OPERATIONAL MANUAL
AN - 1245

TOTAL WEIGHING SOLUTION

INDEX

INTRODUCTION

TECHNICAL SPECIFICATIONS

OPERATION INSTRUCTIONS

- ✓ First weighment
- ✓ Second weighment
- ✓ Tare weight entry from key board
- ✓ Viewing any ticket by RST no.
- ✓ Viewing any ticket by vehicle no.
- ✓ Deleting of any record
- ✓ Printing of any record
- ✓ Report printing
- ✓ Code base system
- ✓ Summary of operation instructions
- ✓ Special notes for operator

INTRODUCTION

Intelligent Terminal shortly IT kit is a very high tech module for weighing purposes.

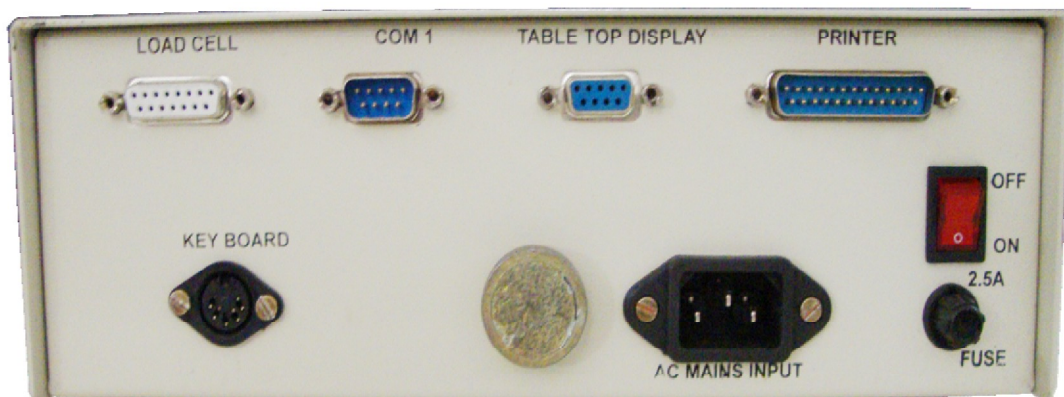Front and rear view of it is as shown in the photos shown below.

There are many facilities in it to replace computer and peripherals and thats why reducing power consumption.

Data can be saved in it and retrieved whenever required.

You can connect printer with it and can get print out in standard form of weighment slip.

You can also connect another display with it.

Computer can also be connected with it and you can use your software.

Technical Specifications

Model AN-1245 Alpha Numeric Digitizer is a microprocessor based indicator for use on a single weigh platform.

Microprocessor	- 8052
Clock	- 11 MHz.
Memory	- 128 K for data storage with battery back up
Power Supply	- Linear mode with EMI/RFI filter and Spike Suppressor.
A/D Converter	- Dual slope type with charge balancing feature.
A/D Clock	- 10 KHz.
Conversion Speed	- 10Hz.
Load Cell Excitation	- 10V @ 300mA
Signal/Unit weight	- 1 micro volt to 3 micro volt.
Key Board	- 101 Key Board IBM PC AT type.
Printer Port	- Centronics compatible parallel port.
Printer	-TVS MSP 240/ EPSON LX 800/ WEP 800DX.
Serial Port	- 1 no. RS-232C type port is available (for computer interface or remote display interface)
Display	- 16 char X 2 lines LCD display with back light for data Entry and display of weight date and time. 6 digit bright red 1" display for weight.
Remote Display Port	- Optional 1/2" / 1" /2.3"/ 4", 6 digit bright red LED display.
Indication	- Buzzer for fault and data entry.
Fuse	- F1 fuse 200mA for AC power in.
Protection	- a) RFI/EMI filter for input power. - b) Spike Suppressor for input transients.
Weight Record Storage	- 1530 records, depending on options programmed.
Consolidated Reports	- Date wise and all 5 entry wise for full & pending report.
Input Voltage	- 200V -250 V AC @ 50Hz.
Power Consumption	- 10 VA(approx).
Environment	- Operating Temp : 0 to +55 Celsius. - Humidity : 0 to 95% non condensing.
Mechanical	- Dimensions : 250mm X 260mm X 80mm (W) (D) (H) - Weight : 4.4 Kg.

OPERATION INSTRUCTIONS
1) FIRST WEIGHMENT

Step1:
Empty the platform and check for zero weight display. If the weight does not
Show zero, press Alt followed by Z from IBM keyboard or press switch
On front panel.

Bring the vehicle on the platform.

Step2:
The display will show the weight on the platform.

When weight becomes stable, press F1 key (When F1 key is pressed, weight on
the platform is locked for weighment)

the display will now interact with operator for data entry. The head will be
displayed and the operator should enter the relevant information through the
keyboard. Terminate each entry by pressing 'Enter' key. To use code data section
'USING CODES DURING 1st & 2nd WEIGHMENTS'. The entries, which are
left blank, will be entered during 2nd weighment.

Step3:
After the complete data entry, the system will display

'Weight Press Enter
XXXXXX kg'

The above display will show the weight which was locked at the time of pressing
F1. Press Enter to accept the weight. Any change in weight after step2 will not
effect the final (locked) weight for weighment.

Step4:
The display will show,
'Gross / Tare (G/T)

Press 'G/T' followed by 'Enter' as the case may be.

The display will show,

'Prnt –Save- Cancel
P/S/C:'

A) Press 'P' followed by 'Enter'. The printer will now print the ticket, for
   number of copies as programmed for 1st weighment.

The display will show,
'Prnt more copies Y/N:'
Press 'Y' followed by 'Enter' to print one more copy of the ticket.
Press 'N' followed by 'Enter' to come out of printing.

B) Press 'S' followed by 'Enter' to store the ticket without printing. The display
   Will show the RST no. on which the ticket is stored as follows:
   'Data Saved
   AT RST No.:'
B) Press 'C' followed by 'Enter' to cancel the weighment.

SECOND WEIGHMENT

Step1:

Empty the platform and check for zero weight on display. If the weight does not Show zero, press 'Alt' followed by 'Z' from IBM keyboard or press 'Zero' Switch on front panel.

Bring the vehicle on the platform.

The display will show the weight on the platform.

When weight becomes stable, press F2 key. (When F2 key is pressed, weight on Platform is locked for weighment)

Step2:

The display will show,

'RST No 2nd Wmnt'

The display will ask for the Recall code (RST No), which is printed, on the first Weighment ticket, Enter the 4 digit RST number (no need to enter 0001 for 1) Through the key board and press 'Enter'

The system will ask for all the entries, which are left blank in first weighment Make all Such entries. To use code data section 'USING CODES DURING 1st & 2ndfo WEIGHMENTS'.

Step 3:

After the complete data entry, the system will display

**'Weight Press Ent
XXXXXX kg'**

The above display will show the weight which was locked at the time pressing F2. Press Enter to accept the weight. Any change in weight after step2 will not effect the final (locked) weigh for weighment.

Step 4:

Now display will show,

**'Prnt – Save – Cancel
P/S/C**

A)   Press 'P' followed by 'Enter' The printer will now print the ticket, for number of copies as programmed for 2nd weighment. Now display will show,

   **'Prnt more copies
   Y/N:'**

   Press 'Y' followed by 'Enter' to print one more copy of ticket.
   Press 'N' followed by 'Enter' to come out of printing.

B)   Press 'S' followed by 'Enter' then system will store the ticket. The display will Show the RST no. on which the ticket is stored as follows:

'Data Saved
AT RST No.:'

C) Press 'C' followed by 'Enter' to cancel the weighment.

While printing, if there is any error like end of paper, printer off etc.,   a message of printer error will be displayed on the front panel display. The operator should correct the printer fault to resume printing.

Special NOTE: If during installation procedure RST type is set as 1, then the second weighment of any ticket could be taken only once. If '2' is selected, this will enable operator to recall any particular RST multiple time

For second weighment by using F2 key, each time the old second weight, date & time will be updated with current weight, date & time, after a re-second weighment.

5) <u>TARE WEIGHT ENTRY FROM KEY BOARD</u>

If F5 key is enabled in special setting during initial installation then the weighment Can be completed in one go.

Press F5

The display will now interact with operator for data entry such as vehicle no, Customer etc. The head will be displayed and the operator should enter the relevant information through the key board. Terminate each entry by pressing 'Enter' key.

After the complete data entry, the system will display

'Weight Press Ent
XXXXXX kg'

Now press Enter to accept the gross weight automatically from the platform.

'Enter TARE Wt:'
Type the weight from the keyboard & press 'Enter'
Now display will show,

'Prnt – Save – Cancel
P/S/C:'

A) Press 'P' followed by 'Enter'. The printer will now print the ticket, for the Number of copies programmed for 1st weighment. The display will show.

'Prnt more copies
Y/N:'

Press 'Y' followed by 'Enter' to print one more copy of the ticket.
Press 'N' followed by 'Enter' to come out of printing.

B) Press 'S' followed by 'Enter' then system will store the ticket. The display Will show the RST no. on which the ticket is stored as follows:
'Data Saved
AT RST No.'
C) Press 'C' followed by 'Enter' to cancel the weighment.

6) <u>VIEWING ANY TICKET BY RST No.:</u>

Press F3. The display will show'
'Enter RST No. For Viewing any Ticket:'

'Enter RST No. followed by 'Enter'. The particular ticket can be viewed on the display by pressing 'Enter' to roll various entries of ticket, on the display.

7) <u>VIEWING ANY TICKET BY VEHICLE No.</u>

Press F6. The display will show,
'Ticket View by Vehicle number'

Now display will show,
'VEHICLE NO':

Key in Vehicle No. followed by 'Enter'. The particulars ticket can be viewed on the display by pressing 'Enter' to roll various entries of ticket, on the display.

8) <u>DELETING OF ANY RECORD</u>

If deletion of record is enabled, in special setting during initial installation then any record can be deleted in following sequence.

Press F10
The display will show,
'Enter Password:'
The Password is **DELET**
Key in the password and press 'Enter'
If the password is correct the display will show.

'DELETE BY
RST/DATE (R/D):'

A) Select 'R' followed by 'Enter' to delete the record RST No. wise. Now the Display will show.
'Ent Start RST:'
Enter the RST No, from which the records are to be deleted. The display will Show.
'Ent Last RST:'
Enter the RST No. up to which, the records are to be deleted. The display will show.
'Deleting record '. After deleting the records, the system will return to normal operation.

B) Select 'D' followed by 'Enter' to delete the record date wise. Now display will Show,
'Date:
Ent Start Date'

Enter the date in DD/MM/YYYY format from which, the deletion of record is required. Now the display will show,
'Date:
Ent Last Date'

Enter the date in DD/MM/YYYY format up to which, the records to be deleted. After deleting the records, the system will return to normal operation.

9) <u>PRINTING OF ANY RECORD</u>

If printing of a particular RST No. is required, then

Press F4
The display will show,

'Enter RST No.
For Print :'

Key in RST No. followed by 'Enter'. The particular record will be printed.

10) <u>REPORT PRINTING</u>

When the system is in the normal mode of weight display, press F7.
The display will show,
'ALL/RST/DATE
(A/R/D):'

A) Select 'A' followed by 'Enter' to print, report of all the records. The system will now ask for all or which header entry, the report is required. Enter the choice (1-6) and press 'Enter'. For example if heads are set as VEHICLE_NO.CUSTOMER, ADDRESS, COMMODITY, SOURCE, the sample display will be as below:
'A/VE/CU/AD/CO/SO
Ent Choice (1-6)'
Press 1 for report of all records, 2 for selecting particular vehicle number and so on. After this if any other option except 1 is selecting give the details which particular record(s), the report is required, for example if 2 is entered, then enter Vehicle_no. for which report is required.

The display will show,
'REPORT (F/P):
Full/Pending'
Press 'F' followed by 'Enter' then system will print full report of 1st & 2nd Weighment of all the RST No. on which the ticket is stored.
Press 'P' followed by 'Enter' to print pending report of only those RST No. whose 1st weighment is done, but 2nd weighment is pending.

B) Select **'R'** followed by 'Enter' to print the report, RST No. wise. The system Will display,
'Ent Start RST:'
Enter the RST no. from which, the report is required. Now display will show,
'Ent Last RST:'

Enter the RST NO. up to from which, the report is required.The system will now ask for all or which header entry, the report is required. Enter the choice (1-6) and press 'Enter'. For example if heads are set as VEHICLE_NO, CUSTOMER, ADDRESS, COMMODITY, SOURCE, the sample display will be as below:
 '**A/VE/CU/AD/CO/SO**

Ent Choice (1-6)'
Press 1 for report of all records, 2 for selecting particular vehicle number and so on.After this if any other option except 1 is selected give the details which particular record(s), the report is required, for example if 2 is entered, then enter Vehicle_no. for Which report is required.
The display will show,
Report F/P
Full/Pending'
Press 'F' followed by 'Enter' then system will print full report of 1st & 2nd Weighment for all the RST No. on which the ticket is stored.
Press 'P' following by 'Enter' to print pending report of only those RST No. whose
1st weighment is done, but 2nd weighment is pending.

C) Select '**D**' followed by 'Enter' to print the report, date wise. Now the system Will show
Date
'**Ent Start Date**'
Enter the date in DD/MM/YYYY format from which, the report is required. The Display will show,
'**Date:**
Ent Last Date'
Enter the last date in DD/MM/YYYY format up to which, the report is required. The system will now ask for all or which header entry, the report is required. Enter the choice (1-6) and press 'Enter'
For example if heads are set as VEHICLE_NO, CUSTOMER, ADDRESS, COMMODITY,SOURCE, the sample display will be as below.
'**A/VE/CU/AD/CO/SO**
Ent choice (1-6)'
Press 1 for report of all records, 2 for selecting particular vehicle number and so on. After this if any other option except 1 is selecting give the details which particular Record(s), report is required, for example if 2 is entered, then enter Vehicle_no. for Which report is required.

Now the display will show,
'Report (F/P):
Full/Pending'
Press 'F' followed by 'Enter' then system ill print full report of 1st & 2nd Weighment of all the RST No. on which the ticket is stored.
Press 'P' following by 'Enter' to print pending report of only those RST No. whose 1st weighment is done, but 2nd weighment is pending.

12) CODE BASED SYSTEM

        Code based system facility can be enable from special settings by using Alt and F6 Keys

        Often there are data entries under various heads like customer, address etc. Some regular customer visit repeatedly, for example one of the customer is "ABC TRANSPORTS". Whenever this customer comes for weighment, the operator has to feed a 14 digit long name (ABC TRANSPORT). Instead of feeding   14 digits each time, the length of data entry can be reduced by codifying this entry. This entry can be assigned a code e.g. ABC Now whenever the vehicle from this Customer comes for weighment, only 3 digits need to be fed. These 3 digits will be the respective code (ABC) programmed using procedure as described in A) & B) below. Feeding this code will recall the complete 18 character from the code   memory, which can be further used for printing and data storage. This coding facility is provided for data entries under headers (subtitles) 2 & 3 only

PROCEDURE FOR PROGRAMMING DATA CODES:

  A) For coding data entry under header (subtitle) 2. Press 'Alt' & F10 keys Sequentially, the display will show,

  'Enter Password:'
  The Password is **CODE2**
  Key in the password through the keyboard & press Enter.
  If the entered password is correct, then display will show,

  'ENTRY 2 CODE'
   Key in the code, which you want to give to a particular data entry through the keyboard & press Enter.
   For example if header entry2 (subtitle) is set as CUSTOMER, then the display will show **'CUSTOMER CODE'**, For above example, feed "ABC" at this point, this is the 3 digit code. The display will show,
  'ENTRY 2':
  Key in the particular data entry for which you want to give a code through the
  Keyboard & press Enter. For example if header entry2 (subtitle) is set as CUSTOMER , then the display will show 'CUSTOMER'. For above example, feed "ABC CARRIERS & TRANPORTATION" at this point, this is the full
  Form for the code. The display will show,
  'Enter next code
  (Y/N):'
  Press 'Y' followed by 'Enter' if one data entry code under this header entry is
  To be programmed.
  Press 'N' followed by 'Enter' to return to normal operation.

B) For coding data entry under header (subtitle) 3. Press 'Alt' 7 'F10' keys
Sequentially, the display will show,

'**Enter Password :'**
The Password is **CODE3**

Key in the password through the keyboard & press Enter.
If the entered password is correct the display will show,

'ENTRY 3' Code'
Key in the code, which you want to give to a particular data entry through the
keyboard and then press Enter. The display will show,
For example if header entry3 (subtitle) is set as ADDRESS, then the display
will show **'ADDRESS   CODE',** feed address at this point.

'ENTRY 3'
Key in the particular data entry for which you want to give a code through the
keyboard & press Enter.
For example if header entry3 (subtitle) is set as ADDRESS, then the display
Will show **'ADDRESS'**, feed address at this point.

Then the display will show,
'Enter next code
(Y/N):'

Press 'Y' followed by 'Enter' if more than one data entry codes under this
header entry is to be made.
Press 'N' followed by 'Enter' to return to normal operation.

The code-based system has a capacity to store 50 codes each, under header
entry 2 & 3. Once this code memory of either entry 2 or 3 is full, it can be
cleared using code memory reset facility, through 'Alt' & 'F8' from keyboard
& entering password **RSTCM**.

C) To print a list of all the codes assigned under header entry2 & header entry3.
Press 'Alt' followed by 'F10' , the display will show,

'Enter Password :'
Password is **CODEP**

Key in the password through the keyboard followed by Enter. The list of all
the data entries with code will be printed

USING CODES DURING 1ST & 2ND WEIGHMENTS:

To use 3 digit codes instead of long data; during first or second weighment, (code base system should be enable during installation) follow the procedure as below:

Step1 of first weighment will be the same.

Step2: Press F1 key

Enter three digit code already assigned for an entry using Alt,F10 key as explained above in section (A) and (B) of 'PROCEDURE FOR PROGRAMMING DATA CODES' After entering code press Enter. The display will show details of code & entry, Press 'Enter' to accept the code automatically with data entry for   storage and printing. After pressing enter the weighment will proceed to next step. Press Esc' to not accept the code and make a new entry for the head.

Example: The display will look like as below for entry during head2 (CUSTOMER)

1.condition 1: If code is found in code list, the display will appear as below,

CUSTOMER CODE ABC= ABC TRANSPORTS   **Enter To Proceed   Esc to reEnter**

If enter key is pressed, the three digits will be treated as code and complete entry will be used further saving, printing etc. for customer name.
If code has to be reentered press escape key.

2.condition 2: If code is not found in code list, the display will appear as in sample below,

CUSTOMER CODE   DDD Not found!   **Enter To Proceed   Esc to reEnter**

If enter key is pressed, the three digits will be treated as data for customer name.
If code has to be reentered press escape key.

Step3 & Step4 will be the same as explained in first/second weighment.

SUMMARY OF OPERATION INSTRUCTION

1) First Weighment : Press 'F1' key for First weighment.

2) Second Weighment : Press 'F2' key for second weighment.

3) Weighment with Tare Weight entry : Press 'F5' key for Weighment with Tare Weight Entry.

4) Viewing any Ticket by Rst no. : Press 'F3' key for Viewing any ticket by Entering Rst number.

5) Viewing any Ticket by Vehicle no. : Press 'F6' key for Viewing any ticket by Entering Vehicle number.

6) Deleting any Record : Press 'F10' key, then Enter the Password **'DELET' to delete** any record Date wise or   Rst no. wise.

7) Printing any Ticket By Rst No. : Press 'F4' key for Printing any ticket by Entering Rst No.

8) Report Printing : Press 'F7' key for report printing.

9) Entry2 Code Programming : Press 'Alt' & 'F10' keys sequentially, then Enter Password **'CODE2'**

10) Entry3 Code Programming : Press 'Alt' & 'F10' keys sequentially, then Enter Password **'CODE3'**

11) Printing Code List : Press 'Alt' & 'F10' keys sequentially, then Enter Password **'CODEP'**

SPECIAL NOTES FOR OPERATOR

1) Avoid frequent ON/OFF switching with the indicator.

2) When ever the indicator is switched 'ON', always allow 5 minutes of warm-up time for load cells. This will ensure accuracy in weighment.

3) Never tamper with true earth connection on Power supply, as failures in this connection will make protection and filter circuit in system ineffective.

4) Never attempt any repairing or adjustment in the indicator electronics.

5) There is no user serviceable part inside. Report any malfunctioning in the system to the nearest services centre.

6) If fuse replacement is required, do so with correct rating (200 mA) only. Never put thick wire, as it may lead to major damage to internal electronics.

7) Whenever the system is switched on, a test cycle of 0 to 9 will be displayed sequentially on the LCD, after completing the test cycle, the display will show,

   '-PASS-
   -PASS' for some time.
   After this the display will show the following screen for some time,

   Ver:XXXXX   -XXX
   R55RD   011403

   This is the reference number of model and the software version. In case of any technical assistance, please quote this reference number.

ENDEAVOUR

TOTAL WEIGHING SOLUTION

ENDEAVOUR INSTRUMENT PVT. LTD.

Corporate H. O. : 4th Floor, Mohini-II, Nr. Gandhigram Railway Station, Nr.Sakar-I, Ashram Road, Ahmedabad – 380 006.