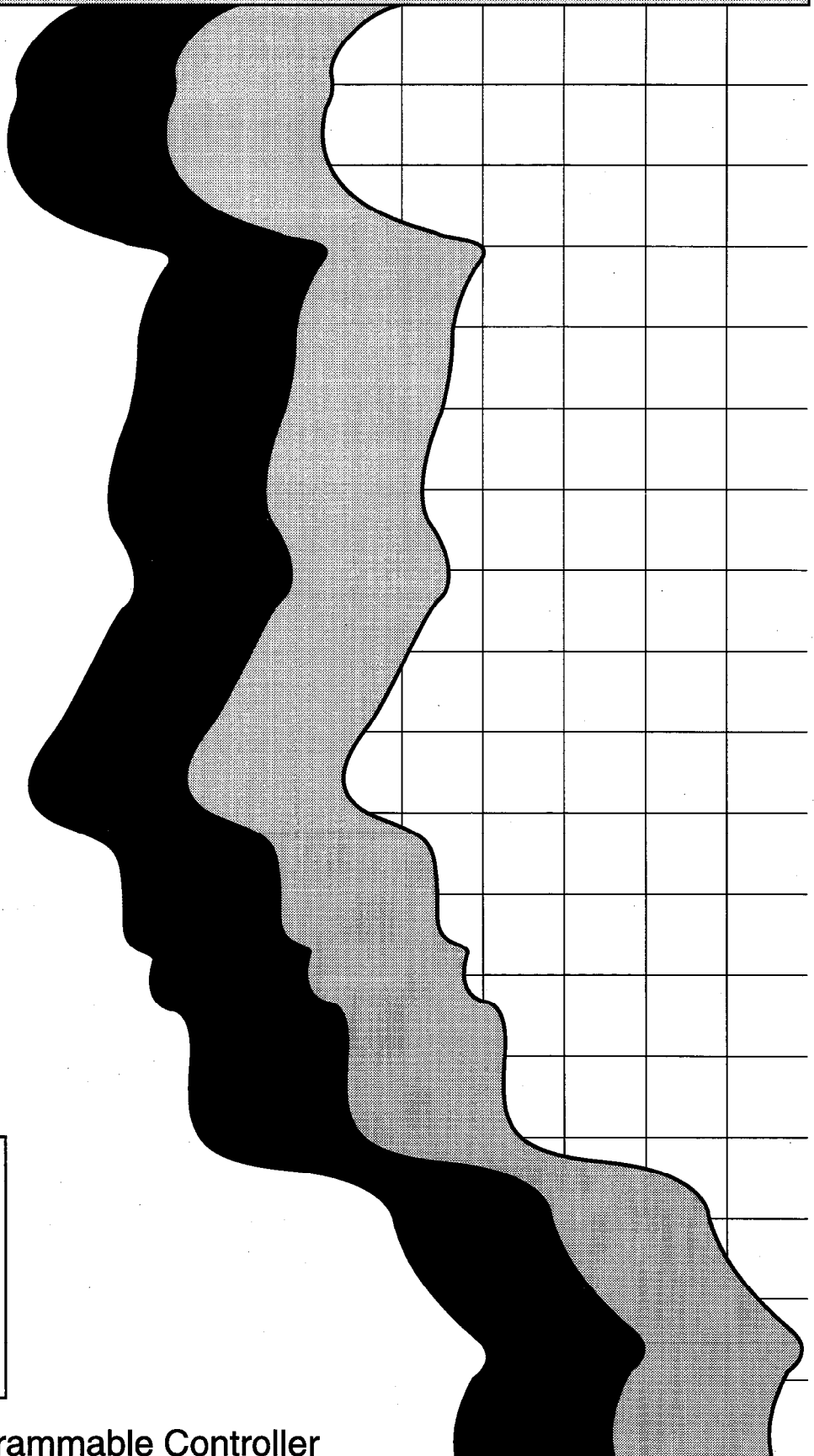# MITSUBISHI

type SW0GHP-A11VCP
Operating Manual

A
MELSEC

Mitsubishi Programmable Controller

● SAFETY PRECAUTIONS ●

(Read these precautions before using.)

When using Mitsubishi equipment, thoroughly read this manual and the associated manuals introduced in this manual.

Also pay careful attention to safety and handle the module properly. These precautions apply only to Mitsubishi equipment. Refer to the CPU module user's manual for a description of the PC system safety precautions.

These ● SAFETY PRECAUTIONS ● classify the safety precautions into two categories: "DANGER" and "CAUTION".

⟨!⟩ **DANGER**	**Procedures which may lead to a dangerous condition and cause death or serious injury if not carried out properly.**
⚠ **CAUTION**	**Procedures which may lead to a dangerous condition and cause superficial to medium injury, or physical damage only, if not carried out properly.**

Depending on circumstances, procedures indicated by ⚠ CAUTION may also be linked to serious results.

In any case, it is important to follow the directions for usage.

Store this manual in a safe place so that you can take it out and read it whenever necessary. Always forward it to the end user.

[DESIGN PRECAUTIONS]

◇ DANGER

- Install a safety circuit external to the PC that keeps the entire system safe even when there are problems with the external power supply or the PC module. Otherwise, trouble could result from erroneous output or erroneous operation.

  (1) Outside the PC, construct mechanical damage preventing interlock circuits such as emergency stop, protective circuits, positioning upper and lower limits switches and interlocking forward /reverse operations.

  (2) When the PC detects the following problems, it will stop calculation and turn off all output.
    - The power supply module has over current protection equipment and over voltage protection equipment.
    - The PC CPUs self-diagnostic functions, such as the watchdog timer error, detect problems. In addition, all output will be turned on when there are problems that the PC CPU cannot detect, such as in the I/O controller. Build a fail safe circuit exterior to the PC that will make sure the equipment operates safely at such times. See Section 8.1 of this user's manual for example fail safe circuits.

    See this user's manual for example fail safe circuits.

  (3) Output could be left on or off when there is trouble in the outputs module relay or transistor. So build an external monitoring circuit that will monitor any single outputs that ⁻ⁱ⁻could cause serious trouble.

- When overcurrent which exceeds the rating or caused by short-circuited load flows in the output module for a long time, it may cause smoke or fire. To prevent this, configure an external safety circuit, such as fuse. ,

- Build a circuit that turns on the external power supply when the PC main module power is turned on. If the external power supply is turned on first, it could result in erroneous output or erroneous operation.

- When there are communication problems with the data link, the communication problem station will enter the following condition.
  Build an interlock circuit into the PC program that will make sure the system operates safely by using the communication state information. Not doing so could result in erroneous output or erroneous operation.

  (1) For the data link data, the data prior to the communication error will be held.

  (2) The MELSECNET (II,/B,/10) remote I/O station will turn all output off.

  (3) The MELSECNET/MINI-S3 remote I/O station will hold the output or turn all output off depending on the E.C. remote setting.
  Refer to the data link manuals regarding the method for setting the communication problem station and the operation status when there are communication problem.

- When configuring a system, do not leave any slots vacant on the base. Should there be any vacant slots, always use a blank cover (A1SG60) or dummy module (A1SG62).
  When the extension base A1S52B, A1S55B or A1S58B is used, attach the dustproof cover supplied with the product to the module installed in slot 0.
  If the cover is not attached, the module's internal parts may be dispersed when a short-circuit test is performed or overcurrent/overvoltage is accidentally applied to the external I/O area.

⚠ CAUTION

- Do not bunch the control wires or communication cables with the main circuit or power wires, or install them close to each other. They should be installed 100 mm (3.94 inch) or more from each other. Not doing so could result in noise that would cause erroneous operation.

[WIRING PRECAUTIONS]

⚠ CAUTION

- Do not connect multiple power supply modules in parallel. Doing so could cause overheating, fire or damage to the power supply module. If the terminal screws are too tight, it may cause falling, short circuit or erroneous operation due to damage of the screws or module.

- Tighten the terminal screws with the specified torque. If the terminal screws are loose, it could result in short circuits, fire, or erroneous operation.

- Tightening the terminal screws too far may cause damages to the screws and/or the module, resulting in fallout, short circuits, or malfunction.

- Be sure there are no foreign substances such as sawdust or wiring debris inside the module. Such debris could cause fires, damage, or erroneous operation.

- External connections shall be crimped or pressure welded with the specified tools, or correctly soldered. For information regarding the crimping and pressure welding tools, see the I/O module's user's manual. Imperfect connections could result in short circuit, fires, or erroneous operation.

[STARTUP AND MAINTENANCE PRECAUTIONS]

◇ DANGER

- Do not touch the terminals while power is on. Doing so could cause shock or erroneous operation.

- Correctly connect the battery. Also, do not charge, disassemble, heat, place in fire, short circuit, or solder the battery. Mishandling of battery can cause overheating or cracks which could result in injury and fires.

- Switch all phases of the external power supply off when cleaning the module or tightening the terminal screws. Not doing so could result in electric shock. If the screws are too tight, it may cause falling, short circuit or erroneous operation due to damage of the screws or modules.

- Tightening the screws too far may cause damages to the screws and/or the module, resulting in fallout, short circuits, or malfunction.

⚠ CAUTION

- The online operations conducted for the CPU module being operated, connecting the peripheral device (especially, when changing data or operation status), shall be conducted after the manual has been carefully read and a sufficient check of safety has been conducted. Operation mistakes could cause damage or trouble of the module.

- Do not disassemble or modify the modules. Doing so could cause trouble, erroneous operation, injury, or fire.

- Switch all phases of the external power supply off before mounting or removing the module. If you do not switch off the external power supply, it will cause failure or malfunction of the module.

[DISPOSAL PRECAUTIONS]

⚠ CAUTION

- When disposing of this product, treat it as industrial waste.

[DESIGN PRECAUTIONS]

⚠ **CAUTION**

- When controlling items like lamp load, heater or solenoid valve using an output module, large current (approximately ten times greater than that present in normal circumstances) may flow when the output is turned OFF→ON. Take measures such as replacing the module with one having sufficient rated current.

[INSTALLATION PRECAUTIONS]

◇ **DANGER**

- Use the PC in an environment that meets the general specifications contained in this manual. Using this PC in an environment outside the range of the general specifications could result in electric shock, fire, erroneous operation, and damage to or deterioration of the product.
- Install so that the pegs on the bottom of the module fit securely into the base unit peg holes, and use the specified torque to tighten the module's fixing screws. Not installing the module correctly could result in erroneous operation, damage, or pieces of the product falling.
- Tightening the screws too far may cause damages to the screws and/or the module, resulting in fallout, short circuits, or malfunction.
- When installing more cables, be sure that the base unit and the module connectors are installed correctly. After installation, check them for looseness. Poor connections could result in erroneous input and erroneous output.
- Correctly connect the memory cassette installation connector to the memory cassette. After installation, be sure that the connection is not loose. A poor connection could result in erroneous operation.
- Do not directly touch the module's conductive parts or electronic components. Doing so could cause erroneous operation or damage of the module.

[WIRING PRECAUTIONS]

◇ **DANGER**

- Completely turn off the external power supply when installing or placing wiring. Not completely turning off all power could result in electric shock or damage to the product.
- When turning on the power supply or operating the module after installation or wiring work, be sure that the module's terminal covers are correctly attached. Not attaching the terminal cover could result in electric shock.

⚠ **CAUTION**

- Be sure to ground the FG terminals and LG terminals to the protective ground conductor. Not doing so could result in electric shock or erroneous operation.
- When wiring in the PC, be sure that it is done correctly by checking the product's rated voltage and the terminal layout. Connecting a power supply that is different from the rating or incorrectly wiring the product could result in fire or damage.

REVISIONS

Print Date	Manual number	Revision
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INTRODUCTION

Thank you for choosing the Mitsubishi MELSEC-A Series of General Purpose Programmable Controllers. Please read this manual carefully so that the equipment is used to its optimum. A copy of this manual should be forwarded to the end User.

CONTENTS

1. INTRODUCTION

This manual explains the operation methods of the SW0GHP-A11VCP System Disk (hereafter referred to as A11VCP) for executing communication with the A11VC voice output module, and storage of voice data onto ROM or to the system disk.

The A11VCP can be used in the A6GPP, A6HGP and A6PHP (hereafter referred to as GPP).

The main functions of the A11VCP are shown below.

Function

VC Mode
- Read ············· Reads voice data stored in the A11VC to the internal memory of the GPP. ·············Page 4-1
- Write ············· Writes voice data stored in the internal memory of the GPP to the A11VC. ···················Page 4-2
- Verify ············· Verifies voice data stored in the internal memory of the GPP and the A11VC. ·····Page 4-2

ROM Mode
- Read ············· Reads ROM voice data to the internal memory of the GPP. ·······································Page 5-1
- Write ············· Writes voice data stored in the internal memory of the GPP to ROM.·························Page 5-1
- Verify ············· Verifies voice data stored in the internal memory of the GPP and in ROM. ·············Page 5-2
- Erase Check······· Checks ROM if ROM data has been cleared. ···Page 5-2

FDD Mode
- Directory··········· Reads the file name directory stored on disk (FD) and reads file names to the GPP. ·····························Page 6-2 to 6-3
- Read ············· Reads FD file names. ························Page 6-4
- Write ············· Write voice data stored in the internal memory of the GPP to FD. ·····························Page 6-5
- Verify ············· Verifies voice data stored in the internal memory of the GPP and FD. ···············Page 6-6
- Delete············· Deletes FD files. ·····························Page 6-6

Comment Mode ———— Displays the record time of each voice data recorded on the A11VC channel and sets comment for each channel. ······· Page 7-1

Printer Mode ———— Sets printer data to execute screen copy (display screen print out). ································ Page 8-1

| POINT |

There is no format function in the FDD mode of the A11VCP. When writing voice data and comments to FD, use the formatted FD (SW0-GPPU). To use an unformatted FD, format it with another system FD (SW□GP-GPPA, SW□-HGPA, etc.).

2. SYSTEM CONFIGURATION

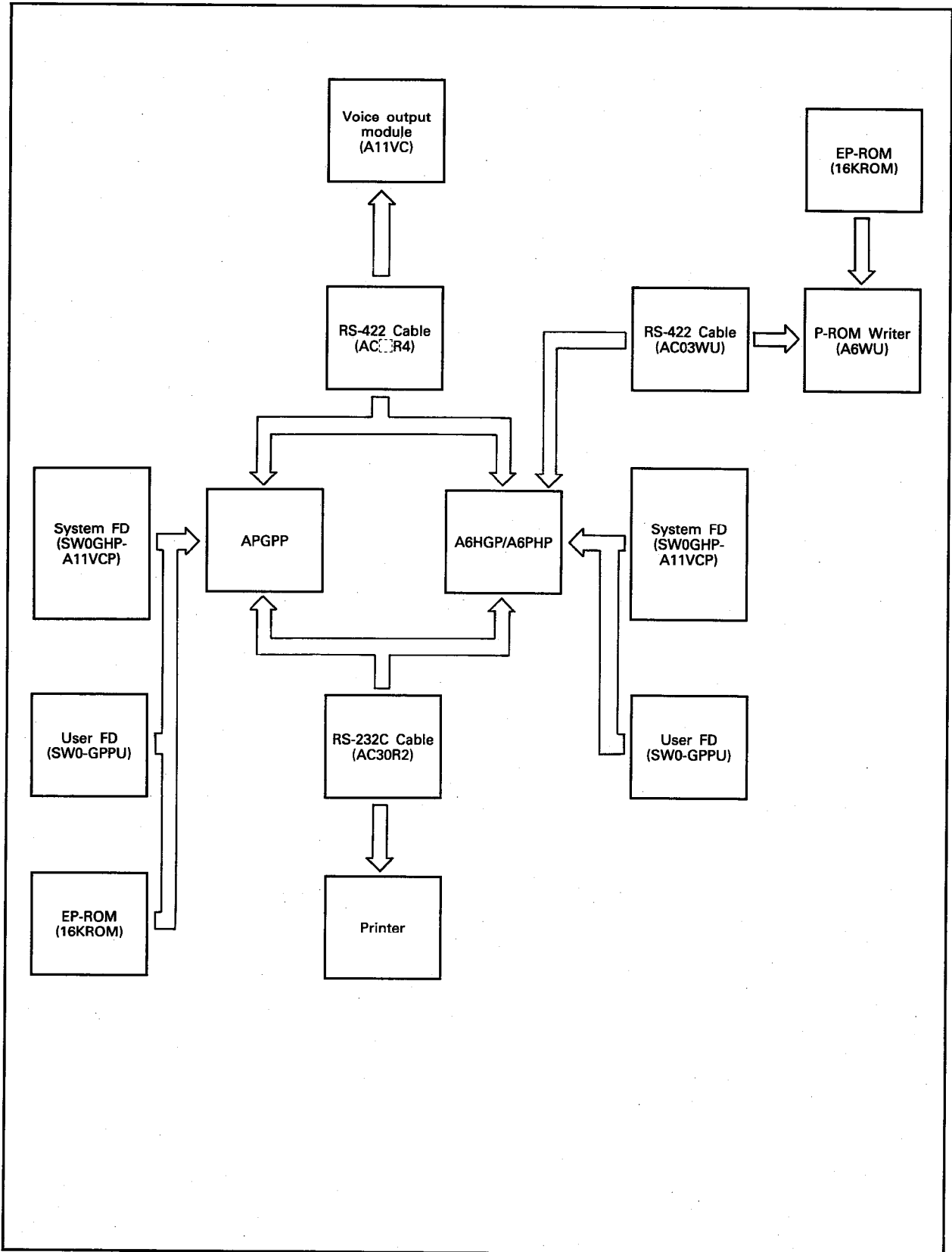The system configuration when using an A11VCP is shown below.

Fig. 2.1 System Configuration

3. SYSTEM START-UP PROCEDURE

Precautions when starting up the system by inserting the A11VCP into the GPP will be explained.

3.1 System Start-up Procedure

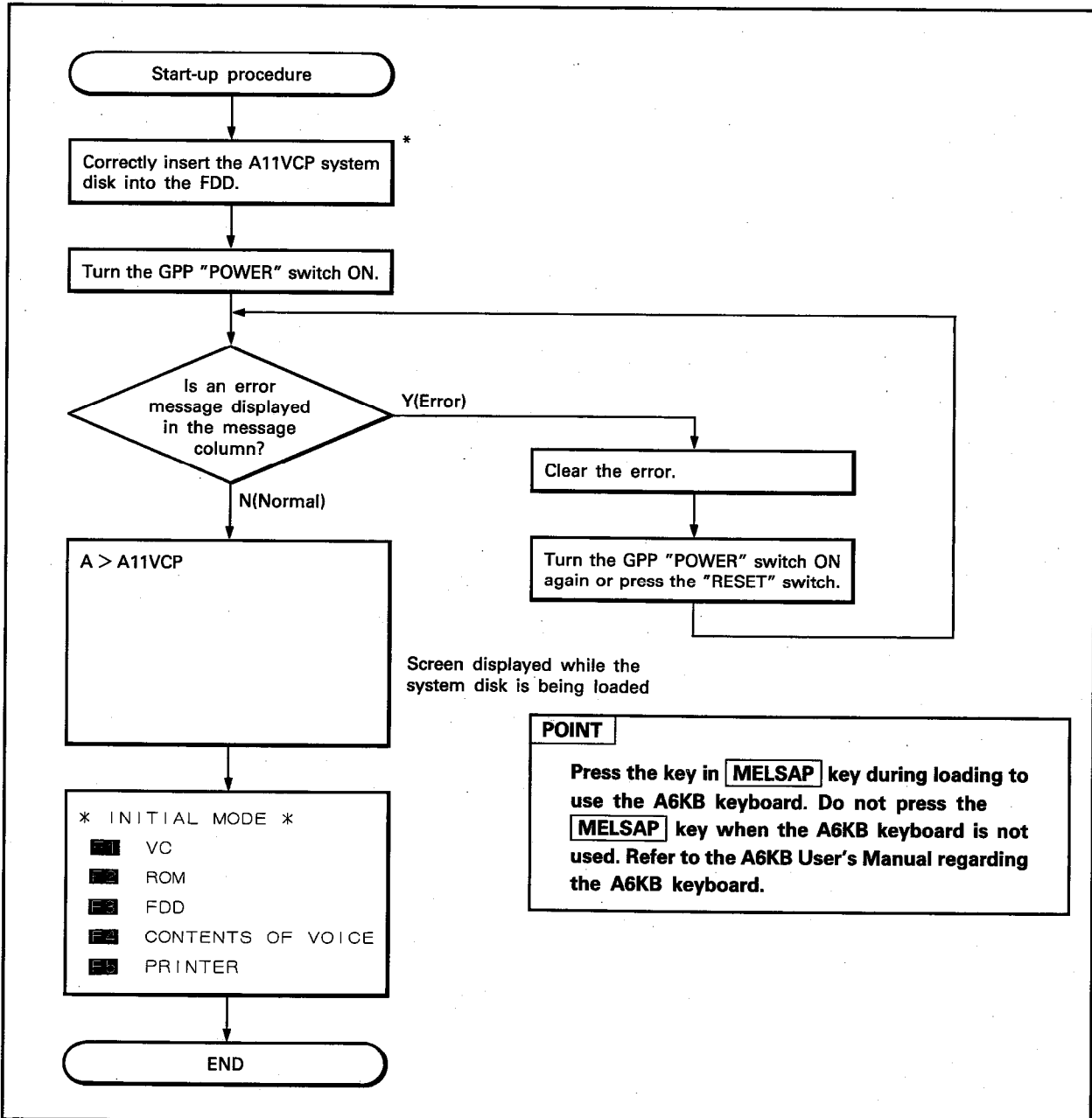The procedure for starting up the GPP is shown below.

```
        ┌─────────────────────────┐
        │   Start-up procedure    │
        └─────────────────────────┘
                    │
        ┌─────────────────────────┐  *
        │ Correctly insert the A11VCP system
        │ disk into the FDD.      │
        └─────────────────────────┘
                    │
        ┌─────────────────────────┐
        │ Turn the GPP "POWER" switch ON. │
        └─────────────────────────┘
                    │
              ◇ Is an error
              message displayed      Y(Error) ──────┐
              in the message                        │
              column?                               ▼
                    │                    ┌────────────────────┐
              N(Normal)                  │  Clear the error.  │
                    │                    └────────────────────┘
        ┌─────────────────────────┐               │
        │ A > A11VCP              │      ┌──────────────────────────────┐
        │                         │      │ Turn the GPP "POWER" switch ON │
        │                         │      │ again or press the "RESET" switch. │
        │                         │      └──────────────────────────────┘
        └─────────────────────────┘
                    │           Screen displayed while the
                    │           system disk is being loaded
        ┌─────────────────────────┐
        │ * INITIAL MODE *        │
        │  ■  VC                  │
        │  ■  ROM                 │
        │  ■  FDD                 │
        │  ■  CONTENTS OF VOICE   │
        │  ■  PRINTER             │
        └─────────────────────────┘
                    │
        ┌─────────────────────────┐
        │          END            │
        └─────────────────────────┘
```

POINT

Press the key in MELSAP key during loading to use the A6KB keyboard. Do not press the MELSAP key when the A6KB keyboard is not used. Refer to the A6KB User's Manual regarding the A6KB keyboard.

Fig. 3.1 System Start-Up Procedure

POINT

(1)*········As a rule, insert the A11VCP system disk into FDD [A] when using the A6GPP. Since FDD [B] of the A6GPP will operate as [A] and FDD [A] will operate as [B], take special care when starting up by inserting the A11VCP system disk into FDD [B].

3.2 Operating Procedure

Procedures for storing voice data recorded on the A11VC in a floppy disk (FD), storage onto ROM, and writing voice data stored in an FD to the A11VC are shown below.

3.2.1 Storing A11VC voice data in the system disk

The operating procedure for writing A11VC voice data to an FD is shown below.

(1) Read A11VC voice data to the GPP.
1) VC mode selection ····························· F1
2) Voice data read ······························· F1 → Y
3) Return to initial menu screen ················· ESC

(2) Write GPP voice data to an FD.
1) FDD mode selection ··························· F3
2) Write function selection ····················· F4
3) System name setting ························· [System name] → CR
   └─→ Alphanumeric (upper-case) max. 8 characters, head character is English
4) Comment ⎧ When set ··················· [Comment] → CR
              │   └─→ Alphanumeric, max. 20 characters
              ⎩ When not set ················· CR
5) Voice data write ····························· Y
6) Return to initial menu screen ················· ESC → ESC

3.2.2 Writing A11VC voice data to 16K ROM

The operating procedure for storing A11VC voice data onto ROM is shown below.

(1) Read A11VC voice data to the GPP.
1) VC mode selection ····························· F1
2) Voice data read ······························· F1 → Y
3) Return to initial menu screen ················· ESC

(2) Store GPP voice data onto ROM.
1) ROM mode selection ··························· F2
2) Write function selection ····················· F2
3) Voice data write to the No. 1 ROM ··········· 1 → CR → Y
4) Voice data write to the No. 2 ROM ··········· 2 → CR → Y
5) Voice data write to the No. 3 ROM ··········· 3 → CR → Y
6) Voice data write to the No. 4 ROM ··········· 4 → CR → Y
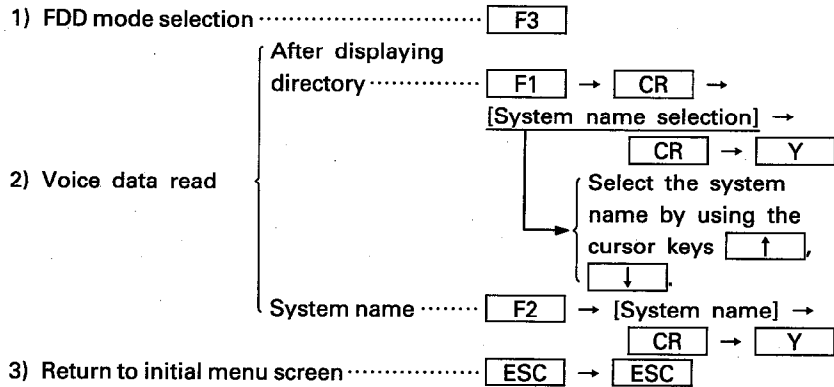7) Return to initial menu screen ················· ESC

POINT

(1) Four 16K ROM chips are required when storing voice data onto ROM.
(2) The operating procedure for the A6GPP is shown in 3.2.2 (2) 2) to 6). For the A6HGP/A6PHP, refer to ROM Mode in the A6WU Operating Manual.
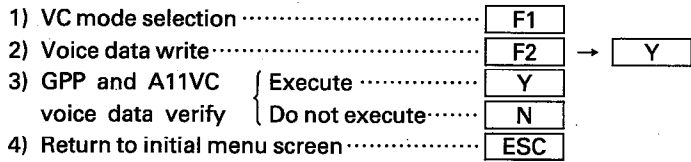

3.2.3 Writing FD voice data to the A11VC

The operating procedure for writing voice data stored in an FD to the A11VC is shown below.

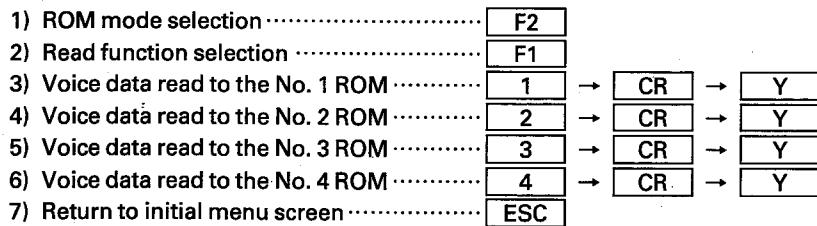(1) Read FD voice data to the GPP.
  1) FDD mode selection ··························· | F3 |

  2) Voice data read
  - After displaying directory ··············· | F1 | → | CR | →
    [System name selection] →
    | CR | → | Y |
    Select the system name by using the cursor keys | ↑ |, | ↓ |.
  - System name ········ | F2 | → [System name] →
    | CR | → | Y |

  3) Return to initial menu screen ················ | ESC | → | ESC |

(2) Write GPP voice data to the A11VC.
  1) VC mode selection ··························· | F1 |
  2) Voice data write ··························· | F2 | → | Y |
  3) GPP and A11VC { Execute ·············· | Y |
     voice data verify { Do not execute······· | N |
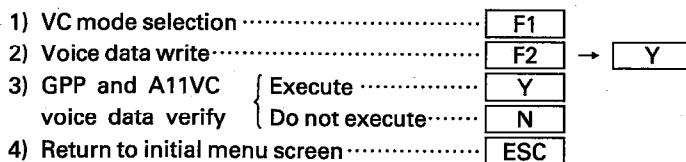 4) Return to initial menu screen ··············· | ESC |

3.2.4 Writing 16K ROM voice data to the A11VC

The operating procedure for writing voice data stored onto ROM to the A11VC is shown below.

(1) Read ROM voice data to the GPP.
  1) ROM mode selection ························· | F2 |
  2) Read function selection ····················· | F1 |
  3) Voice data read to the No. 1 ROM ··········· | 1 | → | CR | → | Y |
  4) Voice data read to the No. 2 ROM ··········· | 2 | → | CR | → | Y |
  5) Voice data read to the No. 3 ROM ··········· | 3 | → | CR | → | Y |
  6) Voice data read to the No. 4 ROM ··········· | 4 | → | CR | → | Y |
  7) Return to initial menu screen ··············· | ESC |

(2) Write GPP voice data to the A11VC.
  1) VC mode selection ··························· | F1 |
  2) Voice data write ··························· | F2 | → | Y |
  3) GPP and A11VC { Execute ·············· | Y |
     voice data verify { Do not execute······· | N |
  4) Return to initial menu screen ··············· | ESC |

| POINT |

(1) The operating procedure for the A6GPP is shown in 3.2.4 (1) 2) to 6). For the A6HGP/A6PHP, refer to ROM Mode in the A6WU Operating Manual.

3.2.5 Writing FD voice data to 16K ROM

The operating procedure for storing voice data stored in an FD onto ROM is shown below.

(1) Read FD voice data to the GPP.
  1) FDD mode selection ·························· [F3]

  2) Voice data read
    After displaying directory ·············· [F1] → [CR] →
    [System name selection] →
      [CR] → [Y]
    Select the system name by using the cursor keys [↑], [↓].
    System name ········ [F2] → [System name] → [CR] → [Y]

  3) Return to initial menu screen ·············· [ESC] → [ESC]

(2) Store GPP voice data onto ROM.
  1) ROM mode selection ·························· [F2]
  2) Write function selection ························ [F2]
  3) Voice data write to the No. 1 ROM ··········· [1] → [CR] → [Y]
  4) Voice data write to the No. 2 ROM ··········· [2] → [CR] → [Y]
  5) Voice data write to the No. 3 ROM ··········· [3] → [CR] → [Y]
  6) Voice data write to the No. 4 ROM ··········· [4] → [CR] → [Y]
  7) Return to initial menu screen ················ [ESC]

POINT

(1) **Four 16K ROM chips are required when storing voice data onto ROM.**
(2) **The operating procedure for the A6GPP is shown in 3.2.5 (2) 2) to 6). For the A6HGP/A6PHP, refer to ROM Mode in the A6WU Operating Manual.**

3.2.6 Writing 16K ROM voice data to FD

The operating procedure for voice data stored in 16K ROM to an FD is shown below.

(1) Read ROM voice data to the GPP.
  1) ROM mode selection ·························· [F2]
  2) Read function selection ························ [F1]
  3) Voice data read to the No. 1 ROM ··········· [1] → [CR] → [Y]
  4) Voice data read to the No. 2 ROM ··········· [2] → [CR] → [Y]
  5) Voice data read to the No. 3 ROM ··········· [3] → [CR] → [Y]
  6) Voice data read to the No. 4 ROM ··········· [4] → [CR] → [Y]
  7) Return to initial menu screen ················ [ESC]

(2) Write GPP voice data to an FD.
  1) FDD mode selection ·························· [F3]
  2) Write function selection ······················ [F4]
  3) System name setting ························· [System name] → [CR]
    Alphanumeric (upper-case) max. 8 characters, head character is English
  4) Comment
    When set ·················· [Comment] → [CR]
    Alphanumeric, max. 20 characters
    When not set ··············· [CR]
  5) Voice data write ······························· [Y]
  6) Return to initial menu screen ················ [ESC] → [ESC]

3.3 Sequence of Display Screens After System Start-Up

(1) Select each A11VCP mode from the initial menu screen. To change modes during execution, first return to the initial menu screen.

(2) Press the ESC key to return to the initial menu screen.

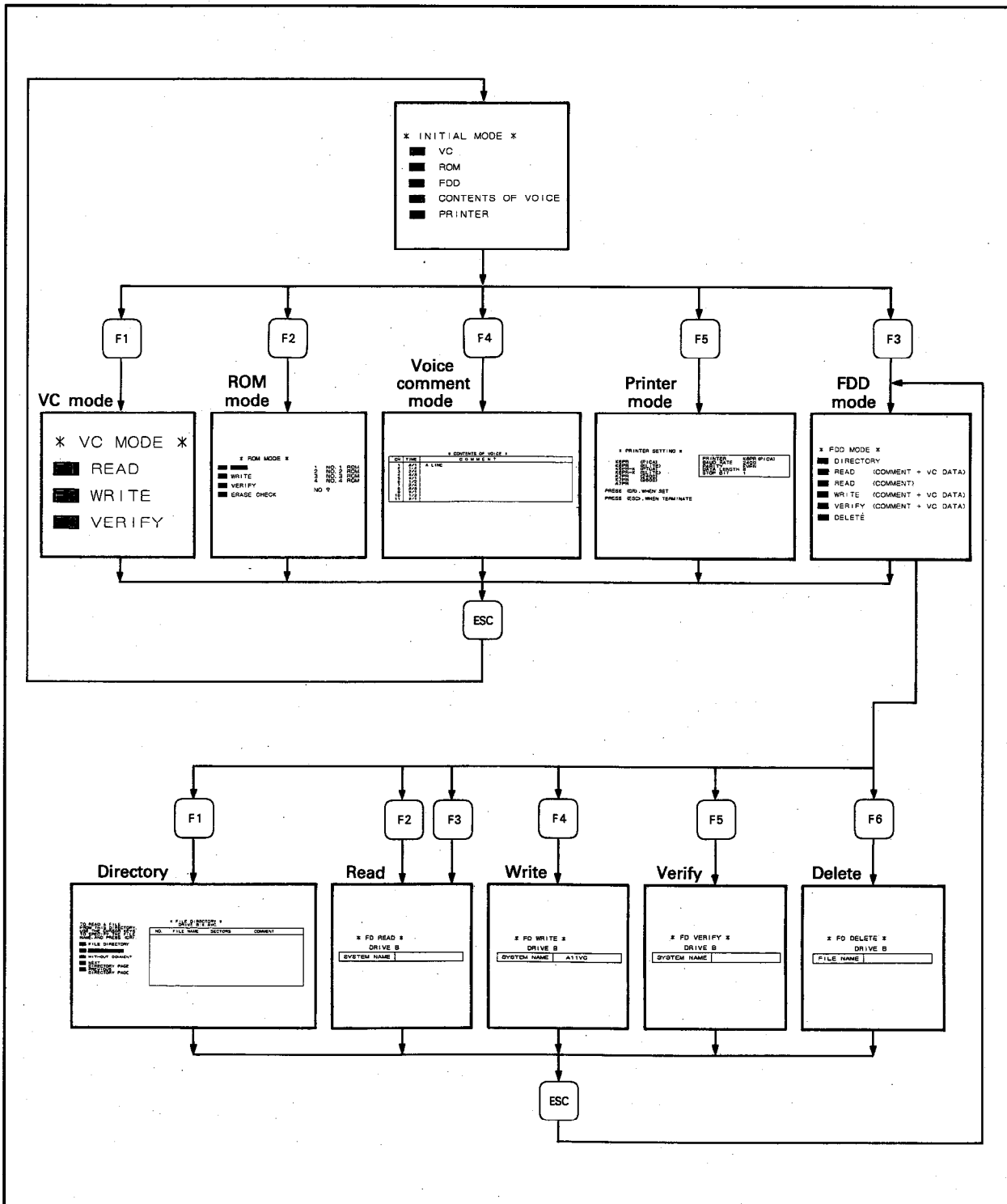(3) Figure 3.2 shows the sequence of display screens when selecting each mode after starting up the system.

Fig. 3.2 Sequence of Display Screens

3.4 Description of Keys

MELSAP mode keys are used in the GPP when starting up by the A11VCP. The pre-defined MELSAP mode keys to be used are shown in Table 3.1.

Key	Application	Remarks
F1 F2 F3 F4 F5	1) Selects menu from the initial menu screen or each function screen.	
ESC	1) Terminates a function during execution and displays the previous screen.	
CR	1) Used when setting each set data 2) Used when discontinuing copying of the GPP screen. Invalid when • the printer is disconnected, or • the printer's power supply is OFF.	
COPY	1) Copies GPP screen.	

Table 3.1 Pre-defined Keys List

4. VC MODE

(1) The VC mode is used to write, read, and verify voice data between the GPP and the A11VC.

(2) In communication with the A11VC, all 4 16K RAM (16K ROM) chips loaded into the A11VC are applicable.

(3) The 4 asterisks (✳) are displayed first during execution of functions selected between the GPP and the A11VC and when 1 16K RAM (16K ROM) chip processing ends, they are removed one at a time.

(4) Confirm the items in the table below when executing communication with the A11VC.

Item	Write	Read	Verify
Is the PC power supply ON?	○	○	○
Is the RS-422 cable between the A11VC and GPP connected?	○	○	○
Is the "BUSY" LED of the A11VC off?	○	○	○
Is the "M.PRO" switch of the A11VC OFF?	○		
Is the "RAM" LED of the A11VC on?	○		
Is the mode selection switch of the A11VC at "REC"?	○		
Is "WRITE IN CPU" of the A6GPP at PERMIT?	○		

BASIC OPERATION
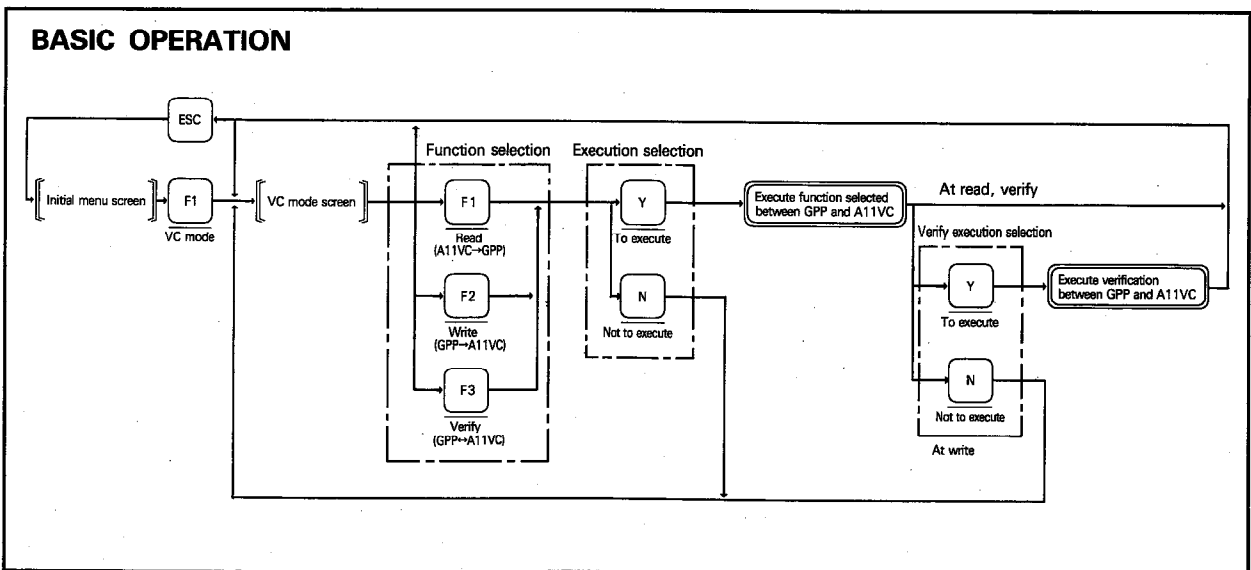
EXPLANATION

| F1 | ········ READ (A11VC → GPP)

(1) Reads voice data recorded in the A11VC to the internal memory of the GPP.

(2) When | F1 | is pressed, the "READ" column is highlighted and "READ OK? (Y/N)" is displayed in the message column. Press either the | Y | or | N | key.
  1) Y: Reads voice data from the A11VC.
  2) N: Cancels the READ function and allows selection of another function.

(3) "EXECUTING" is displayed in the message column during read execution. "COMPLETED" is displayed in the message column at read completion.

(4) Comments can be added to each channel of voice data read to the internal memory of the GPP. (Refer to Section 7 for operation details.)
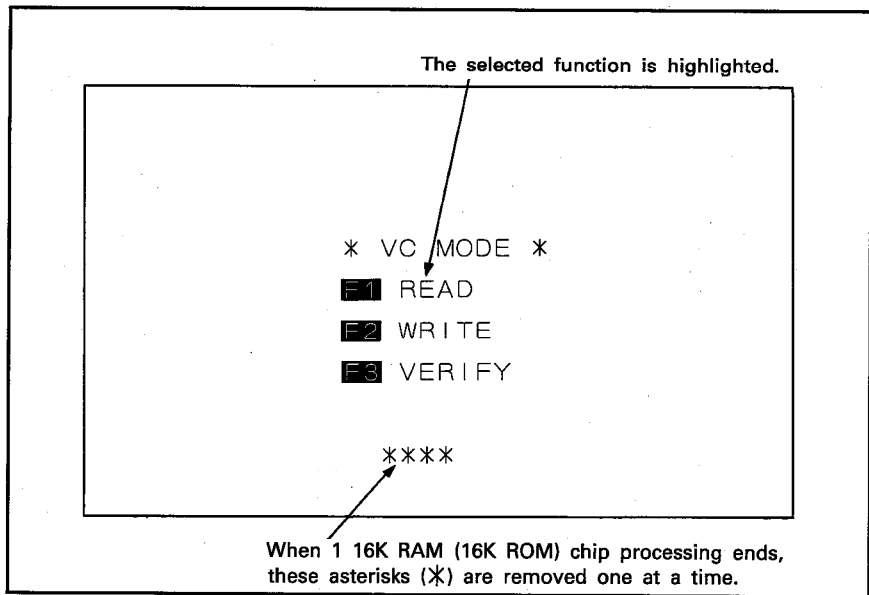
The selected function is highlighted.

```
                    * VC MODE *
                    F1 READ
                    F2 WRITE
                    F3 VERIFY


                       ****
```

When 1 16K RAM (16K ROM) chip processing ends,
these asterisks (✳) are removed one at a time.

Fig. 4.1 VC Mode Screen

| F2 | ········ WRITE (GPP → A11VC)

(1) Writes voice data stored in the internal memory of the GPP to the A11VC.

(2) When | F2 | is pressed, the "WRITE" column is highlighted and "WRITE OK? (Y/N)" is displayed in the message column. Press either the | Y | or | N | key.
   1) Y: Writes voice data to the A11VC.
   2) N: Cancels the WRITE function and allows selection of another function.

(3) "EXECUTING" is displayed in the message column during write execution. "VERIFY OK? (Y/N)" is displayed in the message column at write completion. Press either the | Y | or | N | key.
   1) Y: Verifies voice data written to the internal memory of the GPP and the A11VC.
   2) N: Terminates the WRITE function without verifying.

(4) "EXECUTING" is displayed in the message column during verify execution. "COMPLETED" or "VC DATA UNMATCHED" is displayed in the message column at verify completion.
   1) COMPLETED: When A11VC and GPP voice data match.
   2) VC DATA UNMATCHED: When A11VC and GPP voice data do not match.

| F3 | ········ VERIFY (GPP ↔ A11VC)

(1) Verifies voice data stored in the internal memory of the GPP and the A11VC.

(2) When | F3 | is pressed, the "VERIFY" column is highlighted and "VERIFY OK? (Y/N)" is displayed in the message column. Press either the | Y | or | N | key.
   1) Y: Verifies voice data stored in the internal memory of the GPP and the A11VC.
   2) N: Cancels the VERIFY function and allows selection of another function.

(3) "EXECUTING" is displayed in the message column during verify execution. "COMPLETED" or "VC DATA UNMATCHED" is displayed in the message column at verify completion.
   1) COMPLETED: When A11VC and GPP voice data match.
   2) VC DATA UNMATCHED: When A11VC and GPP voice data do not match.

4

5. ROM MODE

(1) The ROM mode is used to write, read, verify, and erase check voice data between the internal memory of the GPP and ROM.

(2) Only 16K ROM can be used.

(3) Differences in system configuration and operations between the A6GPP and the A6HGP/A6PHP for ROM communication are as follows.
   1) A6GPP: Load a 16K ROM into the ROM socket of the A6GPP and execute communication with the 16K ROM using A6GPP operations.
   2) A6HGP/A6PHP: Connect the A6WU to the A6HGP/A6PHP using an RS-422 cable (AC0-3WU) and execute ROM communication using A6WU operations.

5.1 A6GPP and ROM

BASIC OPERATION
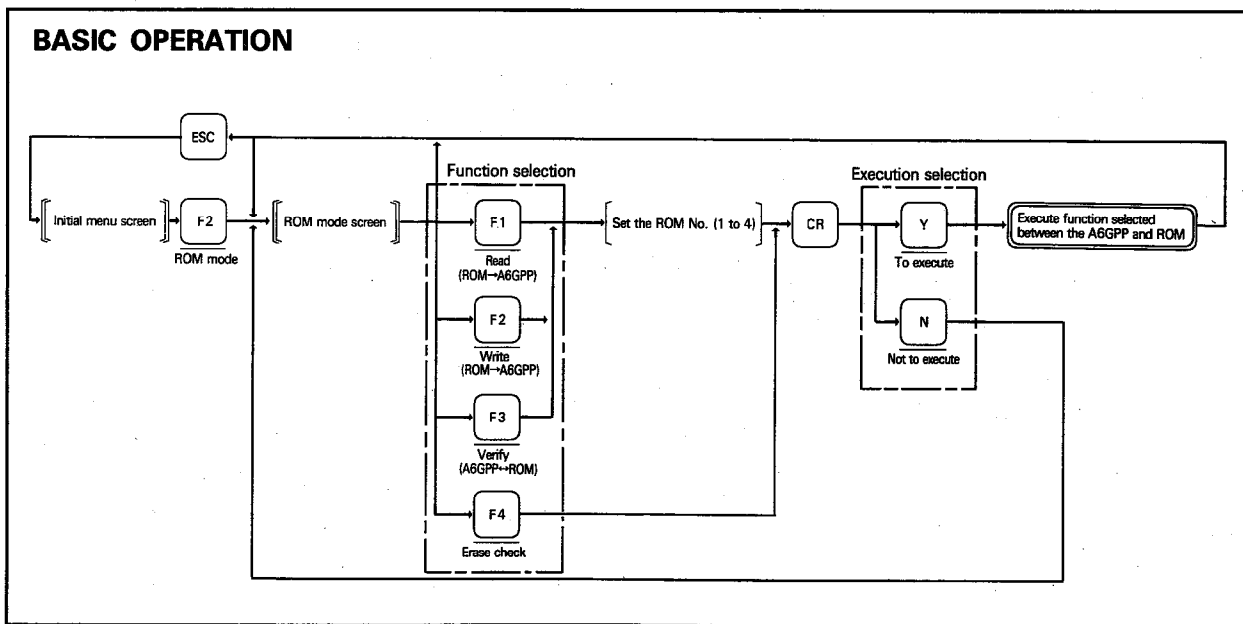
EXPLANATION

☐ F1 ☐ ········ READ (ROM → A6GPP)

(1) Reads voice data stored in 16K ROM to the internal memory of the A6GPP.

(2) When ☐ F1 ☐ is pressed, "READ" is highlighted and the cursor blinks in the ROM NO. setting column. Set the ROM No. by keying in ☐ 1 ☐ to ☐ 4 ☐.

(3) When the ROM No. is set and the ☐ CR ☐ key is pressed, "READ OK? (Y/N)" is displayed in the message column. Press either the ☐ Y ☐ or ☐ N ☐ key.
   1) Y: Reads voice data from ROM.
   2) N: Cancels the READ function and allows selection of another function.

(4) "EXECUTING" is displayed in the message column during read execution. "COMPLETED" is displayed in the message column at read completion.

☐ F2 ☐ ········ WRITE (A6GPP → ROM)

(1) Writes voice data stored in the internal memory of the A6GPP to ROM.

(2) When ☐ F2 ☐ is pressed, "WRITE" is highlighted and the cursor blinks in the ROM NO. setting column. Set the ROM NO. to be written by keying in ☐ 1 ☐ to ☐ 4 ☐.

(3) When the ROM NO. is set and the ☐ CR ☐ key is pressed, "WRITE OK? (Y/N)" is displayed in the message column. Press either the ☐ Y ☐ or ☐ N ☐ key.
   1) Y: Writes voice data to ROM.
   2) N: Cancels the WRITE function and allows selection of another function.

The selected function is highlighted.

```
            * ROM MODE *

    F1  READ              1   NO. 1  ROM
                          2   NO. 2  ROM
    F2  WRITE             3   NO. 3  ROM
                          4   NO. 4  ROM
    F3  VERIFY
                          NO ?
    F4  ERASE CHECK



    ****·············································································**
```

64 asterisks (*) are displayed first during mode execution
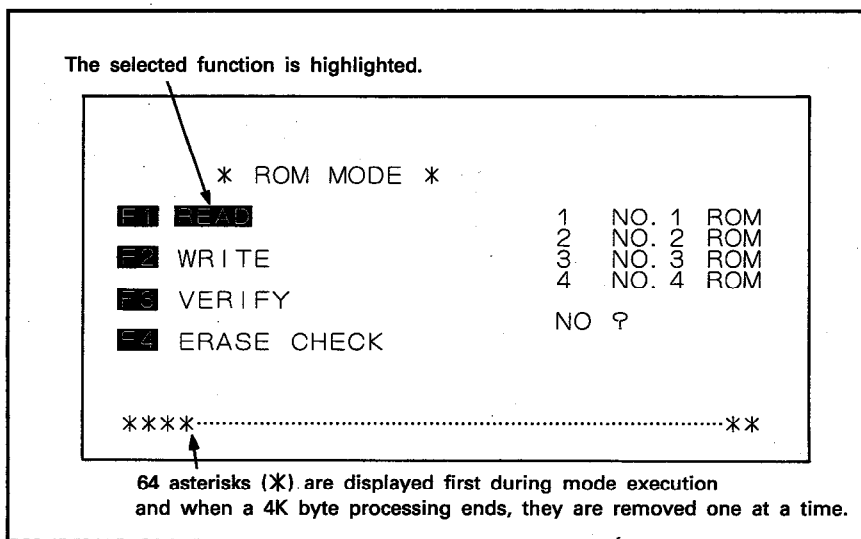and when a 4K byte processing ends, they are removed one at a time.

Fig. 5.1 ROM Mode Screen

(4) "EXECUTING" is displayed in the message column during write execution. "COMPLETED" is displayed in the message column at write completion.

```
F3
```
········ VERIFY (A6GPP ↔ ROM)

(1) Verifies voice data stored in the internal memory of the A6GPP and ROM.

(2) When ⌐ F3 ⌐ is pressed, "VERIFY" is highlighted and the cursor blinks at the right of "NO?" Set the ROM NO. to be verified by keying in ⌐ 1 ⌐ to ⌐ 4 ⌐.

(3) When the ROM No. is set and the ⌐ CR ⌐ key is pressed, "VERIFY OK? (Y/N)" is displayed in the message column. Press either the ⌐ Y ⌐ or ⌐ N ⌐ key.
　1) Y: Verifies voice data stored in the internal memory of the A6GPP and the A11VC.
　2) N: Cancels the VERIFY function and allows selection of another function.

(4) "EXECUTING" is displayed in the message column during verify execution. "COMPLETED" or "VC DATA UNMATCHED" is displayed in the message column at verify completion.
　1) COMPLETED: When A6GPP and ROM voice data match.
　2) VC DATA UNMATCHED: When A6GPP and ROM voice data do not match.

```
F4
```
········ ERASE CHECK

(1) Checks to be sure that nothing is written in the ROM to be used. Be sure to execute erase check before writing voice data to ROM.

(2) When ⌐ F4 ⌐ is pressed, "ERASE CHECK" is highlighted and when the ⌐ CR ⌐ key is pressed, "ERASE CHECK OK? (Y/N)" is displayed in the message column. Press either the ⌐ Y ⌐ or ⌐ N1 ⌐ key.
　1) Y: Erase checks.
　2) N: Cancels the ERASE CHECK function and allows selection of another function.

(3) "EXECUTING" is displayed in the message column during erase check execution. "COMPLETED" or "ROM NOT ERASE" is displayed in the message column at erase check completion.
　1) COMPLETED: When the ROM content has been erased and write enabled.
　2) ROM NOT ERASE: When writing to ROM is disabled due to data having not been written, a loading fault, or a ROM fault. Erase the ROM data or replace it with a new ROM.

5.2 A6HGP/A6PHP and ROM

BASIC OPERATION
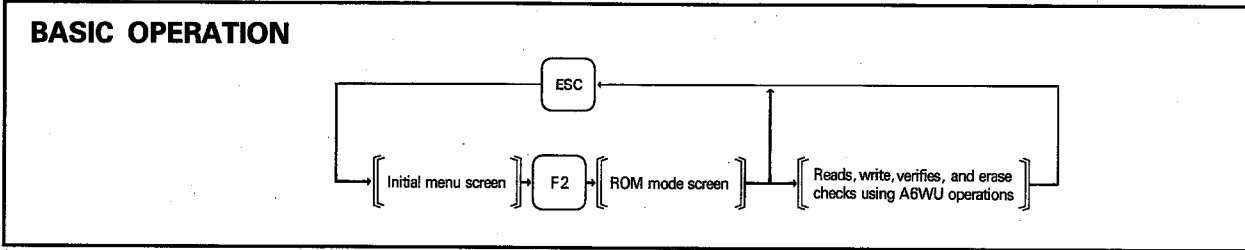
EXPLANATION

(1) Using A6WU operations, the following functions can be executed.
   1) Read:
      Reads the EP-PROM content to the internal memory of the A6HGP/A6PHP.
   2) Write:
      Writes the internal memory content of the A6HGP/A6PHP to the EP-PROM.
   3) Verify:
      Verifies the content of the internal memory of the A6HGP/A6PHP and the EP-PROM.
   4) Erase check:
      Checks to be sure that nothing is written to the EP-PROM to be used.

(2) The A6WU executes in the "OTHER DATA" mode. The address setting range is 10000H to 2FFFFH.

(3) ROM No. and address setting are as follows.

ROM No.	Address Setting Range	Usable ROM
1	10000H to 17FFFH	
2	18000H to 1FFFFH	16KROM
3	20000H to 27FFFH	
4	28000H to 2FFFFH	

(4) When the [ESC] key is pressed, the initial screen returns. The [ESC] key is invalid during execution of communication with the A6WU. If the [ESC] key is pressed during execution of communication with the A6WU, communication is interrupted and the initial screen returns.

(5) The A6HGP/A6PHP ROM mode can be used only for communication with the A6WU. Even if the A6WU is not connected while in the ROM mode, an error message will not be displayed. (If an error occurs during communication between the A6HGP/A6PHP and the A6WU, its error message will be displayed in the A6WU.

```
                  * ROM MODE *
               PLEASE OPERATE A6WU
          NO. 1 ROM   OTHER DATA
                      < ADDRESS 10000 - 17FFF >
          NO. 2 ROM   OTHER DATA
                      < ADDRESS 18000 - 1FFFF >
          NO. 3 ROM   OTHER DATA
                      < ADDRESS 20000 - 27FFF >
          NO. 4 ROM   OTHER DATA
                      < ADDRESS 28000 - 2FFFF >

    WHEN TERMINATE, PRESS <ESC> TO RETURN INITIAL MODE
```

Fig. 5.2 ROM Mode Screen (A6HGP/A6PHP)

6. FDD MODE

The FDD mode is used to display the directory and to read, write, verify, and delete voice data stored on disk between an FD and the internal memory of the GPP.

POINT

(1) Since the internal memory of the GPP is not battery backed, its data will be lost if the GPP power supply is cut or the GPP is reset. Store voice data and each channel's comment read from the A11VC on an FD.

(2) Guide to FD data storage capacity
The usable memory area of an FD(SW0-GPPU) is approximately 640K bytes. The maximum number of file names which can be stored even when data is stuffed is 128.

6.1 File Name Configuration

(1) A file name is required when storing data such as a program on an FD. This is a kind of index of the FD.

(2) The file name configuration consists of the | system name | and the | identifier |.

(3) The system name is set by the user. Alphanumeric characters and the minus key can be used to enter a maximum of 8 characters. (Spaces cannot be used.) Be sure, however, that the first character entered is in English.

(4) The identifier shows the file's identification in the internal memory.

Identifier	Content
AVC	Voice data + each channel's comment

6.2 FDD Mode Screen

The FDD mode screen is shown in Fig. 6.1.

```
* FDD MODE *
■■ DIRECTORY
■■ READ    (COMMENT + VC DATA)
■■ READ    (COMMENT)
■■ WRITE   (COMMENT + VC DATA)
■■ VERIFY  (COMMENT + VC DATA)
■■ DELETE
```

Fig. 6.1 FDD Mode Screen

6.3 Displaying Directory and Reading FD Data

The procedure to display the directory of files stored on FD and to read the file to the GPP internal memory by specifying the file name are explained below.

BASIC OPERATION
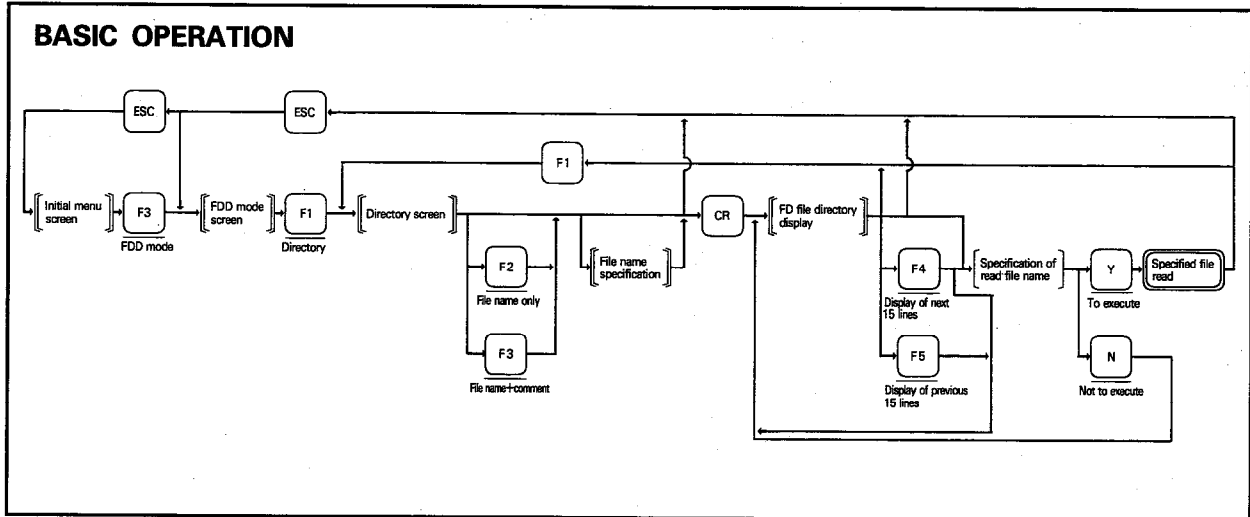
EXPLANATION

Directory

(1) The functions of keys [F1] to [F5] are as follows.

[F1] ·········Terminates currently displayed directory.

[F2] ·········Executes file name, sector number, and the comment directory.

[F3] ·········Executes file name only directory. High-speed search is possible.

[F4] ·········Display of next 15 lines.

[F5] ·········Display of previous 15 lines.

(2) The file names are displayed in 15 lines.

(3) When the file name is not specified in the directory screen, the complete file directory of disk voice data is displayed. ("✳.AVC" is displayed in the file name column when the directory screen is displayed.)

(4) The specified file name only can be displayed by specifying the file name.

POINT

Reading a file where file name is not known accurately

(1) When only the first 3 characters of a full system name (max. 8 characters) in drive B are known and the identifier is voice data:

[SHIFT]

[X] [Y] [Z] [·✳] [·>·] [A] [V] [C] [CR]

All files assigned a file name beginning with "XYZ" and having identifier of voice data are read.

(2) When the system name in drive B is unknown and the identifier is voice data:

[SHIFT]

[·✳] [·>·] [A] [V] [C] [CR]

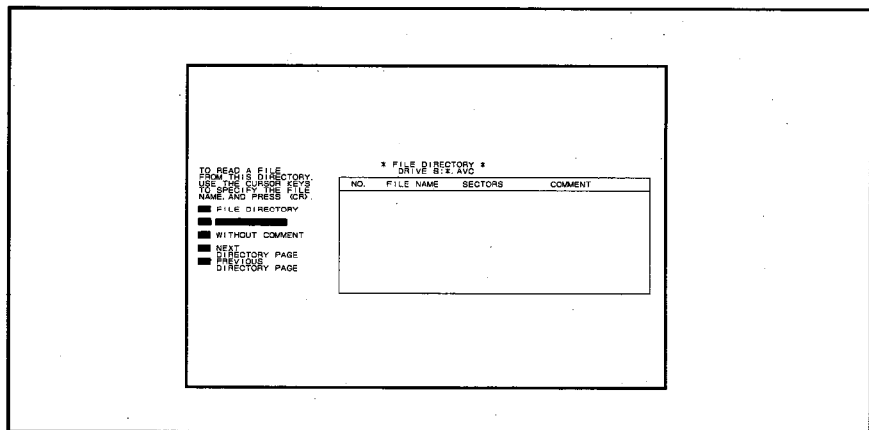All files whose identifier is that of voice data are read with comments.

Fig. 6.2 Directory Screen

```
Voice Data Read
```

(1) Voice data of the specified file name can be read after reading the file names.

(2) When the voice data is read, the comment of each channel is read at the same time. The specified file's comment only can be read by returning to the initial screen.

(3) To read the voice data, use cursor keys (| ↑ | , | ↓ |) to move the cursor to the corresponding line of the file name and press the | CR | key. When the | CR | key is pressed, "READ OK? (Y/N)" is displayed in the message column. Press either the | Y | or | N | key.

　　1) Y: Reads voice data of the cursor specified file

　　2) N: Cancels reading of voice data of the cursor specified file and allows specification of another file name.

```
POINT
```
(1) In voice data read, only the files having "AVC" as an identifier can be read. An OPERATOR ERROR occurs if a file other than "AVC" is specified as the identifier.

6.4 Read, Write, Verify, Delete

This operation reads, writes, verifies, and deletes voice data from the FD by specifying the file name.

BASIC OPERATION
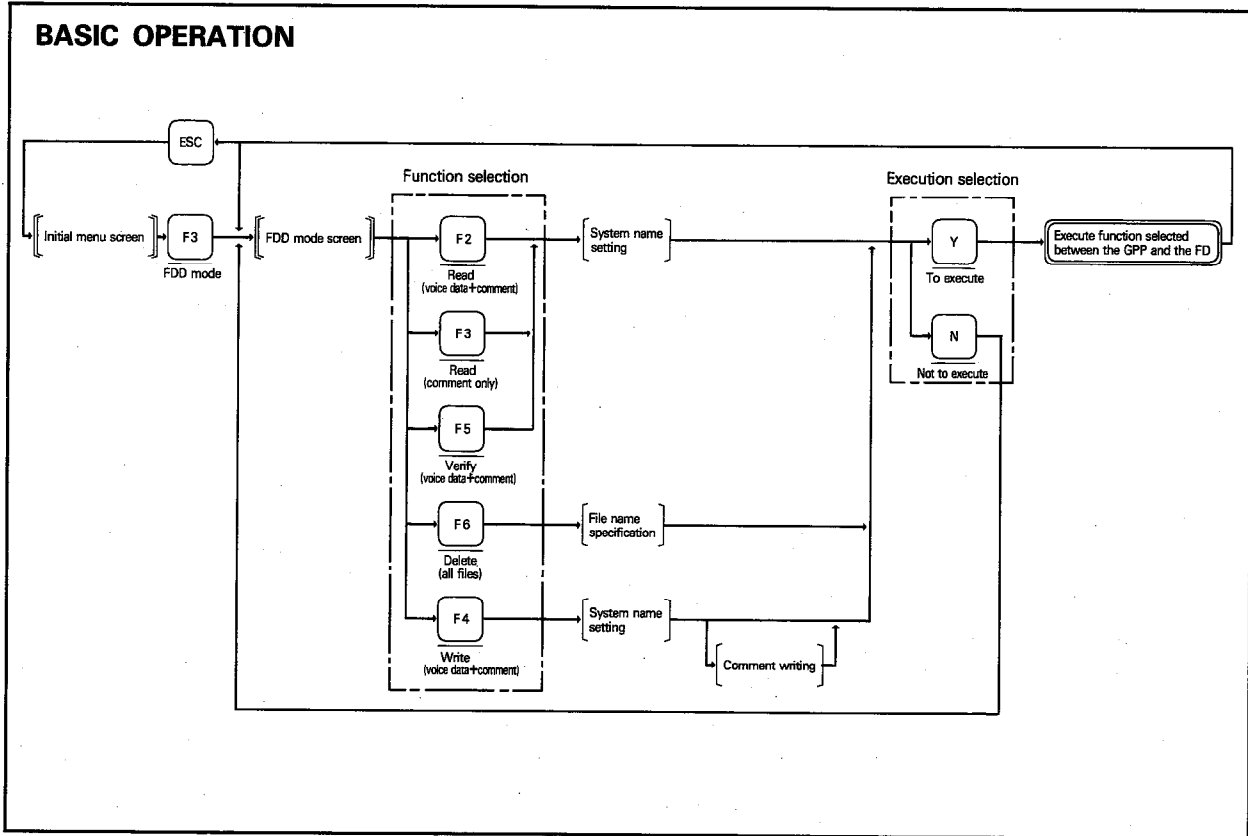
EXPLANATION

| F2 | ········· READ (COMMENT + VC DATA)

(1) Reads voice data of the specified system name and the voice data's comment to the internal memory of the GPP.

(2) When the | F2 | key is pressed, the "FD READ" screen is displayed. Set the system name to be read. When the system name is set and the | CR | key is pressed, "READ OK? (Y/N)" is displayed. Press either the | Y | or | N | key.
1) Y: Reads voice data of the specified system name and the voice data's comment from the FD.
2) N: Allows the system name to be changed.

(3) "EXECUTING" is displayed in the message column during read execution. "COMPLETED" is displayed in the message column at read completion.

| F3 | ········· READ (COMMENT)

(1) Reads only the comment of voice data of the specified system name to the internal memory of the GPP.

(2) When the | F3 | key is pressed, the "FD READ" screen is displayed. Set the system name to be read. When the system name is set and the | CR | key is pressed, "READ OK? (Y/N)" is displayed. Press either the | Y | or | N | key.
1) Y: Reads voice data comment of the specified system name from the disk.
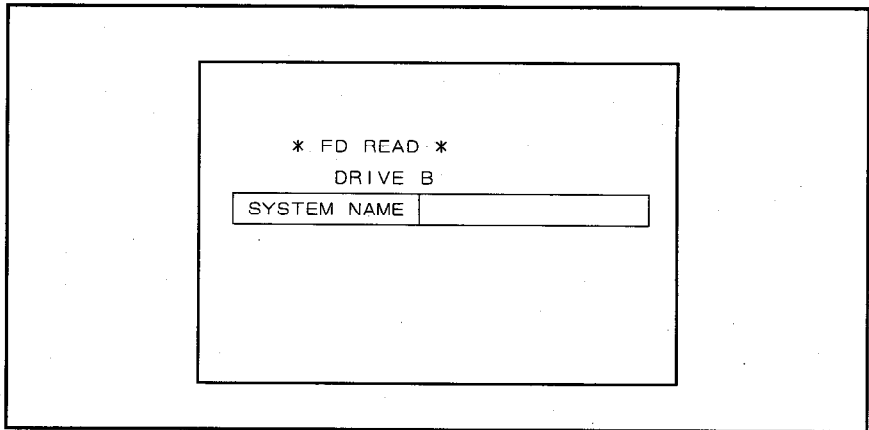2) N: Allows the system name to be changed.

```
┌──────────────────────────────────────────────┐
│  ┌────────────────────────────────────────┐   │
│  │                                        │   │
│  │          * FD READ *                   │   │
│  │            DRIVE B                      │   │
│  │      ┌──────────────┬──────────────┐   │   │
│  │      │ SYSTEM NAME  │              │   │   │
│  │      └──────────────┴──────────────┘   │   │
│  │                                        │   │
│  │                                        │   │
│  │                                        │   │
│  │                                        │   │
│  └────────────────────────────────────────┘   │
└──────────────────────────────────────────────┘
```

Fig. 6.3 Read Screen

[F4] ········· WRITE (VC DATA + COMMENT)

(1) Writes voice data and its comment in the internal memory of the GPP to the FD memory area.

(2) When the [F4] key is pressed, the "FD WRITE" screen is displayed. Set the system name for writing to the FD. When the system name is set and the [CR] key is pressed, the comment column is displayed. The comment can consist of a maximum of 20 characters (alphanumerics, special characters, and upper and lower case characters). When the comment is set, press the [CR] key. If a comment is not necessary, press the [CR] key again when the comment column is displayed. When the [CR] key is pressed, "WRITE OK? (Y/N)" is displayed. Press either the [Y] or [N] key.
   1) Y: Writes voice data and its comment in the internal memory of the GPP to the FD by the specified system name.
   2) N: Allows the system name to be changed.

(3) "EXECUTING" is displayed in the message column during write execution. "COMPLETED" is displayed in the message column at write completion.
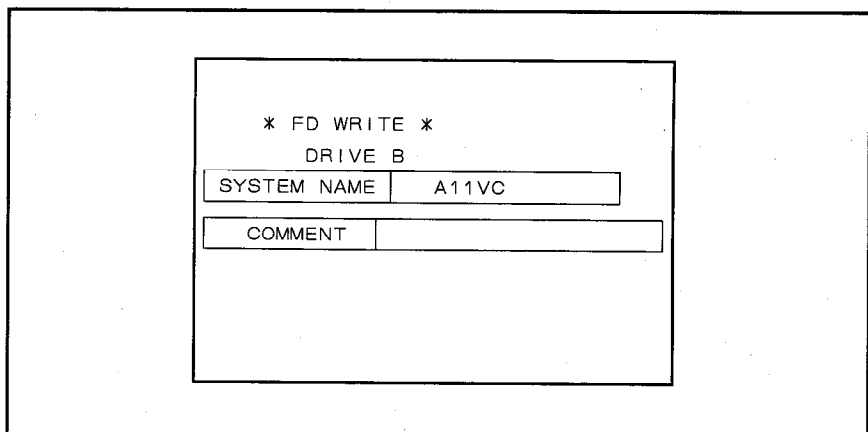
```
┌──────────────────────────────────────────────┐
│  ┌────────────────────────────────────────┐   │
│  │                                        │   │
│  │          * FD WRITE *                  │   │
│  │            DRIVE B                      │   │
│  │      ┌──────────────┬──────────────┐   │   │
│  │      │ SYSTEM NAME  │    A11VC      │   │   │
│  │      └──────────────┴──────────────┘   │   │
│  │      ┌──────────────┬──────────────┐   │   │
│  │      │   COMMENT    │              │   │   │
│  │      └──────────────┴──────────────┘   │   │
│  │                                        │   │
│  │                                        │   │
│  └────────────────────────────────────────┘   │
└──────────────────────────────────────────────┘
```

**Fig. 6.4 Write Screen**

[F5] ········ VERIFY (VC DATA + COMMENT)

(1) Verifies file voice data and its comment in the internal memory of the GPP and the FD.

(2) When the [F5] key is pressed, the "FD VERIFY" screen is displayed. Set the system name to be verified. When the system name is set and the [CR] key is pressed, "VERIFY OK? (Y/N)" is displayed. Press either the [Y] or [N] key.
   1) Y: Verifies file voice data and its comment specified in the internal memory of the GPP and the FD.
   2) N: Allows the system name to be changed.

(3) "EXECUTING" is displayed in the message column during verify execution. "COMPLETED", "VC DATA UNMATCHED" or "COMMENT DATA UNMATCH-ED" is displayed in the message column at verify completion.
   1) COMPLETED:
      When voice data and its comment in the internal memory of the GPP and FD match.
   2) VC DATA UNMATCHED:
      When voice data in the internal memory of the GPP and the FD does not match.
   3) COMMENT DATA UNMATCHED:
      When voice data comments in the internal memory of the GPP and the FD do not match.

[F6] ········ DELETE

(1) Deletes unnecessary disk files.

(2) When the [F5] key is pressed, the "FILE DELETE" screen is displayed. Set the file name to be deleted (system name + identifier). When the file name is set and the [CR] key is pressed, "DELETE OK? (Y/N)" is displayed. Press either the [Y] or [N] key.
   1) Y: Deletes the specified file name from the disk.
   2) N: Allows the file name to be changed.

(3) "EXECUTING" is displayed in the message column during delete execution. "COMPLETED" is displayed in the message column at delete completion.

7. COMMENT MODE

This mode is used to enter and display the comment of each channel recorded in the A11VC.

BASIC OPERATION
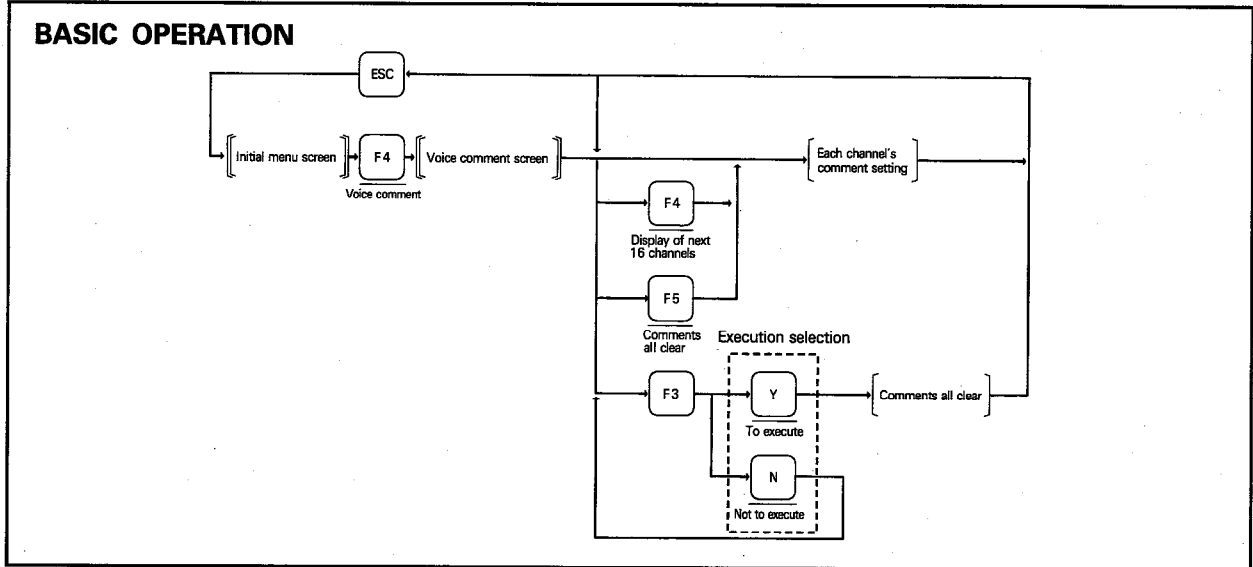
EXPLANATION

(1) Displays the record time of each voice data channel read from the A11VC. Comments (voice data comments) can be added to displayed channels.

(2) Record times and comments for 16 channels are displayed on the voice comment screen. When the [F4] key is pressed, the next 16 lines are displayed; when the [F5] key is pressed, the previous 16 lines are displayed.

(3) When the voice comment screen is displayed, the cursor is displayed at the upper left of the comment column. Comments can be written at the cursor. When the [CR] key is pressed, the cursor moves to the left of the next line.

(4) Voice comments are as follows.
Number of characters: 50 max.
Usable characters: Alphanumeric (upper and lower case), special symbols

(5) The written voice comment is written to the FD added to its voice data. Voice comments cannot be written to the A11VC or 16K ROM.

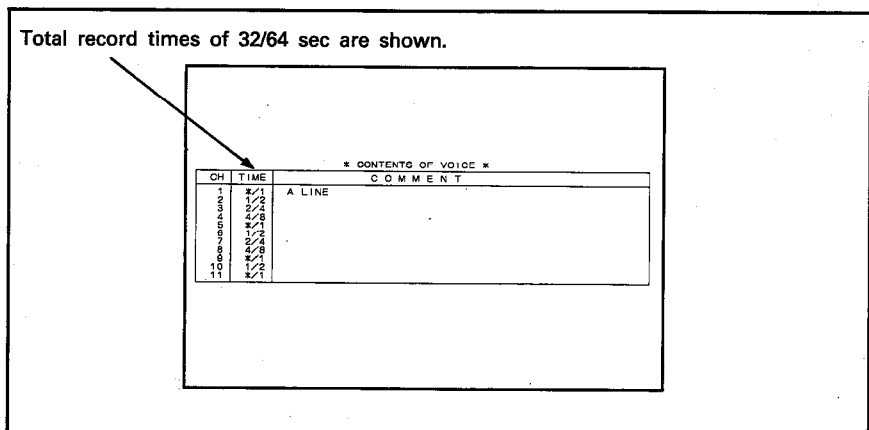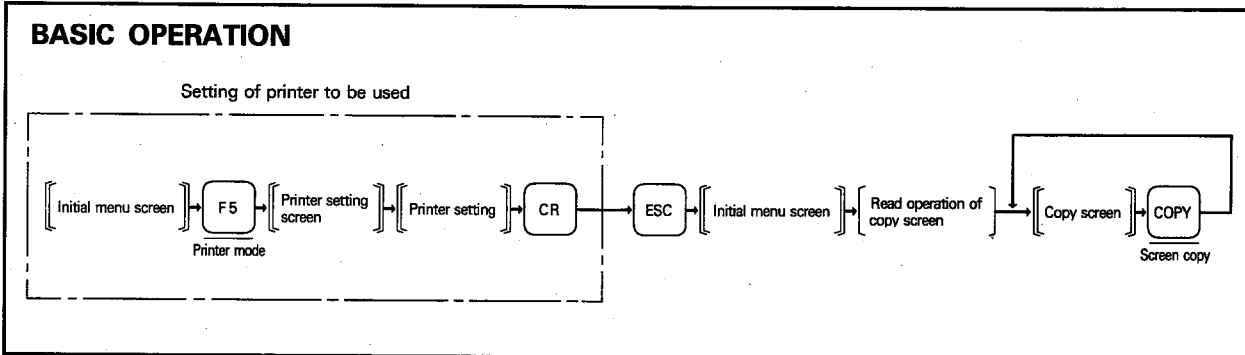(6) When the [F3] key is pressed, all comments can be cleared.

Fig. 7.1 Voice Comment Screen

8. PRINTER MODE

This mode is used to print out the display screen.

BASIC OPERATION

Setting of printer to be used

EXPLANATION

(1) The type of printer to be used must be entered in the internal memory of the GPP when executing a screen copy. Use the printer mode to enter the printer type.

(2) To set the printer, use the cursor keys ([↑], [↓]) to move the cursor to the line of the corresponding printer and press the [CR] key.

(3) The printer setting when the GPP power supply is turned ON or the GPP is reset is K6PR (Pica).

(4) After entering the printer type in the internal memory of the GPP, the display screen can be printed out by pressing the [COPY] key.
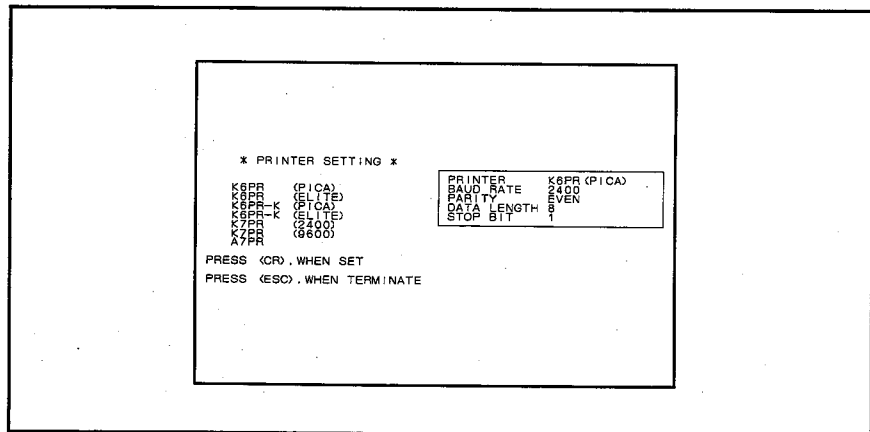

Fig. 8.1 Printer Mode Screen

POINT

(1) Print out the display screen after setting the printer to be used. Normal print out cannot be executed if the [COPY] key is pressed without setting the printer to be used.

(2) If the [CR] key is pressed during screen copy execution using the [COPY] key, screen copy execution can be canceled. The [CR] key is invalid, however, when
1) the GPP and printer are disconnected,
2) the printer's power supply is OFF,
3) the printer's [SEL] switch is OFF, or
4) there is no printer paper.

9. MESSAGE LIST

Messages and error messages displayed on screen are summarized in lists. Messages and error messages at the time of the system start-up, however, are not included.

9.1 Message List

Messages displayed on screen are shown below.

No.	Display	Definition
1	COMPLETED	Displayed when the execution of the selected function has been completed correctly.
2	DELETE OK? (Y/N)	Delete function's execution verification message Y: Executes delete function. N: Cancels delete function selection.
3	ERASE CHECK OK? (Y/N)	ROM erase check execution verification message Y: Executes erase check. N: Cancels erase check selection.
4	EXECUTING	Displayed during execution of selected function.
5	READ OK? (Y/N)	Read function execution verification message. Y: Executes read function. N: Cancels read function selection.
6	VERIFY OK? (Y/N)	Verify function execution verification message. Y: Executes verify function. N: Cancels verify function selection.
7	WRITE OK? (Y/N)	Write function execution verification message. Y: Executes write function. N: Cancels write function selection.

Table 9.1 Message List

9

9.2 Error Messages

Error messages displayed on screen are shown below.

No.	Display	Definition	Corrective Action
1	COMMENT DATA UNMATCHED	Voice comment data does not match during verification.	Match the data of either the GPP or the FD.
2	FILE MISSING	The specified file name cannot be found on the FD.	Read the directory and check for the file name.
3	FILE NAME ERROR	An invalid file name has been set during FD delete or directory operations.	Specify the correct name.
4	FLOPPY ERROR	No FD in accessed drive.	A6GPP: Insert FD or change the drive. A6HGP/A6PHP: Insert FD.
4	FLOPPY ERROR	FD is defective.	Change FD.
5	OPERATOR ERROR	An invalid key has been pressed.	Check operation.
5	OPERATOR ERROR	Incorrect operation.	Execute the correct operation.
6	ROM NOT ERASED	Data has been written to non-erased ROM.	Erase ROM content or exchange for new ROM.
6	ROM NOT ERASED	Erase check of non-erased ROM has been executed.	Erase ROM content or exchange for new ROM.
7	SYSTEM NAME ALRADY USED. OVERWRITE OK? (Y/N)	The destination system name used for write has already been used on the FD.	Press either the Y or N key. Y: To overwrite the same system name. N: To change the system name
8	SYSTEM NAME ERROR	An invalid system name has been set at write, read or verify to the FD.	Set a correct name.
9	VC COMMUNICATION ERROR	The PC power supply is OFF.	Turn the PC power supply ON.
9	VC COMMUNICATION ERROR	A cable or cable connection is faulty.	Confirm existence of cable and re-insert or exchange for new cable.
9	VC COMMUNICATION ERROR	The A11VC is at record enabled condition or is replaying.	Re-execute GPP operations after the A11VC's record or play has terminated.
10	VC DATA UNMATCHED	Voice data does not match during verification.	Match the data of either the GPP or the FD.
11	WRITE-IN ERROR	The "M.PRO" switch is ON.	Turn the "M.PRO" switch OFF.
11	WRITE-IN ERROR	The memory setting pin's jumper is not set or is set in the ROM position.	Set the memory setting pin's jumper in the RAM position.
11	WRITE-IN ERROR	Memory is not loaded into the memory socket or ROM is loaded.	Load 4 16K RAM chips into the memory socket.
11	WRITE-IN ERROR	Write to the A11VC has been executed even though there is no voice data in the GPP.	Write to the A11VC after reading voice data to the GPP.
12	WRITE PROTECT	Write has been executed even though the FD is write protected.	Write enable the FD.

Table 9.2 Error Message List

APPENDIX

Appendix 1 Processing Time

Table 1 shows each A11VCP mode's processing time.

Mode		Read	Write	Verify	Delete	Erase Check
VC mode		6 min. 25 sec	6 min. 42 sec	6 min. 25 sec	———	———
ROM mode	A6GPP	2 sec	2 min. 20 sec	2 sec	———	2 sec
	A6HGP/A6PHP	58 sec	3 min. 20 sec	1 min.	———	13 sec
FDD mode		Comment + voice data: 25 sec Comment only: 4 sec	50 sec	30 sec	5 sec	———

Table 1 Processing Time List

type SW0GHP-A11VCP
Operating Manual

MODEL	SW0GHP-A11VCPE-OPERATION
MODEL CODE	13J714
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