



# DAY DEGREE RECORDER

— **Farm Electronics** —

## Operator Instructions



Crop Storage Equipment

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Instruction Code:  
Batt/D-Deg/0904



## DAY DEGREE RECORDER

### Battery Operated Day Degree In Store Recorder

#### An Overview

The Day Degree Recorder is a portable instrument for use in the Seed Potato Store. The heart of the machine is a microcomputer that monitors the store temperature via a remote **Plug In** temperature sensor which can be positioned in the Crop as desired. An unbolt logging programme will allow you to predict a planting date for your seed potatoes.

#### DAY DEGREE RECORDER TECHNICAL DESCRIPTION:

Display Four digit LCD left to right is digit 1 to 4. Digit 1 is a line number or information number. Digits 2,3,4 are data. (see figure 1)

(figure 1)



#### SET UP OPERATION FROM START:

Clip in 6 No. AA Batteries to the 2 No. Battery connectors - take care to connect each battery the CORRECT way round. Use only Alkaline Durable quality batteries. (see figure 2)

To RESET the Recorder press the RED button, this will display HELP for 2 seconds if the RESET has occurred.

(figure 2)





## DAY DEGREE RECORDER

### Battery Operated Day Degree In Store Recorder (continued)

#### SET TIME

Press the BLUE and then the BLACK button and hold. Current time will be displayed, this will be 00 or midnight (24 hour clock) from RESET. Continue to hold both buttons down, after approximately 4 seconds the time will increase, release both buttons when current time is reached. To read time press both BLUE and Black buttons and release BEFORE display increases, otherwise a new time will be recorded. It should be noted that this setting increments in whole hours only.

#### SET TIME START

Press the BLUE and then the GREY button and hold. Start up time will be displayed this will be 00 or midnight (24 hour clock) from RESET. Continue to hold both buttons down, after approximately 4 seconds the time will increase, release both buttons when required start time is reached (do not set the TIME START to the same time as the SET TIME, data can record out of sequence if the times are apparently equal). To view the start time press the BLUE and GREY buttons and release BEFORE display increases, (*see figure 3*) otherwise a new start time will be recorded. This setting also increments in whole hours.

(figure 3)





## **DAY DEGREE RECORDER**

### **Battery Operated Day Degree In Store Recorder (continued)**

#### **GO**

Press the GREEN button and the Recorder will start recording data when the clock time reaches the START TIME setting.

#### **VIEW DATA**

To view information Press the Automatic Readout Large Blue Button on the side of the enclosure and release. (*see figure 4*). The display will activate and each line of recorded data will be displayed for about 4 seconds

(figure 4)



## **USING THE DAY DEGREE RECORDER**

Programme Definitions:-

The Programme records an accumulation of **DEGREE DAYS** from the **START TIME SET**.

One **DEGREE DAY** is a 24 hour period during which the average temperature has remained 1 degree C above the standard base temperature of + 4 degrees C. (Example: if the temperature is + 10 degrees C for 24 hrs this would record a total of 6 **DEGREE DAYS**).

According to the variety of the seed the accumulated total of **DEGREE DAYS** indicates the maturity of the Potato and can be manipulated by storage condition management to achieve the best response from the **SEED POTATO** at planting.



## **DAY DEGREE RECORDER**

### **Battery Operated Day Degree In Store Recorder (continued)**

**The Display Lines are as follows:**

*Line 0* is Day Degrees

*Line 1* is the total number of days expired

*Line 2* is current average temperature

*Line 3 & 4* are the two previous days average temperatures

*Line 5* is the current time (Hours)

*Line 6* is the start time (Hours)

*Line 7* is not used

*Line 8* is the current actual temperature

### **BATTERY STATE**

When the battery is due to be replaced the word HELP will be displayed between each line of data when the Scroll has been pressed.

After replacing the battery, the Recorder must be set up again as detailed earlier. Previously recorded data will have been lost. Reset by following the instructions under the heading Operation from Start.

**NB: It is a wise precaution to record all data before changing the battery.**

The Day Degree Recorder uses 6 No. AA size 1.5 volt battery cells. Only Durable or equivalent quality should be used. Under normal usage a life of about 2-3 months will be possible.



## **WHEN TO RENEW THE BATTERIES**

It is recommend that if starting a new season or for instance a DEGREE DAY recording, a new set of batteries is fitted to ensure full life over the period being monitored.

Under normal operation the Display Digit 2nd from the left is blank but under the following conditions the word HELP is displayed and the 2nd Digit is used to display the E of HELP.

1. When the Reset Button is pressed
2. When the Batteries reach approx. 5.6v HELP is displayed

## **REPLACE THE BATTERIES WHEN THIS OCCURS.**

### **RESET WARNING**

Only use the RED RESET PUSH BUTTON when you wish to initially set up the unit or begin a new recording period i.e.: DEGREE DAYS.

Remember when this button is pressed ALL LONG TERM MEMORY held in the monitor is erased.