

# IRISTEXT 4000 Maintenance Manual



**WARNING:** This Manual is intended for electronic technicians only.

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## **SECURITY NOTICE CONCERNING THE LITHIUM BATTERY**

\*CAUTION: DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE RECOMMENDED BY THE MANUFACTURER. DISCARD USED BATTERIES ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.

## **AVIS DE SÉCURITÉ CONCERNANT LA PILE AU LITHIUM**

\*ATTENTION: DANGER D'EXPLOSION EN CAS DE REMPLACEMENT PAR UNE PILE NON APPROPRIÉE. REMPLACER UNIQUEMENT PAR UNE PILE DU MÊME TYPE OU DU TYPE RECOMMANDÉ PAR LE FABRICANT. ÉLIMINER LES PILES USÉES CONFORMÉMENT AUX INSTRUCTIONS DU FABRICANT.

(N.B. La version française de ce manuel est disponible)

## A- IRISTEXT CPU/Video board lithium battery Backup:

All IRISTEXT units use non-volatile CMOS memory chips to store messages and scheduling information.

During power failures or while unit is moved a lithium battery protects these chips contents. It also powers the internal clock-calendar and operation registers and indexes.

This battery will last 3 to 5 years if the IRISTEXT is always under power and suffers only occasional power failures.

We recommend replacing this battery **every 3 years** if you do not have a digital voltmeter to test it as the procedure below.

If a voltmeter is available, we recommend testing the battery voltage **once every year**.

## B- Testing and replacing the IRISTEXT CPU/Video board lithium battery



Replacing the IRISTEXT lithium battery demands some care, as there is a danger of explosion if the battery is short-circuited or heated. Please follow this procedure carefully.

**B1-** Ask the Iristext user to do a complete back up of his messages and scheduling information into a file using I-Reach or IRIST TX software.

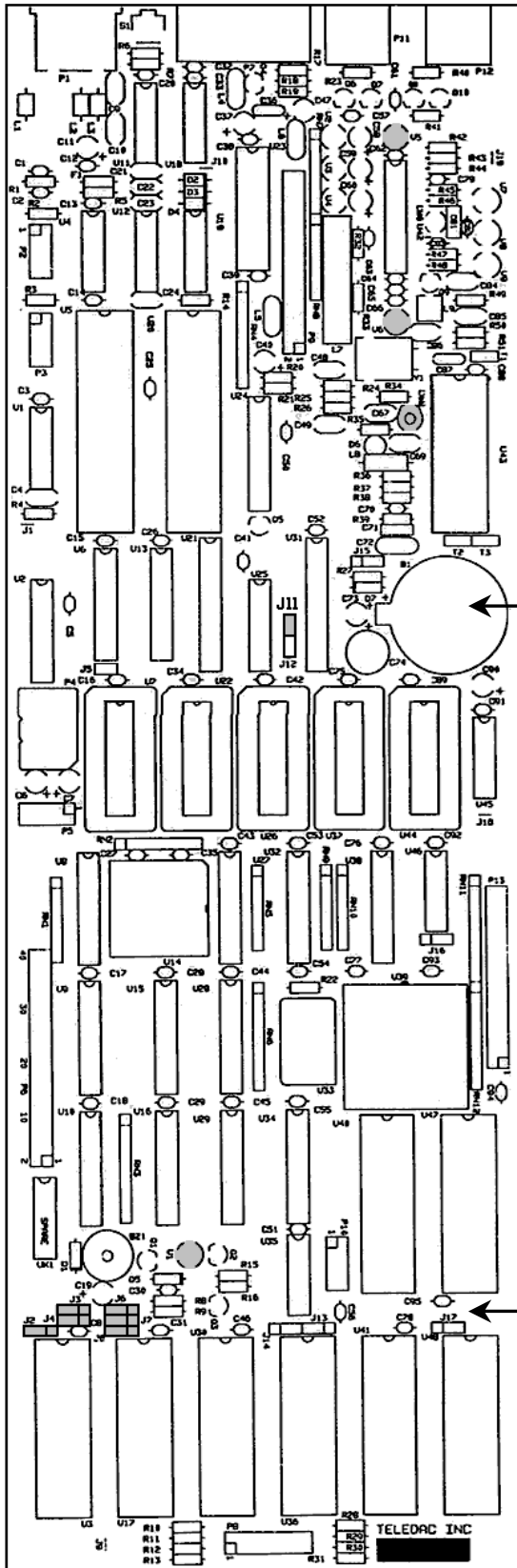
**B2-** On Iristext-4000 unit back panel put the rocker type main power switch to off (0) and unplug the power cable from the back panel. Check that the green power light (LED) is off on the front panel.

**B3-** Remove the top cover and locate the lithium battery as per FIG. 1 on next page.

**B4-** Using a digital voltmeter check voltage between the + side (top) of the battery and the Iristext chassis. To get a good chassis contact use one of the “PEM nuts” from where you removed the top cover screws. This voltage should be around 3.0 volts. If after 5 minutes without power, the voltage is less than 2.80 volts the battery needs to be replaced. **Replace only by: CR2032 (preferable) or CR2025 or equivalent.**

If the battery does not need replacement go to step **B6**

**FIGURE 1: CPU CARD**



REAR



**Lithium Battery**  
Replace only by:  
CR2032 (preferable) or CR2025

**J17 Jumper: Test point to monitor non-volatile memory backup voltage**

FRONT



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**B5- Battery replacement:**

Note that if the back up circuit use a 220-ufd capacitor to maintain power to the memory chips while you replace the battery. It will hold it for approximately 2 minutes. However a complete back up is preferable.

The upper tab holding the battery in the socket demands extra care. If you raise the metallic tab too much, it will lose its force and will not make good contact with the battery anymore, damaging the socket. Pry the battery out of its socket with your fingers or with a nonconductive tool such as a plastic screwdriver. Slide in the new battery with the "+" side facing up.

**B6-** Replace the top cover and re-power the unit. If the replacement was successful, the unit will beep and display will recover where it was before power off. If the "one moment please message" appears, the chips lost power during the procedure and you will need to ask the operator to reload all information filed at step B1 above **and to transmit clock and date.**



**Please don't discard old lithium batteries in regular household or office garbage. Use the correct method of disposal as recommended by battery manufacturer.**

## C- RE-INITIALIZING THE IRISTEXT REGISTERS AND INDEXES:

Perform this procedure only if Teledac following a problem diagnosis recommends it.

**All messages and scheduling information will be deleted** from the IRISTEXT unit. Then all registers including **clock and date** plus indexes will reset to default values.

If possible ask the Iristext user to do complete back up of his messages and scheduling information into a file using I-Reach or IRIST TX software.

For all standalone IRISTEXT models with a keyboard, use procedure **C1**.

For other models supplied without keyboard, a PC AT type keyboard with the large 5 pins DIN connector can be used with procedure **C1**.

If a keyboard is not available you will need to use procedure **C2** that is longer and more complex.

### C1- Re-Initializing the Iristext using a keyboard:

With the unit under power and the keyboard connected:

- USE your left hand to press and hold down simultaneously the **CONTROL**, **SHIFT** and **ALT** keys and ...
- USE your right hand to press and hold down - **(minus)** and then an extra finger to press also **ENTER** simultaneously and ...
- Release all six keys together.

The video screen should go black, then after 2 seconds the unit will beep and the “one moment please message” will confirm that resetting was successful.


**Note:** If the RESET/RAZ light is always on, the keyboard command will not get thru. In this case try to un-power the unit for a few minutes before retrying again. If your command never can get done we recommend procedure **C2**.

## C2- Re-Initializing the Iristext without a keyboard:

**C2.1-** On Iristext-4000 unit back panel put the rocker type main power switch to off (0) and unplug the power cable from the back panel. Check that the green power light (LED) is off on the front panel.

**C2.2-** Remove the top cover and locate **Jumper J17 test point** as per FIG. 1.

**C2.3-** Connect a digital voltmeter between **Jumper J17 test point** and the Iristext chassis. To get a good chassis contact use one of the “PEM nuts” from where you removed the top cover screws. The voltage should be around **3.0 volts**. Now insert a thick piece of paper under the upper tab of the battery socket to disconnect the battery. The voltage will start to drop slowly while the 220-ufd back-up capacitor drains thru the memory chips. You must wait until voltage drop as low as **0.30 volt**. This may take as much as 2 hours but only a few seconds if you have a 10 k-ohms resistor and connect it in parallel with the meter.

 Any 5 to 100 k is OK BUT **do not short-circuit as it is unsafe** and may damage the board.

**C2.4-** Remove the piece of paper insulating the battery. The voltage should recover to about **3.0 volts**. Disconnect the meter.

**C2.5-** Replace the top cover and re-power the unit. If you were successful, the unit will beep and display the “one moment please message”.

**C2.5-** Ask the operator to reload all information.

**For technical support please call toll free: 1-888-659-6362 or Refer to [www.teledac.com](http://www.teledac.com)**