General Note:

"CBA" is abbreviation for "Circuit Board Assembly."

NOTE:

Electrical adjustments are required after replacing circuit components and certain mechanical parts. It is important to perform these adjustments only after all repairs and replacements have been completed. Also, do not attempt these adjustments unless the proper equipment is available.

Test Equipment Required

- 1. DC Voltmeter
- 2. Pattern Generator
- 3. Color Analyzer

How to Set up the Service mode:

- 1. Turn the power on. (Use main power on the TV unit.)
- 2. Press [STANDBY], [2], [7], [1], and [MUTE] buttons on the remote control unit in that order within 5 seconds.
- To cancel the service mode, press [STANDBY] button on the remote control.

1. Initial Setting

General

Enter the Service mode.

Set the each initial data as shown on table 1 below.

Table 1: Initial Data

$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	ITEM	BUTTON (on the remote	DATA VALUE
$ \begin{array}{c c} {\rm CNT(PAL)} \\ {\rm CLR-R(PAL)} \\ {\rm CLR-B(PAL)} \\ {\rm SHR(PAL)} \\ {\rm S-BRT(PAL)} \\ {\rm S-BRT(PAL)} \\ {\rm S-CRT(PAL)} \\ {\rm S-CR-R(PAL)} \\ {\rm S-CLR-R(PAL)} \\ {\rm S-CLR-R(PAL)} \\ {\rm S-CLR-R(PAL)} \\ {\rm S-SHR(PAL)} \\ {\rm C-SRT(PAL)} \\ {\rm C-CR-R(PAL)} \\ {\rm C-CR-R(PAL)} \\ {\rm C-CR-R(PAL)} \\ {\rm C-CLR-R(PAL)} \\ {\rm C-CLR-R(SECAM)} \\ {\rm C-CLR-R(SECAM)} \\ {\rm C-LR-R(SECAM)} \\ {\rm S-BRT(SECAM)} \\ {\rm S-BRT(SECAM)} \\ {\rm S-SHR(SECAM)} \\ {\rm S-SHR(SECAM)} \\ {\rm S-CLR-R(SECAM)} \\ {\rm S-CLR-R(SECAM)} \\ {\rm S-CLR-R(SECAM)} \\ {\rm S-CLR-R(SECAM)} \\ {\rm MENU} \rightarrow 4 \\ {\rm 70} \\ {\rm S-SHR(SECAM)} \\ {\rm MENU} \rightarrow 4 \\ {\rm 70} \\ {\rm S-S-RR(SECAM)} \\ {\rm MENU} \rightarrow 5 \\ {\rm 70} \\ {\rm S-S-RR(SECAM)} \\ {\rm MENU} \rightarrow 5 \\ {\rm 70} \\ {\rm S-SHR(SECAM)} \\ {\rm 143} \\ {\rm C-CNT(SECAM)} \\ {\rm 143} \\ {\rm C-CR-R(SECAM)} \\ {\rm MENU} \rightarrow 6 \\ {\rm 120} \\ {\rm C-CLR-R(SECAM)} \\ {\rm 143} \\ {\rm BRT(NTSC)} \\ {\rm C-SHR(SECAM)} \\ {\rm MENU} \rightarrow 6 \\ {\rm 120} \\ {\rm C-SHR(SECAM)} \\ {\rm 143} \\ {\rm BRT(NTSC)} \\ {\rm C-R-R(SECAM)} \\ {\rm MENU} \rightarrow 7 \\ {\rm 77} \\ {\rm TNT(NTSC)} \\ {\rm 128} \\ {\rm C-R-R(NTSC)} \\ {\rm 128} \\ {\rm S-CNT(NTSC)} \\ {\rm 128} \\ {\rm S-CNT(NTSC)} \\ {\rm 120} \\ {\rm S-RRT(NTSC)} \\ {\rm 128} \\ {\rm S-CLR-R(NTSC)} \\ {\rm 128} \\ {\rm 3138} \\ {\rm S-CLR-R(NTSC)} \\ {\rm 128} \\ {\rm 3138} \\ {\rm S-CLR-R(NTSC)} \\ {\rm 128} \\ {\rm 328} \\ {\rm 320} \\ {\rm 32$		control)	
$\begin{array}{c c} \mbox{CLR-R(PAL)} & \mbox{MENU} \rightarrow 1 & \begin{tabular}{ c c c c c } & \mbox{MENU} \rightarrow 1 & \begin{tabular}{ c c c c } & \begin{tabular}{ c c c c } & \mbox{MENU} & \begin{tabular}{ c c c c } & \begin{tabular}{ c c c c c } & \begin{tabular}{ c c c c c c c } & \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	· · · · ·		
$\begin{array}{c c} \mbox{CLR-B(PAL)} & 70 \\ \mbox{SHR(PAL)} & 143 \\ \mbox{S-BRT(PAL)} & 133 \\ \mbox{S-CNT(PAL)} & 140 \\ \mbox{S-CLR-R(PAL)} & 140 \\ \mbox{S-CLR-B(PAL)} & 70 \\ \mbox{S-SHR(PAL)} & 143 \\ \mbox{C-BRT(PAL)} & 128 \\ \mbox{C-CNT(PAL)} & 128 \\ \mbox{C-CLR-R(PAL)} & 120 \\ \mbox{C-CLR-B(PAL)} & 120 \\ \mbox{C-CLR-B(PAL)} & 120 \\ \mbox{C-CLR-B(PAL)} & 120 \\ \mbox{C-CLR-B(PAL)} & 143 \\ \mbox{BRT(SECAM)} & 130 \\ \mbox{CNT(SECAM)} & 140 \\ \mbox{CLR-R(SECAM)} & 143 \\ \mbox{S-BRT(SECAM)} & 143 \\ \mbox{S-CRT(SECAM)} & 143 \\ \mbox{S-CRR(SECAM)} & 143 \\ \mbox{S-CLR-R(SECAM)} & 143 \\ \mbox{S-CLR-R(SECAM)} & 143 \\ \mbox{C-CNT(SECAM)} & 143 \\ \mbox{C-CRR(SECAM)} & 143 \\ \mbox{C-CRR(SECAM)} & 143 \\ \mbox{C-CRR(SECAM)} & 128 \\ \mbox{C-CNT(SECAM)} & 128 \\ \mbox{C-CLR-R(SECAM)} & 128 \\ \mbox{C-CLR-R(SECAM)} & 128 \\ \mbox{C-CRR(SECAM)} & 128 \\ \mbox{C-CLR-R(SECAM)} & 128 \\ \mbox{C-CLR-R(NTSC)} & 128 \\ \mbox{CLR-R(NTSC)} & 128 \\ \mbox{CLR-R(NTSC)} & 128 \\ \mbox{S-S-RT(NTSC)} & 128 \\ \mbox{S-CLR-R(NTSC)} & 128 \\ \mbox{S-CLR-R(NTSC)}$	· · · /		-
$\begin{array}{c c c c c c c c c c c c c c c c c c c $. ,	$MENU \rightarrow 1$	70
$\begin{array}{c c} \text{S-BRT(PAL)} \\ \text{S-CLR-R(PAL)} \\ \text{S-CLR-R(PAL)} \\ \text{S-CLR-R(PAL)} \\ \text{S-CLR-B(PAL)} \\ \text{S-SHR(PAL)} \\ \text{C-BRT(PAL)} \\ \text{C-BRT(PAL)} \\ \text{C-CLR-R(PAL)} \\ \text{C-CLR-R(PAL)} \\ \text{C-CLR-B(PAL)} \\ \text{C-CLR-B(PAL)} \\ \text{C-CLR-B(PAL)} \\ \text{C-CLR-B(PAL)} \\ \text{C-CLR-B(PAL)} \\ \text{C-SHR(PAL)} \\ \text{D-C-SHR(PAL)} \\ \text{C-CLR-B(SECAM)} \\ \text{CLR-R(SECAM)} \\ \text{CLR-R(SECAM)} \\ \text{S-BRT(SECAM)} \\ \text{S-BRT(SECAM)} \\ \text{S-CLR-R(SECAM)} \\ \text{S-SLR-R(SECAM)} \\ \text{S-CLR-R(SECAM)} \\ \text{S-SHR(SECAM)} \\ \text{S-SHR(SECAM)} \\ \text{C-CLR-B(SECAM)} \\ \text{MENU} \rightarrow 4 \\ \begin{array}{c} 120 \\ 70 \\ \text{S-SHR(SECAM)} \\ \text{T0} \\ \text{S-SHR(SECAM)} \\ \text{S-CLR-R(SECAM)} \\ \text{MENU} \rightarrow 5 \\ \hline 70 \\ \text{S-SHR(SECAM)} \\ \text{C-CLR-B(SECAM)} \\ \text{MENU} \rightarrow 5 \\ \hline 70 \\ \text{S-SHR(SECAM)} \\ \text{C-CLR-B(SECAM)} \\ \text{MENU} \rightarrow 6 \\ \hline 120 \\ \text{C-SHR(SECAM)} \\ \hline 128 \\ \hline \text{C-CLR-B(SECAM)} \\ \text{MENU} \rightarrow 6 \\ \hline 120 \\ \hline \text{C-SHR(SECAM)} \\ \text{MENU} \rightarrow 6 \\ \hline 120 \\ \hline \text{C-SHR(SECAM)} \\ \hline 128 \\ \hline \text{C-CLR-B(SECAM)} \\ \text{MENU} \rightarrow 7 \\ \hline 77 \\ \hline \text{CLR-B(NTSC)} \\ \hline 128 \\ \hline \text{CNT(NTSC)} \\ \hline 120 \\ \hline \text{S-SHR(NTSC)} \\ \hline 120 \\ \hline \text{S-SLR-R(NTSC)} \\ \hline 121 \\ \hline \text{MENU} \rightarrow 7 \\ \hline 77 \\ \hline 120 \\ \hline \text{S-CLR-R(NTSC)} \\ \hline 128 \\ \hline$	CLR-B(PAL)		70
$ \begin{array}{c c} \hline S-CNT(PAL) \\ \hline S-CLR-R(PAL) \\ \hline S-CLR-B(PAL) \\ \hline S-SHR(PAL) \\ \hline C-BRT(PAL) \\ \hline C-BRT(PAL) \\ \hline C-CLR-R(PAL) \\ \hline C-CLR-B(PAL) \\ \hline C-CLR-B(SECAM) \\ \hline CLR-R(SECAM) \\ \hline CLR-R(SECAM) \\ \hline S-BRT(SECAM) \\ \hline S-BRT(SECAM) \\ \hline S-CLR-R(SECAM) \\ \hline C-CLR-R(SECAM) \\ \hline 128 \\ \hline C-CNT(SECAM) \\ \hline 120 \\ \hline C-SHR(SECAM) \\ \hline 120 \\ \hline C-SHR(SECAM) \\ \hline 120 \\ \hline C-CLR-R(NTSC) \\ \hline 120 \\ \hline C-RH(NTSC) \\ \hline 120 \\ \hline S-CNT(NTSC) \\ \hline 120 \\ \hline S-CNT(NTSC) \\ \hline 120 \\ \hline S-CLR-R(NTSC) \\ \hline 120 \\ \hline 130 \\ \hline 130 \\ \hline 130 \\ \hline 140 \\$			143
$\begin{array}{c c} \mbox{S-CLR-R(PAL)} & \mbox{MENU} \rightarrow 2 & \end{tabular} \\ \hline S-CLR-B(PAL) & 143 \\ \hline C-BRT(PAL) & 128 \\ \hline C-CNT(PAL) & 128 \\ \hline C-CLR-R(PAL) & 120 \\ \hline C-CLR-B(PAL) & 120 \\ \hline C-SHR(PAL) & 143 \\ \hline BRT(SECAM) & 140 \\ \hline CLR-R(SECAM) & 140 \\ \hline CLR-R(SECAM) & 140 \\ \hline CLR-B(SECAM) & 143 \\ \hline S-BRT(SECAM) & 143 \\ \hline S-BRT(SECAM) & 143 \\ \hline S-CNT(SECAM) & 143 \\ \hline S-CLR-B(SECAM) & 143 \\ \hline S-CLR-B(SECAM) & 143 \\ \hline S-CLR-B(SECAM) & 143 \\ \hline C-CNT(SECAM) & 143 \\ \hline C-BRT(SECAM) & 143 \\ \hline C-BRT(SECAM) & 143 \\ \hline C-CRT(SECAM) & 143 \\ \hline C-BRT(SECAM) & 143 \\ \hline C-BRT(SECAM) & 128 \\ \hline C-CLR-B(SECAM) & 128 \\ \hline C-CLR-B(SECAM) & 128 \\ \hline C-CLR-B(SECAM) & 128 \\ \hline C-CLR-R(SECAM) & 128 \\ \hline C-SHR(SECAM) & 143 \\ \hline BRT(NTSC) & 128 \\ \hline CLR-R(NTSC) & 128 \\ \hline CLR-R(NTSC) & 128 \\ \hline S-CNT(NTSC) & 120 \\ \hline S+BRT(NTSC) & 128 \\ \hline S-CNT(NTSC) & 128 \\ \hline S-CNT(NTSC) & 128 \\ \hline S-CLR-R(NTSC) & 120 \\ \hline S-CLR -R(NTSC) & 1$	· · · ·		133
S-CLR-B(PAL)70S-SHR(PAL)143C-BRT(PAL)128C-CNT(PAL)128C-CLR-R(PAL)120C-CLR-B(PAL)120C-SHR(PAL)143BRT(SECAM)140CLR-R(SECAM)140CLR-B(SECAM)143S-BRT(SECAM)143S-BRT(SECAM)143S-CNT(SECAM)143S-CNT(SECAM)143S-CRT(SECAM)143S-CLR-R(SECAM)143S-CLR-B(SECAM)70S-SHR(SECAM)143C-CNT(SECAM)70S-SHR(SECAM)128C-CNT(SECAM)128C-CNT(SECAM)128C-CNT(SECAM)120C-CLR-B(SECAM)128C-CLR-R(SECAM)120C-SHR(SECAM)128C-CLR-R(SECAM)128CNT(NTSC)128CNT(NTSC)128S-RR(NTSC)128S-RR(NTSC)128S-CNT(NTSC)120SHR(NTSC)121S-BRT(NTSC)128S-CLR-R(NTSC)128S-CLR-R(NTSC)128S-CLR-R(NTSC)128S-CLR-R(NTSC)128S-CLR-R(NTSC)128S-CLR-R(NTSC)128S-CLR-R(NTSC)128S-CLR-R(NTSC)128S-CLR-R(NTSC)128S-CLR-R(NTSC)128S-CLR-R(NTSC)120S-TNT(NTSC)120			140
$\begin{array}{c c} \hline S-SHR(PAL) & 143 \\ \hline C-BRT(PAL) & 128 \\ \hline C-CNT(PAL) & 128 \\ \hline C-CLR-R(PAL) & MENU \rightarrow 3 & 120 \\ \hline C-SHR(PAL) & 143 \\ \hline BRT(SECAM) & 143 \\ \hline BRT(SECAM) & 140 \\ \hline CLR-R(SECAM) & 140 \\ \hline CLR-R(SECAM) & 143 \\ \hline S-BRT(SECAM) & 143 \\ \hline S-BRT(SECAM) & 143 \\ \hline S-CNT(SECAM) & 143 \\ \hline S-CLR-R(SECAM) & 143 \\ \hline S-CLR-R(SECAM) & 143 \\ \hline S-CLR-R(SECAM) & 143 \\ \hline C-CRT(SECAM) & 143 \\ \hline C-CLR-R(SECAM) & 128 \\ \hline C-CLR-R(SECAM) & 143 \\ \hline BRT(NTSC) & 128 \\ \hline CNT(NTSC) & 128 \\ \hline S-CNT(NTSC) & 128 \\ \hline S-CNT(NTSC) & 128 \\ \hline S-CNT(NTSC) & 128 \\ \hline S-CLR-R(NTSC) & 120 \\ \hline S-CLR -R(NTSC) & 120 \\ \hline S-CLR -R(NTSC) & 120 \\ \hline S-CLR -R(NTSC) & 120 \\ \hline $	S-CLR-R(PAL)	$MENU \rightarrow 2$	70
$ \begin{array}{cccc} \hline C-BRT(PAL) & 128 \\ \hline C-CNT(PAL) & 120 \\ \hline C-CLR-R(PAL) & 120 \\ \hline C-SHR(PAL) & 143 \\ \hline BRT(SECAM) & 140 \\ \hline CLR-R(SECAM) & 140 \\ \hline CLR-R(SECAM) & 140 \\ \hline CLR-R(SECAM) & 143 \\ \hline S-BRT(SECAM) & 143 \\ \hline S-BRT(SECAM) & 143 \\ \hline S-CNT(SECAM) & 143 \\ \hline S-CLR-R(SECAM) & 143 \\ \hline S-CLR-R(SECAM) & 143 \\ \hline S-CLR-R(SECAM) & 143 \\ \hline C-CLR-B(SECAM) & 143 \\ \hline C-CRT(SECAM) & 143 \\ \hline C-CLR-R(SECAM) & 143 \\ \hline C-CLR-R(SECAM) & 128 \\ \hline C-CLR-R(SECAM) & 120 \\ \hline C-SHR(SECAM) &$	S-CLR-B(PAL)		70
$ \begin{array}{c} \hline \text{C-CNT(PAL)} \\ \hline \text{C-CLR-R(PAL)} \\ \hline \text{C-CLR-B(PAL)} \\ \hline \text{C-CLR-B(PAL)} \\ \hline \text{C-SHR(PAL)} \\ \hline \text{120} \\ \hline \text{C-SHR(PAL)} \\ \hline \text{143} \\ \hline \text{BRT(SECAM)} \\ \hline \text{CLR-R(SECAM)} \\ \hline \text{CLR-R(SECAM)} \\ \hline \text{CLR-B(SECAM)} \\ \hline \text{SHR(SECAM)} \\ \hline \text{S-BRT(SECAM)} \\ \hline \text{S-BRT(SECAM)} \\ \hline \text{S-CLR-R(SECAM)} \\ \hline \text{S-CLR-R(SECAM)} \\ \hline \text{S-CLR-R(SECAM)} \\ \hline \text{S-CLR-B(SECAM)} \\ \hline \text{S-SHR(SECAM)} \\ \hline \text{S-SHR(SECAM)} \\ \hline \text{C-CNT(SECAM)} \\ \hline \text{C-CRT(SECAM)} \\ \hline \text{C-CRT(SECAM)} \\ \hline \text{C-CLR-R(SECAM)} \\ \hline \text{C-SHR(SECAM)} \\ \hline \text{C-SHR(SECAM)} \\ \hline \text{C-SHR(SECAM)} \\ \hline \text{C-SHR(SECAM)} \\ \hline \text{120} \\ \hline \text{C-SHR(SECAM)} \\ \hline \text{121} \\ \hline \text{C-SHR(SECAM)} \\ \hline \text{1220} \\ \hline \text{C-SHR(SECAM)} \\ \hline \text{123} \\ \hline \text{CNT(NTSC)} \\ \hline \text{CLR-B(NTSC)} \\ \hline \text{TNT(NTSC)} \\ \hline \text{120} \\ \hline \text{SHR(NTSC)} \\ \hline \text{S-BRT(NTSC)} \\ \hline \text{S-SRT(NTSC)} \\ \hline \text{S-CLR-R(NTSC)} \\ \hline \text{S-CLR-R(NTSC)} \\ \hline \text{S-CLR-R(NTSC)} \\ \hline \text{S-CLR-R(NTSC)} \\ \hline \text{S-TNT(NTSC)} \\ \hline \text{MENU} \rightarrow 8 \\ \hline \begin{array}{c} 128 \\ \hline \text{C-CLR-R(NTSC)} \\ \hline \text{120} \\ \hline \text{S-RRT(NTSC)} \\ \hline \text{120} \\ \hline \text{S-RRT(NTSC)} \\ \hline \text{120} \\ \hline \text{S-RT(NTSC)} \\ \hline \ \text{S-RT(NTSC)} \\ \hline \ \text{S-RT(NTSC)} \\ \hline \ \ \ \text{S-RT(NTSC)} \\ \hline \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	S-SHR(PAL)		143
$ \begin{array}{c} \hline \text{C-CLR-R(PAL)} \\ \hline \text{C-CLR-B(PAL)} \\ \hline \text{C-SHR(PAL)} \\ \hline \text{C-SHR(PAL)} \\ \hline \text{I43} \\ \hline \text{BRT(SECAM)} \\ \hline \text{CNT(SECAM)} \\ \hline \text{CLR-R(SECAM)} \\ \hline \text{CLR-R(SECAM)} \\ \hline \text{CLR-B(SECAM)} \\ \hline \text{S-BRT(SECAM)} \\ \hline \text{S-BRT(SECAM)} \\ \hline \text{S-SRT(SECAM)} \\ \hline \text{S-CLR-R(SECAM)} \\ \hline \text{S-CLR-R(SECAM)} \\ \hline \text{S-CLR-B(SECAM)} \\ \hline \text{S-SLR-B(SECAM)} \\ \hline \text{C-CNT(SECAM)} \\ \hline \text{C-CNT(SECAM)} \\ \hline \text{C-CNT(SECAM)} \\ \hline \text{C-CNT(SECAM)} \\ \hline \text{C-CLR-R(SECAM)} \\ \hline \text{C-CLR-B(SECAM)} \\ \hline \text{C-SHR(SECAM)} \\ \hline C-SHR(SEC$	C-BRT(PAL)		128
$ \begin{array}{c} \hline \text{C-CLR-B(PAL)} \\ \hline \text{C-SHR(PAL)} \\ \hline \text{I43} \\ \hline \text{BRT(SECAM)} \\ \hline \text{CNT(SECAM)} \\ \hline \text{CLR-R(SECAM)} \\ \hline \text{CLR-R(SECAM)} \\ \hline \text{CLR-B(SECAM)} \\ \hline \text{SHR(SECAM)} \\ \hline \text{S-BRT(SECAM)} \\ \hline \text{S-BRT(SECAM)} \\ \hline \text{S-CLR-R(SECAM)} \\ \hline \text{S-CLR-R(SECAM)} \\ \hline \text{S-CLR-R(SECAM)} \\ \hline \text{S-SHR(SECAM)} \\ \hline \text{C-CNT(SECAM)} \\ \hline \text{C-CRT(SECAM)} \\ \hline \text{C-CLR-B(SECAM)} \\ \hline \text{C-CLR-B(SECAM)} \\ \hline \text{C-CLR-R(SECAM)} \\ \hline \text{C-CLR-R(SECAM)} \\ \hline \text{C-CLR-R(SECAM)} \\ \hline \text{C-CLR-B(SECAM)} \\ \hline \text{C-SHR(SECAM)} \\ \hline \text{C-SHR(SECAM)} \\ \hline \text{C-SHR(SECAM)} \\ \hline \text{C-SHR(SECAM)} \\ \hline \text{MENU} \rightarrow 6 \\ \hline \text{120} \\ \hline \text{C-SHR(SECAM)} \\ \hline \text{128} \\ \hline \text{C-RT(NTSC)} \\ \hline \text{C-R-R(NTSC)} \\ \hline \text{MENU} \rightarrow 7 \\ \hline \text{77} \\ \hline \text{TNT(NTSC)} \\ \hline \text{120} \\ \hline \text{S-BRT(NTSC)} \\ \hline \text{S-BRT(NTSC)} \\ \hline \text{S-BRT(NTSC)} \\ \hline \text{S-BRT(NTSC)} \\ \hline \text{S-SHR(NTSC)} \\ \hline \text{S-SHR(NTSC)} \\ \hline \text{S-CLR-B(NTSC)} \\ \hline \text{S-CLR-B(NTSC)} \\ \hline \text{MENU} \rightarrow 8 \\ \hline \begin{array}{c} \text{74} \\ \text{38} \\ \hline \text{74} \\ \hline \text{S-CLR-B(NTSC)} \\ \hline \text{S-TNT(NTSC)} \\ \hline \end{array}$	C-CNT(PAL)		128
$ \begin{array}{c c} \hline C-SHR(PAL) & 143 \\ \hline BRT(SECAM) & 130 \\ \hline CNT(SECAM) & 140 \\ \hline CLR-R(SECAM) & MENU \rightarrow 4 \\ \hline 70 \\ \hline CLR-B(SECAM) & 143 \\ \hline S-BRT(SECAM) & 143 \\ \hline S-BRT(SECAM) & 143 \\ \hline S-CNT(SECAM) & 143 \\ \hline S-CLR-R(SECAM) & 143 \\ \hline S-CLR-R(SECAM) & 143 \\ \hline S-CLR-B(SECAM) & 143 \\ \hline C-BRT(SECAM) & 143 \\ \hline C-BRT(SECAM) & 143 \\ \hline C-CLR-R(SECAM) & 128 \\ \hline C-CLR-R(SECAM) & 143 \\ \hline RENU \rightarrow 6 & 120 \\ \hline C-SHR(SECAM) & 143 \\ \hline BRT(NTSC) & 128 \\ \hline CLR-R(NTSC) & 120 \\ \hline S+BRT(NTSC) & 120 \\ \hline S+BRT(NTSC) & 120 \\ \hline S+BRT(NTSC) & 128 \\ \hline S-CLR-R(NTSC) & 128 \\ \hline S-CLR-R(NTSC) & 128 \\ \hline S-CLR-R(NTSC) & 143 \\ \hline S-BRT(NTSC) & 128 \\ \hline S-CLR-R(NTSC) & 120 \\ \hline S+R(NTSC) &$	C-CLR-R(PAL)	$MENU \rightarrow 3$	120
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	C-CLR-B(PAL)		120
$\begin{array}{c c} \hline \text{CNT}(\text{SECAM}) \\ \hline \text{CLR-R}(\text{SECAM}) \\ \hline \text{CLR-B}(\text{SECAM}) \\ \hline \text{SHR}(\text{SECAM}) \\ \hline \text{SHR}(\text{SECAM}) \\ \hline \text{S-BRT}(\text{SECAM}) \\ \hline \text{S-BRT}(\text{SECAM}) \\ \hline \text{S-CNT}(\text{SECAM}) \\ \hline \text{S-CLR-R}(\text{SECAM}) \\ \hline \text{S-CLR-R}(\text{SECAM}) \\ \hline \text{S-CLR-B}(\text{SECAM}) \\ \hline \text{S-SHR}(\text{SECAM}) \\ \hline \text{S-SHR}(\text{SECAM}) \\ \hline \text{C-BRT}(\text{SECAM}) \\ \hline \text{C-BRT}(\text{SECAM}) \\ \hline \text{C-CLR-B}(\text{SECAM}) \\ \hline \text{C-CLR-R}(\text{SECAM}) \\ \hline \text{C-CLR-B}(\text{SECAM}) \\ \hline \text{C-CLR-B}(\text{SECAM}) \\ \hline \text{C-CLR-B}(\text{SECAM}) \\ \hline \text{C-CLR-B}(\text{SECAM}) \\ \hline \text{C-SHR}(\text{SECAM}) \\ \hline \text{D-C-CLR-B}(\text{SECAM}) \\ \hline \text{C-CLR-B}(\text{SECAM}) \\ \hline \text{120} \\ \hline \text{C-SHR}(\text{SECAM}) \\ \hline \text{120} \\ \hline \text{C-SHR}(\text{SECAM}) \\ \hline \text{143} \\ \hline \text{BRT}(\text{NTSC}) \\ \hline \text{CLR-B}(\text{NTSC}) \\ \hline \text{CLR-B}(\text{NTSC}) \\ \hline \text{TNT}(\text{NTSC}) \\ \hline \text{S-BRT}(\text{NTSC}) \\ \hline \text{S-BRT}(\text{NTSC}) \\ \hline \text{S-BRT}(\text{NTSC}) \\ \hline \text{S-CLR-R}(\text{NTSC}) \\ \hline \text{S-CLR-R}(\text{NTSC}) \\ \hline \text{S-CLR-R}(\text{NTSC}) \\ \hline \text{S-CLR-B}(\text{NTSC}) \\ \hline \text{S-TNT}(\text{NTSC}) \\ \hline \text{MENU} \rightarrow 8 \\ \hline \begin{array}{c} 74 \\ 74 \\ 74 \\ 74 \\ \hline \end{array}$	C-SHR(PAL)		143
$\begin{array}{c c} \mbox{CLR-R(SECAM)} & \mbox{MENU} \rightarrow 4 & \end{tabular} & \end{tabular} & \end{tabular} \\ \hline CLR-B(SECAM) & & \end{tabular} & tabul$	BRT(SECAM)		130
$\begin{array}{c c} \mbox{CLR-B(SECAM)} & 70 \\ \mbox{SHR(SECAM)} & 143 \\ \mbox{S-BRT(SECAM)} & 133 \\ \mbox{S-CNT(SECAM)} & 140 \\ \mbox{S-CLR-R(SECAM)} & 140 \\ \mbox{S-CLR-B(SECAM)} & 140 \\ \mbox{S-SHR(SECAM)} & 140 \\ \mbox{S-SHR(SECAM)} & 143 \\ \mbox{C-BRT(SECAM)} & 143 \\ \mbox{C-CNT(SECAM)} & 128 \\ \mbox{C-CLR-R(SECAM)} & 128 \\ \mbox{C-CLR-B(SECAM)} & 120 \\ \mbox{C-CLR-B(SECAM)} & 143 \\ \mbox{BRT(NTSC)} & 128 \\ \mbox{C-CLR-B(SECAM)} & 143 \\ \mbox{BRT(NTSC)} & 128 \\ \mbox{CNT(NTSC)} & 128 \\ \mbox{CLR-R(NTSC)} & 128 \\ \mbox{CLR-R(NTSC)} & 128 \\ \mbox{CLR-R(NTSC)} & 128 \\ \mbox{S-BRT(NTSC)} & 120 \\ \mbox{S-BRT(NTSC)} & 128 \\ \mbox{S-CLR-R(NTSC)} & 143 \\ \mbox{S-CLR-R(NTSC)} & 128 \\ \mbox{S-CLR-R(NTSC)} & 120 \\ \mbox$	CNT(SECAM)		140
$\begin{array}{c c} \mbox{SHR}(\mbox{SECAM}) & 143 \\ \hline \mbox{S-BRT}(\mbox{SECAM}) & 133 \\ \hline \mbox{S-CLR-R}(\mbox{SECAM}) & 140 \\ \hline \mbox{S-CLR-R}(\mbox{SECAM}) & 140 \\ \hline \mbox{S-CLR-B}(\mbox{SECAM}) & 143 \\ \hline \mbox{C-BRT}(\mbox{SECAM}) & 143 \\ \hline \mbox{C-BRT}(\mbox{SECAM}) & 143 \\ \hline \mbox{C-CLR-R}(\mbox{SECAM}) & 128 \\ \hline \mbox{C-CLR-R}(\mbox{SECAM}) & 128 \\ \hline \mbox{C-CLR-R}(\mbox{SECAM}) & 120 \\ \hline \mbox{C-CLR-B}(\mbox{SECAM}) & 143 \\ \hline \mbox{BRT}(\mbox{NTSC}) & 128 \\ \hline \mbox{CNT}(\mbox{NTSC}) & 128 \\ \hline \mbox{CNT}(\mbox{NTSC}) & 128 \\ \hline \mbox{CLR-R}(\mbox{NTSC}) & 128 \\ \hline \mbox{CLR-R}(\mbox{NTSC}) & 128 \\ \hline \mbox{S-CLR-R}(\mbox{NTSC}) & 128 \\ \hline \mbox{S-CLR-B}(\mbox{NTSC}) & 128 \\ \hline \mbox{S-CLR-R}(\mbox{NTSC}) & 128 \\ \hline \mbox{S-CLR-R}(\mbox{NTSC}) & 128 \\ \hline \mbox{S-CLR-R}(\mbox{NTSC}) & 128 \\ \hline \mbox{S-CLR-B}(\mbox{NTSC}) & 128 \\ \hline \mbox{S-CLR-B}(\mbox{NTSC}) & 128 \\ \hline \mbox{S-CLR-B}(\mbox{NTSC}) & 128 \\ \hline \mbox{S-CLR-R}(\mbox{NTSC}) & 128 \\ \hline \mbox{S-CLR-B}(\mbox{NTSC}) & 120 \\ \hline $	CLR-R(SECAM)	$MENU \rightarrow 4$	70
$ \begin{array}{c c} $S\text{-BRT}(SECAM) \\ \hline S\text{-CNT}(SECAM) \\ \hline S\text{-CLR-R}(SECAM) \\ \hline S\text{-CLR-B}(SECAM) \\ \hline S\text{-CLR-B}(SECAM) \\ \hline S\text{-SHR}(SECAM) \\ \hline C\text{-BRT}(SECAM) \\ \hline C\text{-BRT}(SECAM) \\ \hline C\text{-CLR-R}(SECAM) \\ \hline C\text{-CLR-R}(SECAM) \\ \hline C\text{-CLR-B}(SECAM) \\ \hline C\text{-CLR-B}(SECAM) \\ \hline C\text{-CLR-B}(SECAM) \\ \hline 120 \\ \hline C\text{-SHR}(SECAM) \\ \hline 120 \\ \hline$	CLR-B(SECAM)		70
$ \begin{array}{c c} \hline S-CNT(SECAM) \\ \hline S-CLR-R(SECAM) \\ \hline S-CLR-B(SECAM) \\ \hline S-SHR(SECAM) \\ \hline S-SHR(SECAM) \\ \hline C-BRT(SECAM) \\ \hline C-CNT(SECAM) \\ \hline C-CLR-R(SECAM) \\ \hline C-CLR-R(SECAM) \\ \hline C-CLR-B(SECAM) \\ \hline C-SHR(SECAM) \\ \hline C-SHR(SECAM) \\ \hline C-SHR(SECAM) \\ \hline 143 \\ \hline BRT(NTSC) \\ \hline C-SHR(SECAM) \\ \hline 143 \\ \hline BRT(NTSC) \\ \hline CLR-B(NTSC) \\ \hline CLR-B(NTSC) \\ \hline TNT(NTSC) \\ \hline S-BRT(NTSC) \\ \hline S-BRT(NTSC) \\ \hline S-CLR-R(NTSC) \\ \hline S-CLR-R(NTSC) \\ \hline S-CLR-R(NTSC) \\ \hline S-CLR-R(NTSC) \\ \hline S-TNT(NTSC) \\ \hline \end{array} $	SHR(SECAM)		143
$ \begin{array}{c c} \hline S-CLR-R(SECAM) \\ \hline S-CLR-B(SECAM) \\ \hline S-SHR(SECAM) \\ \hline S-SHR(SECAM) \\ \hline C-BRT(SECAM) \\ \hline C-BRT(SECAM) \\ \hline C-CLR-R(SECAM) \\ \hline C-CLR-R(SECAM) \\ \hline C-CLR-B(SECAM) \\ \hline C-SHR(SECAM) \\ \hline C-SHR(SECAM) \\ \hline 120 \\ \hline C-SHR(SECAM) \\ \hline 143 \\ \hline BRT(NTSC) \\ \hline CLR-B(NTSC) \\ \hline CLR-B(NTSC) \\ \hline CLR-B(NTSC) \\ \hline TNT(NTSC) \\ \hline S-BRT(NTSC) \\ \hline S-CLR-R(NTSC) \\ \hline S-CLR-R(NTSC) \\ \hline S-CLR-B(NTSC) \\ \hline S-CLR-B(NTSC) \\ \hline S-TNT(NTSC) \\ \hline \end{array} $	S-BRT(SECAM)		133
$ \begin{array}{c} \begin{array}{c} \text{S-CLR-B(SECAM)} \\ \hline \text{S-SHR(SECAM)} \\ \hline \text{S-SHR(SECAM)} \\ \hline \text{C-BRT(SECAM)} \\ \hline \text{C-CRT(SECAM)} \\ \hline \text{C-CLR-R(SECAM)} \\ \hline \text{C-CLR-B(SECAM)} \\ \hline \text{C-CLR-B(SECAM)} \\ \hline \text{C-SHR(SECAM)} \\ \hline \text{C-SHR(SECAM)} \\ \hline \text{C-SHR(SECAM)} \\ \hline \text{C-SHR(SECAM)} \\ \hline \text{120} \\ \hline \text{C-SHR(SECAM)} \\ \hline \text{RENU} \rightarrow 6 \\ \hline \text{120} \\ \hline \text{120} \\ \hline \text{SHR(NTSC)} \\ \hline \text{128} \\ \hline \text{CLR-B(NTSC)} \\ \hline \text{120} \\ \hline \text{SHR(NTSC)} \\ \hline \text{S-BRT(NTSC)} \\ \hline \text{S-SRT(NTSC)} \\ \hline \text{S-CLR-R(NTSC)} \\ \hline \text{S-CLR-R(NTSC)} \\ \hline \text{S-TNT(NTSC)} \\ \hline \end{array} $	S-CNT(SECAM)		140
$ \begin{array}{c c} \hline S-SHR(SECAM) \\ \hline C-BRT(SECAM) \\ \hline C-BRT(SECAM) \\ \hline C-CNT(SECAM) \\ \hline C-CLR-R(SECAM) \\ \hline C-CLR-B(SECAM) \\ \hline C-SHR(SECAM) \\ \hline C-SHR(SECAM) \\ \hline 143 \\ \hline BRT(NTSC) \\ \hline C-SHR(SECAM) \\ \hline 143 \\ \hline BRT(NTSC) \\ \hline CLR-R(NTSC) \\ \hline CLR-R(NTSC) \\ \hline CLR-B(NTSC) \\ \hline TNT(NTSC) \\ \hline S-BRT(NTSC) \\ \hline S-CLR-R(NTSC) \\ \hline S-CLR-R(NTSC) \\ \hline S-CLR-R(NTSC) \\ \hline S-TNT(NTSC) \\ \hline \end{array} $	S-CLR-R(SECAM)	$MENU \rightarrow 5$	70
$ \begin{array}{c} \mbox{C-BRT(SECAM)} \\ \mbox{C-CNT(SECAM)} \\ \mbox{C-CLR-R(SECAM)} \\ \mbox{C-CLR-B(SECAM)} \\ \mbox{C-CLR-B(SECAM)} \\ \mbox{C-SHR(SECAM)} \\ \mbox{C-SHR(SECAM)} \\ \mbox{C-SHR(SECAM)} \\ \mbox{D-C-SHR(SECAM)} \\ \mbox{D-C-SHR(SEC)} \\ \mbox{D-C-SHR(SECAM)} \\ D-C-$	S-CLR-B(SECAM)		70
$ \begin{array}{c} \hline \text{C-CNT(SECAM)} \\ \hline \text{C-CLR-R(SECAM)} \\ \hline \text{C-CLR-B(SECAM)} \\ \hline \text{C-SHR(SECAM)} \\ \hline \text{C-SHR(SECAM)} \\ \hline \text{C-SHR(SECAM)} \\ \hline \text{D-SHR(SECAM)} \\ \hline \text{BRT(NTSC)} \\ \hline \text{CNT(NTSC)} \\ \hline \text{CLR-R(NTSC)} \\ \hline \text{CLR-B(NTSC)} \\ \hline \text{TNT(NTSC)} \\ \hline \text{TNT(NTSC)} \\ \hline \text{S-BRT(NTSC)} \\ \hline \text{S-SRT(NTSC)} \\ \hline \text{S-CLR-R(NTSC)} \\ \hline \text{S-CLR-R(NTSC)} \\ \hline \text{S-CLR-B(NTSC)} \\ \hline \text{S-TNT(NTSC)} \\ \hline \end{tabular} $	S-SHR(SECAM)		143
$ \begin{array}{c c} \hline C\text{-}CLR\text{-}R(SECAM) \\ \hline C\text{-}CLR\text{-}B(SECAM) \\ \hline C\text{-}SHR(SECAM) \\ \hline 120 \\ \hline 120 \\ \hline 120 \\ \hline 143 \\ \hline 143 \\ \hline BRT(NTSC) \\ \hline CLR\text{-}R(NTSC) \\ \hline CLR\text{-}R(NTSC) \\ \hline CLR\text{-}B(NTSC) \\ \hline TNT(NTSC) \\ \hline TNT(NTSC) \\ \hline S\text{-}BRT(NTSC) \\ \hline S\text{-}CLR\text{-}R(NTSC) \\ \hline 120 \\ \hline 120 \\ \hline 120 \\ \hline \end{array} $	C-BRT(SECAM)		128
$ \begin{array}{c c} \hline C\text{-}CLR\text{-}R(SECAM) \\ \hline C\text{-}CLR\text{-}B(SECAM) \\ \hline C\text{-}SHR(SECAM) \\ \hline 120 \\ \hline 120 \\ \hline 120 \\ \hline 143 \\ \hline 143 \\ \hline BRT(NTSC) \\ \hline CLR\text{-}R(NTSC) \\ \hline CLR\text{-}R(NTSC) \\ \hline CLR\text{-}B(NTSC) \\ \hline TNT(NTSC) \\ \hline TNT(NTSC) \\ \hline S\text{-}BRT(NTSC) \\ \hline S\text{-}CLR\text{-}R(NTSC) \\ \hline 120 \\ \hline 120 \\ \hline 120 \\ \hline \end{array} $	C-CNT(SECAM)		128
$ \begin{array}{c} \mbox{C-CLR-B(SECAM)} \\ \mbox{C-SHR(SECAM)} \\ \mbox{I43} \\ \mbox{BRT(NTSC)} \\ \mbox{CNT(NTSC)} \\ \mbox{CLR-R(NTSC)} \\ \mbox{CLR-B(NTSC)} \\ \mbox{TNT(NTSC)} \\ \mbox{S-BRT(NTSC)} \\ \mbox{S-BRT(NTSC)} \\ \mbox{S-CLR-R(NTSC)} \\ \mbox{S-CLR-R(NTSC)} \\ \mbox{S-CLR-B(NTSC)} \\ \mbox{S-CLR-B(NTSC)} \\ \mbox{S-CLR-B(NTSC)} \\ \mbox{S-TNT(NTSC)} \\ \mbox{S-TNT(NTSC)} \\ \mbox{S-TNT(NTSC)} \\ \mbox{S-CLR-B(NTSC)} \\ \mbo$		$MENU \rightarrow 6$	120
$\begin{array}{c c} \mbox{BRT(NTSC)} & 128 \\ \hline CNT(NTSC) & 138 \\ \hline CLR-R(NTSC) & 77 \\ \hline CLR-B(NTSC) & 120 \\ \hline TNT(NTSC) & 120 \\ \hline SHR(NTSC) & 143 \\ \hline S-BRT(NTSC) & 143 \\ \hline S-CLR-R(NTSC) & 128 \\ \hline S-CLR-R(NTSC) & 128 \\ \hline S-CLR-R(NTSC) & 74 \\ \hline S-CLR-B(NTSC) & 74 \\ \hline TAU & 74 \\$			120
$\begin{array}{c c} \mbox{BRT(NTSC)} & 128 \\ \hline CNT(NTSC) & 138 \\ \hline CLR-R(NTSC) & 77 \\ \hline CLR-B(NTSC) & 120 \\ \hline TNT(NTSC) & 120 \\ \hline SHR(NTSC) & 143 \\ \hline S-BRT(NTSC) & 143 \\ \hline S-CLR-R(NTSC) & 128 \\ \hline S-CLR-R(NTSC) & 128 \\ \hline S-CLR-R(NTSC) & 74 \\ \hline S-CLR-B(NTSC) & 74 \\ \hline TAU & 74 \\$	C-SHR(SECAM)		143
$ \begin{array}{c} \mbox{CNT(NTSC)} \\ \mbox{CLR-R(NTSC)} \\ \mbox{CLR-B(NTSC)} \\ \mbox{TNT(NTSC)} \\ \mbox{S-BRT(NTSC)} \\ \mbox{S-BRT(NTSC)} \\ \mbox{S-CLR-R(NTSC)} \\ \mbox{S-CLR-B(NTSC)} \\ \mbox{S-CLR-B(NTSC)} \\ \mbox{S-TNT(NTSC)} \\ \mbox{S-TNT(NTSC)} \\ \mbox{S-TNT(NTSC)} \\ \mbox{S-TNT(NTSC)} \\ \mbox{S-CLR-B(NTSC)} \\ S-CLR-B(N$			128
$ \begin{array}{c} \hline \text{CLR-R(NTSC)} \\ \hline \text{CLR-B(NTSC)} \\ \hline \text{TNT(NTSC)} \\ \hline \text{TNT(NTSC)} \\ \hline \text{SHR(NTSC)} \\ \hline \text{S-BRT(NTSC)} \\ \hline \text{S-CNT(NTSC)} \\ \hline \text{S-CLR-R(NTSC)} \\ \hline \text{S-CLR-B(NTSC)} \\ \hline \text{S-TNT(NTSC)} \\ \hline \end{array} \begin{array}{c} \hline \text{MENU} \rightarrow 8 \\ \hline \text{74} \\ \hline \text{74} \\ \hline \text{74} \\ \hline \text{120} \\ \hline \end{array} $			138
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$			77
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$. ,	$MENU \to 7$	-
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$. ,		
$ \begin{array}{c c} $S\text{-BRT(NTSC)} \\ \hline S\text{-CNT(NTSC)} \\ \hline S\text{-CLR-R(NTSC)} \\ \hline S\text{-CLR-B(NTSC)} \\ \hline S\text{-TNT(NTSC)} \\ \end{array} \begin{array}{c} 128 \\ 138 \\ \hline 74 \\ \hline 74 \\ 120 \\ \hline \end{array} $			
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$. ,		
S-CLR-R(NTSC)MENU $\rightarrow 8$ 74S-CLR-B(NTSC)74S-TNT(NTSC)120			
S-CLR-B(NTSC)MENU $\rightarrow 8$ 74S-TNT(NTSC)120	. ,	·	
S-TNT(NTSC) 120		$MENU \to 8$	
· · · · ·			
	S-SHR(NTSC)		143

ITEM	BUTTON (on the remote control)	DATA VALUE
C-BRT(NTSC)	controlj	128
· · ·	-	120
C-CNT(NTSC)	-	128
C-CLR-R(NTSC)	$MENU \rightarrow 9$	
C-CLR-B(NTSC)	_	150
C-TNT(NTSC)	-	120
C-SHR(NTSC)		143
BRIGHT	0	0
NORMAL	0	65
DARK	0	98
COR(C/D/S-1)	VOL. $\checkmark \rightarrow 1$	128
COG(C/D/S-1)	VOL. $\checkmark \rightarrow 2$	128
COB(C/D/S-1)	VOL. $\checkmark \rightarrow 3$	128
DR(C/D/S-1)	VOL. $\checkmark \rightarrow 4$	180
DG(C/D/S-1)	VOL. $\checkmark \rightarrow 5$	180
DB(C/D/S-1)	VOL. $\checkmark \rightarrow 6$	180
SBR(C/D/S-1)	VOL. $\checkmark \rightarrow 7$	0
SBB(C/D/S-1)	VOL. $\checkmark \rightarrow 9$	0
C-COR(C/D/S-2)	VOL. $\checkmark \rightarrow 1$	128
C-COG(C/D/S-2)	VOL. $\checkmark \rightarrow 2$	128
C-COB(C/D/S-2)	VOL. $\checkmark \rightarrow 3$	128
C-DR(C/D/S-2)	VOL. $\checkmark \rightarrow 4$	140
C-DG(C/D/S-2)	VOL. $\checkmark \rightarrow 5$	140
C-DB(C/D/S-2)	VOL. $\checkmark \rightarrow 6$	140
C-SBR(C/D/S-2)	VOL. $\checkmark \rightarrow 7$	0
C-SBB(C/D/S-2)	VOL. $\checkmark \rightarrow 9$	0
7F	VOL. ▼ C	FF
LAST POWER		OFF
SYSTEM		*1
NCM		ON
ASPECT		OFF
RUSSIAN]	OFF

*1 PAL-BG (LDD-A2006), PAL-I (LDD-B2006), SECAM-L (LDD-C2006), PAL-BG/DK (LDD-D2006)

2. Flicker Adjustment

- 1. Enter the Service mode. (See page 6-1.)
- 2. Press [2] button on the remote control unit. The following screen appears.



3. If Flicker Adjustment is not fit, the screen becomes the following.



4. Press [CH. ▲ / ▼] buttons on the remote control unit so that flash stops.

The following adjustment normally are not attempted in the field. Only when replacing the LCD Panel then adjust as a preparation.

3. White Balance Adjustment

Purpose: To mix red, green and blue beams correctly for pure white.

Symptom of Misadjustment: White becomes bluish or reddish.

Test Point Adi. Point Mode Input			
Test Point Adj. Point		Mode	Input
Screen	VOL. ▼ buttons	[RF/AV2(CVBS)] C/D/S-1 [AV1(RGB)] C/D/S-2	White Purity (APL 80%) or (APL 40%)
M.	M. EQ. Spec.		
Pattern Generator,		x: 285 to 295,	
Color analyzer		y: 295 to	305
Figure			
It carries out in a darkroom. Perpendicularity L = 3 cm			
INPUT: WHITE 80% Color Analyzer		nalyzer	

- 1. Operate the unit for more than 20 minutes.
- 2. Input the White Purity.
- 3. Set the color analyzer to the CHROMA mode and bring the optical receptor to the center on the LCD-Panel surface after zero point calibration as shown above.

Note: The optical receptor must be set perpendicularly to the LCD Panel surface.

4. [RF/AV2(CVBS)]

Enter the Service mode. Press [VOL ▼] button on the remote control unit and select "C/D/S-1" mode. [AV1(RGB)]

Enter the Service mode. Press [VOL ▼] button on the remote control unit and select "C/D/S-2" mode.

5. [RF/AV2(CVBS)]----(APL 80%)

Press [6] button to select "DB(C/D/S-1)" for Blue adjustment. Press [4] button to select "DR(C/D/S-1)" for Red adjustment. When "x" value and "y" value are not within specification, adjust "DB (C/D/S-1)" or "DR (C/D/S-1)". Refer to "1. Initial Setting." [RF/AV2(CVBS)]----(APL 40%)

Press [3] button to select "COB(C/D/S-1)" for Blue adjustment. Press [1] button to select "COR(C/D/S-1)" for Red adjustment. When "x" value and "y" value are not within specification, adjust "COB (C/D/S-1)" or "COR (C/D/S-1)". Refer to "1. Initial Setting."

6. [AV1(RGB)]----(APL 80%)

Press [6] button to select "C-DB(C/D/S-2)" for Blue adjustment. Press [4] button to select "C-DR(C/D/S-2)" for Red adjustment.When "x" value and "y" value are not within specification, adjust "C-DB(C/D/S-2)" or "C-DR(C/D/S-2)". Refer to "1. Initial Setting."

[AV1(RGB)]----(APL 40%)

Press [3] button to select "C-COB(C/D/S-2)" for Blue adjustment. Press [1] button to select "C-COR(C/D/S-2)" for Red adjustment.When "x" value and "y" value are not within specification, adjust "C-COB(C/D/S-2)" or "C-COR(C/D/S-2)". Refer to "1. Initial Setting."

7. Turn the power off and on again. (Main power button on the TV unit.)

HOW TO INITIALIZE THE LCD TV/DVD

To put the program back at the factory-default, initialize the LCD TV/DVD as the following procedure.

< DVD Section >

1. Press [1], [2], [3], [4], and [DISPLAY] buttons on the remote control unit in that order. Fig. g appears on the screen.



2. Press [CLEAR] button on the remote control unit. Fig. h appears on the screen.



When "OK" appears on the screen, the factory default will be set.

 To exit this mode, press [CH. ▲ / ▼] or [SELECT] button to go to TV mode, or press [STANDBY] button to turn the power off.

< LCD TV Section >

- 1. Turn the power on. (Use main power on the TV unit.)
- 2. To enter the service mode, press [STANDBY], [2], [7], [1], and [MUTE] buttons on the remote control unit in that order within 5 seconds.
 - To cancel the service mode, press [STANDBY] button on the remote control.
- 3. To initialize the LCD television, press "DISPLAY" button on the remote control unit.
- 4. Confirm "FF" indication on the upper right of the screen.

FIRMWARE RENEWAL MODE

- 1. Turn the power on and press [EJECT] button on the remote control unit to put the LCD TV/DVD into DVD mode. Then remove the disc.
- To put the LCD TV/DVD into F/W version up mode, press [9], [8], [7], [6], and [MODE] buttons on the remote control unit in that order. Fig. a appears on the screen.



Fig. a version op wode Screen

- 3. Insert the disc for version up into the disc slot.
- The LCD TV/DVD enters the F/W version up mode automatically. Fig. c appears on the screen. If you enter the F/W for different models, "Disc Error" will appear on the screen, then the disc will be ejected automatically.



Fig. c Programming Mode Screen

The appearance shown in (*1) of Fig. c is described as follows:

No.	Appearance	State
1	Reading	Sending files into the memory
2	Erasing Erasing previous version data	
3	Programming	Writing new version data

5. After programming is finished, the disc will be ejected automatically. Fig. e appears on the screen and the checksum will be shown in (*2).



Fig. e Completed Program Mode Screen

At this time, no button is available.

- 6. Remove the disc.
- Press [CH. ▲ / ▼] button on the unit to go to TV mode, or press [STANDBY] button on the unit to turn the power off.
- 8. Press [EJECT] button on the remote control unit to put the LCD TV/DVD into DVD mode again.
- Press [1], [2], [3], [4], and [DISPLAY] buttons on the remote control unit in that order. Fig. g appears on the screen.



10.Press [CLEAR] button on the remote control unit. Fig. h appears on the screen.



When "OK" appears on the screen, the factory default will be set. Then the firmware renewal mode is complete.

11.To exit this mode, press [CH. ▲ / ▼] or [SELECT] button to go to TV mode, or press [STANDBY] button to turn the power off.