Important Information

P/N 1-960496-00
Edition 1
January 2001

Read this information before connecting the printer to a scale!

Intermec Scale-Connected Printers

Intermec
Technologies Corporation

A UNOVA Company

Demands on Scale-Connected Printers

Background

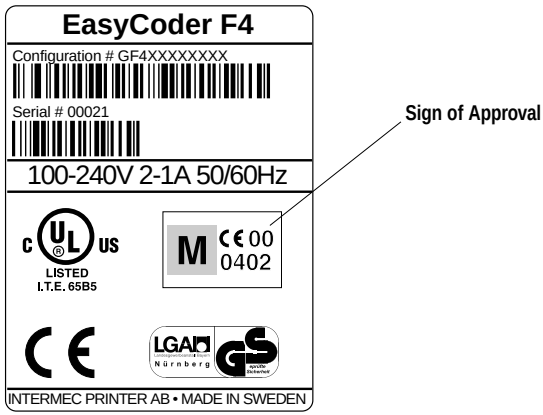
This document describes the demands on the printer and scale implementation. Failure to comply prohibits use of printer with scale according to the certificates mentioned below.

This document covers the following types and models of printers:

- Easycoder F4 and Easycoder F2 covered by certificate No. 0402-MVm030
- Easycoder E4 covered by certificate No. 0402-MVm031

Description and Documentation

Printers approved for scale-connection can be identified by a sign of approval on the machine label on the printer's rear or bottom plate, for example:



Use of the printer in accordance with Paragraph 8.1 of the European Standard on metrological aspects of non-automatic weighing instruments EN 45501:1992 and WELMEC 2.5.

- Essential characteristics
- Functions
- Receiving of weighing data
- Printing weight, price to pay, and price
- Printing bar code
- Printing graphic works

These are the only allowed functions of the printer. Note that, for instance, calculation of price is to be performed by the scale. The printer may only act as a non-intelligent printer without any calculus performed on received data.

Intermec Scale-Connected Printers
Important Information
Edition 1, January 2001
Part No. 1-960496-00

Specification of Hardware and Operative System

The operating system (firmware) of the printer is:

EasyCoder F2 and F4:	Intermec Fingerprint v7.32 or higher.
EasyCoder E4:	Intermec EasyCoder E4 Direct Protocol v2.01 or higher.

Printing is direct thermal or thermal transfer. With a 4-inch printhead, a maximum of 104 signs per row with signs height ≥ 2 mm. With a 2-inch printhead, a maximum of 52 signs per row with signs height ≥ 2 mm.

Conditional parts:
The printer may be equipped with the following protective interface:

- RS-232 serial communication

Software Used

The only allowed printing command to be used in the printer is the Direct Protocol command **LAYOUT RUN** and **LAYOUT INPUT** associated commands.

The printer is connected to the Scale through a RS-232 connection. With a protected command in the scale, the scale can be ordered to send a command sequence for each label through the RS-232 interface.

The command sequence sent from the scale for every label is as follows:

```
LAYOUT RUN "LAY1"        Retrieve already stored format and
                                                read values
<STX>
Value1                   Start filling in the data fields of the label
Value2
...
ValueN                   where N is the same number of vari-
                                ables as in stored layout
<EOT>
PF1                                          Print one label
```

The layout recalled is stored in the printer memory. The layout can be programmed through the printer's serial or parallel interface from a PC and is stored in non-volatile memory (flash, memory card) and recalled with the **LAYOUT RUN "xxxx"** command.

Software Used, cont.

Example of a layout:

```
LAYOUT INPUT "LAY1"
AN 6:FT "Swiss 721 BT",10
PP 100,170:PT VAR1$
PP 430,170:PT VAR3$
PP 430,40:PT VAR6$
AN 6:PP 100,200:PT "Tara kg"
AN 6:PP 300,200:PT "Netto kg"
AN 6:PP 430,200:PT "USD/kg"
AN 6:PP 430,130:PT "Price USD"
AN 6:PP 430,70:PT "Price  "
FT "Swiss 721 Bold BT",12
AN 7:PP 80,380:PT "Article Sample"
AN 6:PP 300,170:PT VAR2$
AN 6:PP 430,100:PT VAR4$
AN 9:PP 430,270:PT VAR8$
FT "Swiss 721 BT",6
AN 7:PP 10,340:PT " "
AN 7:PP 10,320:PT " "
AN 7:PP 10,300:PT " "
AN 4:PP 10,260:PT "Best used as"
AN 4:PP 10,240:PT "prescribed"
BT "EAN13":BF ON
AN 1:PP 25,20:PB VAR9$
AN 7:PP 10,440:PM "INTERMEC"
LAYOUT END
```

Comments:

PP is print position
PT is print text
PB is print bar code
BT is select bar code font
FT is select normal text font
AN is alignment point, that is, local origin of a bar code or a text
A **VARn$** is a variable read from the instream of data. It can only be used in conjunction with the **PT** command.

NOTE!
The printer may NOT use a Fingerprint program to listen at the port and print the label.

Software Identification

Check the correctness of program files in the printer this way.

For the EasyCoder F2 and F4 family:

To verify the firmware used in printer, follow the sequence below.

- Connect a PC to the serial port of the printer instead of a scale[1].
- Start a terminal program.
- Set PC to 9800 baud, 8 bit, parity none, 1 stop bit.
- Type: **? VERSION$**
- Verify the firmware number shown in the terminal window.

To verify the files stored in the printer.

- Connect a PC to the serial port of the printer instead of a scale[1].
- Start a terminal program.
- Set PC to 9800 baud, 8 bit, parity none, 1 stop bit.
- Type: **FILES**
- Check file size of all layout files (suffix .LAY). Type: **RUN "cksum xxx.LAY"** for each layout file presented by the **FILES** command. Note size and checksum.
- To examine and verify contents, type: **Copy xxx.LAY, "uart1:"** **xxx** is substituted for each filename listed by the **FILES** command.
- This will send a stream of ASCII data to the host screen.

For the EasyCoder E4:

To verify the firmware used in printer, follow the sequence below.

- If the printer is on, switch it off.
- While powering on, press the <Feed> button on printer's front. When printer start flashing the LED, release the button.
- Wait until configuration label has been printed.
- Tap the <Feed> button again to restore printer to normal operating mode.
- Verify the firmware number printed on the label.

To verify the files stored in the printer.

- Connect a PC to the serial port of the printer instead of a scale[1].
- Start a terminal program.
- Set PC to 9800 baud, 8 bit, parity none, 1 stop bit.
- Type: **FILES**
- Check file size of all layout files (suffix .LAY).
- To examine and verify contents, type: **Copy xxx.LAY, "uart1:"** **xxx** is substituted for each filename listed by the **FILES** command.
- This will send a stream of ASCII data to the host screen.

[1]/. The printer should always be switched off while a peripheral device is connected or disconnected.