ALGIZ 10XB

Manual



handheld

Safety Precautions

Warning



Always completely disconnect the power cord from the device before you uncover the device and work on the hardware. Do not connect the electronic device with a power socket while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open mechanical housing.

Caution



Always ground yourself to remove any static charge before touching the printed circuit board. The electronic devices are very sensitive to static electricity. For safety purposes, please use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are outside of the chassis.

Temperature

The recommended temperature range for ALGIZ 10XB in adaptor mode is -10 $^{\sim}$ 40 $^{\circ}$ C, battery mode is -10 $^{\sim}$ 50 $^{\circ}$ C, charge mode is -5 $^{\sim}$ 35 $^{\circ}$ C

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Part 1: **Identifying ALGIZ 10XB Getting Started**

What's in the Box

Item	Description
	One 2 Cell Li-Ion Battery Pack
	19V Adapter w/ standard power cord. Standard type, 1.8M
	Screen protector film
See man	ALGIZ 10XB Quick start guide

Specification

ALGIZ 10XB is a rugged tablet PC designed for use in various challenging environments, e.g. field work, outdoor activities and construction sites. With its rugged design, ALGIZ 10XB is able to withstand shocks, vibrations, high humidity as well as high/low temperatures.

System		
Processor	Intel® Celeron® N2930 Quad Core 1.83 GHz Processor	
BIOS	AMI System BIOS	
Chipset	Intel ATOM Soc Integrated	
Memory	SODIMM, DDR3L 1600 4GB	
LAN Controller	Intel® Ethernet Controller I211-AT	
Storage	SATA interface support Mini-PCIe interface SSD 128GB	
Audio	Audio-out / Audio-in / Microphone-in. Internal Speaker	

Display Specification	
Size	10.1" (16:9)
Resolution	1366 x 768
Brightness	600 cd/m2 (typ.)
Touch	4W Resistive Touch

I/O Connectors		
Left Side	1xDC Power Jack, 1xVGA, 1Xusb 2.0,1xRS232	
Right Side	1xLAN, 1xUSB 3.0, 1xMic/Audio Jack,	
	1xSIM Card Slot, 1xMicro SD Card Slot	
Bottom Side	Pogo-pin for docking	
Rear Side	Service Window	

Buttons and Indicators		
Control Button	Power On/Off, Menu, Up, Down, Left, Right, Enter,	
	3 Programmable Hotkeys	
LED Indicators	Power Status, SSD Status, RF Device Status, Battery Status, GPS Status	5

COM Port Assignment

COM1	RS232
СОМ2	B+ Power & UART Wafer
сом3	GPS
COM11	Docking Station
COM12	Docking Station

Boot Options

F1	Initiate factory reset
F2	Enter BIOS
F3	-

Factory Reset

The ALGIZ 10XB has a built-in recovery utility that can be used to reset your computer's SSD disk to its factory state. Press **F1** during booting when the Handheld logo screen appears. Follow the instructions on the screen to continue with the factory reset.

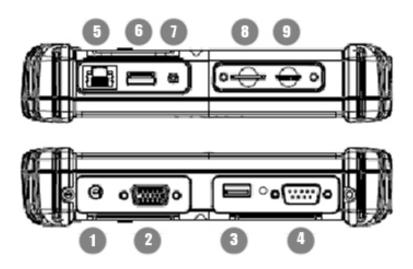
Caution: This procedure will erase all data on your disk.

Front Side



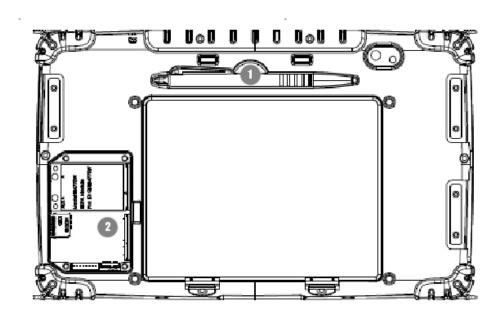
Ref.	Item	Description
1	Front Microphone	Receives sound to make voice recordings.
2	Light Sensor	Senses the ambient light for automatic
		adjustment of the display backlight. The
		features can be enabled through the OSD
		Control Keypad.
3	OSD Control Keypad	The OSD Control Keypad provides hotkeys
		with all functions including
		Power On/Off, Menu, Up, Down, Left, Right,
		Enter and programmable hotkey , Windows
		chrome menu key and Windows Home key
4	Speaker	Front Speaker

Left and Right Side



Ref.	Item	Description
1	DC Power Jack	DC plug for supplying power to the device
2	VGA	For connection to external display devices such as
		monitors and projectors
3	USB 2.0 Port	Can be connected to USB-interface peripherals
4	RS232	Accepts external connections using the interface of
		RS232 (D-sub 9 pins)
5	Ethernet(RJ45) Port	For connection to an Ethernet 10/100/1000-based
		network
6	USB 3.0 Port	Can be connected to any USB-interface peripherals
7	Combo Audio Jack	For connection to a set of headphones or external
		speakers.
9	Micro SD Card Slot	Accepts a Micro SD Card for additional features.

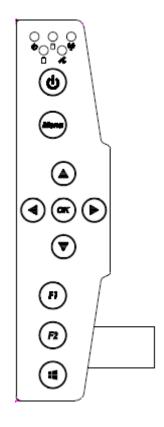
Rear Side



Ref.	Item	Description
1	Stylus Pen	
2	Service Window	User-accessible compartment.

Function Keys

Components	Description
Power Button*	Hold down for 4 seconds to turn the
	computer on.
Menu	Menu button to control: brightness,
	volume, battery, power to modules,
	and system information.
Up/Down/Left/	Control of up, down, left, right and
Right/OK Button	Enter functions.
F1	Programmable button. Press F1 to
	configure.
F2	Windows 8 Chrome menu and it also
	can programmable.
Windows 8 Home	Its function is like the Windows Key
Key	on the keyboard of Laptop and it also
	can programmable.



^{*} If computer does not respond you can power it off by holding down the Power Button until the LEDs are switched off. Hold down for about 10 seconds.

LED Indicators

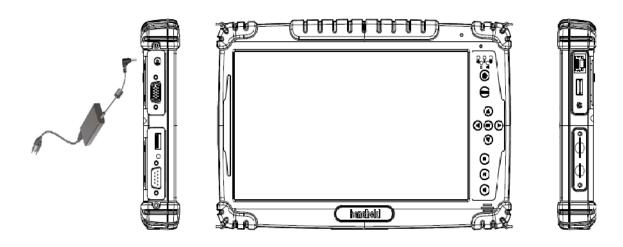
LED Term	Symbol	Indicator Status Description
Power mode	ტ	Green: System is on
		No light: System is off or LED indicators are off in Hot-tab.
Storage Status	0	Flashing green light: SSD is reading/writing data
Radio Status	('\hat{\beta}')	Green: Indicates that any transmitting radio is turned on.
		(WiFi, BT)
Battery Status		Green: Full battery
		Red: Low battery
		Orange: Charging
		Flashing red: Running on Hot-swap battery
GPS Status	10	Green: GPS is on.

Part 2: **Using ALGIZ 10XB**

Before turning the unit on, make sure that the tablet is either connected to AC power or the battery.

AC Power

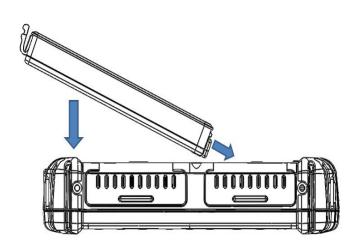
The ALGIZ 10XB power supply is comprised of two parts, the power adapter and the battery. The power adapter converts AC power from a wall outlet to the DC power required by the ALGIZ 10XB. Your ALGIZ 10XB comes with a universal AC-DC adapter. That means that you may connect the power cord to any 100V-120V as well as 220V-240V outlets without using power converters. Different countries may require an adapter to be used to connect the supplied standard AC power cord to a different standard.



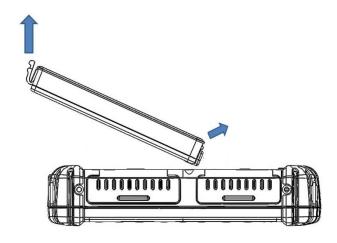
Battery Power

The ALGIZ 10XB is designed to work with two types of battery. A standard battery with 5300mAh and an extended battery with double the capacity. A fully charged battery pack will provide several hours of battery life. Among other factors, the battery life is especially dependent on the battery's condition, tablet usage, as well as the temperature.

Insertion of the Battery Pack



Removal of the Battery Pack



Caution

Please fully charge the battery in advance of operating ALGIZ 10XB for the first time. New battery packs must be 100% charged before ALGIZ 10XB is disconnected from the external power source. It takes a few hours to fully charge the battery when ALGIZ 10XB is turned off.

Charging the Battery

Before you use your Handheld tablet PC, you need to charge the battery. The battery begins to charge as soon as the Handheld tablet PC is connected to the external power source. Please fully charge the batteries before using them for the first time. The new battery should be fully charged before the tablet PC is disconnected from the external power source. The battery pack is fully charged when the battery LED indicator turns OFF. It takes about a couple of hours to fully charge the battery when the Handheld tablet PC is turned OFF.

Battery Care

The Handheld tablet battery pack, like all rechargeable batteries, has a limit on the number of times it can be fully recharged. Fully draining and charging the battery once a day will allow the batteries to last for over a year, but rechargeable time limits are based on the ambient temperature, humidity and how your tablet PC is used. The ideal ambient temperature range is between 10°C and 29°C (50°F and 85°F).

Battery Power System

This tablet PC is designed to work with one removable battery pack placed inside the battery pack compartment. A fully charged battery pack will provide several hours of battery life, which can be extended further by configuring power management in Windows.

Charging the Battery

When the power adapter is plugged in, the battery automatically recharges regardless of whether your tablet PC is in the ON or OFF mode. It takes a couple of hours for the battery to be fully charged when the power is OFF and twice as long when the tablet PC is in use. When the charger LED indicator lights up orange, charging is required. The battery is charging when the red LED is permanently on. When the LED turns OFF, the battery pack is fully charged.

Power Supply

The power for the Handheld rugged tablet PC is supplied by the power adapter and battery pack, the power rating and manufacturer information are listed as below. For safety reasons, the adapter must be connected to ground (earth).

Power Adapter	Manufacturer: EDAC Power Electronics Co Ltd	
	Model: EA10633B	
	Input Rated: 100-240Vac, 1.8A, 50-60Hz.	
	Output Rated: DC ===== 19V, 3.42A.	
Battery Pack	Manufacturer: T-Gee Electronic Co., Ltd	
	Model: ALG10X-08A	
	Rated: 5300mAh DC 7.4V	

Caution!

Do not attempt to fix or replace the battery, as this may cause an explosion! Only use the specified battery and follow the instructions in the manufacturer's user manual.

Starting ALGIZ 10XB

Note: you will be asked to enter the Microsoft Windows license number which can be found under the main battery.

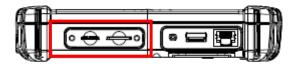
Press the power button for 2 seconds to power on the ALGIZ 10XB. Follow the Microsoft Windows on-screen instructions to get started with Windows. The screen calibration may not be accurate the first time you start the computer. Follow this procedure to calibrate the touchscreen:

Screen Calibration

Open Control Panel > Hardware and Sound > Tablet PC Settings Click Calibrate and follow instructions Repeat step 1 and 2 until you are satisfied with the calibration

Installing SD Card

Remove the SD card cover on the right side. This cover is secured with two screws.



Part 3: **Software**

Hot-Tab

ALGIZ 10XB has a pre-installed control application, Hot-Tab. The control application is used to monitor and control features such as brightness, volume, battery status, power to modules and system information.

The control application is accessed by pressing *menu* on the ALGIZ 10XB. Press *menu* multiple times to navigate through Hot-tab. You can use the arrows on the control panel to navigate within the OSD menu.

To exit Hot-Tab: Double tap outside of the Hot-Tab window or click the "x" in the top right corner.

Adjusting the LCD Brightness

The Brightness Control is accessed by pressing menu once and chooses "Setting". Then choice

and se the left and right arrow keys to adjust the LCD brightness.





Check Auto Brightness to activate automatic brightness. With this item checked, ALGIZ 10XB will adjust the LCD brightness based on the ambient light.



Adjusting the Speaker Volume

The Speaker Control is accessed by pressing menu once and chooses "Setting". Then choice Use the left and right arrow keys to adjust the volume.



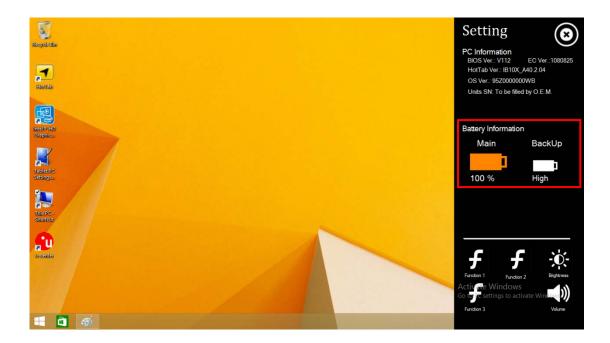




Battery Status

The Battery status is accessed by pressing menu once and chooses "Setting".

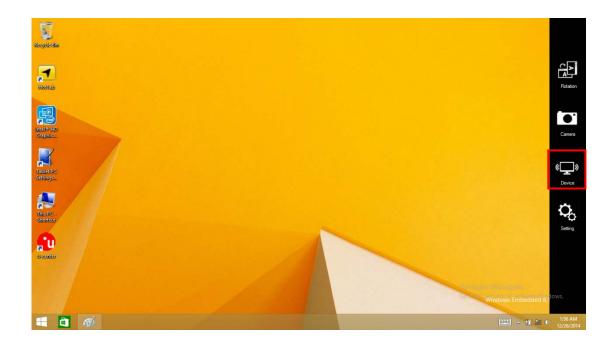
Press the Menu button one time to view the battery status. The ALGIZ 10XB has a replaceable *Main* battery as well as a *second* built-in hot-swap battery. The hot-swap battery will activate once the main battery is empty or unplugged.



WLAN

ALGIZ 10XB can connect to IEEE 802.11 ac a/b/g/n networks operating on 5GHz.

The Function Control is accessed by pressing menu one time and chooses "Device". Check Wi-Fi to turn the Wi-Fi radio on. Uncheck Wi-Fi to turn it off.





Bluetooth

Depending on your application, the Bluetooth module can give you capability for short-range wireless communication between devices without requiring a cable connection. The transmission can pass through walls, pockets and briefcases as long as the two devices are within a range of around 10 meters.

The *Function Control* is accessed by pressing *menu* one time and chooses "Device". Check *Bluetooth* to turn the Bluetooth radio on. Uncheck *Bluetooth* to turn it off.



GPS

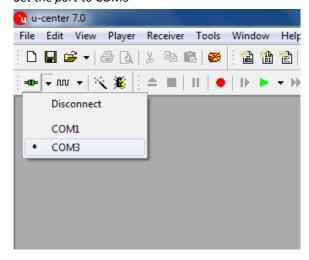
ALGIZ 10XB is equipped with a dedicated GPS receiver for optimum performance.

The Function Control is accessed by pressing menu one time and chooses "Device". Check GPS to turn the GPS receiver on. Uncheck GPS to turn it off.

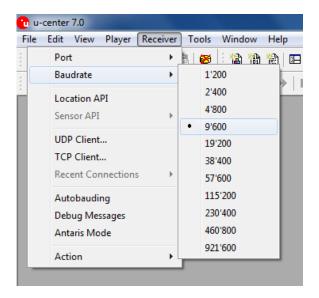


The GPS evaluation software, U-Center, is accessed by double-clicking the U-Center icon available on the desktop.

Set the port to COM3



Set Baud rate to 9600



GPS will now start looking for satellites to calculate its position. This procedure may take from a few seconds to a few minutes depending on satellite positions, interference, environmental factors and radio noise.

Tip: See the U-Center manual for more information about this GPS evaluation software.

Camera

The ALGIZ 10XB has a built-in 5-megapixel camera.

The Function Control is accessed by pressing menu one time and chooses" Device". Check Camera to turn the Camera on. Uncheck Camera to turn it off.



Or press menu and click the Camera icon to start the Camera.



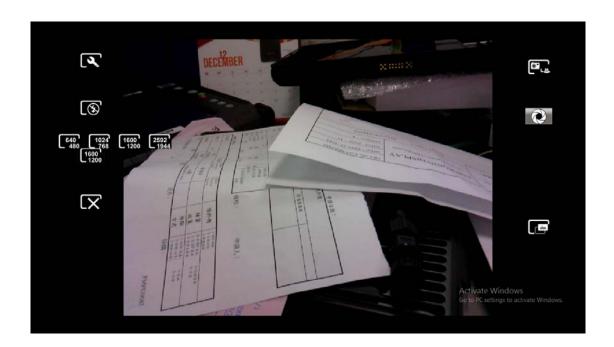
In the settings you can control the destination folder for saved pictures or videos, previews, as well as image resolution.



In the settings you can control the flash light mode to on/off/auto.



In the settings you can control the image resolution.



In the settings you can switch to photograph or video mode.



In the settings you can take a picture.



External GPS Antenna

The *Function Control* is accessed by pressing *menu* one4 time and access to "Device". Check *GPS Antenna* (auto) to activate an external antenna installed on the vehicle dock **Alg10X-05A**. When this item is checked, Alg10XB will automatically switch to the external antenna when the unit is docked. Do not check this item unless you have an external antenna installed on your Alg10X-05A vehicle dock.

Uncheck GPS Antenna (auto) to turn this feature off.



System Information

Press the Menu button one time and access to "Setting" to view system information. Please have this information ready if you are contacting Handheld support.



Part: 4 **ALGIZ 10XB Care**

Battery Protection Tips

To avoid damage to the battery, recharge the battery pack when it is nearly discharged. When recharging, the battery pack should be fully charged.

The battery pack is a consumable product and the following factors will shorten its life:

- Frequently charging the battery pack
- Using, charging or storing the battery at high temperatures

A high ambient temperature will cause the temperature of the battery pack to rise. Avoid charging the battery pack inside a closed vehicle and in hot weather conditions. Charging will also not start if the battery pack is not within the allowed temperature range.

Charging the battery pack with the system's power off is recommended.

To maintain the battery pack's operating efficiency, store it in a cool dark place removed from the tablet PC and with 30 % ~ 40 % charge remaining.

Avoid installing or removing the battery pack when the ALGIZ 10XB is in Standby mode.

Charging time will be prolonged when the ALGIZ 10XB is turned on.

- No debris, combustibles or chemicals should be allowed near the battery while charging. Extra caution is required when charging the battery in non-commercial conditions.
- The battery should only be used in accordance with the instructions for use, storage and recharging as set out by this manual.
- Improper use of the battery may result in fire or explosion.
- Do not use incompatible batteries or chargers. The use of incompatible batteries or chargers may result in risks such as fire, explosion, leaks, etc. If you have any questions about batteries or the charger, contact Handheld.
- Do not attempt to disassemble, open, bend, modify, puncture or smash the product or the battery.
- If you drop the device hard on a solid surface, the battery may overheat.
- Extra care must be taken to avoid short circuiting, connect a metal conductor to the battery terminals.
- Special attention must be paid to avoid modification, resetting, inserting foreign bodies into the battery, exposing the battery to water or other liquids, fire, explosion and other risks.
- Do not allow children to handle the battery unsupervised.
- Used batteries must be disposed of in accordance with local regulations.
- Do not burn the battery.
- If the battery has been swallowed, immediately contact a doctor.
- If the battery leaks, be careful not to allow the fluid to come into contact with skin or eyes. If battery fluid comes into contact with skin or eyes, rinse using plenty of water and seek immediate medical advice.
- If you suspect damage to the device or the battery, contact Handheld.

Touch Screen Protection Tips

Avoid applying excessive force to the display, use only your finger or the supplied touchscreen stylus pen on the display. The recommended force shall not exceed 200gf.

Take care to protect the screen from scratches. Only use a plastic pen designed for touchscreens or the stylus provided. Never use pens, pencils or other sharp objects on the screen.

To clean the touchscreen, wipe the screen with a clean, soft, lint-free cloth.

It is recommended that the screen is protected using protective film (one sheet of protective film is supplied with the product). Advantages of using protective film include the following:

Protects the screen from scratches and grooves.

More realistic feel when writing and touching

Protects the screen from damage caused by abrasion and foreign bodies.

Extends the lifespan of the touchscreen.

Your Handheld product screen is made from glass. Do not apply excessive force to the screen.

Using the touchscreen at low temperatures (less than 5 °C) may cause a slower response time, which is normal. A normal response time will be restored once the unit returns to room temperature. Use only detergents or cleaners intended for computers. Take care not to allow any excess liquid to enter the gaps around the screen. To avoid scratches, wipe using a dry non-abrasive cloth.

ALGIZ 10XB Care

Protect your Handheld product from extreme temperature changes. When the temperature is high, do not leave the device on the dashboard of a vehicle and keep well away from any heat sources.

Do not use or store your Handheld product in dirty, humid or wet conditions that are beyond the product specifications.

To maximize battery life and performance, replace the battery periodically. The battery life depends on its use.

Cleaning the Exterior

Use only detergents or cleaners intended for computers.

Connectors

- Remove the battery
- 2. Soak the end of a swab with isopropyl alcohol and rub across the connector pins.
- 3. Be careful not to leave any residue on the connectors.
- 4. This process should be repeated approximately three times.

Note: If isopropyl alcohol is not available, use computer cleaning detergent or a pencil eraser (rubber), taking care not to leave any foreign bodies on the pins.

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Customer Service

Support is provided by Handheld. Visit our website at www.handheldgroup.com to find updated

information about the product. You can also contact your distributor, sales representative or our

customer support center for further assistance. If you contact our customer support center please

have the following information ready before you call:

Product serial number

Peripheral attachments

Software (OS, version, application software, etc.)

Description of complete problem

The exact wording of any error messages with print screen images

In addition to this, free technical support is available from our engineers during working hours. We

are always ready to provide advice on application requirements or specific information about the

installation and operation of any of our products. Please do not hesitate to call or e-mail us.

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FCC Warning

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 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.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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

Exposure to radio frequency (RF) signals

Body-worn Operation

This device was tested for typical body-worn operations. A minimum separation distance must be maintained between the user's body and the handset, including the antenna: 1 cm to comply with the RF exposure requirements.

Industry Canada Warning

his device complies with Industry Canada license-exempt RSS standard(s). 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. This Class B digital apparatus complies with Canadian ICES-003. Le present appareil est conforme aux CNR d'Ind ustrie Canada applicables aux appareils radio ex empts de licence. L'exploitation est autorisee aux de ux conditions suivantes: (1) l'appareil nedoit pas produire de brouillage, et (2) l'utilisateur de l'appar eil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en comp romettre le fonctionnement.

Operations in the 5.15Ghz-5.25Ghz band are restricted to indoor usage only.