SETTING THE ON-SCREEN PROGRAMMING LANGUAGE AND CLOCK

Use the remote control to select the language and set the clock.

NOTE: Set the clock accurately for proper automatic timer and quick timer
       recording. We suggest you refer to a TV or radio station to obtain
       the correct time.

In the following example, the language is set to English and the clock is
set to 9:30 PM, March 7, 1993.

1. Press VCR on the remote control.

2. Press POWER to turn on the VCR.

3. Turn on your TV and set it to the same channel as the VCR's CHANNEL
    3/4 switch located on the back of the VCR. Then press TV/VCR on the
    remote control so VCR appears on the VCR's display. The TV screen
    shows a blue display if you have not yet selected a channel.

NOTE: If you have connected Model 99 to A/V inputs, set your TV to the
       video mode.

4. Press PROGRAM on the remote control.

    a. If you have just plugged in the
        VCR but have not yet set the
        clock, the language setting
        mode automatically appears on
        the TV screen.

```
| LANGUAGE/CLOCK    |
|   1.  ENGLISH     |
|   2.  FRANCAIS    |
|   3.  ESPANOL     |
```
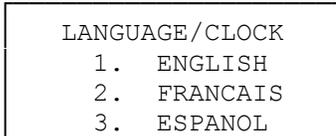
    b. If you have already set the clock
        since plugging in the VCR, the
        menu display appears on the TV
        screen. Press 1 to enter the
        language and clock setting mode.

```
|        MENU           |
| 1.  LANGUAGE/CLOCK    |
| 2.  TIMER SETTING     |
|     PROGRAM CHECK/CLEAR|
| 4.  VCR SETUP         |
```
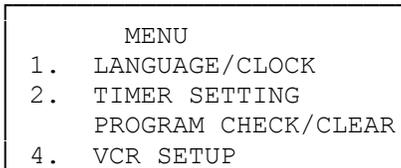
5. Select the on-screen instruction language: Press 1 for English, 2 for
    French, or 3 for Spanish. (Press 1 for English, for example.)

    a. If you have just plugged in the
        VCR but have not yet set the
        clock, the STANDARD/DAYLIGHT time
        selecting mode automatically
        appears on the TV screen. Press 1
        to select standard time or 2 to
        select daylight saving time.

```
| LANGUAGE/CLOCK    |
|                   |
|    STANDARD       |
|    DAYLIGHT       |
```

    b. If you have already set the clock
        since plugging in the VCR, the
        time setting mode automatically
        appears on the TV screen.

```
| LANGUAGE/CLOCK    |
|   TIME --:-- —    |
```
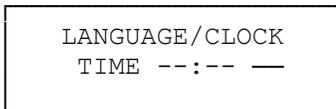
6. When the hour and minute indicators

```
    flash, press the remote control's     | +---------------------+
    number buttons to set the correct hour |  LANGUAGE/CLOCK     |
    and minute.  (Press 0 9 3 0 to set 9:30,|  TIME 09:30        |
    for example.)                          |    AM=1    PM=2     |
                                           | [CLEAR] - TO CORRECT|
                                           | [PROGRAM] - END     |
                                           +---------------------+
```

NOTE: You must precede a single-digit entry with 0. If you press a wrong
        number button, press CLEAR and then press the correct button.

7. Press 1 to select AM to 2 to select
    PM. Your VCR uses a 12-hour clock.

```
    +---------------------+
    |  LANGUAGE/CLOCK     |
    |  TIME 09:30 PM      |
    |  DATE --/--/--      |
    +---------------------+
```

8. When the date indicators flash, press
    the number buttons to set the correct
    date. (Press 0 3 0 7 9 3 to set March
    7, 1993, for example.)

```
    +---------------------+
    |  LANGUAGE/CLOCK     |
    |  TIME 09:30 PM      |
    |  DATE 03/07/94 (SUN)|
    | [CLEAR] - TO CORRECT|
    | [PROGRAM] - END     |
    +---------------------+
```

    When you enter the date, the corresponding day of the week appears.

9. Review the entered information.

    If the information is not correct, press CLEAR as necessary to erase
    the wrong information. The positions you clear flash. Then enter the
    correct information.

    When the information is correct, press PROGRAM. The clock-setting
    display disappears, and the VCR display changes to the correct clock
    display.

NOTES: If you enter an invalid date or time (13:00, for example), ?
        flashes. Press CLEAR, then enter the correct date or time.

        Seconds begin counting at 00 when you press PROGRAM after setting
        the date.

Memory Sentinel

Your VCR has a special memory sentinel feature that protects clock
settings, tuner programming information, and timer memory settings by
providing up to 1 hour of back up power in case a power failure occurs of
if the power cord becomes unplugged. After about 1 hour without power,
the VCR loses all timer memory settings.

Adjusting Standard/Daylight Saving Time

You can switch the clock to daylight saving time (add one hour) or
standard time (subtract one hour).

1. Press VCR on the remote control.

2. Press PROGRAM. The menu display appears on the TV screen.

3. Press 4 to select the VCR SETUP menu.

4. Press 0. The display changes to DAYLIGHT (or STANDARD) and one hour
    is added to (or subtracted from) the current time.

5. Press PROGRAM to exit the menu. The menu display reappears.

6. Press PROGRAM again to exit the menu display.

PROGRAMMING THE TUNER'S MEMORY

You can program the tuner's memory so when you press CHANNEL/TRACKING
(CHANNEL on the VCR) \/ or /\, the VCR's tuner scans only the active
channels in your area.

1. Press VCR on the remote control.

2. Press PROGRAM on the remote control.
    The menu display appears on the TV
    screen.

```
+----------------------------+
|           MENU             |
| 1.  LANGUAGE/CLOCK         |
| 2.  TIMER SETTING          |
|     PROGRAM CHECK/CLEAR     |
| 4.  VCR SETUP              |
+----------------------------+
```

3. Press 4 to select the VCR SETUP menu.

```
+----------------------------+
| 0.  TIME:  STANDARD        |
| 1.  AUTO CH MEMORY         |
| 2.  ADD/ERASE CHANNEL      |
| 3.  TV/CATV:  CATV         |
| 4.  TRACKING:  AUTO        |
+----------------------------+
```

4. Press 3 to select CATV or TV.

    If you have cable service and the
    cable wire is connected directly to
    the VCR without a cable box, select
    CATV. C appears on the VCR's
    display.

```
+----------------------------+
| 0.  TIME:  DAYLIGHT        |
| 1.  AUTO CH MEMORY         |
| 2.  ADD/ERASE CHANNEL      |
| 3.  TV/CATV:  TV           |
| 4.  TRACKING:  AUTO        |
+----------------------------+
```

    If you have cable service and use a
    cable box between the cable wire and
    the VCR, or if you do not have
    service and want to receive up to 68
    VHF/UHF channels, select TV. C does
    not appear on the VCR's display.

5. Press 1 to program the tuner's memory.
    The tuner scans through the channels,
    starting with antenna broadcasts all
    the way through the CATV channels, and
    memorizes all the active channels in
    your area. After scanning all the
    channels, the tuner stops on the
    lowest-numbered active channel.

```
+----------------------------+
|                        01  |
|    AUTO CH MEMORY          |
+----------------------------+
```

6. Press CHANNEL/TRACKING (CHANNEL on the VCR \/ or /\ to check the
    memory's contents.

NOTE: If the AC cord is unplugged or a power failure occurs for more than
       about 1 hour, the tuner will lose the information in memory.

Adding or Deleting a Channel

If the tuner stores a channel that you do not want or misses a weak
channel that you do want, follow these steps to manually add or delete the
channel.

1. Press VCR on the remote control.

2. Press PROGRAM on the remote control.
    The menu display appears on the TV
    screen.

```
              MENU
    1.  LANGUAGE/CLOCK
    2.  TIMER SETTING
        PROGRAM CHECK/CLEAR
    4.  VCR SETUP
```

3. Press 4 to select the VCR SETUP
    menu.

```
    0.  TIME:  STANDARD
    1.  AUTO CH MEMORY
    2.  ADD/ERASE CHANNEL
    3.  TV/CATV:  CATV
    4.  TRACKING:  AUTO
```

4. Press 2 to select ADD/ERASE CHANNEL.

```
                    C 01
                    ADDED
      SELECT CHANNEL
    [SET] - ADD
    [CLEAR] - ERASE
    [PROGRAM] - END
```

5. Use the remote control's number buttons to enter the channel number
    you want to add or erase. (You can use CHANNEL/TRACKING \/ or /\ to
    display the channel to erase.) If the channel is stored in memory,
    ADDED appears below the channel number. If it is not stored in
    memory, ERASED appears below the channel number.

NOTE: If you enter a channel that is not available on broadcast, F
       appears on the TV and VCR display.

6. To add the channel, press SET on the remote control. ERASED changes
    to ADDED.

    To erase the channel, press CLEAR on the remote control, ADDED changes
    to ERASED.

7. Press PROGRAM to exit the menu. The
    menu display appears.

```
              MENU
    1.  LANGUAGE/CLOCK
    2.  TIMER SETTING
        PROGRAM CHECK/CLEAR
    4.  VCR SETUP
```

8. Press PROGRAM again to exit the menu display.

NOTE: With the remote control's number buttons, you can directly select
       channels that are not programmed in the tuner's memory.

CHANNEL SELECTION

You can select channels two ways: scanning and direct.

To manually scan for a channel, press CHANNEL/TRACKING (CHANNEL on the
VCR) \/ or /\. The tuner automatically advances to the next programmed
channel in the direction of the button's arrow.

NOTE: If you press CHANNEL/TRACKING (CHANNEL on the VCR) /\ when the
       tuner is at the highest programmed channel, the tuner returns to
       the lowest programmed channel. If you press CHANNEL/TRACKING
       (CHANNEL on the VCR) \/ when the tuner is at the lowest programmed
       channel, the tuner returns to the highest programmed channel.

To automatically scan all channels, press CH SCAN on the remote control
once. The tuner scans the channels stored in the tuner's memory, stopping
on each channel for about two seconds.

To stop auto-scanning, press CH SCAN again when the desired channel is
displayed. After the tuner stops on all the stored channels, auto
scanning stops.

To directly select a channel, press the remote control's number buttons
or the desired channel. You must precede one-digit channel numbers with
0 (01, 02, 03, and so on). For three-digit channel numbers, press
100/ENTER. Then, enter the second and third digits in the channel number.

NOTE: If you enter a valid but inactive channel number, F briefly appears
       in the upper right corner of the display.

CABLE CHANNEL DESIGNATIONS

Your VCR can receive up to 111 cable channels. The VCR displays the
channels as 1-125.

Channels 2-13 are the same for VHF and cable TV, and cable companies
usually number them as they appear on the display.

However, cable companies often designate other cable channels with letters
or letter-number combinations. The following chart shows common cable
channel designations.

Alternate Channel Designations	VCR Tuner Display	Alternate Channel Designations	VCR Tuner Display
Mid-Band Channels		Hyper-Band Channels	
A	14	W+1	37
B	15	W+2	38
C	16	W+3	39
D	17	W+4	40
E	18	W+5	41
F	19	*	*

```
G                 20          through            through
H                 21             *                  *
I                 22          W+58                94
                             W+59                100
    Super-Band Channels        *                  *
                             through            through
J                 23             *                  *
K                 24          W+84                125
L                 25
M                 26
N                 27          VHF Low-Band Channels
O                 28
P                 29          4A or A8            01
Q                 30          5A or A7            05
R                 31          6A or A6            06
S                 32
T                 33          Mid Low-Band Channels
U                 34          A-3                 97
V                 35          A-2                 98
W                 36          A-1                 99
```

For more information, contact your cable company. You still might have to
experiment to determine the proper cable channel designations for your
cable system.

(ALL-11/10/94)