



KOBETRON

GI-4000PRO



User Manual

**Kobetron, LLC
4720 Independence St.
Wheat Ridge, CO 80033**

Toll-Free: (844) Kobetron (562-3876)

TEL: (850) 939-5222

FAX: (850) 939-0490

EMAIL: sales@kobetron.com

WEB: www.kobetron.com

"Testing Tomorrow's Technology Today"

UNPACKING.....	3
REPACKING AND RETURNING	3
WARRANTY	3
INTRODUCTION	3
UNDERSTANDING THE GI-4000PRO	3
GETTING STARTED	4
CONFIGURING THE SETTINGS	4
UPDATING THE GI-4000PRO.....	6
OBTAINING SIGNATURES FROM PREVIOUS SIGNATURE TOOLS	7
USING OTHER ALGORITHMS	8
CONNECTING TO WIFI	9
UTILIZING THE GLIACCESS DATABASE	10
OUTPUT FILE CONFIGURATION OPTIONS.....	12
VERIFYING A MEMORY DEVICE	15
MEMORY DEVICE ADAPTERS	17
EPROM MEMORY DEVICE SELECTION	17
TECH TIPS	21
OTHER FEATURES	21
BATTERY RELATED QUESTIONS.....	22
GI-4000PRO SPECIFICATIONS	23

UNPACKING

When unpacking the GI-4000Pro, verify that the following items are in the shipping container:

- Carrying Case
- GI-4000Pro
- AC Adapter/Charger
- Complementary Verify+ System Key
- Optional Adapters: MI-332, MI-333, MI-334, MI-335
- Optional GAT Cable Kit

The GI-4000Pro tested and inspected for physical damage before shipment. Carefully inspect the unit for damage that may have occurred during transit. If there is any damage, file a claim with the carrier and notify Kobetron immediately. The Sales Office will arrange for a replacement GI-4000Pro if needed.

REPACKING AND RETURNING

If returning the GI-4000Pro to Kobetron for any reason, pack the unit carefully. Notify Kobetron and wait until the proper Return Material Authorization (RMA#) has been issued before shipping.

WARRANTY

The Kobetron GI-4000Pro includes a 3-Year Parts and Labor Warranty (unless otherwise noted in the purchase agreement). The warranty period is effective from shipment date. Units out of warranty or showing evidence of tampering or misuse will incur a **NOMINAL CHARGE**.

****OPENING the product will VOID this warranty****

INTRODUCTION

The GI-4000Pro is a handheld testing unit used for verifying data in memory and storage devices. Specifically, it provides a reliable method for identifying the jurisdictional status of various components used in slot machines and Casinos. The GI-4000Pro includes a carrying case, making it suitable for both bench top and field service use.

UNDERSTANDING THE GI-4000PRO

The GI-4000Pro has a variety of features that are helpful in identifying and verifying memory and storage devices. The GI-4000Pro can perform the following tasks:

1. **Device Identification:** For memory devices with an Electronic Identification (or Electronic ID), the unit will automatically identify the memory device, size, and manufacturer. Different manufacturers use a multitude of names for Electronic ID such as: device ID, manufacturer identification code, and intelligent identifier. This manual will use the phrase Auto ID to reference this feature.
2. **Signature calculations:** Current signature algorithms available include: CDCK, SHA-1, MD5, Kobe4, Kobe 40, SHA256, Checksum, KCRC-8, Kobe32, Kobe4OddBall, Kobe8, Kobe8OddBall, KobeNewID, LT400CD, LT400Disk, S4-CRC, and SHA512.
3. **Database Verification:** With WIFI and GLIAccess database credentials, the GI-4000Pro will compare signatures received during verification with those included in regulatory letters to assist in quickly identifying the jurisdictional status of the component.

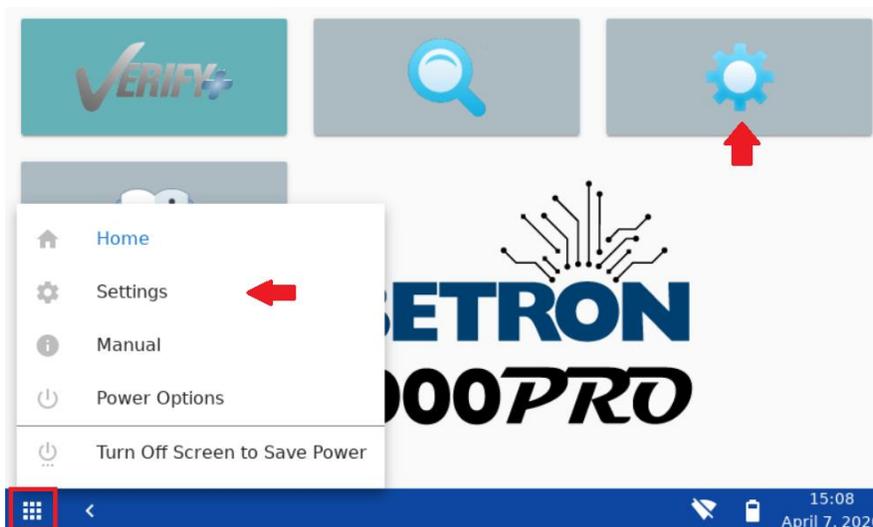
GETTING STARTED

1. Remove the GI-4000Pro unit from the carrying case.
2. Push and hold the power button for 2 seconds.
3. If the GI-4000Pro does not power up, charge the battery with the provided AC Adapter. Plug the AC Adapter into the power connector located on the middle top side of the GI-4000Pro.

NOTE: To prevent damage to your GI-4000Pro, only use the Universal AC Adapter provided by Kobetron™.

CONFIGURING THE SETTINGS

There are two ways to access the settings. Clicking the Gear symbol from the home screen or opening the grid menu and selecting **Settings**.



Once in the settings menu, there are several options available.

Updates

This menu allows the user to check for recent updates and verify that they have the latest version available. See [Updating the GI-4000Pro](#)

General

This menu contains Date/Time and Battery options, as well as the ability to override the signature software version. See [Obtaining Signatures from Previous Signature Tools](#)

Algorithms

This menu allows the selection of multiple signature algorithms, as well as the optional ability to add Seed, HMAC, Salt and GAT strings. See [Using Other Algorithms](#)

WIFI

This menu will show a list of all wireless networks in range and other connection information. See [Connecting to WIFI](#).

Database

This menu stores the credentials for the connection to the GLIAccess database for the specified jurisdiction(s), and options for updating the database. See [Utilizing the GLIAccess Database](#)

Output File

This menu includes all the various settings necessary for creating a Kobetron Signature Generation Report. See [Output File Configuration Options](#)

Logging

This menu is to assist with troubleshooting. Error logging may be necessary when working with Kobetron Support. The GAT logging is to assist the user during the GAT signature process. There is also an option here to allow Kobetron to collect diagnostic information.

Device Info

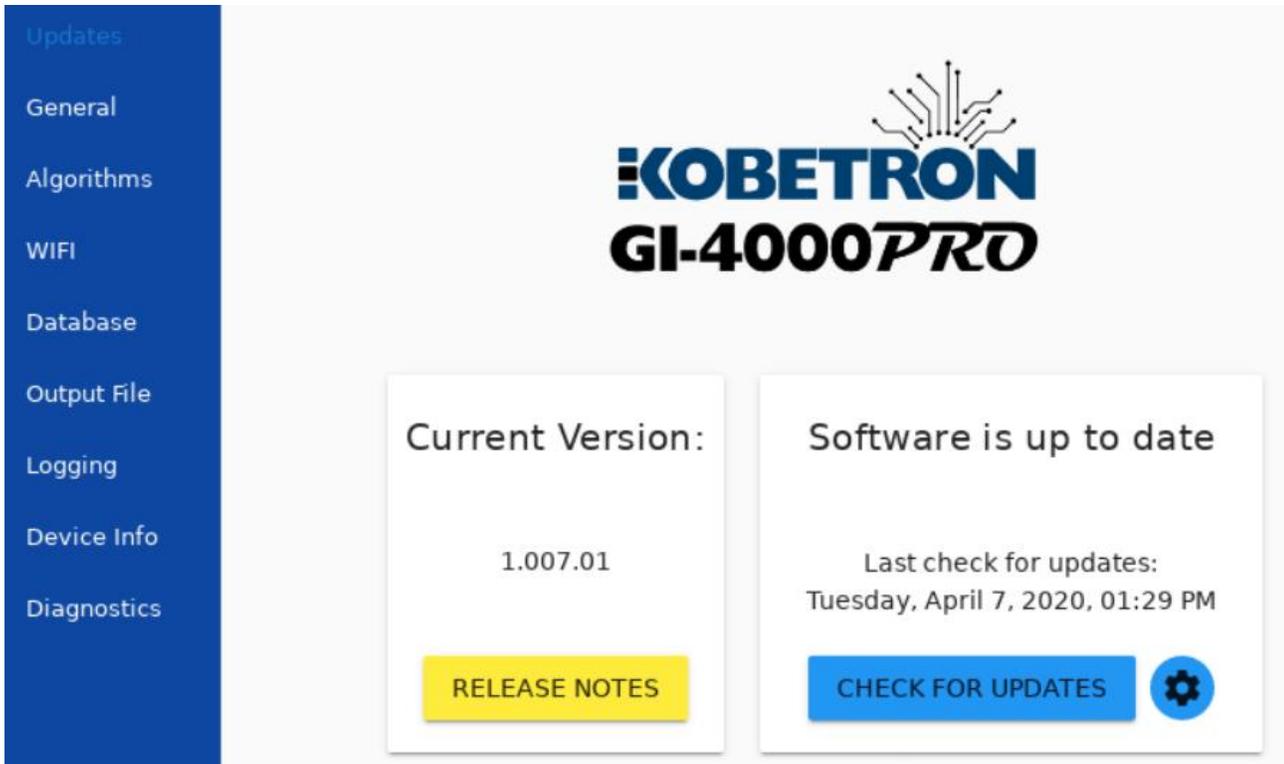
This menu contains information about the current software running on the unit. Kobetron Support may ask for you to provide this information when troubleshooting the unit.

Diagnostics

This menu contains various override options and diagnostic tools that Kobetron Support may ask a user to change when troubleshooting the unit.

UPDATING THE GI-4000PRO

You can receive software updates for the GI-4000Pro using the internal wireless connection. When connected to WIFI, it will periodically check for recent updates from the Kobetron server.



Under the **Updates** menu, the user can manually check for updates by clicking the **Check for Updates** button. This button will dynamically change during the update process. If there is an update available, it will display **Download Update**. Once the update downloads successfully, it will display **Install Update**. The unit may restart several times throughout the update process, and corruption can occur if the unit runs out of power. We recommend connecting to power during this process.

If there is an error with downloading or installing the update, clear the temporary cache using the gear button then try again.

The **Release Notes** button will show current and all previous release notes including all Features and Fixes.

OBTAINING SIGNATURES FROM PREVIOUS SIGNATURE TOOLS

If the GI-4000Pro returns a signature that does not match the GLI reports or certification reports; it may have been obtained using an older version of the software or a different Verification program. If this occurs, it may be necessary to use the **Version Override** option to generate a matching signature. You can access the Version Override function from the **Settings/General** menu.

The screenshot shows the 'General' settings page. On the left is a blue sidebar with menu items: Updates, General, Algorithms, WIFI, Database, Output File, Logging, Device Info, and Diagnostics. The main content area has a 'Version Override' dropdown menu at the top, currently set to 'Verify+ by Kobetron 2.4', which is highlighted with a red rectangular box. Below this is the 'Clock Options' section, which includes a checkbox for 'Show Clock in 12 hour format', a 'Set Date' field with a calendar icon showing '2020-04-07', a 'Set Time' field with a clock icon showing '15:48:38', and a 'SET NEW TIME' button. At the bottom of the settings page is a 'SAVE GENERAL SETTINGS' button. There is also a checkbox for 'Display Battery Charge on Taskbar'.

This option enables you to generate signatures that were obtained using DVCK or older GLI Verify or Verify+ versions. To change the override, use the dropdown menu and select the version needed. Then click the **Save General Settings** button. Please refer to your certification letter and/or approved report in GLIAccess to determine which version was used to verify the software.

If you require further assistance with a certification letter, contact the GLI Compliance department: 1-888-GLI-REGS (454-7347).

USING OTHER ALGORITHMS

By default, the GI-4000Pro will use the SHA-1 algorithm as this is the most common. Currently, the available signature algorithms include: CDCK, SHA-1, MD5, Kobe4, Kobe 40, SHA256, Checksum, KCRC-8, Kobe32, Kobe4OddBall, Kobe8, Kobe8OddBall, KobeNewID, LT400CD, LT400Disk, S4-CRC, and SHA512.

The screenshot shows the 'Algorithms' settings page. At the top, there's a dropdown menu currently set to 'SHA1', which is circled in red. Below this, there are four rows of settings, each with a checkbox, a 'Select Hex String' dropdown, and a text input field:

- Seed: Select Hex String (dropdown), Seed (input field)
- HMAC: Select Hex String (dropdown), HMAC (input field)
- Salt: Select Hex String (dropdown), Salt (input field)
- GAT: Select Hex String (dropdown), GAT (input field)

A blue 'SAVE' button is located at the bottom right of the settings area.

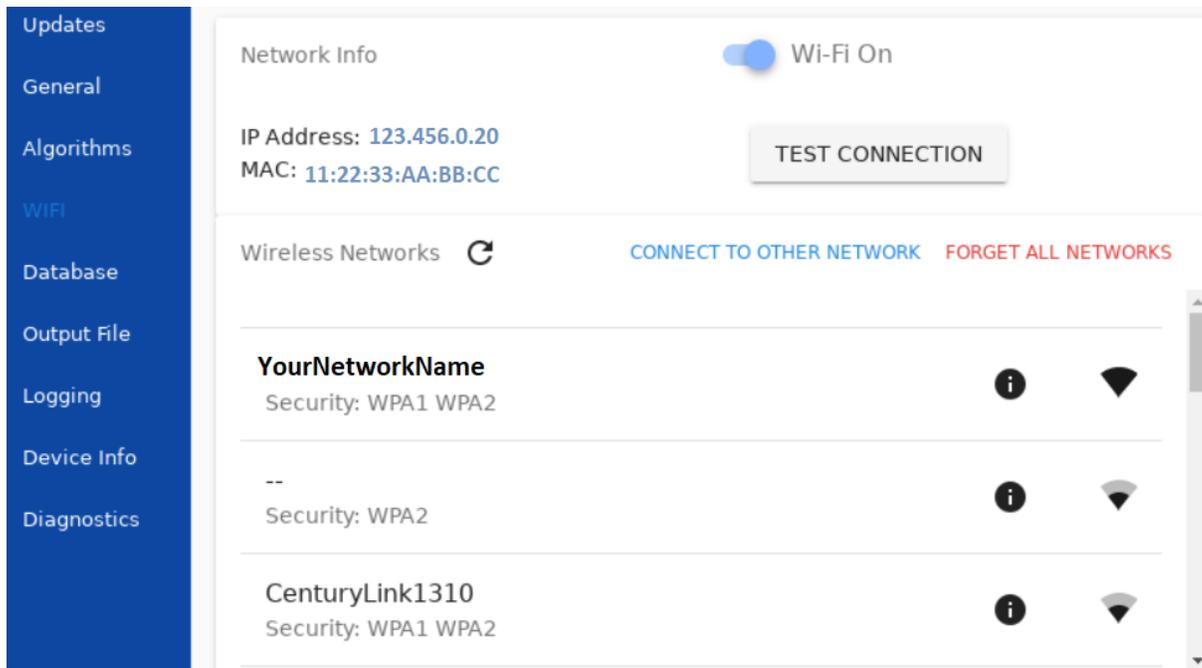
To select additional signature options, navigate to the **Settings/Algorithms** menu and use the dropdown menu to select the checkbox next to the desired algorithms. Once selected, click **Save**. Some of the signature algorithms can use different seed values. Each different seed value will produce a different signature. GLI by default does not use a seed value when issuing certification letters, but some jurisdictions require them. Enter a seed value as either a HEX or DECIMAL number. If the checkbox is active the values cannot be empty.

The MD5, SHA-1, and SHA256 algorithms can utilize HMAC and Salt. HMAC and Salt are like seed values in that every different value entered will produce a different signature. Enter the value as a HEX number or a TEXT string.

The GAT selection is a HEX used only when running a GAT signature.

CONNECTING TO WIFI

When using the GI-4000Pro, we recommend connecting to WIFI to receive the latest updates and to utilize the Database functionality. The WIFI menu has several options to assist in connecting to the network of choice. To access this menu, navigate to **Settings/WIFI**.



Each Kobetron GI-4000Pro unit has a unique MAC address in the case of secure networks that require the use of an Allow List. You can find the MAC address in the WIFI menu below the IP address. The IP address will remain blank until after connecting to the internet. Please note, the IP address will change when reconnecting or connecting to other networks.

To connect to a visible network, select the desired network from the populated list. If the desired network does not appear in the list, try clicking the refresh button located at the top of the network list. If the network requires a password, a prompt will ask for the password before connecting.

To connect to a hidden network, click **Connect to Other Network** and enter the SSID and password for the desired connection.

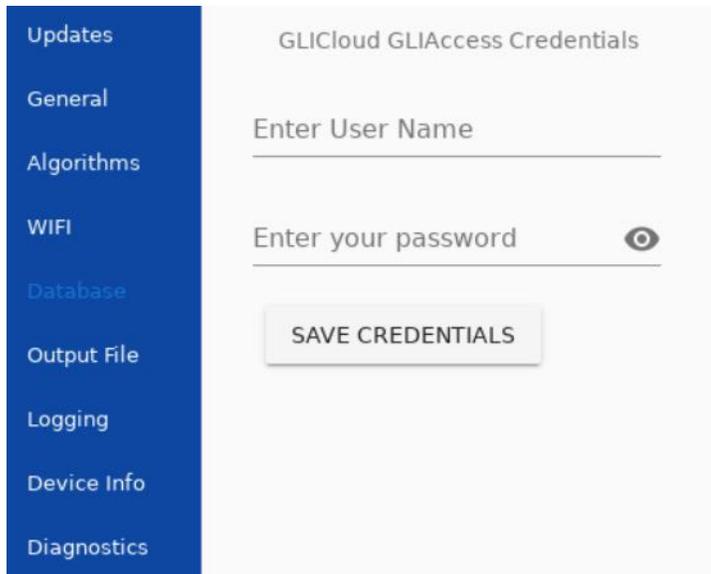
To troubleshoot connection issues, click **Test Connection** to open the diagnostic menu. When the diagnostic menu opens, click **Start Network Diagnostic**. The diagnostic menu will then populate the **IP address** and then the **Local Network**, **Internet Connection** and **Kobetron Services** fields with an indication of a failed or successful connection.



Troubleshooting tip: If **Local Network** and **Internet Connection** connect but the **Kobetron Services** does not, make sure the **date/time** are properly set and then check the network firewall to make sure **Port 443** is open.

UTILIZING THE GLIACCESS DATABASE

To use the Database feature, you will need a GLIAccess username and password. The regulatory authority in each Jurisdiction determines the access permissions. Direct all questions regarding GLIAccess account information to a GLI Development Representative or the GLI Compliance Department.

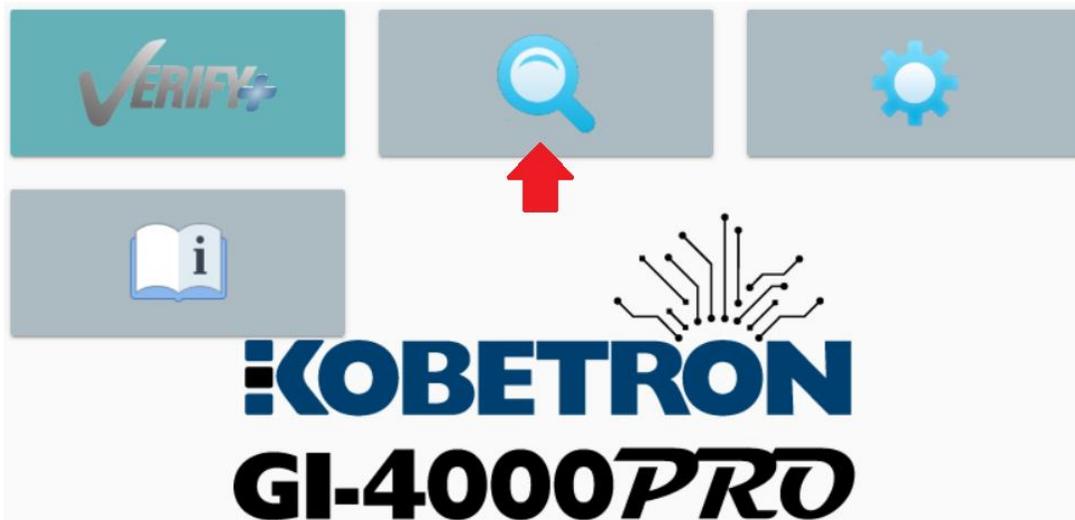


This menu provides an area to enter GLIAccess username and password. Once entered, touch the **Save Credentials** button. This will start the process of synchronizing the Pro with the requested GLIAccess database. The first synchronization process can take up to 20 minutes depending on the total size of the database and internet speed. We recommend a strong WIFI connection and connecting to AC power when downloading the GLIAccess database for the first time.

GLI is constantly updating the jurisdictional database, so we recommend updating the GI-4000Pro often to ensure accurate regulatory information. Please select the frequency that works for your organization.

Clicking **Update Database Now** will download the latest database updates onto your GI-4000Pro. Configure automatic updates using the selections under **Updates Frequency**. Click the **Set Database Frequency** button to save changes. The last synchronization will appear in red text under the **Update Database Now** button.

Database searching will become available after downloading the GLI Access Jurisdictional database. Access the search by clicking the magnifying glass symbol on the **Home** screen.



The search functionality gives basic options for searching specific fields or all fields for an exact match. For wild card options, use the star symbol.

*7354f Select All Fields SEARCH

File	Manufacturer ↑	ID Number	Version	Date Code	Cert. Lab	Test La
------	----------------	-----------	---------	-----------	-----------	---------

We use color indicators to display certification status. You will see this during signature verification or when searching the Jurisdictional database. If there is no match in the database, the display will remain uncolored.

COLOR LEGEND Rows per page:

To view the matching signatures for each item in the database, click on the desired line item.

*73 Select All Fields SEARCH

MO-22-ATR-	GTECH USA, LLC	SAP#	SAP#	CLEARTEK II TR
MO-22-IGT-	IGT	RW000	.BIN	REEL TOUCH 01/09/07

Type	Signature
CDCK	ABCD
CDCKext	123abcdef72456h90lakd42

OUTPUT FILE CONFIGURATION OPTIONS

To determine the header structure and behavior for your output files, use the output file configuration

options.

The screenshot shows the 'Output File' configuration screen. On the left, a blue sidebar lists menu items: Updates, General, Algorithms, WIFI, Database, Output File (highlighted), Logging, Device Info, and Diagnostics. The main content area is split into three columns. The first column, 'File Header Options', contains eight unchecked checkboxes: 'Output Top Header', 'Output Version', 'Output Offsets', 'Output Signature Method', 'Output GAT Function', 'Output Date', 'Output Final Signature Only', and 'Output Verification ID'. The second column, 'Out File Options', has an unchecked checkbox for 'Always Output Signatures' and two radio buttons: 'Append' (unselected) and 'Overwrite' (selected). The third column, 'Preview', displays two sample outputs separated by dashed lines. The first sample shows a file path 'C:\LOCATION\OF\yourFileName.txt' followed by 'SHA-1=A87D5C28AB821287A6040C0AA24CBB6262CC0015', 'MD5=B155045C713236118C47D7F806913451', and 'Kobe4=3A41'. The second sample shows a file path 'C:\DIFFERENT\LOCATION\differentFile.txt' followed by 'SHA-1=7E87AF49D9899615C8E39C9429E53E90150EFFDF', 'MD5=2367E210E874555A9B08A840F252D71B', and 'Kobe4=5PP7'. Below the preview is a third sample for 'Overall Signatures' in directory 'C:\OVERALLLOCATION\': 'SHA-1=31759FACE022B2C1C57D100DE737A272FDA85A5D', 'MD5=AD19DAF9522932FE7FF532408AB20884', and 'Kobe4=C94U'. At the bottom of the screen are four buttons: 'RESTORE TO DEFAULTS', 'EXPORT FILE', 'E-MAIL EXPORT FILE', and 'SAVE CHANGES'.

Adjusting **File Header Options** will change the preview of how the output file will look in the **Preview** box on the right. For any option, uncheck it to remove and the preview will reflect how the new appearance. Once the Preview displays, touch the **Save Changes** button. Restore defaults at any time by touching **Restore to Defaults** and then **Save Changes**.

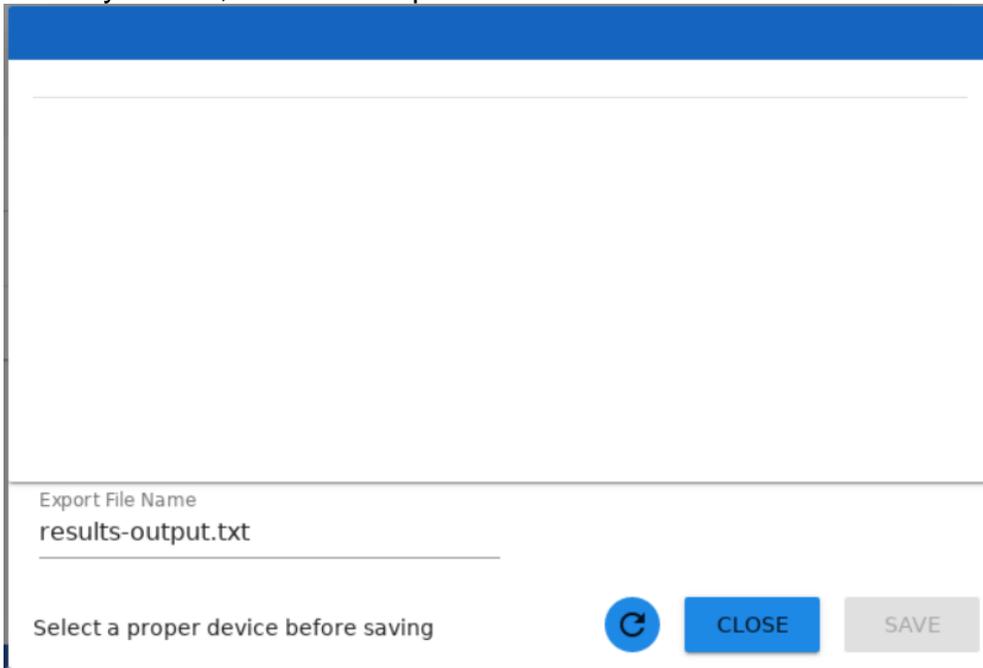
Click **Save Changes** when the preview displays the desired format.

- **Output Top Header:** Will output a header to identify the document.
- **Output Version:** Will output the current version of the signature utility used to make the signatures, or the overridden version if applicable.
- **Output Offsets:** Will output (Starting offset, Ending offset)
- **Output Signature Method:** Will output the method used, such as File, Directory or GAT.
- **Output GAT Function:** This shows the GAT function selected during the verification process.
- **Output Date:** Will output the date of verification. "Date: 06/23/89 08:05:25 Mountain Standard Time"
- **Output Final Signature Only:** Used for directory signatures. Will output only the final signature instead of the final signature and signatures of each item in the directory.
- **Output Verification ID:** Will signature the whole output file and append the signature onto the document.

The Output File Options section is for handling the output file itself.

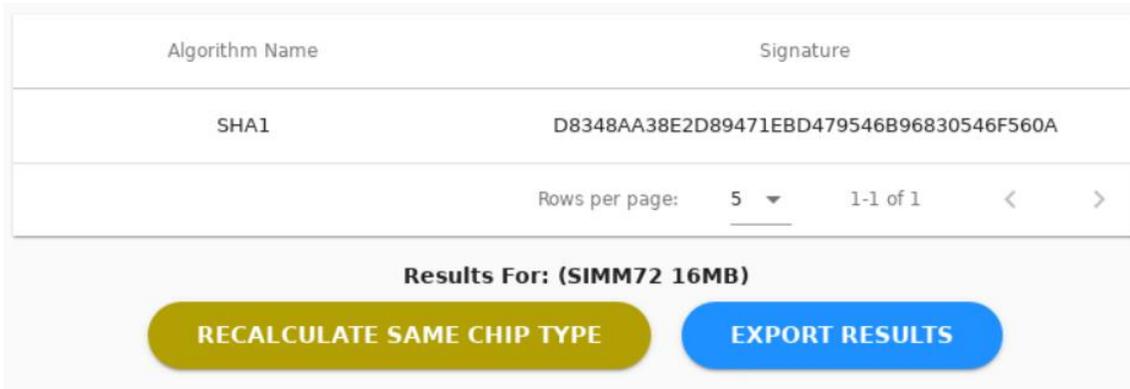
- **Append:** Will add each verification signature to the end of the output file.
- **Overwrite:** Will overwrite the output file after a verification to only have the most recent signature in it.
- **Always Output Signatures:** With this selected, each verification performed will write signatures to the output file in the desired append/overwrite option.

You can export or email the Output File to an external memory from this menu. When exporting to a memory device, there is an option to rename the file.



The screenshot shows a dialog box with a blue header bar. Below the header is a large white text area. At the bottom of the dialog, there is a label "Export File Name" followed by the text "results-output.txt" in a text input field. Below the input field, there is a warning message "Select a proper device before saving" on the left, a circular refresh icon in the center, and two buttons: "CLOSE" (blue) and "SAVE" (grey).

After each verification there is also an option to export directly to external memory device without going back to the Settings menu.



The screenshot displays a table with two columns: "Algorithm Name" and "Signature". The first row contains "SHA1" and "D8348AA38E2D89471EBD479546B96830546F560A". Below the table is a pagination control showing "Rows per page: 5" with a dropdown arrow, "1-1 of 1", and left and right navigation arrows. Below the table, there is a heading "Results For: (SIMM72 16MB)" and two buttons: "RECALCULATE SAME CHIP TYPE" (yellow) and "EXPORT RESULTS" (blue).

Algorithm Name	Signature
SHA1	D8348AA38E2D89471EBD479546B96830546F560A

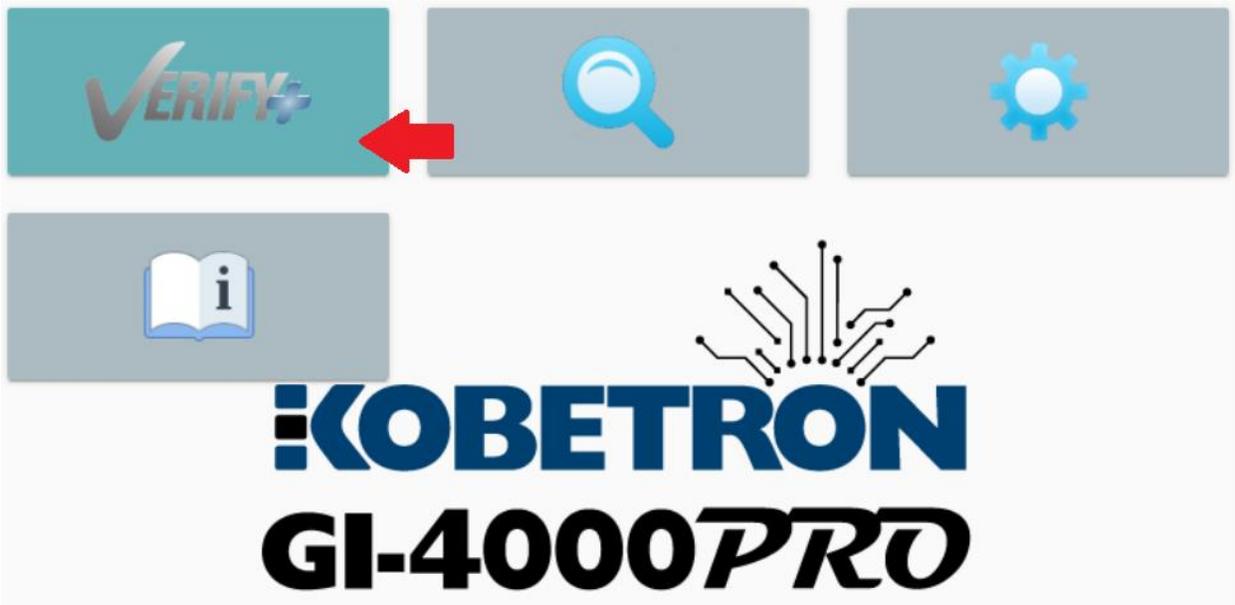
Rows per page: 5 1-1 of 1 < >

Results For: (SIMM72 16MB)

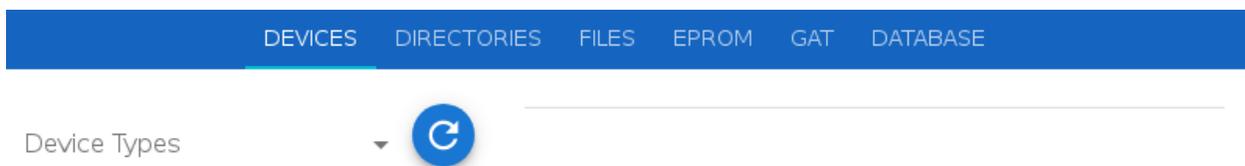
RECALCULATE SAME CHIP TYPE EXPORT RESULTS

VERIFYING A MEMORY DEVICE

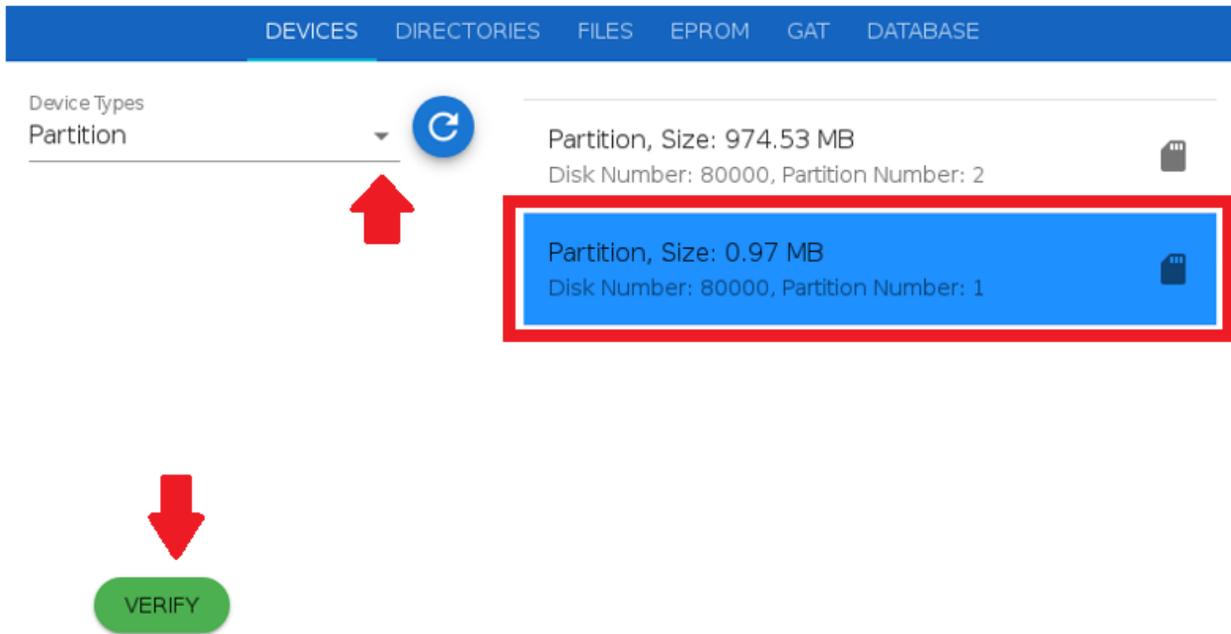
1. Insert the desired memory device into the unit. Accepted memory devices are Compact Flash cards (CF), CFast cards, or USB.
 - a. Note: If using an EPROM, see [EPROM MEMORY DEVICE SELECTION](#)
2. Select **Verify+** Icon from the home screen.



3. Select appropriate category from the top of the screen, this will depend on the type of memory device you are using. Please refer to the certification letter and/or approved report in GLIAccess to determine verification method.

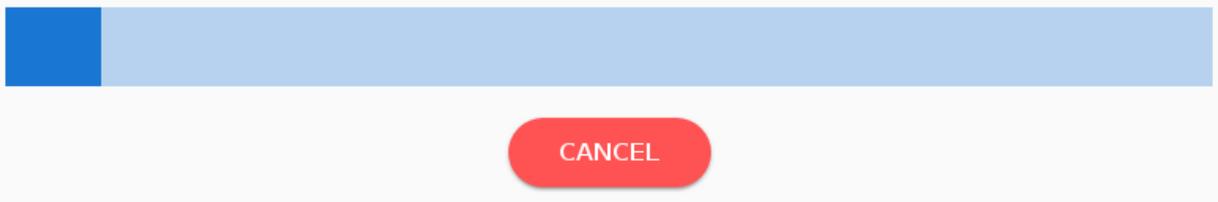


4. If the memory device does not appear, try re-connecting the device or touching the refresh button.
5. Select the proper type from the available dropdown list. The list will change depending on the type of device entered, giving more options if the Tester recognizes a specific file structure. Then select the item needed for verification and click **Verify**.



6. While the Tester is verifying, you will see a progress bar. Running multiple signature algorithms or a more complicated algorithm may take longer to calculate than running a single calculation.

Verification for: (Partition, Disk Number: 80000, Partition Number: 1) in progress....



7. Once verification is complete, all signatures requested will populate. Export using the Output file. For more information, see [Using Other Algorithms](#) and [Output File Configuration Options](#).

MEMORY DEVICE ADAPTERS

This is the full list of adapters released by Kobetron for use with our GI series.

Model Number	Adapter Description	Supported by
MI-311	32-PIN Adapter (DIP)	GI-3000
MI-312	40-PIN Adapter (DIP)	GI-3000
MI-313	40-PIN Adapter (DIP)	GI-3000
MI-314	42-PIN Adapter (DIP)	GI-3000
MI-315	32-PIN Adapter (PLCC)	GI-3000
MI-316	44-PIN Adapter (PLCC)	GI-3000
MI-317	44-PIN Adapter (PLCC)	GI-3000
MI-318	72-PIN Adapter (PIXEL SIMM)	GI-4000 and GI-4000Pro
MI-319	80-PIN Adapter (SIMM)	GI-4000 and GI-4000Pro
MI-320	72-PIN Adapter (CG SIMM)	GI-4000 and GI-4000Pro
MI-321	32-PIN Adapter (PLCC)	GI-3000
MI-322	32-PIN Adapter (PLCC)	GI-3000
MI-323	24-PIN Adapter (DIP)	GI-3000
MI-324	UNIDESSA Adapter (Proprietary)	GI-4000 and GI-4000Pro
MI-325	24-PIN Adapter (DIP)	GI-3000
MI-326	Cash Code Memory Stick	GI-4000 and GI-4000Pro
MI-327	32-PIN Adapter (PLCC)	GI-3000
MI-328	44-PIN Adapter (PLCC)	GI-4000 and GI-4000Pro
MI-329	32-PIN Adapter (PLCC)	GI-3000
MI-330	44-PIN Adapter (PLCC)	GI-4000 and GI-4000Pro
MI-331	Compact Flash & MMC	GI-4000
MI-332	48-PIN Universal Adapter (DIP)	GI-4000 and GI-4000Pro
MI-333	32-PIN Universal Adapter (PLCC)	GI-4000 and GI-4000Pro
MI-334	SOIC/SOP 8/16 Pin Adaptor	GI-4000Pro
MI-335	DIP 8/16 Pin Adaptor	GI-4000Pro

EPROM MEMORY DEVICE SELECTION

Important notes before beginning:

- We recommend removing memory devices while powering the unit on or off. The adapter can remain in place during power cycling.
- Always use the proper memory device adapter.
- To install a memory device in the MI-332 adapter, lift the ZIF socket lever. Insert the memory device in the socket, then lock the device in place by moving the ZIF socket lever down.

- Always observe the orientation of Pin 1 by referencing the configuration shown on the MI-332 adapter.
- Place the memory device at the bottom of the MI-332 socket (closest to the ZIF socket lever).
- Make sure none of the memory device pins are damaged.
- Always try using Auto ID first when verifying memory devices over 512KB. Use Manual ID for all unidentifiable memory devices.

The GI-4000Pro uses two methods of operation for verifying EPROM memory:

AUTO ID

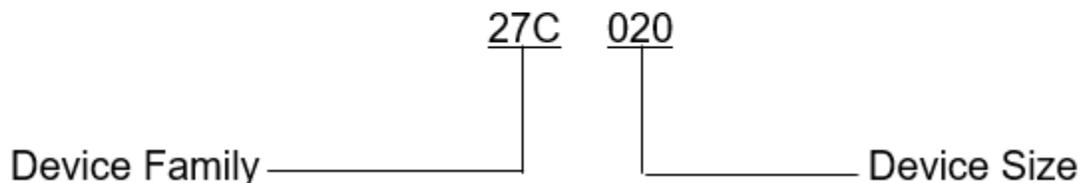
- The GI-4000Pro can identify memory devices using an Auto ID feature. This feature allows the GI-4000Pro to directly read the memory device's size, type, and manufacturer. This will automatically configure the GI-4000Pro for verifying that memory device. Please refer to the manufacturer's device manual before using Auto ID, or use Manual ID.
- **NOTE: If the Auto ID displays an ID that does not match the memory device DO NOT CONTINUE THE VERIFICATION. This can result in damage.**

MANUAL ID

- Manual ID is for devices not added to the device library, or do not support Auto ID. If the display reads "Error Device not in Library" the user must manually select the device family and size from the options available on the menu screen.

Example for a 27C020 EPROM

Device Type – EPROM
Size – 2 Mb

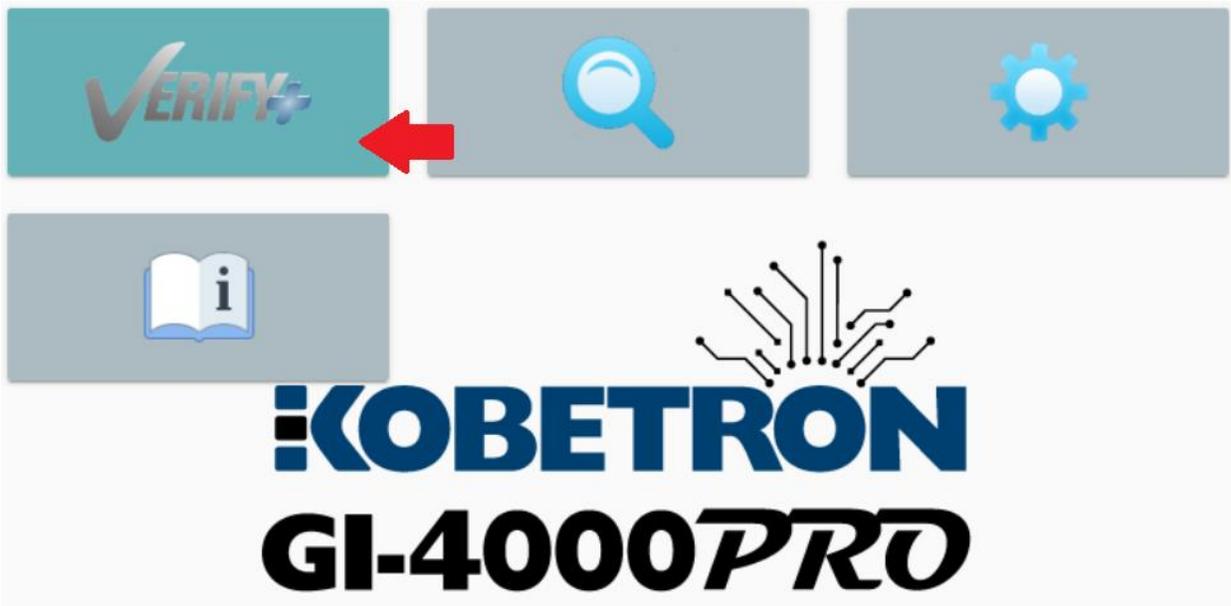


Steps for Verifying an EPROM:

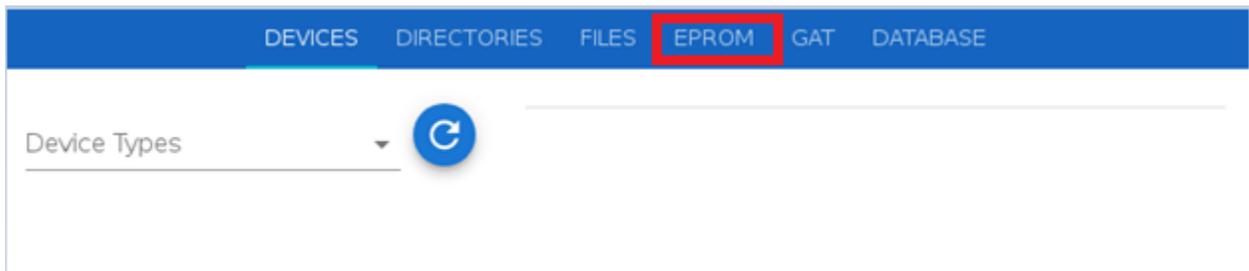
1. Insert the correct adapter for the desired EPROM into the 96-pin header located behind the door on the right side of the unit. Make sure to line up pins and attach adapter as evenly as possible so as not to bend the 96-pin header.
2. Insert EPROM into adapter, making sure to pay attention to the direction and placement of the pins. Below is an example of an EPROM placed correctly in the MI-332 adapter.



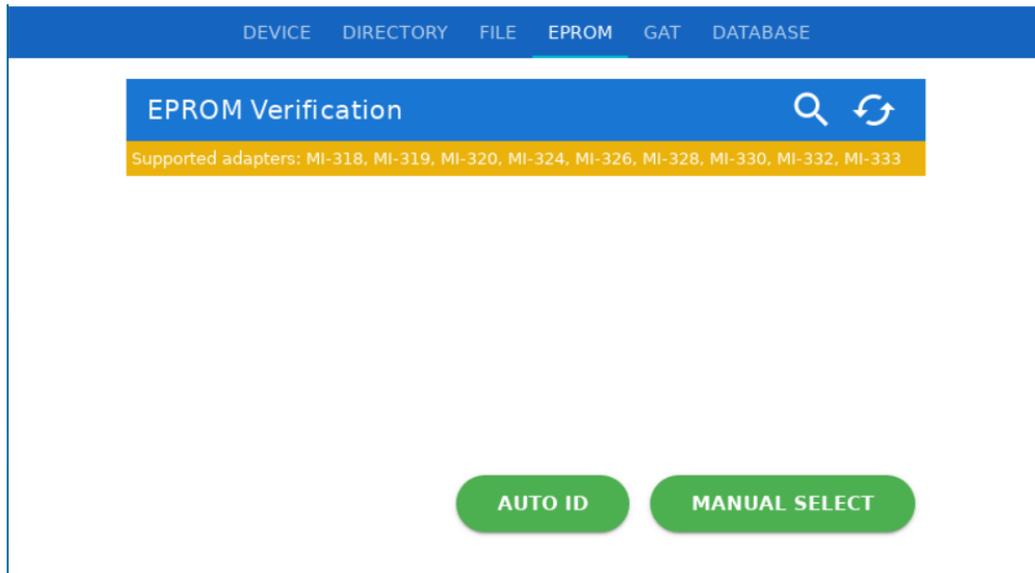
3. Select **Verify+** Icon from the home screen.



4. Select EPROM category from the top of the screen.



- Select **Auto ID** and wait for the GI-4000Pro to read the EPROM. If the EPROM is compatible with Auto ID a confirmation screen will appear with information about the EPROM including size, manufacturer, ID, and number of pins. Review the information and if correct, click **Verify**.



- If the EPROM is not compatible with AutoID select **Manual Select**. A **Chip Select** menu will open with a list of items in the device library. Choose the item from this that best matches the EPROM. There is a search bar at the top to facilitate this selection. After the selection, a confirmation screen will appear with information about the EPROM including size, manufacturer, ID, and number of pins. Review the information and if correct, click **Verify**.

Part Number ↑	Manufacturer	JEDEC ID	Chip Type	Pin Count	VCC
27C020		FFFF	EPROM	32	5
27C020	AMD	9701	EPROM	32	5
27C020	ATMEL	861E	EPROM	32	5
27C020	FAIRCHILD	070F	EPROM	32	5

- While the GI-4000Pro is processing the verification, you will see a progress bar. Running multiple signature algorithms or a more complicated algorithm may take longer to calculate than running a single calculation.

Verification for: (Partition, Disk Number: 80000, Partition Number: 1) in progress....



CANCEL

Once verification is complete, all signatures requested will populate. Export using the Output file. For more information, see [Using Other Algorithms](#) and [Output File Configuration Options](#).

TECH TIPS

- SIMMS (72 pin) can be either Standard/Pixel or CG SIMMS.
- The standard SIMMS may have a bank of switches. Turn off all switches before testing with the MI-318.
- The CG SIMM has a larger PCB height. The CG SIMM must use the MI-320 Adapter to obtain a correct signature.

OTHER FEATURES

Periodically, Kobetron will add additional features to the GI-4000Pro. For information on anything not listed in this manual, please contact our team for a demo or assistance.

BATTERY RELATED QUESTIONS

Your new GI-4000Pro has a high-capacity Lithium-Ion battery pack. To prevent damage and ensure maximum battery life, please read the following frequently asked questions.

What does the question mark on the battery mean? /How to recalibrate the battery.

This means the battery is currently uncalibrated. To recalibrate the battery, remove the AC adapter and let the battery fully discharge, waiting until the unit shuts down on its own. Attach the unit to AC power and let charge until the yellow light stops blinking and remains steady. This may take several hours.

What if the unit will not turn on/Why does the yellow light blink but the unit will not turn on?

This can indicate that there is not enough power in the battery pack to run the boot sequence, or that the battery is uncalibrated and is not conveying the proper charge level. Plug the unit into AC power. Often the unit will boot up once it receives power without needing to push the power button. If the yellow light begins to flash quickly instead of slowly, please contact Kobetron Support.

Can I use any battery charger to recharge my battery pack?

No. Do not attempt to recharge the battery pack with any unknown charger. Doing so could damage your battery pack and void your warranty. The charger shipped with your GI-4000Pro has internal settings for the specific Lithium-Ion battery pack used.

How long should the battery pack last on a full charge /Why is my percentage off?

Under normal operating conditions, your battery pack should provide enough power to run the GI-4000Pro for a minimum of 3 hours continuous use at room temperatures. Please also be aware that the percentage of battery life displayed is approximate and may need to be recalibrated per the instructions above.

How long should it take to fully charge the battery pack?

On average, the battery pack can take 2-3 hours to recharge. When the battery pack is full, the blinking yellow light on the unit will stop blinking and turn to a steady yellow light.

What is the expected battery life?

The Lithium-Ion batteries in your GI-4000Pro have a life expectancy of approximately five hundred charge cycles. To maximize the life of your battery, make sure your battery is fully recharged and that the yellow flashing light on your unit stops flashing and turns to a solid yellow light before removing the battery from the charger. As you approach the end of the life cycle of the battery, you may experience less usage time per full charge. This is quite normal for Lithium-Ion batteries.

GI-4000PRO SPECIFICATIONS

Power

- 4 Cell Lithium-Ion Battery Pack - 8.4 VDC, 6500 MaH
- Universal AC Adapter - 12.0 VDC, 3 Amp

Hardware

- 7" Touch Screen
- 1 USB Port
- 1 Compact Flash Port
- 1 CFAST Port
- 1 96 Pin Header (for Kobetron Adapters)

Supported Memory Devices

- EPROMs, FLASH, SPI, I²C & Firmware Hubs
- 72/80-pin SIMMs, Memory Sticks & S400 Modules
- Compact Flash Cards
- CFast Cards
- USB Thumb Drives
- USB Connected Devices



If you have any questions or comments, please call:

KOBETRON, LLC.

Phone: (850) 939-5222

Fax: (850) 939-0490

Monday - Friday 9:00 a.m.-5:00 p.m. (ET)

Email: sales@kobetron.com

Website: www.kobetron.com

Kobetron™, LLC. reserves the right to make changes to this document at any time without notice. KOBETRON™ is a trademark of KOBETRON, LLC
Copyright© 2014 KOBETRON, LLC. All rights reserved.