NEOGEO POCKET

SYSTEM WORK REFERENCE MANUAL

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PREFACE

Materials covered in this manual are based on the NEOGEO POCKET production version. Please understand that with system program version updates, the reference manual material will change.

SYSTEM WORK DEFINITION

EQU definitions of the system work and bit flag are listed in the header file "SYSTEM.INC."

Battery_Voltage

monochrome	O	color	O

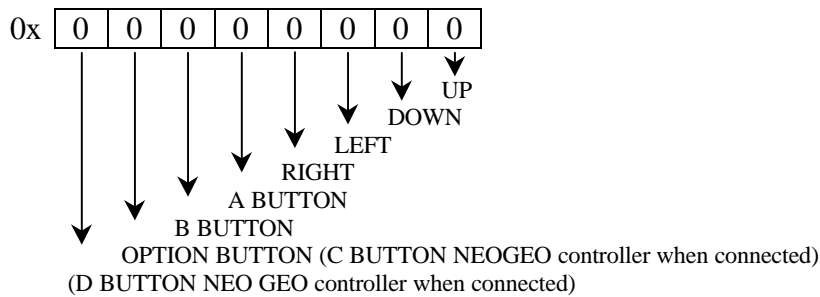|	
Address:	**0x6f80**
Length:	**word**
Attribute:	**Read Only**

This work contains the voltage of the main battery measured periodically by the system. The value range is 0H~3FFH.

Sys_Lever

monochrome	O	color	O

Address:	**0x6f82**
Length:	**byte**
Attribute:	**Read Only**

This work contains the "chattering" filtered "Lever" inputs. Each bit has the following information:

```
0x  0  0  0  0  0  0  0  0
                        |
                        UP
                     DOWN
                  LEFT
               RIGHT
            A BUTTON
         B BUTTON
      OPTION BUTTON (C BUTTON NEOGEO controller when connected)
   (D BUTTON NEO GEO controller when connected)
```

Language

monochrome	O	color	O

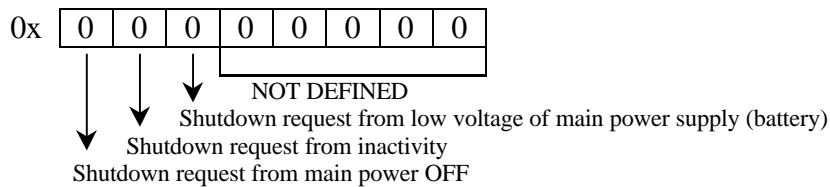|	
Address:	**0x6f87**
Length:	**byte**
Attribute:	**Read Only**

It stores the language code chosen. Currently, 0 is for Japanese and 1 is for English.

User_Shutdown

monochrome	O	color	O

> **Address:** **0x6f85**
> **Length:** **byte**
> **Attribute:** **Read Only**

This is the bit flag work to request the user for shutdown.
Power ON/OFF operation of the NEOGEO POCKET is managed by the system. Please check these shutdown request bits to initiate shutdown quickly if the request arises.
Please use the system call VECT_SHUTDOWN for shutdown operation.
Currently, the upper 3 bits are used. Since it is possible that lower bits may be used for other designations, please initiate shutdown if any of these bits are 1.

0x | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

NOT DEFINED
Shutdown request from low voltage of main power supply (battery)
Shutdown request from inactivity
Shutdown request from main power OFF

Main Power OFF Shutdown Request
> Bit Equation: MP_SHUTDOWN_REQ
>
> This request arises when the main power is turned OFF through the use of the power switch. This bit is checked by the system and shutdown is initiated. The system is shutdown before the user can evaluate the bit.

Inactivity Shutdown Request
> Bit Equation: TIME_SHUTDOWN_REQ
>
> This request arises from prolonged inactivity (i.e. No inputs from the control panel). If the bit is not set in the User_Answer (defined later) work , the request is not generated. Currently, ten minutes of inactivity warrants shutdown.
> If the request arises, please prepare for shutdown and use the system call
> VECT_SHUTDOWN.

Low Voltage Shutdown Request
> Bit Equation: BAT_SHUTDOWN_REQ
>
> This request arises when the battery voltage falls and system operation is affected.
> Please be aware that if this request is continually ignored and the voltage continues to fall, the system will shut itself down.
> If the request arises, please prepare for shutdown and use the system call
> VECT_SHUTDOWN.

User_Boot

monochrome	O	color	O

Address:	**0x6f84**
Length:	**byte**
Attribute:	**Read Only**

This is the bit flag work which stores the startup status.
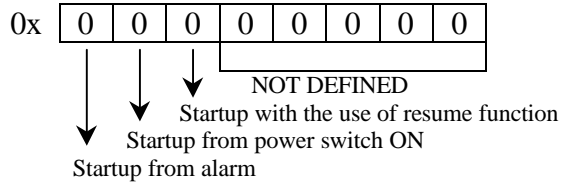
Alarm Startup

Bit Equation: ALARM_BOOT_REQ

Designates that startup was initiated by the alarm interrupt.
This bit is set only when the system starts up after the user sets the alarm interrupt
by using the system call "VECT_ALARMDOWNSET."

Power ON Startup

Bit Equation: POWER_BOOT_REQ

Designates normal power switch ON startup.

Resume Function Startup

Bit Equation: RESUME_BOOT_REQ

An area of the work RAM (0x4000 ~ 0x5FFF) is saved with data before the last
shutdown. There are several conditions that need to be met before this startup can
occur properly.

· The startup software is the same as the software which requested the resume startup (by
setting the proper value in the User_Answer work) the last time the power was turned
OFF.
· No other software or internal system software (excluding system daily alarm) was run. If
another software was run, the data in the work RAM is destroyed and the RAM data is
not preserved.
· The battery and the lithium battery have the required voltage, and data in the work RAM
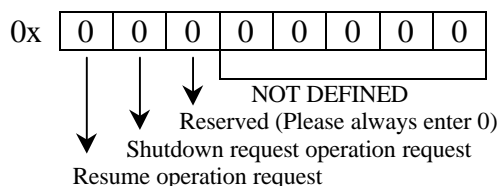may be saved during power OFF.

During resume startup, the system "eye catch" is not displayed and the user software
is immediately started up. Please be aware that the possibility of both this bit and the
alarm startup bit being ON simultaneously exists. This resume function only saves
the RAM data as is. There is a necessity for the user software to verify the validity of
the data by check sum and other methods.

User_Answer

monochrome	O	color	O

Address: **0x6f86**
Length: **Byte**
Attribute: **Read / Write**

This is the bit flag work for requests to the system from the user.

0x | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0

NOT DEFINED
Reserved (Please always enter 0)
Shutdown request operation request
Resume operation request

Resume Operation

Bit Equation: RESUME_ANS

Specifies the use or non-use of the resume function. Setting the bit to 1 specifies the use of the resume function.

If resume function is used, an area of the work RAM (0x4000 ~ 0x5FFF) is saved at the time power is turned OFF. If the same game software as the one which set the bit for this function is inserted into the unit, the next time the power is turned on the game program starts without displaying the system "eye catch."

If the resume function is used, please check the resume startup bit of the User_Boot, verify the validity of the saved data, and run the necessary operations for resuming the game.

Shutdown Request Operation

Bit Equation: TIMER_SHUTDOWN_ANS

Specifies whether shutdown requests are generated or not from the system with prolonged inactivity (10 minutes of no input from the control panel). Setting the bit to 1 turns the request generation ON.

ALWAYS set this bit in the user program as possible.

OS_Version

monochrome	O	color	O

Address: **0x6f91**
Length: **Byte**
Attribute: **Read Only**

Contains the version information of the NEOGEO POCKET system program.

  Less than 0x10 … NEOGEO POCKET system program monochrome LCD version
  More than and including 0x10 …NEOGEO POCKET system program color LCD version

Please do not compare the OS_Version value to be the same as 0x00, but as less than (or more than and including) 0x10.

REVISION HISTORY

rel 0.1	Initial release	1998/05/18
rel 0.2	Modified	1998/07/15
rel 0.3	Resume function added (ES1C version)	1998/07/27
rel 0.8	Preface modified "Language" explanation modified "TIME_SHUTDOWN_REQ" modified "User_Answer" explanation modified	1998/08/20
rel 0.9	"OS_Version" added	1998/09/25
rel 1.0	Monochrome/color use/not usable mark added	1998/10/26