

you want each 24 hours using the **nd** setting. The real time defrosts can be programmed by unlocking the **AA<sup>1</sup>** menu and entering the time offsets for defrosts in the settings **St1-St12**.

Be sure to set the time in **AA<sup>2</sup>** so defrost times are correct, also battery insulator is removed!

A second **M** Probe may be used as a temperature termination sensor for the defrost. It is used between the GND & S2 outputs. The **tE/rA** setting should be set to **tE** and the defrost terminate temperature set by **tr** at 5, 10, 15 or 20° C.

**6. TEMPERATURE LOGS USING MEMORY STICK**

The TACm will automatically start logging temperature a soon as you plug a USB memory stick into the USB port. The sensor temperature and time will be logged once per minute to a file called **LOG.TXT**. Events such as alarms and programming will be appended with the current time to a file called **EVENTLOG.TXT**. For data logging applications it is important that the time and date is set correctly to ensure records are correct. Removing the USB memory is OK ( no logs are stored while it is removed) and TACm will resume logging when the USB stick is re-inserted.

The RTC must be set correctly for logging- by removing the insulator AND set the correct time and date.



The USB plug provided can be left as is when logging is not required and no memory stick fitted. When logging is employed, cut 3 sides of the plug to allow a flap which raises for the memory stick as shown in the photo below.

**7. FIRMWARE UPGRADES**

Make a backup of settings first: firmware updates over-rite all programmed settings!

It is possible to upgrade the firmware to units in the field with a USB memory stick. Load **tacmv2\_xx.hex\*** (\* Version 41 & higher; if this does not work, rename file to **tacmv2.hex** & retry) file onto a USB memory stick and

then plug your memory stick into the USB port. Power down the TACm and power back up again while holding all 4 keys down and with the USB in the USB port. After 5 seconds the display will toggle between the bottom two segments, then chase, then tAc will appear on the display before going into normal mode of operation. The new firmware will then be automatically loaded into the processor. Recycle power before re-programming.

*For Technical assistance please contact :*  
**PHASEFALE CONTROLS PTY LTD**  
83 Taunton Drive Cheltenham VIC. 3192, AUSTRALIA  
Tel +613 95845590 [www.phasefale.com.au](http://www.phasefale.com.au) [sales2@phasefale.com.au](mailto:sales2@phasefale.com.au)