turning the system Off and back On again. Pressing the <F11> key during bootup allows you to enter the Boot menu. The following message will appear on the screen:



Press <DEL> to Enter Setup
Press <F11> to Enter Boot Menu

## Cleaning the Surface of the All in One PC

Below are the approved disinfectants. The disinfectants have been validated on both housing and the touch glass. To prevent potential damage to the computers, please use the disinfectants listed below. Should you have any questions, please contact Cybernet.

Cleaner	Brand
Viraguard®	Veridien
Sodium Hypochlorite 6%	Multiple suppliers
Ammonium Chloride 10%	Multiple suppliers
SANI-CLOTH HB	PDI
SANI-CLOTH PLUS	PDI
SUPER SANI-CLOTH	PDI
Cavi Wipes	Metrex
Super HDQL 10	Spartan
Cloro-Wipe Towelette	Surgipath
Healthcare Hydrogen Peroxide Wipes	Clorox
Virex	Johnson
70% Isopropyl Alcohol	Multiple suppliers
Alcohol Prep Pads	PDI, others
Screen Cleaner	Office Depot, others

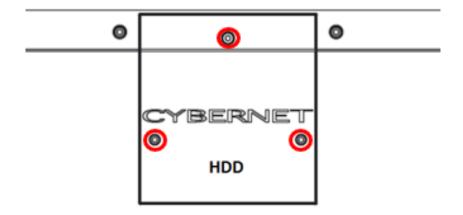
For cleaning best practices, please use a pre-moistened wipe with the disinfectant already applied, or spray the disinfectant on to a cleaning cloth and clean the unit. Wipe the surface using a circular motion and taking care not to let any excess liquid drip. Wait for the surface to completely dry before use.

Please note spraying the disinfectant directly on to the unit may cause a drip hazard where the disinfectant will drip on to the floor if too much disinfectant is sprayed on to the unit.

Note: Shut down the AIO and then disconnect the power cord and remove batteries before cleaning the AIO.

### **Servicing the HDD**

- 1. Ensure that the AIO PC is powered off. Unplug the power adapter and remove all of the batteries before servicing the HDD.
- 2. To access the HDD bay, first remove the stickers in the highlighted areas below. Then unscrew the HDD bay cover. Next, lift the HDD bay cover up to remove.

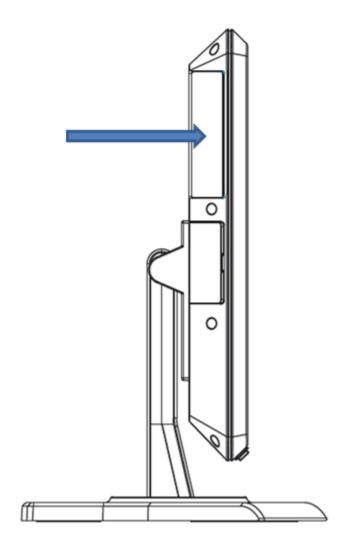


3. Once the HDD bay cover has been removed, unscrew the 4x screws on the HDD bracket highlighted below. Then slide the HDD up to remove.



# **Servicing the Batteries**

- To install the batteries, push down on the battery door to spring the door open. Then slide the battery into the battery slot with the label facing towards the front and the battery tab facing outwards. Next, push the door down to close the battery doors before using the system.
- To remove the batteries, push down on the battery door to spring the door open. Then grab the battery's Pull-Mylar to pull the battery out.



# **Troubleshooting**

### **Display problems:**

Display problems.	
When I turn on the AIO PC, nothing appears on the screen.	If the screen is blank, make sure that:  - The AC adapter is connected to the AIO PC and the power cord is plugged into a working electrical outlet.  - The power is on. (Press the power button again for confirmation.)  - The memory is installed correctly.
	If these items are properly set, and the screen remains blank, try the clear CMOS procedure. <a href="https://www.cybernetman.com/kb/article/how-to-perform-the-clear-cmos-procedure-on-your-cybernet-pc">https://www.cybernetman.com/kb/article/how-to-perform-the-clear-cmos-procedure-on-your-cybernet-pc</a>
	If the clear CMOS proecdure does not work, have the AIO PC serviced.
When I turn on the AIO PC, only a white cursor appears on a blank screen.	Restore backed-up files to your Windows environment or the entire contents of your hard disk to the original factory contents. If you still see only the cursor on the screen, have the AIO PC serviced.
My screen goes blank while the AIO PC is on.	Your screen saver or power management may be enabled. Do one of the following to exit from the screen saver or to resume from sleep or hibernation mode:  - Touch the screen.  - Press the power button.

# Startup problem

	Check the BIOS boot priority to ensure Windows startup manager is selected as the first boot device.
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### Storage drive problem

The Storage disk drive	In the boot menu of the BIOS, make sure that the Storage
does not work.	drive is selected in the Boot priority order correctly.

### **AIO PC Screen problem**

The screen is blank.	Check the following:
	- Check the screen brightness setting.
	- If the AIO PC is in sleep mode, press the power button to resume the AIO PC.
	- If the problem persists, refer to the solution in the following problem "the screen is unreadable or distorted."
The screen is unreadable or distorted.	Make sure that:
	- The display device driver is installed correctly.
	- The screen resolution and color quality are correctly set.
	- The correct display mode is selected.
Incorrect character appears on the screen.	Check that the Operating System or application programs are installed or configured correctly. If they are installed and configured correctly, have the AIO PC serviced.
Sound problem	
No sounds can be heard from the speaker, even when the volume is turned up.	Make sure that:
	- The Mute function is off.
	- The headphone jack is not being used.
	- Speakers are selected as the playback device.
Battery problem	
Windows shows that the battery is not present	Make sure that:
	- The battery door is closed.
	- The battery is installed properly with the battery label facing towards the front of the unit.
	- Check the battery's LED indicator to check if the battery is charged.
	If the battery is still not detected, try charging the battery with the battery charging station. Otherwise, have the battery serviced.
Other problems	
The AIO PC does not respond.	To turn off your AIO PC, press and hold the power button for 4 seconds or more. If the AIO PC still does not respond, remove the AC adapter.
The AIO PC does not boot from the desired device.	Check the Boot menu of BIOS setup utility. Make sure that the Boot priority order is set so that the AIO PC starts from the device you want.

# **Appendices**

#### A - Battery behavior of CyberMed / iOne NB series

Batteries can be charged by the system when the power adapter is plugged in. While the power adapter is plugged in, the system will charge both batteries at the same time and will take 7 hours to charge from 6% to 99%.

Windows will report when the power adapter is plugged in and charging the batteries. While the power adapter is plugged in, you will see that battery icon change to the picture shown to the right. Please note, Windows does not always report charge times accurately.



Windows will report when the unit is powered by battery with the battery icon shown on the right. While on battery power, Windows will report which battery is currently in use and how much time is remaining on the batteries. Note, depending on the OS, the battery door number can vary between the left and right battery. Also, discharge times reported by Windows may vary due to workload and use case.



#### **B – Battery Storage and Maintenance**

• Do not store batteries higher than the below temperature:

1 month -20°C ~ + 45°C 3 months -10°C ~ +35°C 1 year 0°C ~ + 25°C

Note for NB series: If the system environment temperture is over 40°C, we strongly suggest the customer to remove the batteries if not in use.

- For the NB series, remove the battery from the unit and disconnect the power adapter when the unit will not be in use for more than two weeks. Since the battery pack will discharge over time in storage, it must be charged every nine months to extend cycle capacity or else it may fail to charge or hold power in the future.
- The battery should be stored at a temperature range between 0°C and 25°C. You
  must take into account that the AIO PC's internal temperature is higher than the
  outside temperature. Any temperature below this range would decrease battery
  performance. Operating the battery at a higher temperature increases the risk of
  a battery explosion.
- The battery typically has a lifespan of 300 cycles under normal usage and operating conditions. After 300 cycles, the battery capacity may lower to 80% of its original capacity. Therefore, Cybernet recommends to replace these batteries for new batteries for a better run time experience. Using the AIO PC in a higher or lower ambient temperature affects the total number of cycles in the battery's service life.
- Do not store the battery pack in a damp or cold environment! Moisture or a cold environment might speed up the discharge rate. The chemical ingredients inside the battery might degrade when exposed to low temperatures. Conversely, when exposed to extremely high temperatures, there is a risk of explosion.
- Avoid frequently plugging and unplugging the power adapter to extend the battery's lifetime
- Do not place the AIO PC or battery pack near a radiator, fireplace, stove, or any source of heat. Temperatures over 60°C (140°F) might cause the battery pack to explode, leak chemical fluids, or cause a fire.

#### C - Battery Door

Please review this section to prevent false alarms being reported to your technical staff.

The NB series products have a built-in safety feature that only allows the battery to be charged and discharged when the door associated with that battery is closed. This includes:

- 1) Charging and discharging the battery
- 2) Powering ON by the battery
- 3) Detection of the battery

If all doors are open during battery operation, the system will shutdown and data may be lost. Therefore, Cybernet recommends users to open one battery door at a time during hot swap battery replacement. Please avoid opening all of the battery doors during battery operation. Please note that if the unit is connected to the power adapter, the unit will remain ON even if all of the battery doors are open.

Other helpful information such as recommended cleaning agents can be found on our knowledge base at <a href="https://www.cybernetman.com/kb/">https://www.cybernetman.com/kb/</a>.

Please contact us at (888) 834-4577 or email our technical support staff at <a href="mailto:support@cybernet.us">support@cybernet.us</a> if you have any questions. Thank you for your purchase!

### **D - Cybernet Limited Warranty**

#### What the warranty covers

Cybernet warrants its products to be free from defects in material and workmanship during the warranty period. If a product proves to be defective in material or workmanship during the warranty period, Cybernet will, at its sole option, repair or replace the product with a similar product. Replacement Product or parts may include remanufactured or refurbished parts or components. The replacement unit or component will be covered by the balance of the time remaining on the customer's original limited warranty. Cybernet provides no warranty for the third-party software or hardware included with the product or installed by the customer.

#### **Lithium Batteries**

Lithium batteries in all monitors, tablets, and All in One computers carry a one-year warranty regardless of warranty on the main device. Please see the Battery Maintenance Guide to prevent battery damage due to long term storage. How long the warranty is effective

- Commercial Grade models vary by product. Cybernet offers up to five years of warranty. Contact your Cybernet sales representative for additional details.
- Cybernet Medical Grade Computers come with a three-year warranty as of 1/1/2013 and customers can purchase additional two years for total of five years.
- Cybernet Medical Grade Tablets come with a two-year warranty as of 1/1/2013 and customers can purchase additional two years for total of four years.
- Cybernet accessory products come with 30 days warranty. Limited warranties vary by product. Contact your Cybernet sales representative for additional details.
- Warranty on LCD & LED panels used in our All-in-One Products are 1-year warranty for dead pixels that meet the following criteria: 5 bright sub-pixels, 7 dark sub-pixels, or a combination of 7.

### How to get warranty service

Cybernet's warranty support hours are Monday through Friday, 8:00 AM to 5:00 PM, Pacific Time. If you are outside the United States or in a different time zone, you can begin the process of requesting warranty service via our support request form.

For information on obtaining warranty service, call your Cybernet dealer or Cybernet. Cybernet's Customer Support telephone number is 1-888-834-4577.

### **E - Cybernet's Recycling Program**

# Cybernet's Recycling Program

Helping save our Environment!

Send us your old Computer and if it has monetary value we will apply that toward a purchase of a new computer!

If your computer does not have monetary value, we'll recycle it responsibly.

Step 1: Log-on to www.cybernet.us

Step 2: Submit a request for an RMA number

Step 3: We will schedule a pre-paid FedEx pick-up at no cost to you



For more information, please call 888-834-4577

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