Tinytag Alarm Box User Guide

Instructions for using the ACS-5000 Tinytag Alarm Box and software tool.

www.tinytag.info

data collection & retrieval » temperature » humidity » shock » vibration » count » voltage » current

Gemini Data Loggers (UK) Ltd.
Scientific House, Terminus Road, Chichester, West Sussex, PO19 8UJ, England
t: +44(0)1243 813000 f: +44(0)1243 531948 e: sales@tinytag.info **www.tinytag.info**

Warnings

- If this equipment is installed or used in a manner not specified by the manufacturer then the protection provided by the equipment may be impaired.
- This equipment should only be interfaced to equipment which is powered by a Safety Extra Low Voltage Supply. The maximum voltage levels are to be 30V rms, 42V peak or 60V d.c. and separated from hazardous voltages by double or reinforced insulation. For the United States consider a Safety Extra Low Voltage Supply to be a Class 2 source as defined in the National Electrical Code. If the unit is connected to a computer outdoors the computer must also comply.
- The relay output is intended for alarm purposes only and should not be used in critical or safety control applications.
- This equipment is safe to use indoors over the temperature range 0°C to 50°C (32°F to 122°F).

Supplied Items

1 x ACS-5000 Tinytag Alarm Box
1 x CAB-0012 Alarm Box Cable
1 x 9V PP3 Battery
1 x Tinytag Alarm Box User Guide

Optional Accessories

1 x SWCD-0040 Tinytag Explorer software (version 4.4 or above)
1 x CAB-0007-USB Tinytag Ultra/Plus/View USB Interface Cable or
1 x CAB-0007 Tinytag Ultra/Plus/View Serial Interface Cable

Supported Units

The ACS-5000 Tinytag Alarm Box is suitable for use with the following data loggers:

Tinytag Plus 2:

TGP-4017	TGP-4020	TGP-4104	TGP-4204
TGP-4500	TGP-4510	TGP-4520	TGP-4810

Tinytag View 2:

TV-4020	TV-4050	TV-4076	TV-4104
TV-4204	TV-4500	TV-4501	TV-4505
TV-4506	TV-4510	TV-4704	TV-4804
TV-4810			

Initial Setup

Using a cross-point screw driver, remove the back of the unit and fit the supplied 9V PP3 battery (the Alarm Box will give a double beep when it powers up).

Using the Tinytag Explorer software the alarm unit can be programmed to wait for a specified length of time after the logger reports an alarm state. In this way, the unit can ignore short periods in an alarm state and it will only sound after a more prolonged, continuous alarm event.

If you do not wish to set a delay in your Alarm Box, skip to the **Final Setup** section.

Tinytag Explorer

To configure a Tinytag Alarm Box you will require a copy of Tinytag Explorer version 4.4 or above.

If you are using an earlier version of the software, a free of charge upgrade can be downloaded from our web site at:

www.tinytag.info/downloads

For instructions on how to install and set up Tinytag Explorer, please see the Quick Start Guide and Help files provided with the software.

Using Tinytag Explorer to Configure an Alarm Box

- Plug the Alarm Box into a spare serial or USB port using a CAB-0007 or CAB-0007-USB cable.
- Open Tinytag Explorer.
- Go to **Options** and **Configure ACS-5000 Alarm Box**.
- Click **Next** on the screen that appears and select the communication port the box is plugged into before clicking **Next** again.
- If you want your Alarm Box to sound as soon as an alarm limit is breached select **Sounds Alarms Immediately** and then **Program**.
- If you want your Alarm Box to sound only after an alarm limit has been breached for a set period of time, select **Sound Alarms After a Delay** and enter the duration of the delay you require. When set, click on **Program**.
- When complete the software will confirm that the Alarm Box has been programmed, click **OK** to exit the setup program.

The Alarm Box is now ready to use.

Final Setup

Set up your data logger as described in the Tinytag Explorer Quick Start Guide and then screw one end of the supplied CAB-0013 cable into the data logger and the other end into the Alarm Box.

Alarm Box Features

Alarm Sounder

When the logger reports that a pre-set alarm level has been exceeded, the alarm box emits a loud beep every 2 seconds.

When the logger ceases to report an alarm condition the Alarm Unit is silenced.

Test button

The test button simulates an alarm condition while it is pressed, but without any delay. It has no other effect.

Continued . . .

Alarm Box Features *(continued . . .)*

Clear Alarms Button

If the logger is set with latched alarms, it will continue to report a previous alarm condition even when it is no longer in an alarm state. This will result in the alarm unit sounding continually.

The Clear Alarms button resets the alarm in the logger, which will remain off until the next time it crosses back into the alarm state. Consequently the alarm unit is silenced.

The Clear Alarms button must be held down until a triple beep is heard.

Audible battery low warning

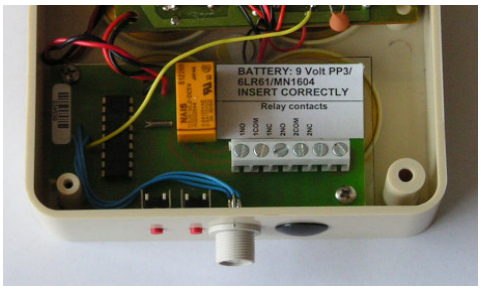
When the battery voltage falls below about 6 Volts the unit emits three rapid high-pitched beeps once every minute.

Volt-Free Relay Contacts

There is a built-in latching relay, which can be used to connect other devices to the alarm unit.

Two sets of changeover contacts are available from a set of screw terminals inside the case.

A label under the battery shows the arrangement of the terminals.



A blanking plug in the side of the case allows cable access.

The relay operation reflects the state of the audible alarm (a small delay may be noticeable).

It is the user's responsibility to ensure that the relay contacts are used in a safe manner.

Switched Output Specification:

Maximum voltage: 42V peak / 60V d.c.
Maximum current: 1A a.c. or d.c.

Read carefully the warnings at the start of this manual.

Physical Specification

Operating Range
Temperature 0°C to +50°C (32°F to +122°F)
Relative Humidity 0 to 90% (non-condensing)

Case Dimensions
Height 115mm / 4.53"
Width 105mm / 4.13"
Depth 33mm / 1.3"

Weight (including battery) 220g / 7.8oz

Interface Cable Length 1.5m

Battery Information

Battery Type 9V PP3 Alkaline or equivalent
Replacement Interval Annually

To change the battery, the case must be opened using a cross-headed screwdriver.

To avoid damage, take care not to touch the electronics or trap any wires.

The unit gives a double beep on power-up.

Remove battery if exhausted or if the unit will not be used for a prolonged period.

Do not recharge.

Approvals

This equipment complies with part 15 of the FCC rules.
Operation is subject to the following two conditions: (1) this device may not cause any harmful interference, and (2) the device must accept any interference received, including interference that may cause undesired operation.

Gemini Data Loggers (UK) Ltd. operates a Quality Management System which conforms to ISO 9001. The scope of the system covers the manufacture, design and supply of data loggers and their associated software, accessories and services.

Warranty & Disposal

- This product carries a manufacturing defects warranty of 12 months from the date of purchase. Units returned under warranty will be repaired or replaced at the manufacturer's discretion. This warranty does not cover mishandling, modification or replacement batteries and is subject to the standard Terms and Conditions of Sale, a copy of which is available on request.
- **The equipment/goods are sold "as is" and with "all faults" (applies in USA). Claims under warranty should be referred to the point of sale.**
- Data loggers, accessories and batteries should be disposed of at organised facilities, where available, in line with local regulations.
- In accordance with the WEEE directive, Gemini Data Loggers (UK) Ltd. will accept the return of any equipment purchased directly for disposal. Equipment not purchased directly should be returned to the point of sale.