User Manual Version 1.0

Universal Label Printing Indicator

Introduction

Congratulations on your purchase of the HR2000 Label Printing Indicator.

As you will discover, one of the HR2000's advantages is ease of use. The remainder of this manual provides step by step instructions on getting the best use out of the unit.

The HR2000 uses the Intermec C4 sticky label printer.

Unpacking the box

You should find the following supplied :

> One HR2000 Label Printing Terminal
> Two Interconnecting leads
> Floppy disk with demo label format
> This User manual

The leads are labelled and are connected in the following way :

1. A hardwired lead comes from the HR2000 to plug directly into the rear of the C4 printer

2. A 4 way waterproof connector on the HR2000 allows the following to be connected :

    PC with serial output   -   PC cable

Getting Started - PC software

It is first necessary to install the supplied software supplied with your C4 label printer on the PC you wish to use to design your labels.

When correctly installed you will have an icon placed on your desktop called '**Labelshop'**

When the package is first run you should choose :

File	(from the menu)

then

Select Printer	(from the submenu)

then

Add	(soft button)

then

Choose the desired printer from the left scroll box
Choose the desired FREE serial port from the right box

then

OK

A serial port is usually COM1 to COM4 and you should identify the output connector on the rear of your PC

You should now insert the supplied floppy disk and choose :

File

then

Open

then

Select the **A:** drive using the down arrow on the Look In box

then

Choose the file named **'Label _iss1'**

The label format should now be displayed on the screen.

How it all works - IMPORTANT TO UNDERSTAND

It is important to understand only the FORMAT of the label is being set up on the PC. Most of the actual information eventually printed is subrtituted by the HR2000 just before printing.

This means the format has to have special hooks to tell the AD1033 what to substitute and where.

For example :

If you put **HH:MM** on the label format the AD1033 knows this ia a special hook for the time and will substitute the HH and MM with the current hours and minutes at the time of printing.

Note when putting HH:MM on the label format you are choosing the text position, size, font, etc but not the actual time data itself.

The following is a complete list of hooks which are available during label design.

Any hook underlined show the MINIMUM ammount of the hook which may be used.

List of available formatting hooks

HH:MM - Time

Current time of printing (hrs and min)

PD/PM/PYYY - Packed on date

Packed on date (current date at printing) The year can also be 2 digit (PY) and PM and PD may be reversed for USA format

UD/UM/UYYY - Use by date

Use by date is the current date plus a number of useby days which is defined within each product in the AD1033. The year can also be 2 digit (PY) and PM and PD may be reversed for USA format.

SD/SM/SYYY   -   Sell by date

Sell by date is the current date plus a number of sellby days which is defined within each product in the AD1033. The year can also be 2 digit (SY) and SM and SD may be reversed for USA format.

<u>P111111111</u> to   <u>P666666666</u> -   Product

Uo to six lines of product may be put on each label. P11111 is the first line of product and P666666 is the last line of product,

Each line of product can have a maximum of 30 characters ie P followed by 29 ones

It is possible to have say P111111111 as the product name in large bold characters perhaps 10 characters long, and then P222222222222222222 to P666666666666666666 as say the product ingredients perhaps 20 or 30 characters long

Some of these lines may be used for other information which is linked to a product selection eg:

      STORE AT LOW TEMPERATURE
      GRADE A QUALITY
      GRADE B QUALITY

C111111111   to   C666666666   -   Customer

Up to six lines of customer may be put on each label. C11111 is the first line of the customer and C666666 is the last line of the customer.

Each line of customer can have a maximum of 30 characters.

Typically C111 will be used for the customer name and C222 to C666 will be used for the customer address.

S111111111   to   S666666666   -   String

Up to six lines of strings may be put on a label. S11111 is the first string and S666666 is the last string.

Each line of string can have a maximum of 16 characters.

There are only six lines of strings on the AD1033, but they may be set to be entered by the operator when the print button is pressed,

The order of prompting is also selectable (0 for no prompting)

eg :

    S11111 may be used to enter the batch number
    S22   may be used to enter the operator initials

Typically the AD1033 would prompt :

        BATCH: BX1234
        OPERATOR: D.H

The label would typically show :

      Batch Number :   BX1234

      Operator Code :   D.H

IIIIIIIII (nine i's)   -   Sequential number

This is a sequential number which is automatically **I**ncremented by the HR2000 each time a label is printed.

The HR2000 allows the number to be reset to any value.

If the label format has six I's then a six digit sequential counter will be created.

CCCCCCCC ccc   **-**   Count

Usually the decimal point is not required and ccc is usually substituted by PCS (pieces)
Similar otherwise to displayed quantity above

TTTT,TTT ttt   **-**   Tare

This hook is usually used on scales and indicators
Similar otherwise to displayed quantity above

UUU.UUU uuu   -   Unit Weight

NNNN.NNN nnn   -   Nett Weight

GGGG.GGG ggg   -   Gross Weight

BARCODE HOOK

Currently there are two barcode types supported :

      EAN13   (12 digit plus 1 checksum)
      EAN128   (Up to 50 characters)

It is necessary to set down a barcode of the desired type and size and define its data as all zeros.

Human readables below the barcode may be selected if desired.

The HR2000 will substitute the actual barcode data before printing.

Other formatting features available

All of the general static features are available on the PC design package to be used as desired eg :

      General text (Upper and lower case)
      Drawing lines (Any thickness)

Rectangles (Any thickness)
Image import (Logo - company heading)
Static barcodes (Any format)
Special imported text fonts

All features may be rotated through 360 degrees as desired.

Initial switch on of the HR2000

When the HR2000 is initially powered on the screen should be visible. If it is not but the keys are beeping when pressed follow the following procedure :

Cycle the HR2000 mains power off and on again

Press the bottom left red **I/O** on /off power button once
Press the F1 key once
Press the 1 key repeatedly (up to 10 times)

If nothing visible on the screen press the 2 key once then press the 1 key repeadly up to another 10 times.

The screen should become visible during this contrast adjust.

MODE key

The mode key allows three different types of display to be selected:

>Weighing mode (Standard)
>Weighing mode (Label printing)
>Counting Mode

The desired mode should be selected by the operator

WEIGHING MODE KEYS :

ZERO	-	Zero scale with no weight applied
TARE	-	Tare out container contents
	-	(Or clear existing tare)
PRESET	-	Enter a tare value
NET/GROSS	-	Switch between gross and nett modes
PRINT	-	Print a label

LABEL MODE KEYS

All weighing mode keys plus :

SAMPLE   -   Generate a unit weight

COUNT MODE KEYS

All weighing mode keys plus :

SAMPLE   -   Generate a unit weight

Switching scales

The 1 or 2 key allows switching between the two platform
scales.

Downloading formats to the HR2000

From the main screen press :

      MENU

then

      PC communications

then

      Download/Print/Save label format

The HR2000 screen will show :

      Ready to receive format

Ensure the supplied PC cable is connected to the PC and the
HR2000 then from the Label design package select :

      File

then

      Select Printer

To ensure the package will print out the serial port you are
connected to.

Then select :

File

then

Print   (Number of labels may be set here)

then

OK

The HR2000 should display '**recieving format'** while the communications is taking place.

The HR2000 is capable holding up to ten formats so the format may be save to the desired location (0-9) by selecting :

Save format

then

Enter format number (0-9)

The format will. be permanently saved in this location even when the power is removed.

Often weighing instrument information will not be displayed on the HR2000 until a valid label format is active.

Setting up the Product Information

Up to 100 products may be **DEFINED** and stored in the HR2000 memory.

The product to be defined is selected by :

        F1

then

        Define Parameters

then

        Define Product

then

        Enter Product number (000 - 099)

The screen then shows six line of product description P1 - P6

ENTer may be pressed to move around each line

Pressing a key more than once causes up to four options for that key to be entered.

When the desired value is shown the cursor will advance to the next position within about 1 second.

The F1 key may be used to quickly clear to the end of the line

The << key may be used to backspace one character

When the product information is correct the Next Page may be selected, this contains futher product information :

Sellby days	-	To be added to current date
Useby days	-	To be added to current date
Label format	-	References a pre-stored label format
Barcode	-	The 1 key toggle around the options

The barcode has three options :

> NONE
> EAN13
> EAN128

When the Edit option is choosen while EAN13 is selected the system immediatly displays a scroll list of what is required in each element of the barcode.

The EAN128 barcode differs in that it first requests the size of the barcode before displaying the scroll list.

Note EAN13 is numeric data only while EAN128 may be alphanumeric.

The format for each part of the barcode may be defined in this scroll list in a similar way to the PC label formatting.

eg :

If the first 4 elements of the barcode are desired to be the sequential number then the start of the list would be set as follows :

> **01:   I:6**
> **02:   I:5**
> **03:   I:4**
> **04:   I:3**

The following is a complete list of all the hooks which may be used in the barcode.

FROM	TO		DESCRIPTION
I:1	**I:9**	**-**	Sequential number
P1:1	**P6:30**	-	Product
C1:1	**C6:30**	-	Customer
S1:1	**S6:16**	-	Strings
U:1	**U:8**	-	Unit weight
T:1	**T:8**	-	Tare weight
C:1	**C:8**	-	Count
N:1	**N:8**	-	Nett weight
G:1	**G:8**	-	Gross weight
:x		-	x is alphanumeric

Care must be taken when setting up barcodes as only a limited ammount of checking can be done by the HR2000 to ensure the correct barcode is produced.

It is usually a good idea to leave the human readables switched on so the barcode may be checked.

Setting up the Customer Information

Up to 100 customers may be **DEFINED** and stored in the HR2000 memory.

The customer to be defined is selected by :

      F1

then

      Define Parameters

then

      Define Customer

then

      Enter Customer number (000 - 099)

The screen then shows six line of customer description C1 - C6

The customer description is edited in a similar way to the product description above, but there are no futher customer pages.

Setting up String prompts

Up to 6 string prompts may be defined..

The string list is selected by :

      F1

then

      Define Parameters

then
> Define String

There are three parts to this string prompt list :

Label   :   This is the user prompt label on the HR2000
String :   This is the string printed on the label
Order: This is the prompt order when PRINT is pressed

If order is 0 the string is not prompted but still may be used on the label

Below is an example of a string table :

S1:	**Batch**	**2AB**	**1**
S2:	**Operator**	**DH**	**0**
S3	**Machine**	**4**	**2**

When the print key is pressed the Batch will first be requested with a default of 2AB The operator can press ENTER or can change it. 2AB will be printed on the label in the S111 position.

The Machine number will then be prompted with a default of 4 and may be changed if desired, and printed on the label in the S222 position

The operator DH will not be prompted but may be printed on the label in the S333 position

Setting the Sequential number

There is only one sequential number on the HR2000

The sequential number is selected by :

      F1

then

      Define Parameters

then

      Set Sequential Number

The sequential number is simply keyed in followed by an enter.

Set Contrast / Time / Backlight

There are three options within this menu :

1. Set Contrast

The contrast may be adjusted using keys 1 and 2 as desired

2. Set Time

The current time and date are simply keyed in

3. Set Backlight

The backlight can be switched ON or OFF as desired

PC communications

There are three options within this menu :

1. Download / Print/Save label format

This was discussed previously, a format can be printed on the PC and recieved by the HR2000. When recieved it will automatically print on the C4 if it is connected. It can then be saved to a format number (0-9)

If the format being sent is too large the HR2000 will inform the user of this and the label must be reduced in complexity (Usually reduce graphic elements)

2. Print Label format

This is a utility to reprint stored label formats

3. Save system memory

This option is currently not active.

System Setup

This option is unused in this software

Product and Customer selection

The SEL PROD key allows the user to select a product. number (00-99) followed by a Customer number (00-99)

As the label format is contained within the product it is important the selected product contains a label format.

Total

Individual product totals are held, When a product is selected the main screen always shows that total.

All total can be cleared by :

      MENU

then

      Totals

then

      Clear Totals

then

      CLEAR MEM   -   To clear all totals !!!

The total is held in the working precision of the displayed or weight value.

Typically this is useful for internal use to show how much of each product has been shipped daily or weekly as desired.

Security Information - REMOVE PAGE

It is possible to set the Supplied by prompt by holding the BACKLIGHT key down while powering on with I/O

The requested password is 2000

In the system setup menu the requested password is 2000