

Operation Manual



3268

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Introduction

Introduction

Thank you for purchasing **AP-700 Console Software** (**AP-700CS**). This software is for Windows 98SE/ME/NT/2000/XP. This software includes the following tools: Format Design, Database Management, Batch Management and History Management, which can make various labels for AP-700. Each tool is designed that you can operate it without this manual by using the help function and menu driven screens. However, in order to utilize all the functions and full power of this software, it is very important for you to take the time to review the whole manual. This manual explains and illustrates how to use this software from various aspects and with many examples.

Note

- 1. If you encounter any problems setting up AP-700CS, you are entitled for a replacement.
- 2. It is not warranted that the functions contained in this software must meet your requirements or that the software operation will be uninterrupted or error free.
- 3. Software specification and information contained in this manual is subject to change without notice.

Check List

Please confirm contents of AP-700CS Package are as follows:

- 1 CD-ROM
- 1 ID USB Key (which has to be inserted into the USB port on AP-700 machine)
- 1 Operation Manual
- 1 Touch Pen

Operation Environment

- Model: Desk Top Personal Computer or Notebook
- CPU: Pentium 100MHz or higher
- OS: Windows98SE/ME/NT/2000/XP
- Memory: 64MB or more
- Display: Windows-Compatible True-Color Display (800x600 resolution or more)
- Drive: CD-ROM, CD-RW or DVD
- Hard Disk: 100 MB of Free Space
- Mouse: Windows-Compatible Pointing Device
- Interface: More then 1 USB and more then 1 LAN

Installing AP-700CS

- 1. Start Windows.
- Insert AP-700CS Installer CD-ROM in the CD-ROM drive.
- 3. Click the **Start** button and then click **Run**. A dialog box appears.
- 4. Type **d:\setup** in the **Open** box and click **OK** when done.
- 5. Select the Language.
- Click Browse button to select the directory where AP-700CS is set up. Default directory is c:\AP-700
- 7. Click **Next** button to continue as shown on the right.
- 8. Select name of Program Manager group as AP-700.
- Click Next button to start installation as shown on the right. The installing is begun.

Installing	
Copying file: C:#AP-700#Msvbvm60.dll	
3%	
Cancel	





Select ProgMan Group frår de spor if de Prepar Manate prog ti alt W201 kans to	5 149-780
AP-TED ACTFURE Advis- Advis- Advis- Server AC Advis- Advi-	1
 Driftighel DVD Danak DVD Sanak DVD-RAM PLAC ROMA P20-X P-MORTH ROMA P20-X ROMA P20-X ROMA P20-X ROMA P20-X ROMA P20-X ROMA Data A P20-X RO	

- 10. A confirmation dialog box appears. Click **Finish** when done as shown on the right.
- Click Start button on the taskbar and then point to Programs to view AP-700 menu. It consists of the following submenus: Format Design, Database Management, Batch Management, History management, Uninstall.



CHAPTER

AP-700 Console Software

In order to make a variety of labels, AP-700 Console Software offers powerful tools to design the label, manage the database and control the automatic labeler machine.

This chapter introduces the functions and the composition of AP-700 Console Software.

About AP-700 Console Software

Recently, due to the progress of computer technology, more efficient labeling systems are requested. AP-700 Console Software is developed for creating labels that satisfy the various requests, and for controlling the **Automatic Labeler Machine AP-700** efficiently.

The main features of AP-700 Console Software are as follows.

- AP-700 Console Software can create and print a variety of labels for different purposes.
- AP-700 Console Software can control three AP-700 machines to print and stick three different labels at the same time.
- AP-700 Console Software makes it easier to create and manage databases which are used to save the necessary data for making the label.
- AP700 Console Software can record the printed data to history files and can total and analyze the history data conveniently.
- AP700 Console Software can set up and control all the peripherals of the automatic labeler machine together.





When software is started, the following screens are displayed as Main Menu.

The operation is divided into the following three menus.



Print Labels

Printing and sticking labels using formats and databases.



Set up and Manage Data and Parameters

Start management tools (Format Design, Database Management, Batch Management, History Management, File Management), Set up system parameters, roll In/out, and date/time. Upload/Download files.



Exit Program

Exit the application program.

* All operations of the application are done by touch panel or key pad of AP-700.

Label Printing

Printing and sticking labels after calling out the data such as label formats and databases.

Before Label Printing...

Please make and prepare the necessary data for making labels, such as formats and databases beforehand. Although how to create those data is described in this manual later, please read those instructions well before using the application.

Label Printing Window



Layout View Window / List View Window

The content (layout of format, data accuracy, etc) of a label format are shown in a layout screen before printing. The layout screen is divided corresponding to connected labeler.

Moreover, a layout screen is used to display result of a data field based on data called out from a database, data entered via keyboard, initial value of counter, date & time.

List view window is used to display the names, attributes and values of each data. Modification of data value is also possible here. The following icons are displayed and the input source of data is shown.



Page Switch Button of List View Window

When the format has list of data, they are displayed in the List View Window. And the page number are displayed between the Page Switch Buttons. If there are two or more pages, switch pages with buttons. Moreover, the list screen can be expanded or reduced by pressing F4.

Pack Count Input / Display Window

Touch P button, and then input frame is displayed

as shown in figure on the right.

Input Print Number of Label (Pack) in the frame.

When inputting Print Number, the display of count mode is shown as When inputting "0" as Print Number, the display of count mode is shown as



(Count Down Mode) as (Count Up Mode)



displays the number that has been printed.



displays the number that has not been printed (remainder).

Conveyer State Display Window

The running state of the conveyer during printing labels is displayed.

The signs are three types as shown on the right.

Moreover, during printing, the speed (Level1-5) of the conveyer is displayed on the right side of the sign.

Online / Offline Display Window

"Online" means that the labeler is connected to console and is able to print.

"Offline" means that the labeler is not connected to console and is not able to print.

Menu Buttons



Open File

First of all, please touch the layout view window to select the target labeler and then touch the **Open File** button. [**Select File**] window appears as shown in figure on the right.

	•••• Stop [Orange Sign]
•	・・・Running [Green Sign]
.	Emergency Stop [Red Sign]



SELECT FILE		
AATH C:Tep-TOTFcamplact	Calabase	
No. 1111 1046	and the second	
CONTRACTOR OF		
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and the second	(ain	

Database

When this button is pushed, the list including only database files is displayed. At the **Database priority** Mode, select this button please.

Format

When this button is pushed, the list including only Format files is displayed. At the **Format priority** Mode, select this button please.



When this button is touched, the list including only Batch files is displayed.

Select a file from the list, and press the button

The corresponding format will be displayed in the layout view window of the target labeler.

Chapter 1 AP-700 Console Software



Close Format

Close Format

When this button is touched, the format file of the target labeler will be closed and layout view will be cleared. Before touching this button, please touch the layout view window to select the target labeler.



Adjust Print Position

When this button is touched, a screen where the print position can be adjusted is displayed. Firstly, specify a labeler, and then adjust print position.

The display will change into + and – or Left and Right whenever the button is touched.

Touch **Send** button to send the input numerical value to labeler.

Touch **Reset** button to set the current value to the initial value.

The adjustment value is recorded according to the labeler number and the format name.

The adjustment value recorded will called out when using the same combination of the format and the labeler next time.

Press the **PRINT** key on the key pad to do the test print.



Adjust Labeling Position

Firstly, specify a labeler, and then touch the button.

The adjustment screen is displayed as shown in figure on the right.

Adjust the labeling position within the range of $-350 \sim 350$.

Whenever touching +5mm -5mm button once, it is adjusted by 5mm (-5mm).

Press **DETAIL** to display the screen of Labeling Adjustment where the labeling position can be adjusted by each labeler.



Push the key **PRINT** on the key pad to do the test print.

Pass Mode

Set Pass Mode

Touch this button to switch into the Pass Mode and the color of the button will be orange. Even if the commodity passes on the conveyer, the label is not issued in this mode.

Data Entry and Modification

Touch white lines or the icons in the list window, data input window is displayed.

Push the Clear button to clear the input data.

Push the Enter button or icons again to fix the input data.

However, when touching the DB icons and the Table icons, a data list is displayed to select the input data.

AP-700 has a key pad as an input means besides the touch panel.

1	8	9	F4	DB1	
4	5	6	F7	DB2	DB3
1	2	3	F8	FEED	PRINT
0	$\overline{\cdot}$	C	F9	ENTER	

• **F4** key switches the size of the list display. (Refer Figure in next page)

- Keys [DB1], [DB2] and [DB3] correspond to database 1, 2 and 3 respectively. Press each key, each database list is displayed.
- Input the call code first, and then touch icons of Database 1,2 and 3 or touch keys [DB1], [DB2] or [DB3], the data can be called out.
- [FEED] • Feed Label
- [PRINT] • Print Test Label

1-1-10		PRINT LABEL		10 10 VIT	277(11)	PRINT LABEL	2186,402/1 22,59
ane all	Ø		National States	-	Name -	Espire Days	175
	Vigita J		JAR Gal	Class	State Come	Atantaent	Cier
	1.1.2.2.4.1.1.	S00Yem	Wenutat		Nered netwee	Curp: Hone	10
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hyde i	-		Price	122	Pr ice		1
3404		100 ret	a Provent		Benresiane		
	P 0	0 R C	1/2 4	CAT.		00 08 0 1/2	

Figure

Press [F4] to change the display size of List Window.

How to Search Item in the Database Window

When buttons [DB1], [DB2], or [DB3] are pushed in the format that has set the database, the corresponding database list is displayed.

There is a box in the list to input the word to be searched.

Input the search word, and then touch the button.

The select bar moves to the target data if there is a matching data.

Touch this button to search the next same word continuously.

The error message is displayed when there is no more matching data.

Setup Menu



There are following ten menus in this routine.



File Management

The files can be moved to the specified folder from the default folder of AP-700. The files of AP-700 in the memory card can be moved to the default folder oppositely.

When the files are selected, it shows [**Order**]. When the transfer ends, it shows [**Success**].

A folder selection screen is displayed on which you can select the folders.

Ap-70	FILES MANAGEM	ENT		
Get from	c:¥ap-700¥samples¥	REPER Databas		Select the file type. Touch [All Files] to
Put to	D:\	REFER	1	display all files.
	Get from File List	mpty Space:OM Bytes		
No. STAT	TUS FILE NAME			
001	Bread.dbs	All Files		
002	Category.dbs			Select the direction of movement.
003	Category1.dbs	TAKE		
004	Company.dbs	OUT		[TAKE OUT]OTHER FOLDER AP700
005	083.dbs			
006	08P01.dbs	PUT IN		
007	DBP02.dbs			
008	Discount.dbs			
009	Dish.dbs	DELET		
010	Dr ink.dbs	Berner		
011	Format.dbs	Transfe		[DELEIE]Delete selected files in the list
012	Fruit.dbs			
013	Goods.dbs			[Transfer]Transfer selected files in the list
014	GoodSUB.dbs	JL EXT		
0101	UOODSDRY. DDS	- CAI		

System Setup

In case of Database Priority, Select [Open], and set the path and name of the database that will be automatically loaded when the application starts.

Set the path and name of the history structure file. It is not possible to print if it is not correctly set.

file is changed or not.

c:\ap-700\samplesi

21

10

C:\AP-700\config\base.hst

YES

OPEN FILES AUTOMATICALLY WHEN DATABASE PRIORITY

PATH OF THE DEFAULT LOAD FILE

PATH OF THE HISTORY FILE

CREATE BACKUP FILE

Select whether to make the backup file (extension is **BAK**) automatically when the

PATH OF THE DEFAULT FOLDER IN WHICH YOU SELECT FILES

GLOBAL COUNTER NO.1 GLOBAL COUNTER NO.2

Current 0

10 1

0

NOT OPEN

REFER

REFER

Select the default folder for AP-700. Only the files in this folder can be used.

This parameter must be set, otherwise no file can be called.

Set the current value, increment interval, minimum value and maximum value of the global counter. A current value can be changed on the label-printing screen.

99999999



Adjust the date and time.

Select the part to be adjusted, and adjust date and time using 🔄 シ button.

Finally push button to fix the set up.





Label Design

Before printing a label, you have to create a label format first. Logo, illustration, barcode and multiple fonts can be applied. Label format can be created freely and flexibly. This chapter introduces various features of label design.

About Label Design

Using the format design tool of AP-700 Console Software, you can make various label designs easily.

This chapter describes all the features that are available in format design tool of AP-700 Console Software to make label designs more efficient.

These sample labels displayed below are made by format design tool of AP-700 Console Software. They give the user an idea of what types of label designs can be created.







Chapter 1 Label Design

Features

Format Design Tool of AP-700 Console Software offers various features shown below to provide a faster, flexible and more effective tool in handling label design. By combining these features, it is possible to create label formats that satisfy any user's specific requirements.

Input	Data can be entered via a keyboard directly or called out from a database file before printing of labels.
Refer	Print the data of a selected object as a copy of the part of another object.
Combine	Combine the data of several selected objects together and print the result on the label.
Image	Objects such as logo, picture, symbolic mark etc. can be printed on the label.
Counter 2 3	 Three types of counter are supported. Global Counter: Common counter that is not dependent on any item, label format or database. Format Counter: Each label format has its own respective counter. Value of counter is not affected by another label format. Database Counter: Each item in a database has its own counter.
Total	Data of the selected object can be summed up and the total result can be printed on the label.
Date & Time	Current date & time can be printed automatically on the label. Various date and time formats can be set up.
Period	If a valid period is specified, the date & time of expiry will be calculated automatically and printed on the label.
History	If necessary, the printed data can be recorded in a history file and can be referred in the future.
Barcode	Support most commonly used barcode such as CODE39, EAN, JAN, UPC-A, CODE128, etc.

Chapter 1 Label Design

Database

Each label format can be linked to three different databases at one time.

Format Editor Window

The following figure introduces the basic elements of the format design window.

Figure 2-1



Tool Bar: Display standard buttons for commonly used commands, such as copying, pasting and deleting items; changing zooms; and jumping backward and forward. Refer to [Help] menu for further information. **Object Button:** Located in the left frame of the window and contains buttons of objects that will be used in creating label formats.

A click on any button changes the mouse pointer into the selected object's image. Move the object pointer to the layout screen and click on the desired position, a dialog box of the selected object will be displayed. Refer to [Help] for further information.

Object Types & Setting Up

Object Toolbar consists of many objects such as string, box & line, barcode, image, etc. Each object has its own attribute and design operation procedure. Consider the layout of a sample design below. Objects below are created using the object toolbar. The type and the attribute of each object are also shown.

Figure 2-2



Division of Objects

The format design is to set up the objects as mentioned previously. It is important to illustrate how to separate the content of the label into the objects. Several rules to separate the objects are shown as follows.

- To separate the objects by type.
 For example: "String", "Barcode", "Image", "Date", etc.
- To separate the objects by attribute.
 For example: Objects ① and ④ in Figure 2-2 are String objects, but their attributes are classified as "Fix" and "Input" respectively. A description of attributes is mentioned later.
- To separate the objects by content.
 For example: Although objects ④ and ⑧ in Figure 2-2 are linked to the same database file, object ④ refers to "Commodity Name" whereas object ⑧ refers to "Unit Price".
- To separate the objects by printing method.
 For example: Objects of the same types and attributes may have different printing position & angle, font size, etc.
- To separate the objects by special function.
 For example: The content of an object may be the result of a function.



A Property of an object can be one of the followings:

- Fix
 The content and the design of the object do not change during the whole printing. (For example: Text, Title, Line, etc.)

 Imput
 The content of the object con be set via a keyboard directly or from a
- Input The content of the object can be set via a keyboard directly or from a database file during printing of labels.
- **Refer** The content of the object can be set as a copy of the part of another object during printing of labels.
- **Combine** Object's data is setup by combining some objects together during printing of labels.

Chapter 1 Label Design

Adding Objects

This section illustrates the importance of using the correct mode to add various new objects to a label design.

There are two modes ("Append" / "Insert") to add new objects.

In "Append" mode, the new object is added after the last object in object list.

In "Insert" mode, the new object is added before the selected object.

There are two ways to select "Append" / "Insert" mode.

Click (2) Edit on the menu bar. Point to (<u>C</u>) Append/Insert and then click.

Or



Click Append/Insert button on the Standard Toolbar.

play&Jump (<u>5</u>)Item (7)T	iool (8)Lar	iguage (9)	Help
/			@♥₽₩	唱 🤍
,30 .		,50 .	,60	No

Object Buttons



String

This object is used frequently as text, title, message, etc.



Barcode

This object is selected to print a barcode on a label.



Box & Line

This object is used to draw lines (horizontal · vertical) or rectangular frames on a label.



VALÍD

Date & Time

During printing of labels, current date & time can be printed automatically via this object.

Period

During printing of labels, the expiry date & time of the period can be calculated and printed automatically via this object. The past expiry date & time is also possible.



Image

This object is set to print images such as drawing photograph, logo, symbol, etc. on a label. The format design tool supports the image types of BMP, JPEG, GIF only. Although color images can be set, they will be printed in monochrome only due to the printer.

888

Counter

This object is set as a counter to print sequence number, increment / decrement data, etc. There are three types of counter called as "Global Counter", "Format Counter" and "Database Counter". Initial value of counter can be set in label printing program. Counter will circulate within specified limits and will be reset automatically to minimum value when reaching maximum value.

Global Counter \rightarrow This is a common counter that is used by all formats and all database items. For example: If the value of Global Counter reaches 10 during printing by format ①, then initial value of Global Counter will be set to 11 when printing by format ②.

Format Counter \rightarrow Each format has its own respective counter. The value of Format Counter is not affected by other formats. Click on (<u>C</u>) Format Counter... submenu of (<u>4</u>) Setup menu to set initial value, interval, minimum and maximum values of Format Counter.

Fermat Gounter Go	elicaration		
Format Counter No	a.1	Format Counter N	ia 2
Initial/Velue:	X	Initial Value	a D
Verention	0	Valato	n: [0
Minimum	0	Minister	s D
Maximum	0	Meximum	s [D
Forbid modifice	fion within Label Print	The Portbid modifie	cetion within Label Print
QK	9	secol	Holp

Database Counter \rightarrow Each item in a database has its own counter. Since the items in the database are independent of each other, it is easy to manage the counter for every item. For example, by checking the counter of each item, it is very easy to know the total number of labels printed for each item.

Calculate

The result of this object is based on an arithmetic operation of two other objects during the process of printing labels. This object supports six types of arithmetical operations such as "Plus", "Minus", "Multiply", "Divide", "Remainder" and "Power". For example, total price (weight * unit price), amount of discount (total price * discount rate), discount price (total price - amount of discount), label number (total number / unit number), increment rate (today's sales / yesterday's sales).

$\sum_{i=1}^{n}$

Total

This object is used to calculate total value of another object. For example, total number of labels printed today, total number of goods produced today, total weight of meat, total sales amount today, etc. The total value can be printed on a total label or every label and can be cleared during printing.



Print Number

This object is used to print the number of labels to be printed on the label.



Call Data

This object is a very flexible one. During printing of labels, Call Data object extracts data from the given database and the given field based on the given condition and prints it on the label. In other words, Call Data is a table-reference data. Call Data object is used mainly for the following scenario.

- If criteria and result are not related, it is difficult to get a result from Calculation or Function object due to no formula. Therefore, result can be obtained easily by referring to a table. For example, international phone call charges are based on time zones such as 8:00~18:00 (No discount), 18:00~23:00 (20% discount) and 23:00~08:00 (40% discount). If discount rates from 00:00 to 23:00 are registered into a database in advance, these values can be called out easily via Call Data object. In this case, the Data & Time object will be the condition for calling out.
- If there is a direct relationship between criteria and result but it is very difficult or impossible to get a result due to complex calculations. Therefore, result can be obtained easily by referring to a table. For example, sine value of an angle. However, it is impossible to calculate since there is no such mathematical function available in the software. If the sine values of each angle based on a constant interval from 0° to 360° are registered into a database in advance, these values can be called out easily via Call Data object.

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Acts as an extension of a database input function. Although each label format can be linked to three databases, this object can extract and print data from a different database based on another String object's data from a keyboard. During printing of labels, a call code can be input via a keyboard and the corresponding data can be called out & printed from a referred database.

History

00

This object is configured to record the printing data of another object during label printing. When the printed data are recorded, operation check, result confirmation, data analysis and report output can be performed. More than one History object can be set in a label format and the printed data of any object can be recorded. In **AP-700C.S.**, there is a history structure file (**HST** extension) which should include all the necessary fields to record the printed data. Therefore, the history structure file has to be created first. The history data is recorded in the history file (**HDT** extension) which is created automatically based on history structure file. Run history management program to view the history files after label printing has been completed.

Diagonal

This object is used to draw a diagonal or straight line of any thickness from one point to another.



Function

Various conversions can be performed on a specified object data (string or value) via Function object which acts like a filter. For example, align string, insert or delete comma in price, convert decimal number into integer, etc. The result of a Function object cannot be printed directly on a label. A String object must be configured and linked to a Function object whose result is printed via the attached String object.



Ellipse

This object is used to draw an arc, ellipse or pie chart.



Polygon

This object is used to draw a polygon with less then 30 sides.



QR Code

This object is used to print a 2-dimensional barcode (QR Code) on a label. Please refer to the standard document of QR Code for further information.

PDF Code

This object is used to print a 2-dimentional barcode (PDF Code) on a label. Please refer to the standard document of PDF Code for further information.

Jump

This object is used in the case that you want to change the order of the printing process.

The condition for jump is to compare 2 specified objects by the given method of comparison. If the condition is met, then the process will go to the item of jump destination. If the condition is not met, then the next item will be processed.

By this object, it becomes easy to change the printing content of the label using one format design according to the condition.



Conditional Refer

Same as the Jump object, this object is used to change the printing content of the label by referring different item based on a given condition using one format design. Set the "Truth" item and the "False" item corresponding to the comparing condition. And the printing content will change by the condition (the "Truth" item or the "False" item).



Data Matrix

This object is use to print 2-dimensional barcode (Data Matrix) on a label. Please refer to the standard document of Data Matrix for further information.

Sub Label

This item is used to save time or reduce mistakes when a group of items (such as a complicated calculation, or a combined barcode, etc.) are set repeatedly in different label formats. If the part of the printing content in two or more different labels is the same, then set the same part by objects into a format called "Sub Label Format". The Sub Label format can be inserted into another label format called "Main Label Format". It is used like a macro.

Label Design Part 1

Some samples of label formats are shown before on Page **18**. First of all, a sample label format based on Figure 2-2 of Page **21** is created. Somple1.FMT consists of seven objects such as Box & Line, String, Counter, Barcode, Date & Time, Image and Function. Furthermore, each String object has its own attributes such as Fix, Input, etc. Label size must be set before adding objects to a label format.

Setting Label Size

1

Click (<u>4</u>) Setup on the menu bar. Point to (<u>A</u>) Layout... and then click.

2

A dialog box appears.

Width and height of a label are set up here.

When specifying the size of the label, select **Custom**

from Type.

- Width = 64
- Height = **45**

Click OK when done.

3

Refer to dialog box to set up other options. Click **OK** when done.

* Click on **HELP** button for further information.





Setting Database

Database feature is discussed before on Page 20 where three databases can be linked to each label format. First of all, a sample database file (GoodsDB.dbs) based on Figure 2-2 of Page 21 is set here.

* Procedures to create a database are shown below.

1	(4)Setup (5)Display&Jump
Click (<u>4</u>) Setup on the menu bar. Point to (<u>B</u>) Database and then click.	(A) Layout E5 (B) Database F6 (C) Format CounterK(F7 (D) Print Condition F8

stations Continuention

	Database No.1	
A dialog box appears.	Constant of a second of the start of the	Browse.
File name of a database is set up here.	IC-Encoursemple mocosperatori	External Refer
	Database No 2	
		Browse
		External Perfer
Manual Entry	Detebase No.3	
Type path and name of the database file		Browse
	2	External Pieter
		1
Example:	DK. Dwicel	Help

C:\ AP700\ Samples\ GoodsDB.dbs

--- Reference ---

 \mathbf{O}

- "Browse" button refers to internal database files created by Database Management Tool.
- "External Refer" button refers to external database created by other database programs such as Access, Excel, etc.

Chapter 1 Label Design

Setting Box & Line

A 3x2 frame is set up here. Click (6) Item on the menu bar. Point to (C) Box & Line... and then click.

	AP700 So	ft-Format Editor
	(DFIIe (DEdit	@Position&Rotate @Setup
	Arial	🔹 12 💽 🔂 🖻 🖻
	ARC IIII "	P
(
		20

2

Click on Box & Line button changes the mouse pointer into the selected object's image.

Move the object pointer to the layout screen as shown on the right.

Click and drag the object pointer to set up the desired frame size.



A dialog box appears.

Row and column of a frame are set up here.

- Row = 3
- Column = 2

Refer to dialog box to set up other options. Click **OK** when done.

* Click **HELP** button for further information.

4

Object List and Layout Screen are shown on the right. If the first object (001: Box Fix...) in Object List is selected, frame of the selected object is shown in blue on the Layout Screen.

5

Use the mouse pointer $\stackrel{\bigcirc}{\sim}$ to select any Line

object in **Figure 2-2** on Page 21. Length and position of selected object (shown in blue) can be change by dragging the mouse pointer. During moving or resizing a line, a crosshair pointer (shown in red) will display the new position of the selected object.

Moving a Line: Move the mouse over the selected object until the mouse pointer changes to this

0.1 mm	Round Corner	Table Studies (1-5 Row 3 Column
Ure Type F Solid Dash Dot DeshDot	F NatPostBord	ler Qi
Color	Begin Pos End Posit	ton.



pointer and then drag the line to the desired position. Resizing a Line: Click on the selected line. Move the mouse over the selected line until the mouse pointer changes to the sizing pointer \clubsuit and then drag to the desired length.

Setting String

String objects are printed on a label as text, title, message, etc. Object (1), (2) and (3) of Figure 2-2 on Page 21 are set to Fix Property as their data do not change after creation

--- Setting Fix Property ---

Click (<u>6</u>) Item on the menu bar. Point to (<u>A</u>) String ... and then click.



Click on **String** button changes the mouse pointer into the selected object's image. Move the object pointer to the layout screen as shown on the right.



Click on **Fix...** button of Property group to display another dialog box as shown on the bottom right.

4. Input the data of the object in the Fix String box. Click **OK** when done to return to previous dialog box.

(<u>A)Str</u> (<u>A</u>)Str (<u>B</u>)Bar (<u>C</u>)Bor	- (?)Tool - (2)Langu ing / Code ky x&Line
Arial	• 12 • 🐯
ABC m	m <u>0</u> 12
	ABC
Since Contextation	8
P For Type * Screen * Dote * Digh Post Post	Preservi Averge
Add Wagi Total Langth Lang Langth Gap Between Line Attention: Add Wite Uned when Line La	E Bytes P sector determines D Bytes P sector determines P sector responses P sector response P sector response
DK.	Lave
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Fixed Iron Contains after	- 19
Fallstinghtumen (III Bytes)	7
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TeC Via on prin despire distant by pressny -C34VE	
Ty2 Vacces are the billing assesses CH-8 sec to append sex the	ŧ.
Tard Viscon and Revisioning control dependent	
"T Mult. "U Liudening "E Bar "Ht Reprituppe Come." "E Repritures Carlier "R Han Lore	4
Roman H FC FC	
The second second second	1

The Party Cale

Chapter 1 Label Design

Sample Price Mo

Click on Font... button to change font properties such as size, style, etc.

Refer to dialog box to set up other options.

Click **OK** when done.

* Click on **HELP** button for further information.

6

Objects 6~8 (Price, Currency Symbol and No.) in Object List (shown on the right) are set up using the same procedure.

Font size can be changed by dragging the sizing pointer of the selected frame as shown in red.

---- Setting Input Property ---

Object ① and ② of the above figure are linked to an existing database file (GoodsDB.dbs) where data are extracted and printed.

String object ① (Item) with property as Input is created using steps 1 and 2 of current procedure.

Click on Input... button of Property group and a dialog box appears as shown on the right.

Select **Database No.1** option as the Input Source.

New Course		
1° Delabase No 2 1° Delabase No 7 1° 1000	Data Langti Data Langti	Quecel
Real Cells Hitman		Bab
i arterPenny € men al benefit a serie		Bab

		Line Line String String String String	
Layout Screen			
Sample		٦	
Price	Тег	- -	
Ma			

Object List

01209-0111023 2.8.11.01-421 8,11.01 2.8.2001-421 8,2001

040201-0483011

Yen



8

Input Data Name should be same as a linked database field name.

Example: If Input Data Name is Brand Name, this should be linked to the database field of Brand Name instead of Item Name.

Click on **Refer...** button to display a related database field list. Select a field from the list as shown on the right.

 If the related database file has not been specified, a dialog box appears as shown on the right. Click Yes to specify a database file. Refer to Setting Database for operation procedure.





Refer to dialog box as shown on right side of step **7** to set up other options. Click OK when done.

* Click on **HELP** button for further information.

10

String object ② (Price) with property as Input is also created using steps **7~9** of current procedure.



Chapter 1 Label Design

Setting Counter

This object is set as a counter to print sequence number, increment / decrement data, etc. automatically. There are three types of counter such as Global, Format and Database. Although Object ⁽¹⁾ of **Figure 2-2** on Page 21 is set up as a Format Counter, another Database Counter is also created here.

Click (6) Item on the menu bar. Point to (6) Counter... and then click.



Click on **Counter** button changes the mouse pointer into the selected object's image.

Move the object pointer to the layout screen as shown on the right.

Click the object pointer to insert the object and a dialog box appears.



Firstly, select Format Counter NO.1 option under Counter Type group to create a Format Counter. Secondly, select Database Counter No.1 option to create a Database Counter.

Database file (GoodsDB.dbs) is registered as a Goods Counter.

Click OK when done.

Since more than one counter type can not be

selected at one time, set up each counter object individually.





Both counters are created as shown on the right.

* Click on **HELP** button for further information.

Sample	* ABCDEFGHIJKLMNOPQR	
Price	ABCD	Ve
16. 13 90	249678 246878 ()	

Object List

TVQ.	AND OPP.	rightly.	CO244
C 001	Box	Fix	位长201-341,4231
0002	Line	Fix	21110-010110
C 000	Line	Fiz	0.02037-01.02040
0004	Line	Fix	H4028-0482010
0005	String	Fix	(Tample)
0006	Drive	Fix	Pricel
(C) (00)7	Shing	Fix	Blait
G 008	String	Fix	fileral
0009	String	Input	IDEI, Namel
0011	String	Input	(DB1, Price)
0011	Coaster	240	(Formet Counter No.12
0012	Counter	Aro.	(Detabuse Counter Mal)
		****	*********
Setting Barcode

Format design tool supports standard barcode format usually used in label printing. Refer to HELP for a detail explanation of each type of barcodes.

Object (1) of **Figure 2-2** on Page 21 is set up as a Barcode with Combine Property. Therefore, this Barcode object is created here based on the combination of Database Counter and String (Input) \rightarrow Price objects that are created before.

	_	_	-	-
-				
-				
	E.			

Click (6) Item on the menu bar. Point to (B) Barcode... and then click.

AP700 So	lt-Format Edi	tor - [C:WAP-7
(I)File (2)Edit	OPosition&Rot	ate @Setup @
Arial	• 9 •	· 😴 🗋 🖻
ABC mm	P	
Bar C	ode	
al 🕲 🗄	Sample	ABCDEF
888 🖬 🖹		

Click on **Barcode** button changes the mouse pointer into the selected object's image.

Move the object pointer to the layout screen as shown on the right. Click the object pointer to insert the object and a dialog box appears.



Barcode object with property as Combine is created here.

Click on **Combine...** button of Property group as shown on the right.

Property	Bar Cada Tupe	Desichtoolde Store	Ande
F	Frankerved 2 of N/TP) +	(1258-www.(369) *	of silves
inget.	Check Digit Type	Thick/The Day Relic	C 18Deg
C Fictor.	C Add Dack Digt	21 0.910	
· Contine.	Sandard •	Der Context Neight	04
Code Lengt	Fundation Draw Products	A rest	
12 8,444	T MORE	the street of th	Gwori
Postor.	∓ ûwovike Code	("Tim All Space	1107200
P Post	Allove Bre Cade	IT Cas Revene	Code

3

A dialog box appears.

Objects to be combined are selected from the list as shown on the right.

Select object 10 and 12 for combination.

*Click on **HELP** button for further information.

Barcode object is created as shown in Object List and Layout Screen.

ample	ABCDEFGHIJKLMNOP	QRS		
Price ABCD ven				
rice	A B C D	Ye		
12	045678 045678			
	ninanan "			



String

Count

Count

C 010

011

012

014 In

015 Dute

87	Auto	Format Counter
er -	Auto	(Database Coun
de .	Combi	0No.010+012+00
	Fix	C#AP-700#Sar
	Janto.	(2005.06.22)

(DB1, Price)

No.12

e Ne

Object List

Input

Setting Image

Images (drawing, photograph, logo, symbol, etc.) can be printed on a label.

Format design tool supports BMP, JPEG, GIF image types only. Change image files of other types into these (BMP, JPEG, GIF) files before adding into a label design.

Although a color file can be added, it will be printed in monochrome only.

Object ⁽¹²⁾ of **Figure 2-2** on Page 21 refers to an image file (Pic1.bmp) located in **samples** folder that is set up as an image object with **Fix** Property.

Click (6) Item on the menu bar. Point to (F) Image... and then click.



Click on Image button changes the mouse printer into

the selected object's image.

Move the object pointer to the layout screen as shown on the right.

Click the object pointer to insert the object and a dialog box appears.



Image object with property as Fix is created here. Click on **Fix...** button of Property group as shown on the right.

3

Type C:\ AP700\ samples\ Pic1.bmp in Fixed Image File Name box as the path and name of the specified image file.

Otherwise, click **Browse...** button to specify an image file.

Click **OK** when done to return to previous dialog box.

4

Refer to dialog box as shown on right side of Step **2** to set up other options.

Click OK when done.

* Click on **HELP** button for further information.







Setting Date & Time

Current date & time can be printed automatically during printing of labels.

Object (13) of **Figure 2-2** on Page 21 is set up as a Date object. Moreover, various date and time formats can be set too.

Click (6) Item on the menu bar. Point to (D) Date & Time... and then click.

Click on Date & Time button changes the mouse pointer into the selected object's image.

Move the object pointer to the layout screen as shown on the right.

Click the object pointer to insert the object and a dialog box appears.





Click on Format... button as shown on the right. A dialog box appears.



Select desired date and time format from the various

options as indicated by this mark igsquire on the right.

2005.06.22_		flacopere
- (Speci	AM/PM en/pe	ANPH Impo
Your 2008 8 85	Marth G IS	A. 195. 444.
Day 12 811 220	most Wetherday WE	D Tel: Biolineans
Han 11 111	Moute: 29 929	Second T 12
	Awy Te	e Apert

Otherwise, type desired text in Any Text box as shown in red figure.

Click Append button to insert desired text in Date & Time Pattern box as shown in **blue** figure. Click OK when done to return to previous dialog box.

Any Text:	SI	Append	2005.06.22-SI_	
	- <u>-</u>			

4

Refer to dialog box as shown on right side of step 2 to set up other options.

Click OK when done.

* Click on **HELP** button for further information.

Date & Time object is created as shown in Object List and Layout Screen.



Setting Function

In the case of Interleaved 2 of 5 Barcode object, a Function object has to be set up.

Various conversions can be performed on a string or a value via Function object. **Interleaved 2 of 5** barcode can accept digit characters only but no alphabet characters. Object (10) is set as a String object (price) with a length of 4 digits. If the price string has less than 4 digits, barcode cannot be displayed correctly as remaining digits are treated as spaces.

As a result, remaining digits must be replaced with the digit 0.



Click (6) Item on the menu bar. Point to (P) Function... and then click.



Otherwise, click on Function button under Object Toolbar.

2 A dialog box appears. Click on **Refer...** button to Processed Item Index.



3

A dialog box appears.

Select object (10) 010:String Input (DB1, Price) from the list as shown on the right.

Click **OK** when done to return to previous dialog box.



Refer to dialog box as shown on right side of step**2** to set up other options. Click **OK** when done.

String Length (bytes) of object ① is also displayed. Although string length can also be changed, it must be an even number in the case of Interleaved 2 of 5 barcode. If it is changed from 4 bytes to 5 bytes, the error message on the right will be displayed.



Function object is added in Object List as indicated

by this mark \bigcirc on the right.

Barcode object 13 is derived from a combination

of objects 10 and 12. Change the current combination

to objects 12 and 16 respectively.

Double-click on object 13 (013:Barcode Combine) in

Object List.

Click on **Combine...** button.

Type **16** in Index of **Combined Item 2** box to replace current number. Click OK when done.

6

Rearrange order sequence of objects in Object List. During printing of label, each object must be processed in the correct sequence based on the label format. It is necessary to move object 16 (016: Function Refer) just before object 13 (013:Barcode Combine).

Click on object 16 (016: Function Refer) in Object List. Click (2) Edit on the menu bar.

Point to (G) Order... and then click.







A dialog box appears. Select object 13 (013: Barcode Combine) from the list as shown on the right. Click Move button when done.

Also you can directly drag the object 16 on Item List to the position of object 13 and release. The object 16 will come to the above of the object 13.

No	from Type	Property	Other	ñ
0 009	String	input	(DB1, Nome)	
E 10	String	Input	(DB1, Price)	
011	Counter	Auto	Format Court	
012	Counter	Auto	(Detebase Co	
0	BerCode	Combi	Pro.012+016+	
014	image	Fix	(C)AP-760,Sa	
0 015	Date	Auto	(2005.06.22)	
016	Punc	Refer	@4a.010.Zero I	
-				×
€			25	



Based on Figure 2-2, label formats must be saved upon completion as shown below.



Click (<u>1</u>) File on the menu bar. Pont to (<u>D</u>) Save As... and then click. A dialog box appears.

Save					<u> ? ×</u>
Look ja: 📔) samples	_	•	۵ 🖻	• 🔳 •
≌ sample6.t ≌ sample5.t ≌ sample4.t	ímt ímt ímt				
File game:	sample.fmt			- [Save
Files of type:	All Files(".")			•	Cancel Help

2

Type **sample.fmt** in Filename box.

Click Save button when done.

Label Design Part2

Although some features have been illustrated in **Label Design Part 1**, an understanding of the remaining features is necessary.

This chapter describes the remaining available features in Format Design Tool to make sample labels (Sample2.fmt, Sample3.fmt, Sample4.fmt) as shown below. Refer to other sample labels (Sample5.fmt, Sample6.fmt, Sample21.fmt, Sample22.fmt) in C:\ AP700\ Samples folder for further information.





	Ha	n(sice)
S u r c	Meat Sugar, Saft / Memor C.	0
	Produce Date Expire Date	05/07/01 05/09/30
Cor	ntent: 1234 g	Preservation Method: Preserve lowwer than 1 dgree temperature.
M	ABC Carponitoriligi	
a n Osaka Narida 245 u		
P Coperation B		
P Nyoto Machiya 676		
s	DDD Carporation	102600 03770
î.	Toky Chijoda 4-5-6	

Printing Calculated Data

Example: Discount Price of **500YEN** is calculated based on the Total Price of **552YEN** as shown in Sample2.fmt format file. Let's examine the operation procedure for setting Calculate object.

Refer to Object List as shown on the right. Setting String object is illustrated in Label Design Part 1. Objects 006 & 008 are configured as String objects with Input property. However, object 006 is linked to Usual Price field whereas object 007 is linked to Discount Amount field of Database 1 respectively. Object 007 is also configured as a String object with Fixed property.

Object 009 will refer to objects 006 & 008 for its result but object 008 will not be printed on the label as indicated by missing print symbol (**P**).

Standrd Price)
	552
500	Von
000	1 611

			_
1005	Counter	Auto	(Global Counter No.1)
P 006	String	Input	(DB1, Price)
() 007	String	Fix	(Standrd Price)
008	String	Input	(DB1, Depreciate)
(2) 009	Calc	Refer	(No.006-No.008)



(1)

2

Click (6) Item on the menu bar. Point to (H) Calculate... and then click.

Click on Calculate button changes the mouse pointer to the selected object's image.

Move the object pointer to the layout screen as shown on the right.

Click the object pointer to insert the object. A dialog box appears.

3

Type 6 in Calculated Data/Referred Item Index box and click corresponding checkbox (☑).

Otherwise, click **Refer...** button to select object **006** from the list as shown in Page 43. Therefore, Calculate object is currently linked to object 006 as shown on the right.

Select Minus option under Operator group.

Type 8 in next Calculated Data/Referred Item Index box and click checkbox (☑).

Otherwise, click **Refer...** button to select object **008** from the list.

Note: If both checkboxes \square (next to **Refer...** button) are not selected, data entry in both boxes will be treated as numerical values instead of object numbers. In this case, result of Calculate object is -2 (6-8).

Refer to dialog box on Figure ③ to set up

Click on **HELP** button for further

other options.

information.

*

Click OK when done.

		The state of the state of the
9 Poet George 9 Zero/Peets	Single Development Operand Releved from Index Single Development	bisger 6 Pig
" AbgnLet " Cierter " AbgnPigte	Operator T Plus T Multiply T Decteur II Marco T Decte	Pounding * Reard Off
Treat Space	Operand-Retwood then index	C RaudDen
- 1111	C Complex Expresson	QK.
Passar.	5.0	1.000

6

Faters	t here index			10.00	
140	Iten Type	Property	Offer	6	- QK
000	-		Pita Berth		
C 191	Ecs.	Fig. 1	(5.0.1.4)-(78.0.73.0)		
Q 082	Sking	Input	(DE1. Norva)		1.2257-2466
0.003	BerCode	input	(D61, JAN Code)		Dexcel
0004	String	infort -	(DG1, MideuRochurer)	-	
400	Coarder	Art	(Global Counter No.1)		
<u>e</u>	10000	100	(100) +100)		
Cont	Shing	12.	Coloring to a cel		
000	Called	input	(DOV, Deprecize)		Histor

Printing Date & Time of Expiry

If a valid period is specified manually via keyboard or linked to a database, date & time of expiry can be calculated automatically and printed on label as shown in figure ①.

Produce Date:	5.06.29
Expiry Date:	5.07.29

Click (6) Item on the menu bar. Point to (E) Period... and then click.

Click on **Period** button changes the mouse pointer into the selected Object's image. Move the object pointer to the layout screen as shown on the right.

Click the object pointer to insert the object.

A dialog box appears.



1

2

Select **Input** option under Property group as shown in figure ③.

Click on **Input...** button and a dialog box appears as shown in figure ④.

Select **Database No.1** option as the Input Source. In this case, it is linked to GoodsDB2.dbs database file.

Input Data Name should be the same as the name of a linked database field (example: Expiry Days).

Click on **Refer...** button to display a related database field list. Select a field from the list as shown in figure (5).

2 Print	- Property	Period Unit
nange	C D.	PF Day
AlgoLet		Munth
Center	# Input.	CHos
Algs Fight	and a second second	- nour
Equel Gep	Feler_	Data Length 8 Puter
Inute Rounding Round off	Index of item used o	ss Base Date Bet System Date da
Nute Rounding Round off Round up Round down	Dens Format	ss Base Date Bet System Date as Base Date if tern Index is Zero
Note Rounding Round off Round up Round down	Index of item used of Deter.	ss Base Date Bet Bystem Date as Base Date if there Index is Zero mdd oryymrdd*
Round of Round of Round up Round down	Index of item used in Dens Format: Fix Longh "System Fort.	ss Base Date Set Bystem Date as Base Date if tern Indexis Zero mdd oryymmdd*
Inde Rounding Round of Round up Round down	Index of item used in Date Format Fix Longh "System Fort.	ss Base Date Set Bystem Date as Base Date if then Index is Zero mild or yymmild"

3



3

Select **Day** option under Period Unit group as Expiry Days field of GoodsDB2.dbs is registered in days.

If Period Unit option is not selected correctly based on relevant field in database, Expiry Period will not be printed correctly.

Peri	od Unit—
۲	Day
С	Month
0	Year
0	Hour

4

Click on Format... button as shown in figure (3).

A dialog box appears as shown in figure (6) on Page 46. Although the operation procedure to set up various options is similar to setting Date & Time under Label Design Part 1 on Page 37, additional information is stated here.

Note: 0XX means a zero prefix as indicated by this figure

Example: If Day Format is specified as **026**, it looks abnormal.

However, this Day Format (**026**) is chosen to display 1~9 as 01~09.

If there is one digit only, **0** is inserted. Otherwise, **0** will not be inserted if there are two digits (10~31).

5.08.29_					Backspace
- 11:	Spece AM	P.M.	a.m.jp.m.	AMPM	anjpre
reer: 2005 5	05 N	forth: 6	06	Ane	JUN JN
Day 29 029	29th Week	Wedne	udey WE		DOC means prefix
Hour: 18 418	м	inune: 41	041	Secon	at 20 033
			Any Te	e 🕅	Appeed

5

Refer to dialog box as shown in figure (3) to set up other options. Click **OK** when done.

* Click on **HELP** button for further information.

Setting Image Using Database References

Although Setting Image is explained in Label Design Part 1 on Page 36, this section illustrates setting Image object with Property as Input. The image file is called out from a database and printed on a label.

1

Image object 015 in sample label (Sample1.fmt) is set up with Property as Fix. Change Property of Image object to Input.

014	BarCode	Combi	(No.012+013+000+000+000)
P 015	Image	Fix	(C:¥AP-700¥Samples¥Pic1.bmp)
CO16	Date	Auto	(2005.06.30)

(2)

Image Configuration

Fix...

Input.

Refer.

Property

Double-click on object 015 from Object List as shown in figure ①. A dialog box appears.

2

Click on Input... button of Property group.

Select **Database No.1** option as the Input Source as shown in figure ② -1(page 49).

Click on **Refer...** button of Input Data Name group to display a related database field list.

Select **Picture** field (Image Name) from the list as shown in figure 2 -2(page 49).

Click **OK** when done.

Refer to figure 2-3(page 49), name of selected database field is shown in Input Data Name box.

Chapter 1 Label Design · Part2





Input (2005.06.30) P 016 Date Auto

Total value of an item can be calculated during printing of labels. Example: Number of labels printed today, number of goods produced, total sales today, etc.



Type **9** in Total Item box as shown in figure ①.

Result of Total object is a summation of object 009 (Calculate · Refer) values which calculates Discount Price of each item. Other options are set up as shown in figure ①.

Note: Tick **Print** checkbox to print total result on a label. Otherwise, please do not tick.



Setting History & Viewing Records

History object is set up to capture number of labels issued for each item, content of each label, etc.

Click (6)Item on the menu bar.

Point to (N)History... and then click.

Otherwise, click on History button

utton 💾 and a

dialog box appears as shown in figure ①.

2

Object List of sample label Sample 22.fmt is shown in figure ②.

Click on **Refer...** button in figure ① to display a list of objects as shown in figure ③.

Select object **002** from the list to create a history file based on database field **Name**. Click **OK** when done.

Click on **Refer...** button of Data Name in figure ① to display a list of Database field Name of History Structure file (extension is .HST), and then select the field name from the list. Object 022 (History • Refer) is added to Object List as shown in figure ②.

Entern of Octobel Constant Constan

(2)			
017	Total	Refer	(No.009)
018	History	Refer	(No.002,Name,20B)
019	History	Refer	(No.009,Price,4B)

-	Horn Inches			8	
Not	ferre Types	Preserv	Other	-	
803			No lars		
C 1011	Ens.	Fe	0.21.0+76.974.0		
900	1004	THE .	DOL Norrel		
@ 8C3	BerCode	legs/	(DB1, ANV Cashel		Cancel
G 104	Storg	log-A	(DB1 Merulechreit		1/1/17/28/54
Q 265	Country	A.64	(Globel Counter No.1)		
19 MG	Sting	high f	(DEI1, Fisca)		
19 14 7	Sking	PH .	Bond		
· 265	Shing	logs.4	(DB1. Degracerso)		Tanks

Note: To record the history data, it is necessary to set a History structural file (HST) beforehand. Please refer chapter 4 for how to set the HST.

Object 023 (History • Refer) is created similarly with reference to object 019. However, Database field Price is displayed in History Data Name box.

3

When an actual label is issued, a history data file (extension is HDT) is created.

The History Data file can be referred by using the History Management Tool.

Open the History Management Tool, and then click (<u>1</u>) File on the menu bar. Point to (<u>B</u>) Open... and then click.

History Management				
 File ② Edit ③ Search&Jun 	np (<u>4</u>) Setup			
(A)Nevv				
(E)Open. (C)Save				
(D)Load History data (E)Make total of History data	F15 F4			
(E)Exit	Alt+F4			
DC#AP-700%config%base.hst @C#AP-700%Samples%cample22	2hst			

Otherwise, click on **Open** button in and a dialog box appears. Select history structure file (extension HST) and then click OPEN button.

After the HST file is opened, click (<u>1</u>) File on the menu bar, and then click (<u>D</u>) Load History Data, Otherwise, click on

 \blacksquare button and a dialog box appears as shown figure ④.

Select history data file (extension HDT) and then click OK

button. [When every day is selected in setting of HST, two or more HDT will be displayed.]

(5)

No

BRUTAP-700Yconlighteseen.hdt

Name

History data file appears as shown in figure ⑤. The list will display information such as Item Name, Price, number of labels issued and Time.

nation	00001	Vegetable Juice	500	5 2005- 6-30 18:45 55
per of	00002	Stomach Medicine	790	5 2005- 6-30 18:46:25
	00003	Vegetable Jurce	500	3 2005- 6-30 18:46:51
	00004	Storoach Medicine	790	4 2008- 6-30 18:47:23
	00005	Vegetable Juice	500	3 2005- 6-30 18:47:48
		NAME OF COMPANY		and assessment of the second sec

Price

4

Using general-purpose printer can print history record list. And it can be also converted into a text file (.CSV) that can be used by external programs such as Excel, Lotus 1-2-3, Access, etc. To Analyze or total the history data, Click (1) File on the menu bar and point to (E) Analyze History Data and then click. Otherwise, click on button 6

and the history data list will be displayed as shown in figure 6.

Click on **CSV** button in History Record List dialog box.

A dialog box appears as shown in figure \bigcirc .

- Nerva		\smile		
_				
			-	
Bei.	Name	Price	Number	Title:
100001	Vegetable Juice	500	5	2005- 8-30 18
00102	Stamach Medicine	200	- 5	2005- 11-30 18
03165	Vegetable Juice	500	3	2005- 6-30 10
431100	Stanach Medicine	790	1	2005- 6-30 18
	Negetable .https	500	1	2005- 8-30 18



48



Number Time

Chapter 1 Label Design · Part2

Realizing Database Relationship Using Call Data

This section illustrates the calling out of data from one database that is linked to another database. The relative information about each item (manufacturer) is registered in database file **GoodsDB3.dbs** located in **C: AP700 Samples** folder. Manufacturer Code and other relative information (Name, Address, etc) are registered in another database file **Manufacturer.dbs**. However, GoodsDB3.dbs and Manufacturer.dbs database files are linked mutually via **Manufacturer No.** and **Code** respectively. Example: Manufacturer No. is retrieved from GoodsDB3.dbs which in turn call out the associated manufacturer's name and address via the Manufacturer Code. Refer to sample label Sampel6.fmt for further

(1)

the later	Late Price	File	Manufacturer file.	Processor No.	Satis/NJ.	JANECIDE .	6
ICHEM	Note	Mine	a	7.	t	ADECREGATION .	12
ECHICO .	Pane	Fare	1 (1	1	AUCROR/YEA	18
ROROG	1.00	Name .	2	2	۰	416,0800,773	3
	Taine	1000	8	2 1		******	125

GoodsDB3.dbs



O TAP-78885 and in all and is target also				
ND.	Code	Manufacturer.	Ampess	
00001	1	ABC CorporationA	Tokyo Ayane 234	
00002	2	ARC Corporator#	Ocean Nanda 245	
00063	3	AB Corporation Tokyt:	Tolgo Ayane 234	
00004	4	AE Corporation	Tołyo Obashi 340	
00005	5	ABC Corporation 12	Tokyo Ayase 234	
Addit				

Manufacturer.dbs

Sample label Sample6.fmt is shown in figure ③. The relative information about Manufacturer and Seller are expanded as shown in figure ④. Content of relevant objects is displayed in figure ⑤. String object **036** is set up with Property as **Input** shown in figure ⑤. GoodsDB3.dbs is specified before as Database No.1 (DB1). Although object 036 call out **Manufacturer No.** from Database No.1 (GoodsDB3.dbs), its data will not be printed.

			(5)
036	String	Input	(DB1, Manufacturer No.)
P 037	Call	Refer	(No.036, Manufacturer, 20B)
038	Call	Refer	(No.036, Address, 50B)
P 039	String	Refer	(No.038, Refer All)
040	String	Input	(DB1, Processor No.)
041	Call	Refer	(No.040, Proccessor, 30B)
042	Call	Refer	(No.040, Address, 50B)
043	String	Refer	(No.042, Refer All)
044	String	Input	(KEY, Seller No.)
P 045	Call	Refer	(No.044,Seller,36B)
046	Call	Refer	(No.044, Address, 50B)
P047	String	Refer	(No.046, Refer All)



(3)

Call Data object 037 is set up to print Manufacturer Name that is called out from another referred database (**Manufacturer.dbs**). Although Call Data object is explained in Page 25, object 037 data is retrieved via object 036 (**GoodsDB3.dbs**

Manufacturer No.) which in turn extracts its corresponding data

Change 13 Byes put put Type an Prove prove Prove prove Data Data and Data Prove Data Data Prove Descent Dyne Descent Dyne Dyne Descent Dyne Descent Dyne Descent Dyne Dyne Descent Dyne Dyne Descent Dyne Dyne Descent Dyne Dyne Descent Dyne Dyne Descent Dyne Dyne Descent Dyne Dyne Descent Dyne Dyne Descent Dyne Dyne Descent Dyne
ter 749 19 Fordet 7 Energi De 19 Fordet 7 Energi De Electric Lasting Fordet 7 Sciences Bytes Electric Bytes
Refer 1/2 Safety T Second Safety Descent Bytes
Robert Descent Dyles
And a second sec
Post.
Polet. Postere.
Feter. 2 Para
P Adhturgutiut Refet. 1" Auto Welt Amorga

from the database field **Manufacturer.dbs** • **Manufacturer** according to the condition **Manufacturer.dbs** • **Code= GoodsDB3.dbs** • **Manufacturer No.**. Refer to figure (6) for further information.

3

Call Data object 038 is set up to print Manufacturer Address that is called out from another referred database (**Manufacturer.dbs**). Object 038 is set up similarly like object 037 as shown in figure ⑦ . However, click on **Refer...** button to select **Address** as Referred Data Name in Database.

Potend Cutation			Anna	Data Lingth		
CV4P-TW/Dexploriple	evitaciume dan	Sweeches Browse. /* His Charge /* Alge Lat		bi Dynas [pt		
Cell De Cata Nerse X fre Database		Robei	17 Center 17 Align Popta 17 Equil Gap	Poren C Edeni C Digt	Decel	
Call Out Grantize				San Lip Sening		
Calury 1 Code	Pates,	+ Calmus	Di Pater	-P for-the Destroit Base	54	
Calvera 2	False.	+Cethol	Fatter.	Fire.		
Catere I	Future .	+Gensi	Fam.	Position.		
Colores 4	Rates.	+ Call first	Sen.	C StavEssillassage		
Coloret	Rates.	+Cathiet.	Fatte	P Astronyation		
			11	T Charaction May CallCol		

 $\overline{7}$

Moreover, do not tick the **Print** checkbox. Although data length of this object is limited to 50 bytes, it still went out of the printing area. Therefore, String object 039 is set up to refer and print object 038 data with auto wrap.

4

String object 039 is set up with total reference to object 038. Although the total length is set to 50 bytes, length of each line is limited to 30 bytes only as shown in figure (8).

uto Wrap	(8)
Total Length: 50 Bytes	T Auto Height Arrange
Line Length: 30 Bytes Gap Between Lines: 0.0 m	Line Arrange Align Top
Attention: Auto Wrap will Not be Used when Line Length is Zero.	C Align Bottom

5

Referring to figure (5), String object 040 & Call Data object 041 (Processor) are set up similarly like steps **1~4** to print Manufacturer Name and Address that is called out from another referred database (**Manufacturer.dbs**).

6

Content of objects 036~047 are displayed in the layout screen of Label Printing program as shown in figure (9). Call Code of Manufacturer, Processor and Seller objects are displayed in list screen as shown in figure (10).



Calling Data Out From Additional Database

Although data can be called out and printed from database No.1 to No.3, it is also possible to call data from additional databases besides the above 3 databases. Call Data object is used in this scenario. Setting Call Data objects, with reference to additional databases, is explained in Page 49.

Referring to figure (5), String object 044 (Seller No.) is set up with Manual Input via keyboard but its data is used as a Call Code for Call Data object 045 to print **Seller Name**. String object 047 is set up to print **Seller Address** that is called out from another Call Data object 046 whose data is also called out using Call Code of object 044.

Although Input Source of String object 044 is Keyboard, **Input Data Name** box should be set with the same name as the referred field (Seller No.) in GoodsDB3.dbs database shown in figure ①.

1 9195	Peoplety	Average
Type	P Px. 1	C No Charge
IF Parents		H Algelah
Extend	W hpst.	C Center Hosp.
- orde	r mar 1	C ASpellupt
Fort.		C Rand Gap
Footos.	P Dorbes.	C. Auto Width Anange
Auto Wrap	28 Day 01	
Auto Witap Total Larg	n kiteren 17	and the fit which he
Auto Wrap Total Long Line Long	¢r. 8.834an (* ¢r. 0.834an	Line Areage
Auto Wrap Total Long Line Long Gap Between	ft 8.8ykes F ft 0.8ykes Lises 10.000	Unit Arenge
Auto Wrap Total Lang Line Lang Gapi Deteom Attention Auto	dt 8 Bytes ⊤ ds 0 Bytes Lises ⊡0 mm who withictor	Contractor Contractor Production Contractor Production

2

Call Data objects 045~046 are set up similarly like steps **2** & **3** on Page 50 with String object 044 as a **Call Code**. Call Data Configuration dialog box of object 045 is shown in figure ② and it will call out data of Seller. Figure ③ shows that the address of Seller is called out by object 046.

2

C/4%/BX/Semplesi/Seller site	froves.	F No Change F AlignLaft
Call Dut Data Name in the Database		C Center
Sater	Fale	C Equal Gap

(2)	
(0)	
\sim	

Ratend Database		Arrange
CWP/RX/Imples/Delerates	Drovee.	C No Change F AlignLati
Call Dut Data Norma in the Database		C Center
[4331000	Falo.	C Equal Gap
Call Out Candilion		
Column 1 CODE Rates	-Cettion	44 Refer.

3

String object 047 is set up similarly like step **4** on Page 50 with total reference to Called Data object 046 (Seller Address).

4

During printing of labels, a Call Code is entered via a keyboard that is used to call out and print Seller Name & Address from a referred database (Seller.dbs). Refer to figure (9) and (10) for further information.

Printing According to Condition (JUMP)

Jump object is used to avoid printing some items when using one format during label printing. By deciding two compared objects, comparison method and Jump-To-Item, once the condition is satisfied, the print order will jump to the item specified in the Jump item. E.g., for the products that are sold every day from Monday to Sunday, the prices on Tuesday become cheaper than the other days as special prices. This can be realized easily by using two different formats. It also can be realized by using Jump object in one format. However, pay attention to the case that the index of jump-to-item is before the index of Jump item. In this case, the program will repeat the process between the Jump-to-item and Jump item forever when printing labels. Therefore it is suggested to avoid this kind of setting. When such a process repeated 50 times, the jump-to-item would be reset to the next item of the Jump item compulsorily. When the jump-to-item has to be set before the Jump item, add another jump item between the two items and specify an item as the jump-to item whose position is after the two items.



1

Two labels in the above figure (①-a, b) are printed by the same format. (①-a) is a label which is printed on weekdays except Tuesday, and (①-b) is printed on Tuesday, the bargain sale day.

Why the contents printed are different by one format? It is because the jump item is set to the format.

Please refer ①-c shown on right. This is the Object list of the format (①-a, b).

The String object is set up to display the regular price, and the Calculate object is also set up to display half the price in the format.

No.	Item Type	Property	Other
P 001	String	Fix	(Product:)
P 002	String	Input	(DB1, Name)
P 003	String	Fix	(Price:)
(2) 004	String	Fix	(yen)
005	String	Input	(DB1, Price)
P 006	BarCode	Input	(DB1, JAN Code)
007	String	Input	(KEY, WEEK)
008	Jump	Auto	(No.007<>"Tues"->No.013)
P 009 🕑	Polygon	Fix	26 corner polygon(31.0,8.0)-(58.0,27.0)
P 010	String	Fix	(Sale!!)
P 011	Calc	Refer	(No.005*0.500000)
012	Jump	Auto	(Jump Absolutely->No.014)
P013	String	Refer	(No.005,Refer All)
() 014	String	Input	(DB1, Manufacturer)
***	***	****	****

(**)**-c

Chapter 1 Label Design · Part2

String object 005 calls the price from the database. However, it is not to be printed. It becomes a referred item of the Calculate object 011, which is set to print half the price.

Object 013 is set to print ordinary price as referring 005. Object 007 is set to input the condition for jumping.

The jump item is set before the item that doesn't want to be printed on a certain condition. So, in this sample, set the jump item before object 009~011 because they are only wanted to be printed on Tuesday.

Click (6)Item on the menu bar. Point to (V)Jump... and then click.

Otherwise, click on **Jump button u** and a dialog appears as shown in figure on the right.

ingi Type T. Junp Absolutely Y. Junp with Condition	Til Pater	
mp Condition		
Compared Volue/Fieldered Ners Ind	ir Peter	
Operator	Compose Type	
C+ C4+ C4	C Digited	
4.0 (3) (3	+ Stad	
Comparing Value, Parkinst New Inc.	den .	
Tues	E Pater.	

Firstly, select the [Jump Type].

[Jump Absolutely]: jump to the item specified unconditionally.

[Jump with Condition]: when the condition set in [Jump Condition] is satisfied, jump to the item specified.

Next, set [jump condition].

Input compared value directly, or select the index of referred item by clicking Refer Button. And then select the comparison method from the list in the center.

Select [**Digital**] to compare value as digital, or [**String**] to compare value as string. Because character string "Tues" is to be a comparison in this example, [**String**] is set. Set the jump destination in [**Jump To**].

Click Refer button to select the jump-to-item from list. In this example, object 013 is set.

3

Object 009~011 is not printed when "Tues"(Tuesday) is input to object 007 at label printing. Jump-Item is also seen in 012. It is set for not printing object 013 of the ordinary price when "Tuse" is input to object 007. The items are processed in set order and printed usually. Therefore, [Jump Absolutely] should be selected in [Jump type] in this case.

Referring According to Condition (Conditional Refer)

Conditional Refer is used to select two different printing contents during label printing, by deciding two compared objects, comparison method and True/False referring item corresponded with the condition of comparison. Like the Jump item, this item is very useful when in one format the print content of the label need to be changed according to a certain condition.

The label of the following conditions is shown as an example.

"Five points are printed in a commodity that is higher than 130 cents, and 1 point is printed in a commodity that is cheaper than 130 cents."

In this sample, "The price is higher than 130 cents" is the condition, and corresponding answer of "Truth and False" is [5 and 1]. Each character string [5] and [1] are set as a string object not to be printed.

Refer to the object 009 and 010 in the figure ① on the right.

			Ú
No.	Bern Type	Property	Other
(2) 001	Box	Fix	(1.0.0.99-948:8.49.0)
C 002	Box	Fix	(1.0.48.80-948.8.37.2)
P 003	String	Fix	(NAME)
CO 4	String	Input	(DB1, Name)
P 005	String	Fix	(PRICE)
(2) 006	String	Fix	(Cents)
(2) 007	String	Input	(DB1, Price)
(2) 008	String	Fix	(POINT)
009	String	Fix	ත
010	String	Fix	a)
011	ConRefer	Reter	(No.007>130.000000)?No.009 No.010)
C 012	String	Refer	(No.011,Refer AID
C 013	String	Fix	(out line)
***	****	****	********

2

 \bigcirc

Click (6) Item on the menu bar. Point to (X) Conditional Refer... and then click. Otherwise, click on Conditional Refer button and a dialog appears as shown in figure 2Firstly, Input compared value directly, or select the index of referred item by clicking Refer

Next, select [Operator].

on the right.

button.

In this sample, it become like this. Price [object 007] > 130

Senditional Refer Configuration	N 1997
Condition	
Compared Value/Refered Item Inc	lex
7	Pefer
Operator	Compare Type
C- C- C-	@ Digital
CO C>- #>	C String
Comparing Value/Refered from Inc	Befer.
Refer to(if TRUE) Refer to(if FAL 3 Refer. 10 Ref	SE) Data Length ec., 1 Bytes
QK. <u>C</u> ancel	Help

3

Next, set items of [Refer-to-(Truth/False)].

In this sample, the result is that "Five points are printed in a commodity that is higher than 130 cents and 1 point is printed in a commodity that is cheaper than 130 cents".

Therefore, object **009** of the character strings **5** is set to Truth, and object **010** of the character strings **1** is set to False.

Click Refer button to select the index of the item referred to when the condition is true/false.

August and a second	Iner Trees	Preset	(ha)	25
	Tares Davis Davis Davis Davis	lecke	DRI Honal (PRCE) Cont (Col.Pros) (POHT)	Quicel
111	Conframe Conframe	C.	(1) (Pre-MD+12000000(Pre-M0+a-drift	

Lastly, to print this result, setting the string item that refers to this object 011. (Refer to the object **012** in the figure ①.)

4

At the label printing, two kinds of print contents in one format are selected and printed according to the called price data.

NAME Suger	Toas	+
PRICE	89	Cents
	1	POINT

PRICE 89 < 130								
One	point	is	printed	because	it	is	cheaper	than
130c	ents.							

NAME Tuna	Sandw	ich
PRICE	135	Cents
[5	POINT

PRICE 135 > 130 Five points are printed because it is higher than 130cents.



Database Management

During printing of labels, Productivity can increased by using a database as it is unnecessary to input data manually everytime. Moreover, it is possible to communicate with the database in factory, shop, etc. and to access the data in a remote host computer over a network.

This chapter introduces various features of Database Management.



In order to print an item label, information about an item (example: Code, Name, Ingredient, Production Place, Price, etc.) must be gathered beforehand for every item and save in a database file. During printing of labels, data can be called out and printed from the database file.

		Fields							
D	<mark>⊘onsole Soft</mark> ②Edit ③Sea X ■	-Database Manago rch&Jump (@Setup 🚉 🔿 🔿 👍 📲	5)Tool	<mark>[C:¥AP-700¥S</mark> ©Window ⑦La	amples¥ neuaee	GoodsDB.dbs] ®Help ?		-	
No.	1	Name	Manuf	acturer		JAN Code	F	Price	Depr
00001	(Coffee	Pokka			49024710032	20	110	
00002	C	co Tea	Calpis			49013405122	21	210	
00003	Origi	inal Blend	UCC			49012010070	08	688	
00004	H	ot Tea	Calpis			49013403748	51	108	
Add R									
		Dufforble		Opened File: 4	Down	4 Column 1	1 6:	. 140	> 000
		Butter: Nor	ie (upened File: 1	ROW:	4 JColumn: 1-	4 [51Z	e: 118	190
		L,	tems						

Database must be created carefully with only the relative data that referred to the same subject. If unrelated data is registered in a particular database, neither data management nor calling out of data can be preformed correctly.

The number of columns that can be set to a database is 250 columns, and the number of items (rows) that can be registered is up to 999999.

During registration, an item can be added, inserted, deleted, etc.

Database Management Window

The following illustration introduces the basic elements of Database Management window.

Figure 3-1

ystem But	ton To	ol Butto	n 🔰 Data Na	me	Button		
Ті	tle Bar	Men	iu Bar		Window Fr	ame Columi I	n Add Butto
AP700 (Console Sol	ft-Database	Management -	[C:	¥AP-700¥Sai	mples¥D <mark>B3.dbs</mark>)	
		earche.Jump				tuage Gymeip	- 0' X
No.	ID	W	are Name		Price	Add C	
00001	0001	C	computer		21000		
00002	0002	el	Business		19600		
00003	0003	PHS I	mobile phone		840		
00004	0004	Interi	Internet Software		960		
00005	0009	CD-	ROM Driver		1080		
00006	0010	CF	RT Monitor		6000		
Add R —							
< 15 ou #1	Col D.	fforbland	Onened File	. 9	Dour R	Column: 2 C	>
Roy Num	w Add Bu	tton Select	Frame	Stat	us Bar	oddinii. o jo	120. 1111

"No." Button

Click "No." button to select all items as shown on the right.

If Call Code of a database is not set, items can be called out via this Number.

Data Name Button

The name of every field in the database is displayed. Click this button to select a database column.

		Parallel Handstort widdang (Deig Chat)	STAT ZUITA	
No.	D	Ware Name	Price	Ac
10000	0001	Computer	21000	
00002	8002	eEutretts	19600	
DDDDDD	8003	F3-65 mobile phone	040	
00004	1004	Internet Software	960	
00005	0009	CD-ROM Driver	1383	
00006	9815	CRTMontor	6000	
Add R				

Double-click to display Column Configuration dialog box.

Add Column / Row Button

Click Add Column button to add a new field and a Column Configuration dialog box appears. Click Add Row button to add a new item.

Select Frame

This frame is displayed in red to indicate a selected cell.

List Screen

Database data is displayed here. Items and fields can be added, deleted or copied to a buffer.

Row Number Button

Each item is allocated in a unique number. Click this button to select an item in the database.

Select Bar

This bar is used to display a selected field or item.

Setting Database

In order to create a database, it is necessary to set up the structure of a database such as column name, property and data length.

😫 AP700 Cor	nsole Soft-Data	base Man	age
(1)File @Edit	@Search&Jump	(4)Setup	6)
(A)New	N		
(B)Open (C)Save	16	F1 F2	
(D)Save As (E)Print		Sh	ift+F

Setting Database

Run Database Management program.
Click (1) File on the menu bar.
Point to (A) New and then click as shown on the right.
List Screen of new database file (Noname01.dbs) appears.
Click on Insert Column button and a dialog box appears.



Column Configuration Dialog Box

Column Name

During printing of labels, data is called out from a database via this name. Therefore, the column name must be the same as the name of the input data

		Refer	Data Lo	igh(0.600) Bytes
Costen Property Normel Call Code Counter	F Roman C Extend C Digt		-	Ōĸ
Counter Variation Counter Minimum Counter Miximum Format Name	Anange IR AlignLeit IC Center IC AlignRight	External Data Nome		Gancel
Detabase Name Inage Name Print Namber	FinDeteColumn F Unchangeable Findeted Setting	n Printing	1	Reib

of an object specified in a label format.

If the column name is changed, then the names of the related data in all formats have to be changed too, otherwise the labels cannot be printed out.

If you don't know the names of the related data in a format, click

Refer... button to specify the format and then select the **Column Name** from the list of data names. This method can reduce mistakes.

Column Property

Normal and special data fields can be set in a database via this Database Management program. Special data field can be set up once only except for Image Name option. Each option under Column Property is explained in the following page.

This is the data that will be searched when calling out an item from the database.

A counter is assigned to each item. This counter is updated whenever a label is printed.

This is not required if the increment or decrement value of all item counters is the same. In that case, click (4) Setup on the menu bar. Point to (B) Counter... and then click. A dialog box appears. Type a number in the Variation box.

This is the Increment or decrement value of item counter.

Counter Minimum

Counter Variation

Call Code

Counter

This is the Minimum value of item counter. This is not required if the minimum value of all item counters is the same. In that case, click (<u>4</u>) Setup on the menu bar. Point to (<u>B</u>) Counter... and then click. A dialog box

appears. Type a number in the **Minimum** box.

Counter Maximum

This is the Maximum value of item counter.

This is not required if the maximum value of all item counters is the same. In that case,

click (4) Setup on the menu bar.

Point to (B) Counter... and then click. A dialog box appears.

Type a number in the **Maximum** box.

Format Name

This field is related to a label format file. If Print Mode is set to **Database Priority** (call out data from database first and then a related label format is loaded later), this field is necessary.

Since the field data consists of drive, folder and file name of a

label format file as shown on the right, this data field must have a sufficient data length to accommodate every label format filename.

In AP-700, since 3 labelers can be controlled at the same time, 3 formats corresponding to the 3 labelers can be set. The order of the 3 formats is the same as the order of the 3 labelers.

Go	unter Configuration	
	Counter Parameters	
	Variation:	<u>0</u> K
	Minimum: 0	
	Meximum: Jo	Cancel
	Attention: If the counter parameters of each record are different, please set the	
	parameters as data in database.	Help

(A)Colump

(<u>B</u>)Counter..

(E)Password...

(E)Option...

(<u>C</u>)Text Delimiter... (<u>D</u>)Base Format...

(G)External Database...

(H)Clear Counter

No.	No	FORMAT NAME
00001	01	C WP-700(Samples)sample2 fmt
00002	02	C /Ditabel\sample/sample/20.hht
00003	03	C.WP-700/Samples/sample21 fmt
00004		1

Database Name

This field is related to another database file. Since the field data consists of drive, folder and file name of a database file, this data field must have a sufficient data length to accommodate every database file name.

Example:

Category field data of Category.dbs database is shown in figure .

Click File Browse button iii on the

No.	Code	Name	Category
10000	01	Meat	C VAP-7007/Samples/Meat.dbs
00002	02	Vegetable	C VAP-700/SamplesWegetables dbs
Add R	2		

Toolbar and an Open dialog box appears.

Select the relevant database file from the appropriate folder.

Item Number 00001 in figure is linked to Meat.dbs database as shown in figure .

A label format can be made to print Meat items such as Pork and Beef.

Moreover, Item Number 00002 is linked to Vegetables.dbs database as shown in figure . A label format can also be made to print Vegetable items such as Spinach and Onion.

Product Code	Product Name	Add C	1
0001	Meat		
0002	Chicken		
0004	Beef		
onne	0	-	
	Product Code 0001 0002 0004 Mane	Product Code Product Name 0001 Meat 0002 Chicken 0004 Beef none Own	Product Code Product Name Add C 0001 Meat 0002 Chicken 0004 Beef none Own

No.	Product Code	Product Name	Add C
00001	0001	spinach	
00002	0002	onion	
00003	0003	cabbage	
nonei	10004	railets	

Image Name

This field is related to an image file.

Since the field data consists of drive, folder and file name of a database file, this data field must have a sufficient data length to accommodate every image file name.

Print Number

This field is related to the number of labels to be printed for each item.

Unit Number

This field is related to the number of items in per box for each item.

Data Length

Length of field data is associated with number of characters per field. Data length is set up automatically if the column name is associated with a label format reference.

Data Type

Default option is Roman instead of Kanji unless current Windows Operating System can support double-byte characters such as Chinese, Japanese or Korean. During data input, the input methods for single-byte and double-byte characters will be converted automatically based on Data Type option.

<u>Arrange</u>

Alignment of field data is set via this option. Select **Align Left** option if the field data is a string of characters. Select **Align Right** option if the field data is a number.

Unchangeable in Printing

If this checkbox is ticked, it is impossible to make any changes on the field data when in printing program.

List Screen Operation

It is possible to add, copy, delete, list and edit database data on List Screen.

Scrolling List Screen

List Screen can be scrolled via a mouse, shortcut keys or menu bar cum toolbar.

<u>Mouse</u>

Scroll through the list screen horizontally or vertically by using a mouse to drag the horizontal or vertical scroll bar. Position of select frame is unaffected by this scroll operation.

Shortcut Keys

Use [**Page Up**] or [**Page Down**] keys to scroll list screen by 10 rows each time. Otherwise, use [**Shift**]+[**Page Up**] or [**Shift**]+[**Page Down**] keys together to scroll list screen horizontally by 2 columns each time. Position of select frame is affected by this scroll operation.

Moreover, moving a select frame via arrow () keys can scroll list screen horizontally or vertically.

Menu Bar cum Toolbar

Click (3) Search & Jump on the menu bar or quick access buttons on the toolbar as shown below.



Chapter 3 Database Management

Selecting Item & Field

Item (Selecting Row)

Click any **Row Number** button to select one item only. Use or arrow to move Item Selection Bar vertically. Otherwise, use [**Page Up**] or [**Page Down**] key to scroll one page each time.

No.	D	Ware Name	Price	Add C
00001	0001	Computer	21000	
00002	9002	eBusness	19800	
00003	0003	PHS mobile phone	840	
00004	0004	Internet Sattware	960	
00005	0009	CD-ROM Driver	1080	
00006	0100	CRT Monitor	6000	
Add R				

Click any **Row Number** button and drag to select a group of items. Alternatively, click any **Row Number** button to select first item of group. Then press [**Shift**] key and click any **Row Number** button to select last item of group.

Field (Selecting Column)

Click any **Data Name** button to select one field only. Use or arrow to move Field Select Bar horizontally. Otherwise, use [**Shift**]+[**Page Up**] or [**Shift**]+[**Page Down**] key to scroll two columns each time.

No.	D	Ware Name	Price	Add C
00001	0001	Computer	21000	Contraction of the local division of the loc
00002	9002	eBusness	19800	
00003	D003	FHS mobile phone	840	
00004	0004	Internet Satiware	960.	
00005	0009	CD-RCM Driver	1080	
000006	0010	CRT Monitor	6000	
Add R				

Click any **Data Name** button and drag to select a group of fields Alternatively, click any **Data Name** button to select first field of group. Then press [**Shift**] key and click any **Data Name** button to select last field of group.

Selecting All Items

Click (2) Edit on the menu bar. Point to (G) Select All and then click.



Otherwise, click (<u>2</u>) Edit on the menu bar. Point to (<u>B</u>) Add Column and then click.

Double-Click on any Data Name button to edit selected field.

A Column Configuration dialog box appears and clicks **OK** when done to save changes.

Alternatively, click (<u>4</u>) Setup on the menu bar. Point to (<u>A</u>)Column... and then click.

Add & Edit Data

Whenever any cell is chosen, the cell will be surrounded by a Select Frame in red. There are 3 ways to add and edit data.

No.	ID	Ware Name	I
00001	0001	Computer	I
00002	0002	eBusiness	1
00003	0003	PHS mobile phone	1
00004	0004	Internet Software	I
			T

1. Double-click on any cell to add or edit data.

2. Move **Select Frame** to any cell to add or edit data.

Press [Shift]+[Enter] keys together.

3. Move **Select Frame** to any cell and type to add or edit data. The first character is displayed in the cell.

During data input, input method for single-byte and double-byte characters will be converted automatically based on Data Type option (Roman or Kanji) as shown on the right.

Press [Esc] key to cancel Add or Edit Data operation.



Selecting File

Type file name directly in any related cell wherever **Column Property** of a field is set as Format Name. Database Name or Image Name. However, it is inconvenient if the file name is not known.

Otherwise, click **File Browse** button **I** on the toolbar.

Alternatively, click (2)Edit on the menu bar.

Point to (H) File Browse... and then click as shown below.

An **Open** dialog box appears.

Select the relevant file from the appropriate folder.

Click **Open** button when done to input file name to cell automatically.

aro-var-	7000	iomplest Format dbs	
No.	No	NAME	
00001	01	C VP-700/SamplesIsample3 fmt	
00002	02	C VP-700/Samples!sample1 fmt	
00003	03	C:WP-700/SampleSisample21.Imt	
00004		-	
AME		\$1c	


Moving Item & Field

There are 3 steps to be taken for moving an item or field.

- 1. Click any Row Number buttons or Data Name buttons and a Select Bar is displayed.
- 2. Click (2) Edit on the menu bar. Point to (D) Cut and then click. Otherwise, click Cut button on the toolbar.
- 3. Click any Row Number buttons or Data Name buttons as new position of Select Bar.
- Click (2) Edit on the menu bar. Point to (F) Paste and then click to paste selected item or field. Otherwise, click Paste button on the toolbar, Selected item is inserted above the Item Select Bar whereas selected field is inserted on left side of Field Select Bar.

Importing & Exporting Text File

AP-700CS database files cannot be accessed directly by external programs such as Access, Excel, Oracle, SQL Server, etc.

Fortunately, any file created by external database software in text format (**.TXT**) can be imported via this Database Management Program. Moreover, database files created by this program can be exported into a text file that can be modified by external database software.

Setting Text Delimiter

During import or export, text files accessed or created by external database software use text delimiters to differentiate between data fields. Database Management Program can create text files easily using various text delimiters such as comma, space, etc. Click **(4) Setup** on the menu bar.

Point to (C) Text Delimiter... and then click.

ase

Text Delimiter

Text delimiters are used to differentiate between data fields during import of export of text files. Any alphanumeric character or symbol can be used as a text delimiter besides common text delimiter options. Select **Other Sign** option and type an alphanumeric character or symbol in box. Select **Fixed Length** options only if the text file consists of fixed length character strings without text delimiters. However, text files must have the same data length as specified in AP-700CS Database.

ort Datenter Tab Conversi Sentockon Spece Pis Length With Pedant Fis Length Without	Tuel Medi ¹⁴ Double Guardian Meric ¹⁵ Specie ¹⁵ Specie ¹⁶ Nove ¹⁶ Other Sign [7]
--	--

Text Mark

This parameter is needed to differentiate field data from text delimiter whenever any field data consists of the same alphanumeric character or symbol as the text delimiter.

Example: "Wine", "1,900"

A comma delimiter (..e "," 1..) is used to separate the two fields whereas the comma in unit price (1,900) is actually a Digit Grouping symbol.

Any alphanumeric character or symbol can be used as a text mark besides common text mark options. Select **Other Sign** option and type an alphanumeric character or symbol in box. However, select **None** option only for text mark whenever any field data does not consist of the same alphanumeric character or symbol as the text delimiter.

Note: Text delimiter and text mark must not be the same alphanumeric character or symbol. Otherwise, it is impossible to access the text file.

With Data Name

Select this option only when the first line of text in a text file is considered as a field header that specifies the name of each field. Otherwise, the first line of text is treated as field data.

Exporting Text File

Goods.dbs database is exported to a text file as shown in figure .

Click (1) File on the menu bar.

Point to (F) Export to Text File... and then click.

A dialog box appears as shown in figure

Type **goods.txt** in File name box. Select a desired folder for the text file. Click **Save** button when done.

Note: Click **Delimiter...** button and a dialog box appears.

Select relevant text delimiter and text mark options. Click **OK** when done.

If **goods.txt** file is opened via Notepad program, it is displayed in figure with Comma (,) as text delimiter and Double Quotation Marks ("") as text mark.

No.	D	Ware Name	Price	1
10000	1000	Computer	21000	1
00002	0007	ellutrett	15800	
00003	0003	PHS mobile phone	840	T
00004	0004	Internet Spitware	860	
00005	0009	CD-ROM Driver	1080	1
00006	0100	CRT Montar	6000	
Add III				۲.

	<u>-</u> - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
	a 440 a 44024 janda 4679
goods.txt	

🗊 goods.txt - 37.66	×
ファイルビ 編集(1) 書式(1) 表示(1) へいざ(1)	
"0001"."Computer"."21000" "0002","eBusiness","19600" "0003","PHS mobile phone","840" "0004","Internet Software","960" "0009","CD-ROM Driver","1080"	>
"0010","CRT Monitor","6000"	¥
5	1

Importing Text File

Click **(1) File** on the menu bar. Point to (A) New and then click to create a new database file. Otherwise, another database file (.dbs) is displayed in a database window.

Click (1) File on the menu bar.

Point to **(G) Import from Text File...** and then click. A dialog box appears as shown in figure . Type a file name in File name box or select a text file from desired folder. Click **Open** button when done. Click **Delimiter...** button to select relevant text delimiter and text mark options with reference to goods.txt file. Click **OK** when done.

If **Overwrite** option is checked, **goods.txt** file is imported into Goods.dbs database with 4 items as shown in figure . Otherwise, Goods.dbs database will have 8 items instead of 4 items.

Setting Database for Database-Priority Print Mode

Database created based on Database-Priority Print Mode is a little different from a normal database. It is necessary to set a column whose property is Format name. That Column is needed for calling out the format when printing label.

Note: It is unnecessary to set up this column in a database in Format-Priority Print Mode where a label format is called out first before calling out related data from a database.

Setting Base Format

Click (<u>4</u>) Setup on the menu bar. Point to (<u>D</u>) Base Format... and then click. A dialog box appears as shown in figure .

Base Format File Name

Type file name in **Base Format File Name** box.

Otherwise, click Browse... button to select from any folder.

Each File Name box from the top corresponds to the printer of 1, 2, and 3.

aur Format Ganfiguration	1
Base FormatFile Name	
	Browse.
CIAP-700(Samples)(123 FMT	Browse_
	Drowse.
	Erone.
Attention In detabase-prior print mode. set before label printing. Because bate are created according to the base form must include all format items which call i	base tormal must be It file and history file It. The base format dels from database
QK Gencel	Here

Note: In Database-Priority Print Mode, both Batch files (Label Print data) and History file are created based on a base format. Therefore, content of all formats registered in database should be included in a base format especially History objects and objects with Property as Input in label formats. Otherwise, label cannot be printed correctly.

Setting Multiple Formats

To make a database for Database-priority Print Mode, it is necessary to set a column, the property of which is format name. Because it is possible to print by calling out three formats or less in AP-700, three format columns can be set as shown in figure .

The point that should be noted is that the database which is set in each format in the same row has to be all the same.

NO.	code	Formati	Famat2	Format3
00001	100	C.WP-700/Samples/F1.PMT	C.WP-700/Samplex/F2.FMT	
20000	002	C WP-7005 angles/F3 FMT	C.WP-708/SamplexF3.FWT	C:WP-T006SampleolF1 FMT
10063	013	C WP-707/Samples/F3 FMT		C:WP-300cSamplers/F2:FMT
MAR				

Moreover, this database for Database-Priority Mode is set automatically as [DB1] database in each format.

Chapter 3 Database Management

Even if a database were set in each [DB1], it would be ignored and cannot be called when printing label.

- It is possible that each format does not use the same number of Databases. Example: Format #1 uses only DB2, but Format #2 uses DB1, DB2 and DB3. However, DB2 must be the same database in this case.
- It is possible that the same format in different rows may use different database. Example: Format #1 in Item #1 use DB2 (Drink.dbs), but Format #1 in Item #2 use DB2 (Vegitable.dbs).

Accessing External Database

AP-700CS can refer not only databases that were created via Database Management Program of AP-700CS (internal database), but also general-purpose databases (external database). However, in case of using external databases, ODBC driver of databases must be installed and data source name of ODBC must be registered beforehand.

Registering ODBC Data Source Programs Documents Settings Click Start button on the taskbar. Network Connections Printers and Paxes Point to Settings and then click Control Panel. Taskbar and Start Menu Help and Support Double-click on the icon **ODBC Data Sources** A dialog box ODBC Data Source Administrator Log Off Administrator ... Appears as shown in figure Turn Off Computer On-Screen Keyboar

Data Sources (ODBC)

2

Click Add... button in Use DSN tab as shown in figure . Another dialog box Create New Data Source appears as shown in figure Select Microsoft Access Driver (*.mbd) option from the list. Click Finish button when done to add new data source driver.

Nets	Dire	ANU
Excel Files Faultes Files - Hord HG Access Detabase drautin Wenal Forthe Detabase Wanal Forthe Tables	Managati Casal Di ver Vida Managati Casil Di ver Vida Managati Kasho VF Di ver Vida Managati Kasan Di ver Vida Managati Di ver Vida Managati Visaal Yashin Di ver Managati Visaal Yashin Di ver	1. Defen
an IDEC Uses dat	e source starts triansitus stand here is provide. A liver data cauter is ong val	caser prod the Re for prince





A dialog box **ODBC Microsoft Access Setup** appears as shown in figure . Click **Select...** button to select database from desired folder.

01
Help
anced.
I some

4. A dialog box **Select Database** appears as shown in figure . Select database file from desired folder.

Click **OK** when done to return back to **ODBC Microsoft Access Setup** dialog box.

NY NO POPULATION	OK.
±#ap-700Vsamples	The Present
😂 AP-200 🔺	Larce
En FUNCTIONS	Help
NDUSTRY	E fired Driv
TEM LABEL	Exclusive
	EREP-700Visionples

5

File name of specified database is displayed as shown in figure

Type any name in **Data Source Name** box.

Click OK when done to return back to Create New Data Source dialog box.

Path and name of new Data Source is displayed in User Data Sources list shown in figure Click **OK** when done and registration of ODBC new data source name is completed.

ODBC Microso	ft Access Setup		
Data Source N	ame: shouhin2		
Description:			
- Database			
Database:	C:¥AP-700¥SAM	PLES¥ShouHin.MDI	в
Select	Create	Repair	Co



Accessing External Database via Database Management

6

Setting external database via Database Management program of AP-700CS is illustrated here. Click (1) File on the menu bar. Point to (1) Load from External Database... and then click. A dialog box appears with a list of ODBC (32bit) data source name as shown in figure . Select a data source from the list. Click Next when done. A dialog box appears asking for User ID and pass word as shown in figure . Click OK to bypass user ID and password entry. Otherwise, type user ID and password. Click OK when done.



7

A dialog box appears as shown on the right. Select a table from the list.

Click **Next** when done to display another dialog box as shown in figure .

-	MSysAccessObjects MSysACEs MS-sOftects	
	MSysQueries MSysRelationships	

8

Refer to figure . Select a data field from **Available Field** list on the left.

Click _____ button to add any selected data fields to **Selected Field** list on the right.

Click button to remove any selected data fields from **Selected Field** list.

Click Load button when done. External database is loaded as shown in figure

Chapter 3 Database Management

ProductName [508,VARCHAR] Maker Name [508,VARCHAR] Provide United States Discount Price (118, INTEGER] term of validay [118, INTEGER] Volume [118, INTEGER]	33	Product Name [SIB:VAPU Maker Name [SIB:VAPC] Price [31BJN7EGER]
select the column which want to be lo	inded, then	press (Load)

절역	Productione	Intoiner Tatal
800E1	Dolongtea	SUNTORY
80082	Drunge Axie	PADOME
89083	Aggine Jusce	KAGOME
83084	Coke	+ (Rither
DOD:	Whisiy	SUNTORY
10011	Grentes	THEOLOGIA
10011	Genetia	IIHOJOKA
	·	

Setting External Database Link

To call directly the data of external general-purpose databases, it is necessary to set up **External Database Configuration** to an empty local database.

9

Firstly, make an empty local database.
Click (4) Setup on the menu bar. Point to (D)
External Database... and then click.
A dialog box appears as shown in figure .
Click [Refer...] button to select external database.
After selecting external database, select type of loading way.

Click **OK** when done.

Setup of external database is completed.

Name	
	Refer
Data from Extern	al Database
a from External D	Database
te Data Mode	
Cancel	Help
	Data from Externi a from External D te Data Mode <u>C</u> ancel

Manual Update Data from External Database

If this parameter is checked, the auto update will not be performed. To load the external database, user has to open a database of AP-700CS in [Database Management] and select [**Update from External Database**] from menu.

Auto Update Data from External Database

If this parameter is checked, all the data are loaded automatically from linked external database when a database of AP-700CS is opened in [Label Printing]. In this case, if the external database has any change before loading, it will always have influence on local database. However, in label printing, there are a lot of cases where the same database is opened many times, but the database won't be loaded for second time after it has been loaded once. Moreover, because it is not influenced by local databases linked, even if there is a change in an external database, the data of printing might not be the latest data. It takes a minute to open a local database.

Real Time Update Data Mode

If this parameter is checked, as soon as a specified data of external database is opened, the data will be loaded. In this case, the data to be called is only one row data in external database. However, the newest data can be loaded always.

The external table name and data name are displayed in the Column Configuration of internal database that linked the external database as shown in figure on the right.

Column Name			Data Lee	ngth(0.880)
Product Name		Parlet.	50	Bytes
Column Property	Data Type	External Table Nome	_	
CallCode	C Extend	Product	-	QK.
Counter Variation Counter Minimum Counter Meximum Format Name	Anonge IF Align Lott IF Center IF Align Right	External Data Name Product Name [S18, V Ecology Name [S18, VA Maker Name [S18, VA	AF •	Çencel
Database Name Image Name Prot Number Prot Number	F RxDeteColumn	Price [118.INTEGER] Discount Price (118.IN Pritem of validity (118.IN Volume (118.INTEGE		Hetb



Batch Management

Batch Management program facilitates printing of a large amount of labels based on records in a batch data file with BHT extension. This chapter introduces various features of Batch Management.

About Batch Management

A batch data file is also known as a schedule file for storing print data in advance. Example: A batch data file is automatically loaded to print ten labels of Item 1, five labels of Item 2 and one label of Item 10. Hence, a batch data file can improve the efficiency of label printing with lesser mistakes whenever it is utilized correctly. It is most appropriate to use a batch data file in the following cases.

- When printing many items, call out and then print one item at a time is inefficient.
- When current item has many labels to print, the print operation for the next item cannot be done until the current print job is completed.
- Creation of print data and operation of printing label are in different place or time.
 Example: Print data is created in headquarter today but it is printed at the stores tomorrow.
- Different persons handle creation of print data and operation of printing label.
- Same print data is printed repeatedly for many times.

A batch data file is similar to a database. However, the data structure of a database file can be set up freely, but the data structure of a batch data file cannot be set up freely because it is based on label format. Please pay attention to it.

During creation of a new batch data file in Format-Priority Print Mode, the structure of a batch data file will be created automatically based on a corresponding label format name specified. Similarly in Database-Priority Print Mode, the structure of a batch data file will be created automatically based on the base format of a corresponding database name specified.

Batch Management Window

The following illustration introduces the basic elements of the Batch Management window.

Figure 4-1

Sy	stem I	But	ton		Me	nu B	ar					т	ool E	3ar					
	No	B	utton			C	Data	a Nam	е										
			Ti	itle B	ar			W	ind	low Fr	ame	•							
2	ap7	00 C	ion so le	Soft-	Batch M	anage	mer	nt - [C:	¥A	P-700¥	Sam	ples¥S	ample	21.bt	h]				×
E	21 O F	ile	(2) Edit	(2) Inp	ut (⊈) Se	arch&J	итр	(5) Set	up	(6)Tool	Ø	Window	®)La	nguag	. (₽) He	lp	- 8	×
]	Dæ	۰.	2 %	P		1		围窗	d	6 1 6 4		í b	<u>a</u> l 1	> %	?		2		
Γ	No.		Call Co	ode1	Call Co	ode2	A	ljustme	nt	Numb	er	Status	s						^
	0000	1	000001		000001		12				10	Print							
Γ	0000	2	000001		000002		12				5	Print							
	0000	3	000002		000001		30				5	Print							
	00004	4	000002		000002		30				15	Print							
	Add F	3																	
<	¢ 💷															1		>	Ť
					Buffer.	Cel		Opene	ed F	File: 1	Rav	v: 5	Colu	ımn:	5	Siz	e:	5652	T
				Sele	ct Fram	e													
		l Ad	d Row	Butt	on	-	L	.ist Wir	nde	w				Ho	oriz	ont	al /	Verti	cal
R	ow Bu	utto	n							Status	s Ba	ır				30	OII	bar	

Operation & Setup

Data Field Information

Double-click on any data name button in the list window to view data name, attribute, length, type and alignment. [Data Item Setting] dialog box has all relevant information.

Data Item Setting		×
Data Name Adjustment		QK
Data Attribute Normal_Data	Data Longth (0.600) 3 Bytes	Qancel
Arrange Align Left	Data Type Extend	Help
C Center C Align Right	Print Insert Label when C Apply Filter when Import	hange Data

Initial Setup

The batch data file must correspond to the label format or database. In **Format-Priority** Print Mode, a batch data file corresponds to a label format and the structure of the batch data will be arranged automatically based on the content of the label format specified in initial setup. Similarly in **Database-Priority** Print Mode, a batch data file corresponds to a database and the structure of the batch data will be arranged automatically based on the content of the content of the batch data base format of the batch data will be arranged automatically based on the content of the base format of the batch data will be arranged automatically based on the content of the base format of the base format of the base specified in initial setup.

When creating a new batch file, selecting a corresponding label format or database is done first in **[Initial Setup]**.

The structure of a batch data file cannot be changed after initialization is finished once. Therefore, point to (<u>A</u>) New under (<u>1</u>) File menu and then click to create a new structure of the batch data file again.

	Browne	Q4.
	Browse.	
	Breess	Dencel
	pinta	
PertMode # FormetPeat	E Generate by Cell Code	Endo
Detabase Prior	P add to the real	

Relative Batch or Database File Name

Set up the name of a corresponding label format or database here. Select Print Mode option before performing this setup. A label format name is chosen for **Format-Priority** Print Mode whereas a database name is chosen for **Database-Priority** Print Mode.

Each File Name boxe from the top corresponds to the labeler of 1, 2, and 3. (In case of **Format Prior**)

Print Mode

Select Format-Priority or Database-Priority Print Mode.

- Under **Format-Priority** Print Mode, a label format is loaded first before calling out the related data from a database.
- Under **Database-Priority** Print Mode, the print data is called out from a database and then a related label format is loaded automatically.

Generate By Call Code

Tick this option to insert Item Call Code field in a batch data file. This option will minimize size of batch data file by calling out data from database during label printing. In this case, to change the batch data will not affect the original data in the database.

Display Setting

When a batch file is called, the type and the order of item that is displayed on the Label Printing can be selected.

Click (5) Setup on the menu bar.

Point to (E) Display Setting...and then click.

A Dialog is displayed to select items as shown in figure on the right.

Exist Column	Displayed Column	Ourset Suffrag
Name JAN Dode Wendschuter Price Deprecielle Epitre Deyn Adjustmeth Corp. Name	48	Nama Manufacturer Phoa Espire Days Cog. Name
-		Come of 1

Select items to display from Exist Column, and add to Display Column by using

When deleting items, use **_____** button.

The result of the selected display can be confirmed only on the screen of Label Printing.

Example:



Sample21-2. bth

No.	Status	Number	Nane	Manufacturer	Price	Expline Dava	Corp. Nane
si el	Print	5	Product AAA	Yoshiaki Tanaka	400	12	444 Company
1000	Print	4	Procuet BBB	Hirofuni Yoshioka	450	7,	BBB Company
2					0805		A SAAD COMPUT

Sample21-2. bth

"

No.	Status	Nuber	Name	Corp. Name	apufacturer	Price	Expire Davs
DOM: 1	Print	5	Product AAA	http://www.unut	Yoshiaki Tanaka	400	12
10.00	Print	4	Product BBB	BBB Company	Hirofumi Yoshioka	450	7
2							

CHAPTER 5

History Data Management

[AP-700 Console Software] makes it possible to record the printed contents on labels to a history data file freely. History data management is the tool used to inquire, manage and total the history data recorded, such as what kind of the items were printed, when and how many labels were printed.

History Data Management

In the [**AP-700CS**], for managing the history data, firstly, the history structure file (Extension is.**HST**) must be created. The history structure file is to set the way in which the history data file name is decided, the storage period of the history data, and the data item recorded by default, etc. The actual history data is recorded in the history data file (.**HDT**).

Create History Structure File

Click (<u>A)</u> **New** on the menu bar. Click (<u>1</u>) **File** or, button in the toolbar. A dialog box [**Initial Configuration**] appears as shown in figure .

Initial Configuration		8
Record File by /* Pixed (* Each stOry)	Recorder Reterinent Period * One Day C One Week C Three Months C Half Voer	C Dea Month C Dea Vitor
Add Column 17 Trans 17 Profileme 17 Profileme	i‴ Tana I‴ Index	Decel

Firstly, choose the type of the record form of the history file from [Record File by]. If [**Fixed**] is selected, all the records will be saved into one history data file. The history data file name is just the same as the history structure file name (Format Prior Mode), or database file name (Database Prior Mode). If [**Each of Day**] is selected, the history data file name is the fix name mentioned above + date. Therefore, everyday a new history data file is created for management. In this condition, the desired storage period of data files can be specified at the [Recorder Retainment Period].

3

By ticking the check boxes at the [Add Column], the desired columns can be set to history data file automatically. Click [OK] to complete the initial configuration.

For other columns outside the range of [Add

Add C

by pressing

button. Once the button

is pressed, [Data Item Setting] dialog appears as shown in figure , where the columns that are matched with the desired history data can be input and selected. At the [Data Type]. Columns that have already been chosen at the "Add Column" in [Initial Configuration] cannot be chosen. When setting history data in Format

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Column], they can be added

Design Tool, the data name set here is displayed when input by referring to.

Finally, click (C) Save from menu (1) File or tool button to save the file. The history structure file can be set in the <u>history setting file's path and name</u> from menu [system configuration](refer to P12).

Inquiry of History Data

To inquire the history data, firstly, open the **history** structure file (.HST). Secondly, click (D) Load

History Data from menu (1) File or button to

open [Select Table] dialog.

As shown in Figure , several history data files are listed in the dialog, because the file type of recording is set as [**Each of day**] in the initial setting. Select a file and click [**OK**] button, the history data file is opened.

			-
stary_13052005.htm stary_15052005.htm			
			_
Vent 7	* Mariti		Day
	views_1382205.4d wiesy_1582205.4d	view_1382305.44 view_1582305.44	wheny_13852005.4e8 wheny_15852005.4e8 View 7 • Maritti [11 •]

To manage the history data, although "**Remove Column**" and "**Delete Column**" can't be performed, the other operations (such as "Data Modification" or "Data Search") are the same as those in the database management. Please refer to [**Chapter 3 Database Management**].

No. PdName Print_Number Print Time 00001 Coffee (300g) 100 11-07-2005 10 17:48		v 11062085 Adl	700ReputieRhistory 11	OTAL
00001 Coffee (300g) 100 11-07-2005 10:17:48	 Print Time	Print_Num	PdName	No.
	 11-07-2005 10:17:48	100	Coffee (300g)	10000
00002 Green Tea (250g) 200 11-07-2005 10 27 68	11-07-2005 10:27:08	200	Green Tea (250g)	00002
00003 Sugar (1kg) 50 11-07-2005 10.47:49	11-07-2005 10.47:49	50	Sugar (1kg)	00003
00004 Salt (1kg) 80 11-07-2005 11:13:54	11-07-2005 11:12:54	90	Salt (1kg)	00004
Add R				Add R

About Data Total Analysis Window

Operation Procedure of History Data Total

When a history data file (.HDT) is displayed in the list window, double click each data item at the top row of the list to open [Data Item Setting] dialog. [Assort] option for Data Total Analysis can be set in [Data Item Setting].

Set [Assort] for Data Total Analysis

Here, only the [Assort] option can be set. An assort object is the data item that becomes an assortment when totaling data assorted. The assort object varies from 1 to 5, which stands respectively for large assortment, large medium assortment, medium assortment, medium small assortment, and small assortment. For example, if the sales revenues are desired to total by month, shops, and goods separately, set month as Assort1, shops as Assort2, goods as Assort3. [Total (Total Object)] is the data item whose value will be totaled. Still in the above

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example, sales revenues are the total objects. Only the data item whose property is numeric can be set as Total Object.

Set Total Range

Total	Sort	Save Setting	Load Setting	CSV	Print	Exit(Esc)	Show Detail
Product N	iame •	Company	Product	NO.			
	•		• •••••	•			

To total the history data, firstly, open the history data file, then click (E) Load Current History from the menu (1) File or button. By then the History record list is displayed, and the

Assort Objects set in [**Data Item Setting**] are displayed in order. The check box at the left of the name of the assort object indicates whether to total the assortment. Tick the desired data item name and click **Treat** button at the upper left of the window, the total operation can be performed according to the assortment, such as employee, shop, goods.

Besides, with the two combo boxes below the assort object, the displaying and total range of the assortment can be decided. In the given conditions, the corresponding total and details can be displayed.

Sort

As for sorting the items, firstly move the select bar/select frame to the data cell whose column is to be sorted so that the data item can be specified as sort object.

Next, click the menu [Search & Jump]'s sub item [Sort]. By then, the [Sort] dialog is displayed and the data item name specified is displayed in [Column for Sort]. The column for sort can be selected from the combo box respectively. Five sort objects at Max are

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allowed at one time. When the type of data item is string, select [Ascii Code] option; when number, select [Value] option. The sort order can also be chosen. [Ascendant]: sort from low to high. [Descendant]: sort from high to low.

Click [**Sort**] button to commit the sorting. When it was finished, the result is displayed in the list view. Pay attention that, once the data is sorted, there is no way to recover the original order. However, as long as the sorting result is not saved, you can recover it by reloading the original database file.

It is the same way sorting in the History record list.

Chapter 5 History Data Management

	_			_	-	-
Sum 5	kz12	AP-700P	120	331245	100	28-06-2004 17:27:29
Sum 4	kz12	AP-700P	120	331245	100	28-06-2004 17:27:29
Sum 3	kz12	AP-700P	120	331245	100	28-06-2004 17:27:29
Sum 2	kz12	AP-700P			295	
Sum 1	kz12	AP-700P			295	
Total					540	

Total can be divided into "Assort Total" and "Amount". Assort Total is calculated in total 1-5 for the items which are specified as the assort objects at **Data Item Setting**. The objects to be calculated are the items set as the total objects. The total assortment are set with an order of priority as assort object1, assort object 2, assort object 3, assort object 4, assort object5. The order of priority means that the item in the higher order is settled firstly while items in the later order are settled later.

As shown in the left figure, there are [Sum1] and [Sum2]. AP-700C and AP-700P are separately calculated. The **Product name** is set as assort object1 and the **Price** is set as the total object. The total value is displayed in red. And then, the total result of the total object **Price** based on assort object2 **Product No** is shown by [Sum2].

Display Total and Details

No.	Product Name	Product NO.	Price
00001	AP-700C	695987456	50
00002	AP-700C	695987456	50
00003	AP-700C	695987456	100
Sum 2	AP-700C	695987456	200
00004	AP-7000	FJKLLM112	30
00005	AP-700C	FJKLLM112	20
Sum2	AP-700C	FJKLLM112	50
Sum 1	AP-700C	1	250
00006	AP-700P	031015	15
00007	AP-700P	031015	15
00008	AP-700P	031015	5
Sum2	AP-700P	031015	35
00009	AP-700P	GFBK-A152	30
00010	AP-700P	GFBK-A152	12
Sum2	AP-700P	GFBK-A152	42
Sum1	AP-700P		11
Total			327

[**Total**] is the sum amount of each total result based on assort objects.

Example:

[Total (327)]=[Sum1 (250)]+[Sum1 (77)]=[Sum2 (200)]+[Sum2 (50)]+[Sum2 (35)]+[Sum2 (42)]