Service program

ES VI-Technology
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Basics of operating the service program

Definitions
Normal mode: I.e. normal operating mode for customers. The phonograph accepts money insert and plays selected titles.

Service mode: The service operating mode for the operator of the phonograph or the service staff. The door of the phonograph is open and the service switch is pulled out. Settings are possible, phonograph statistics can be read out, or several tests can be made.

Menu: This is a list of different service functions.

Direct access: Direct access of a service function is possible by entering the corresponding number. Regard the syntax: Menu points are separated by dots (e.g.: 2.3.1.1).

Dialog box: Group of matching input fields (mask).

Operating
By pulling out the service switch the phonographs service program is entered. The service program is menu driven. It is separated into multiple sections. The service program is operated via the operators key pad in the operating console of the phonograph or via the IR-remote control.

For your orientation: The menu number (e.g. /2.1.5.4) is displayed in the lower left corner of the operators display.

A service function can be accessed directly by entering the corresponding menu number ("direct access"). For example, if you want to modify the sound setting of the phonographs amplifier, just enter the corresponding number 2.3.1.1 directly. Afterwards the dialog field for sound settings appears in the operators display.

If there is a "=>" sign in front of a menu name, it indicates that there is another menu field following this one. For example "2.>Settings" means, that another menu will appear after entering "2".

Entering the number "0" within any menu position takes you back to the main menu. This is optimized for operators that always jump to service functions directly using "direct access".

For stepping through the entry fields within a dialog box use the arrow keys (→, ↑, ↓).

For your orientation: Within the upper right corner of the operators display the corresponding name of the entry field is displayed.

After closing the front door the service switch is automatically pushed in, and the service program is terminated. The phonograph re-enters the normal mode.

While not otherwise specified the keys of the operators key pad have the following meaning if the phonograph is in service mode:

- 1...0: Input of menu item or parameter values.
- C: "Cancel input" (1. pressing) or "Back one menu level" (2. pressing).
- →: Within dialog box step right one entry field.
- ↑: Within dialog box step up one entry field.
- ↓: Within dialog box step down one entry field.
- Hit: Confirm entry.
- ⇔: step to the next possible parameter, switch display mode, or switch upper case/lower case while in text input mode.
- A-Z: Text input. Here the number keys (1...0) have a different meaning (see also layout of the IR remote control transmitter). Key 1 is also designed as "ABC", key 2 as "DEF" and so on. In this mode the first pressing of key 1 works as "A", two times pressing gives you a "B" and so on.
- Symbols: This is for entering symbols, such as monetary symbols, while you are in text input mode. The different symbols are displayed by repeatedly pressing the symbols key.
Service program

/0 Main menu

1: Setup
2: Settings
3: Bookkeeping
4: Service Functions

C-Back

After pulling the service switch (push button switch) the phonograph switches to service mode, and the service program is entered. The service mode can be terminated by either pushing the service switch back into its closed position or by confirming "YES" after pressing the "C" key (on the IR transmitter or the operators key pad).

/1. >Setup

1: CD-Initialization
2: Date/Time
3: Change Security Code
4: Return to Factory Presets

C-Back

This service program section is used for the basic initialization of the phonograph.

/1.1 >CD-Initialization

1: Initialize Discs
2: Show Disc Database
3: Clear Disc Database

C-Back

Newly inserted CD must be initialized (read in of table of contents), thus to enable correct title selection and credits calculation for selected album (different number of tracks/titles).

CDs may be classified as "known", "not known", or "not available".

Each time a CD is played, it is newly initialized. New inserted can be initialized by selecting track 1 once.

/1.1.1 Initialize Discs

Enter disc(s): 114 - 100

Start

Enter the range of CDs to be initialized. Afterwards select [Start] and press the "Hit" key to start the initialization routine.
**Service program for ESVI Technology**

**Enter disc(s):**
- **From:** First CD to be initialized.
- **To:** Last CD to be initialized.
- **Start:** To start the initialization routine.

First the data of the entered range are cleared. Afterwards the defined CDs are read-in one after another to be initialized. The display shows number of titles and total play time of the CD.

While initialization the keys have the following function:
- "C" key = To cancel the initialization routine.
- "Hit" key = Change the range of CDs to be initialized.
- "s" key = Display the initialized title memory.

**Note:** If you have started the initialization routine you may push the service switch (close the door / lid of the phonograph). After finishing the initialization the phonograph then directly goes into normal play mode.

**Regard** that the initialization routine only can be interrupted by pressing the "C" key if the service switch is pulled.

**1.1.2 Show Disc Database**

The initialized information of all CDs is shown (format: CD-tracks). Press the arrow keys to step through multiple screens. Press "C" key to leave this menu.

**1.1.3 Clear Disc Database**

Enter the range of CDs of which the data base should be cleared. Afterwards select [Start] and press the "Hit" key to start this routine.

**Enter disc(s):**
- **From:** First CD to be cleared.
- **To:** Last CD to be cleared.
- **Start:** To start clearing routine.
1.2 Date & Time

This function is used to set date and time. The internal real-time clock is used to control various functions within special time windows, such as auto-play, background, happy-hour, and so on.

**Time:**
The actual time. Format: hours, minutes, seconds.

**Date:**
The actual date. Format: day, month, year.

**Date Format:**
Select desired display format of the date display:
DD/MM/YY: day / month / year
MM/DD/YY: month / day / year
DD.MM.YY: day . month . year

**Remark:** The week-day (Monday...Sunday) is automatically calculated from the entered date.

1.3 Box ID and Location

This inputs may be used to identify the machine or the location. With the data exchange via DataPrint or PC, this settings will be transmitted.

**Number:**
The machine number for identifying the machine.
Assign every machine its own free defined number.

**Name:**
The name of the machine. i.e., "TRADITION", "ULTIMATE", etc.

**Usage:**
Regard the layout of the number keys of the remote control (1/ABC, 2/DEF, 0/Sym). The first pressing of key "1" works as "A", two times pressing gives you a "B" and so on. Use key "0" to enter symbols.

Use " * " key to switch between upper and lower case. Save your message by pressing the "Hit" key.

The "C" key has different functions:
1. If the background of the display is darkened, e.g. after pressing the "Hit" key, pressing the "C" key will terminate/cancel this entry mode.
2. If the background of the display is high-lighted, e.g. after entering a character, you are in entry mode. Pressing the "C" key works as 'delete previous character'.
3. Press and hold the "C" key for 3 s to re-build the original entry (undo). The corresponding key on the IR remote control is named "VIP" key.
Service program for ESVI Technology

Regard that different characters have different width. So it may happen that the local message is not displayed correctly in stand-by mode if you enter to much wide characters.

1.4. Change Security Code

By defining a security code (password) you can protect your phonograph against unauthorized usage. Service functions can only be started by authorized service staff who knows the right password. After pulling the service switch you are requested to enter the right password.

Enter Security Code:
Input of security code.
Input is requested twice to exclude typing errors.
If you enter the code = "0" this function is disabled.

Enter:
Select Enter and press the "Hit" key to store the newly entered security code.

Attention: Note the security code (password) and store it in a safe place, because if you lost the password you will not have any access to the service program!
1.5 Reset to Factory Defaults

The phonograph is prepared to use default values set at the factory site. Call this function to reset the phonograph to this settings. For different countries different price and monetary settings (basic settings) are programmed:

GB: Settings for GB
USA: Settings for USA
AUS: Settings for Australia
D: Settings for Germany

To confirm your selection select [Confirm] and press "Hit" key. Afterwards the desired factory default settings are activated and the phonograph's program will be restarted.
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/2. >Settings

Use this menu to change different parameter settings of the phonograph.

/2.1 >Monetary & Prices

Settings for monetary values, prices, or free credits can be changed here.

/2.1.1 >Monetary

Settings for currency and monetary values.

/2.1.1.1 Value Per Channel

Use this function to value up to 6 coin channels and up to 2 bill channels. Just enter the corresponding value of coins and/or bills related to the smallest value unit of your country. For example: 50c = 50, 1$ = 100.

Tip: With insertion of a coin into the coin chute the program automatically activates the corresponding entry field, and you directly may enter the expected value. Repeat this steps for all valid coins used in your country.

/2.1.1.2 Mech_Coinmeter Value

Use this function to define the monetary value being necessary to indicate an impulse to the electromechanical cash counter.

Example: Setting = 10: Inserting 1$ makes 10 impulses to the electromechanical cash counter. That means the cash counter counts in steps of 10c.
## 2.1.3 Currency Settings

Setting the currency.

**Symbol Position:**
Define whether the currency symbol is displayed in front of the value (Leading), or following the value (Behind). Press the "+" key to change the setting.

**Currency Symbol:**
Define the currency symbol to be displayed with the price information on the operators display. Enter symbol using the IR remote control transmitter, press key "1" for letters ABC; press key "2" for letters DEF and so on.

For input of symbols like $, £, or so, press the "0" key as long as necessary to meet the desired symbol.

**Point Position:**
Use this function to define the position of the decimal point displayed with the monetary value.

Example: Setting = "0": Value 100 (e.g. 1$) is displayed as 100.
Example: Setting = "2": Value 100 (e.g. 1$) is displayed as 1.00.

## 2.1.2 >Price Lists

Use this command to define different prices for different time windows, i.e. different daily or weekly events.

### 2.1.2.1 List #1

<table>
<thead>
<tr>
<th>List #1 (Normal)</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Defines the pricing for normal operation. Example setting 50 = 2: that means you need 50 monetary impulses to get 2 credits for selections. Enter prices sorted by increasing monetary values. Regard the settings of menu 2.1.4 (Conversion) to ensure either direct or indirect conversion is to be used.

### 2.1.2.2 List #2

Bonused pricing in HAPPY HOUR time windows.
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2.1.2.3 List #3
Bonused pricing for special occasions or operating times.

2.1.2.3 List #4
Bonused pricing for other special occasions or operating times.

2.1.3 >Time Windows

<table>
<thead>
<tr>
<th>Time Windows</th>
<th>Start Time (hh:mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:00 to 06:00</td>
<td>Normal</td>
</tr>
<tr>
<td>06:00 to 12:00</td>
<td>Normal</td>
</tr>
<tr>
<td>12:00 to 18:00</td>
<td>Normal</td>
</tr>
<tr>
<td>18:00 to 00:00</td>
<td>Normal</td>
</tr>
</tbody>
</table>

Settings for different pricing for different daily and weekly time periods.

2.1.3.1 - /2.1.3.8 Monday...Sunday, All Days

Program up to four independent time windows for each week-day using different price lists. Enter time values in format "hhmm", i.e. 1015 for a quarter past ten o'clock.

Start time:
Enter time for the beginning of the time window.

Stop time:
Enter time for the end of the time window.

Price list #:
Use "*" key to select the price lists to be active while time window.
- "Normal",
- "Happy-Hour",
- "Special1", or
- "Special2".

2.1.4 Conversion

Direct: The conversion of inserted coins into given credits is performed on each inserted coin directly (coin related).
Example: 50c = 1 credit, 1$ = 3 credits → insertion of 2x50c gives 2 credits.

Indirect: The conversion of inserted coins into given credits is performed indirectly, that means related to the total amount of inserted coins.
Example: 50c = 1 credit, 1$ = 3 credits → insertion of 2x50c gives 3 credits.
### 2.1.5 Free Credits

Menu for programming free credits.

#### 2.1.5.1 Restrictions

<table>
<thead>
<tr>
<th>Restriction</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allow albums?</td>
<td>Yes</td>
</tr>
<tr>
<td>Allow special titles?</td>
<td>No</td>
</tr>
<tr>
<td>Discard free selections?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Restrictions while using free credits.

**Allow Albums?:**
Setting to allow album selection (selection of track 00) while phonograph is in free credit mode.

**Allow Special Titles?:**
Setting to allow selection of special tracks while phonograph is in free credit mode.

**Discard Free Selections?:**
Use this setting to define if selections in free credit mode are deleted from the title memory after termination of the free credit mode (either by using remote control or automatically by running out of the programmed time window).

### 2.1.5.2 Free Credit Settings

Settings for free credits.

**Remaining Free Credits:**
Setting of the total number of free credit to be given.

The programmed value is decreased by 1 each time a free credit is given until the value is “0”. If the value is = "0" no further free credits are given until this program step is performed again.

Exception: programmed value = “999” means endless amount of free credits.

**Service Credits:**
Setting the number of free credits given after pulling the service switch and if the “normal” credit counter (credit display) is “0”.
This function is used to enable the service technician to make title selections for service purposes without money insert.
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/2.1.5.3 Free Credits per Weekday

<table>
<thead>
<tr>
<th>Day</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credits</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

Settings different numbers of maximum free credits for each day of the week.

/2.1.5.4 Time Windows

Within different time windows you may activate free credits to be given automatically or after pressing a function key on the remote control.

/2.1.5.4.1 /2.1.5.4.8 Monday, Sunday, All Days

<table>
<thead>
<tr>
<th>Time</th>
<th>Start time (hh:mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:00 to 24:00</td>
<td>Single Limited</td>
</tr>
<tr>
<td>00:00 to 06:00</td>
<td>Bulk Limited</td>
</tr>
<tr>
<td>06:00 to 24:00</td>
<td>Bulk Limited</td>
</tr>
</tbody>
</table>

4 independent entries are possible for each week-day to activate free credits automatically or for selection via remote control.

Settings:

Start time:
Enter time for the beginning of the time window.

Stop time:
Enter time for the end of the time window.

Mode:
Use "+" key to select the mode of free credits to be given:

"Single": The defined free credits for this week-day may be called one by one by pressing the corresponding function key.

"Bulk": The defined free credits for this week-day may be called all at once by pressing the corresponding function key.

"Auto": The defined free credits for this week-day may be called all at once automatically at start windows time.

"None": No free credits while this time window is active.

Limitation:
Use "+" key to select between:

"Limited": Free credits are limited to the defined number of free credits for this week-day (see /2.1.5.3 Free credits per week-day).

"Unlimited": The number of free credits is not limited within this time window.
2.2 Categories

- Completions
- Special Titles
- Autoplay
- Advertisement
- Background
- Title Lockout

Summary of functional categories

2.2.1 Completions

Completions are summaries (lists) of different titles or albums (CDs). These summaries are to be used for "Autoplay" (automated attract mode within time intervals), "Advertisement" (automated playing of ad tracks within time intervals), "Background" (automated background music), and "Title Lockout". You can also enable the audience to select Completions. Thus you can expand your musical offering or categorize it.

Up to 100 Completions can be programmed, each with up to 100 entries (single tracks or albums).

The total number of entries over all compilations is limited to 1000.

Completions are split into three number categories,

1. 1 to 199 (these are used for audience selection by creating a virtual CD, i.e. selection 103*05 when using a 100 Changer or 51*06 when using a 50 Changer, this will enlarge the music offering. Use virtual CD's to build special music categories, i.e. rock pop, country & western, classic, dance etc.

2. Completions 200-249 are not selectable, because they are reserved to be played as "Autoplay titles", "Advertisement titles", or "Background titles and lockouts", i.e. compilation 201 is a file. Within that file you enter the group of CD's or tracks to be used within one of the above features, i.e. background titles etc.

3. Compilation 250 is a factory default setting that contains all the CD's within the jukebox, making them all selectable within "Autoplay" or "Background" feature. Compilation 250 cannot be changed.

Usage:
Select the desired category using the arrow keys (Completions). In the lower right corner of the display the function of the "Hit" key is displayed (i.e. "Hit=Select"). By pressing the "*" key you can choose between the following functions: "Select", "Insert", and "Delete".

Activate the insert function by pressing the "*" key until "Hit=Insert" is displayed. Then press the "Hit" key to add a new compilation.

Activate the delete function by pressing the "*" key until "Hit=Delete" is displayed. Then press the Hit key to delete an existing compilation.
Activate the select function by pressing the "x" key until "Hit=Select" is displayed. Then press the "Hit" key to display the contents of a compilation. In this mode you can add new titles or delete titles from the selected compilation.

/2.2.2 Special Titles

"Special Titles" are titles or albums which are defined with special features. This features are displayed as:

- H = Hide Track (1. title is hidden)
- I = Immediate Play (title is played next after selection)
- xc = Credits Special (x credits are deducted for playing this title)
- L = Left Channel (play only left channel of the audio signal, Karaoke)
- R = Right Channel (play only right channel of the audio signal, Karaoke)
- S = Stereo (play both channels of the audio signal, Karaoke)

Usage:
Select the desired category using the arrow keys (Special Title). In the lower right corner of the display the function of the "Hit" key is displayed (i.e. "Hit=Insert"). By pressing the "x" key you can choose between the following functions: "Insert", "Modify", and "Delete".

Activate the insert function by pressing the "x" key until "Hit=Insert" is displayed. Then press the "Hit" key to add a new special title.

Activate the delete function by pressing the "x" key until "Hit=Delete" is displayed. Then press the "Hit" key to delete an existing special title.

Activate the modify function by pressing the "x" key until "Hit=Modify" is displayed. Then press the "Hit" key to change the features of a selected title or CD.

After selection of "Hit=Insert" enter the number of the desired title and press the "Hit" key. Input of title 00 i.e. 02-00, means that the whole CD is defined as "Special".
Features:

Credits:

In this entry field you may define how many credits are to be deducted for selection of this title/CD. Here you have the possibility to define different prices for different titles, some more expensive and some for free. Change entry by pressing the "+" key:

Default: As many credits are deducted as defined.
Special: A different number of credits is deducted for this title. See entry in next field.

Audio-Mode:

Enter the audio channel of the amplifier to which the reproduction of this title is switched to. This setting is to be used, i.e. for "Karaoke-CDs" where sound and voice is recorded to one channel (left channel), and only sound is recorded to the other channel (right channel).

Use a function key of the remote control to switched this features between "Left", "Right" and "Stereo". See also "/2.3.3.2 Function Keys".

Default: A predefined audio channel is switched to the amplifier.
Left: The left channel of the audio signal is switched to the both channels of the stereo amplifier.
Right: The right channel of the audio signal is switched to the both channels of the stereo amplifier.
Stereo: Normal setting. Both channel are switched to the stereo amplifier. Remark: This setting is independent from setting "Mono/Stereo" as described in "/2.3.1.4 Audio Modes".

Note: With Setting "Left" or "Right" the music will not attenuated, independently of the settings under "Settings/Hardware/Music/Attenuation"

Hide Track 1:

On most Video CDs track 1 is used as intro or table of contents. In this case the printed cover of this CD differs from the real contents of the CD. Use this setting to suppress track 1, that means on selection of track 1 track 2 is played (selection of xx*01 plays xx*02).

No: Track #1 is not suppressed.
Yes: Track #1 is suppressed.

This entry field becomes active only if the corresponding CD was initialized as "Video CD".

Immediate Play:

Certain titles can be played directly after selection independent of previously selections. For example: A "Happy Birthday" title to be played at a predefined moment.

No: The title is not played immediately (normal setting)
Yes: After selection the title is played next.
Service program for ESVI Technology

2.2.3 > Autoplay

Use "Autoplay" to play certain titles automatically in predefined time intervals. This function becomes active if it is enabled in at least one of four time windows of the corresponding week day and if the phonograph is in stand-by (no actions on the phonograph).

A selection of a title will fade out the actually played "Autoplay" title.

2.2.3.1 Autoplay Settings

Settings:

Play Mode:
Normal: Titles are played in order of the programmed compilation used.
Random: Titles are played randomly from the programmed compilation.
Off: Autoplay is deactivated. No Autoplay titles are played.

Max. Playing Time:
This is the maximum time an Autoplay title is played. After the programmed time in seconds the title is faded out.

2.2.3.2 > Time Windows

Within different time windows you may activate Autoplay to start automatically.

2.2.3.2.1 / 2.2.3.2.8 Monday, Sunday, All Days

4 independent entries are possible for each week-day to activate Autoplay automatically.

Settings:
Start time:
This is the beginning time of the time window.
Stop-Time:
This is the ending time of the time window.

Compilation #:
Number of the programmed compilation to be played in the Autoplay mode.

Interval (min):
Time in minutes between two Autoplay titles, respectively the time the phonograph is in stand-by before an Autoplay title is played automatically.
Use this function to play special advertisement titles within predefined time intervals. This function becomes active if it is enabled in at least one of four time windows of the corresponding week.

### Advertisement Settings

#### Play Mode:
- **Normal:** Titles are played in order of the programmed compilation used.
- **Random:** Titles are played randomly from the programmed compilation.
- **Off:** Advertisement is deactivated. No advertisement titles are played.

#### Max. Playing Time:
This is the maximum time an Advertisement title is played. After the programmed time in seconds is over the title is faded out.

### Time Windows

Within different time windows you may activate Advertisement titles to start automatically.

#### Settings:
- **Start time:** This is the beginning time of the time window.
Stop-Time:
This is the ending time of the time window.

Compilation #:
Number of the programmed compilation to be played in the Advertisement mode.

Interval (min):
Time in minutes between two advertisement titles. After this time the next advertisement title is played from the programmed compilation regardless of eventually existing title selections.
2.2.5 >Background

In Background mode titles are played from 3 predefined compilations as long as no titles are selected by audience. A selected title will fade-out a just playing background title. Background mode becomes active if it is enabled in at least one of four time windows of the corresponding weekday.

2.2.5.1 Background Settings

<table>
<thead>
<tr>
<th>Background Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Play Mode:</td>
</tr>
<tr>
<td>Max. Playing Time:</td>
</tr>
<tr>
<td>Play Video Titles:</td>
</tr>
</tbody>
</table>

Settings:

**Play Mode:**
- Normal: Titles are played in order of the programmed compilation used.
- Random: Titles are played randomly from the programmed compilation.
- Off: Background mode is deactivated. No Background titles are played.

**Max. Playing Time:**
This is the maximum time a background title is played. After the programmed time in seconds is over the title is faded out.

**Play Video Titles:**
Video title can be locked. Use the "*" key to select "No" for this setting if you don't want video titles (e.g. part of standard compilation 250) to be played as background titles.

2.2.5.2 >Time Windows

Within different time windows you may activate background titles to start automatically.

2.2.5.2.1 - 2.2.5.2.8 Monday, Sunday, All Days

<table>
<thead>
<tr>
<th>Time Windows</th>
<th>Start time (h:mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>00:0000</td>
</tr>
<tr>
<td></td>
<td>00:0000</td>
</tr>
<tr>
<td></td>
<td>00:0000</td>
</tr>
<tr>
<td></td>
<td>00:0000</td>
</tr>
</tbody>
</table>

Date: 10/17/2000
4 independent entries are possible for each week-day to activate automatically playing of background titles.

**Settings:**

**Start time:**
This is the beginning time of the time window.

**Stop-Time:**
This is the ending time of the time window.

**Compilation #:**
Number of a programmed compilation to be played as background music.
3 different compilations may be predefined. Titles from one of these 3 compilations are played until the background mode is terminated by reaching the end of the time window or by pressing the function key on the remote control. With each call-up of the background mode the compilation is changed.

**Mode:**
Mode of operation for background music.

*Auto*: Background mode will start automatically if one of four time windows will start. Background music is played automatically. By pressing the function key on the remote control you may deactivate the background mode (ref. /2.3.3.3 Function Keys).

*Key*: Background mode will start automatically if one of four time windows will start. Background music is played after pressing the function key on the remote control.
Selection of titles or albums can be locked out basically, or automatically, or time depending.

### 2.2.6.1 > Operator Lockouts

Enter titles or albums to be locked out basically. Use this function to lock out certain titles or CDs to avoid malfunction on playing defective CDs.

**Usage:**

- By pressing the "*" key you can choose between the following functions: "Insert", and "Delete".
- Activate the *insert function* by pressing the "*" key until "Hit=Insert" is displayed. Then press the "Hit" key to add a new special title.
- Activate the *delete function* by pressing the "*" key until "Hit=Delete" is displayed. Then press the "Hit" key to delete an existing special title.
- Select position using the arrow keys.

### 2.2.6.2 > Time Restricted Lockouts

Titles or albums may be locked for each week-day separately.

### 2.2.6.2.1 - /2.2.6.2.8 Monday...Sunday, All Days

4 independent entries are possible on each week-day for time depending lockouts.

**Settings:**

- **Start time:**
  - This is the beginning time of the time window.
- **Stop-Time:**
  - This is the ending time of the time window.

**Compilation #:**

Number of a programmed compilation including titles to be locked against selection.
/2.2.6.3 Automatic Lockouts

Titles or albums having problems while playing because of pollution or scratches can automatically be locked out.

Locked out titles within the corresponding list can be released to enable them to be selectable again.

Use the arrow keys to select the desired title. Press the "Hit" key to confirm your selection.

/2.2.6.4 Lockout Preferences

Errors Allowed:

Enter number of errors that may occur to lockout a corresponding title automatically.

Enter "0" to disable this function.
Service program for ESVI Technology

/2.3 >Hardware

Summary of the functional units: Amplifier, Title display, Remote control, Operators display, Operators key pad, and CD changer.

/2.3.1 >Amplifier Settings

Summary of all settings for audio reproduction.

/2.3.1.1 Music

Settings for volume and sound of music.

Volume:
Attenuation in "dB" of the actual music volume of the four audio channels:
0dB = No attenuation (maximum volume).
-79dB = Full attenuation (minimum volume).

Treble:
Equalizer-setting in "dB" for the high frequencies of music for channel 1/2 or channel 3/4.
0dB = normal setting
14dB = maximum treble boost.
-14dB = maximum treble cut.
Enter the desired value. Press "x" key to toggle polarity (+/-).

Middle:
Equalizer-setting in "dB" for the middle frequencies of music for channel 1/2 or channel 3/4.
0dB = normal setting
14dB = maximum middle boost.
-14dB = maximum middle cut.
Enter the desired value. Press "x" key to toggle polarity (+/-).

NOTE: This setting cannot be changed via remote control.
Bass:
Equalizer-setting in “dB” for the low frequencies of music for channel 1/2 or channel 3/4.
0dB = normal setting
14dB = maximum bass boost.
-14dB = maximum bass cut.

Enter the desired value. Press “*” key to toggle polarity (+/-).

NOTE: The setting for volume, treble, and bass are changing by pressing the corresponding keys on the IR remote control respectively by sliding the controls on the wired remote control.

Microphone

Settings for volume and sound of a connected MIC.

Volume:
Attenuation in “dB” of the actual MIC volume of the four audio channels:
0dB = No attenuation (maximum volume).
-37dB = Full attenuation (minimum volume).

Treble:
Equalizer-setting in “dB” for the high frequencies of the MIC for channel 1/2 or channel 3/4.
0dB = normal setting
14dB = maximum treble boost.
-14dB = maximum treble cut.

Enter the desired value. Press “*” key to toggle polarity (+/-).

Bass:
Equalizer-setting in “dB” for the low frequencies of the MIC for channel 1/2 or channel 3/4.
0dB = normal setting
14dB = maximum bass boost.
-14dB = maximum bass cut.

Enter the desired value. Press “*” key to toggle polarity (+/-).

NOTE: The defined settings are changing by pressing the corresponding keys for MIC volume and sound on the IR remote control.
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/2.3.1.3 Input Gain & AVC

<table>
<thead>
<tr>
<th>Input Gain &amp; AVC</th>
<th>12 db</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain Music:</td>
<td></td>
</tr>
<tr>
<td>AVC Response Time:</td>
<td>20 ms</td>
</tr>
<tr>
<td>Gain AUX:</td>
<td>0 db</td>
</tr>
<tr>
<td>Gain MIC:</td>
<td>0 db</td>
</tr>
</tbody>
</table>

Gain:
It is possible to set the input gain of 3 different input channels separately. Depending on the type of connected audio source (CD-Player/SAT-Receiver/Tape or capacitor microphone/dynamic microphone) the output level of the source can vary extremely and therefore optimization of this setting is required.

12dB = maximum input sensitivity
0db = minimum input sensitivity

AVC:
The volume dynamic of CDs often is not equal. So we have integrated an automatic volume control (AVC = Automatic Volume Control) for the CD player, thus to avoid extreme volume changes while playing different CDs.

Settings:

Gain Music:
This is input sensitivity in dB for the CD input.
6db = normal setting

AVC Response Time:
This is the response time for the AVC.
No: = AVC deactivated
Yes: = AVC activated

Gain AUX:
This is input sensitivity in dB for the AUX-In input.

Gain MIC:
This is input sensitivity in dB for the MIC input.
Different modes for playing of music or for the auxiliary inputs/outputs (AUX-In/AUX-Out) can be set paired for the audio channels (1/2 or 3/4).

**Signal:**
Select between MONO and STEREO. Press the "*" key to select.

**Stereo:** Music reproduction is performed in "Stereo". Use this setting only for rooms where it is possible to hear the stereo effect.

**Mono:** Music reproduction is performed in "Mono". Use this setting if an equal positioning of loudspeakers for stereo is not possible, or if different rooms should be exposed with different volumes.

**AUX-Mode:**
The mode of operation of the 2x2 AUX-outputs (1/2 or 3/4) can be set differently. Use the "*" key to change the mode:

**Fixed:** The output level of the outputs is fixed that means it is independent from the volume setting and sound setting of the phonograph. Use this setting i.e. for connecting a tape recorder or an additional amplifier with integrated volume control.

**3 Band:** The output level of the outputs is depending on the setting for volume and sound of the phonograph. Use this setting i.e. for connecting an additional amplifier without integrated volume and sound control.

**Surround:** For using this phonograph with real surround sound you need at least four loudspeakers for that different sound material. An external amplifier to drive the surround speakers must be connected to the AUX-Out connectors.

**Variable:** Equivalent to "3 Band" the output level depends on the setting of the phonograph.

**AUX-Priority:**
The priority of the "AUX-In"-inputs (1/2 or 3/4) can be set differently. Use the "*" key to change the priority:

**Idle:** Playing a CD has priority. The phonograph fades the AUX-In signal to the amplifier only if no CD is played (stand-by).

**Detect:** The external device has priority. The phonograph fades the AUX-In signal to the amplifier immediately after detecting an audio signal.

**Aux:** The phonograph switches the AUX-In signal to the amplifier immediately after detecting an audio signal. If no signal is detected the amplifier is deactivated. In this mode CD music is not played to the corresponding channels (1/2 or 3/4).

**Through:** The "AUX-In"-input is always switched to the amplifier, even if there is no signal. In this mode the CD music is not played to the corresponding channels (1/2 or 3/4).

**Off:** The "AUX-In"-input is deactivated.
Service program for ESI Technology

2.3.1.5 Attenuation

| Attenuation | Background Mode (-db): | 1 |
|            | Microphone Mode (-db): | 12 |
| Output (-db): | 0 | 0 | 0 | 0 |

The output level can be attenuated differently for different mode of operation.

**Background Mode:**
Attenuation of music volume in background mode.
If background titles are played the volume is automatically decreased by the programmed value.
0dB: = no attenuation.
-36dB: = maximum attenuation.

**Microphone Mode:**
Attenuation of music volume if a MIC signal is detected. Example: For any message broadcasting it is useful to reduce the music volume.
0dB: = no attenuation.
-36dB: = maximum attenuation.

**Output:**
The total output level of the four channels can be attenuated differently. Use this setting for limiting the volume or the output power.
0dB: = no attenuation.
-36dB: = maximum attenuation.

2.3.1.7 >MORE

More settings for sound reproduction.

2.3.1.7.1 >Sound Features

1: Surround Sound
2: ERS Sound

Two different sound effects are available within this phonograph. They can be activated via the IR remote control. The parameter for this sound effects can be set or changed as desired.
2.3.7.1 Surround Sound

| Surround Sound Mode | Effect Control (-dB): 6 | Phase Shift: 322 |

**Mode:**
4 different modes can be set:
- **Simulated:** A stereo effect is simulated built from a mono input signal.
- **Music:** Optimized setting for music-CDs
- **Movie:** Optimized setting for movie sound tracks
- **Off:** Surround sound is deactivated and cannot be activated via remote control.

**Effect Control:**
The intensity of the surround effect can be attenuated to the following values:
- -6dB = minimum attenuation
- -21dB = maximum attenuation

2.3.7.2 SRS Sound

| SRS Sound Mode | Space Control (-dB): 12 | Center Control (-dB): 5 |

**Mode:**
You may select between 3 different modes:
- **-Surround:** The original audio signal is the input signal for the SRS-module
- **+Surround:** The audio signal modified by the surround module is the input signal for the SRS module.
- **Off:** SRS is deactivated and is not to be activated by the IR remote control.

**Space Control:**
The space effect of the sound reproduction can be set to:
0dB = maximum “space effect”.
-31dB = minimum “space effect”.

**Center Control:**
The center effect of the sound reproduction can be set to:
0dB = maximum “center effect”.
-31dB = minimum “center effect”.

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2.3.17.2 Save NORM Values

The actual setting for sound reproduction as VOLUME, BASS, MIDDLE, TREBLE, SURROUND, and SRS are saved as NORM values.
You can recall these saved values every time by pressing the "NORM" key on the IR remote control.
Use the arrow keys to select YES or the "1" key and confirm your selection by pressing the "Hit" key.

2.3.17.3 Power-Up Values

Within this program step you can predefine which settings should be used for audio reproduction after power-on the phonograph.

On Power-Up:

Use Last: The actual settings just before power-off are taken as new settings after power-on.
Use NORM: The settings saved as NORMAL settings are used after power-on (see "Save NORM Values").
Use the "*" key to toggle.

Max. Volume: Setting to define the maximum power-on pre-set volume. This setting is useful i.e. to avoid high volume at the silent morning after a big party.
For the mechanical title display unit several settings can be taken.

**Valid Pages:**
The number of display positions in the title display.

- **.25** = sliding title display showing 4 covers on each position.
- **.13** = wall boxes with 8 viewable covers on each position.
- **.7** = stand alone phonographs with 16 viewable covers on each position.

**Animation Interval:**
The time interval (in minutes) until the move to the next position is performed. This function is useful to attract attention to the phonograph. Enter “0” to deactivate this function.

**Advertisement Interval:**
The time interval (in minutes) until the next automatic move to the next defined position is performed.
This function is useful to show preferred *pages* in defined time intervals. Enter “0” to deactivate this function.

**Pages:**
Enter the pages (positions) to be displayed after the "Advertisement Interval" time is reached. 8 different positions are possible. After reaching the interval time the next position is moved to.
Service program for ESVI Technology

2.3.3 > Remote Control

Settings for the remote control.

2.3.3.1 General Settings

<table>
<thead>
<tr>
<th>General Settings</th>
<th>Minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Mute time:</td>
<td></td>
</tr>
<tr>
<td>Credits required</td>
<td>Yes</td>
</tr>
<tr>
<td>Standby Priority</td>
<td>High</td>
</tr>
<tr>
<td>Enable clearing code?</td>
<td>No</td>
</tr>
</tbody>
</table>

Max. Mute Time:
This is the maximum time in minutes the phonograph stays MUTE. Use this function to avoid that the phonograph stays in MUTE mode by mistake too long.

Credits required:
Title selection via remote control can be done without credits. Use the "*" key to toggle (No/Yes):
No: No credits necessary.
Yes: Credits necessary.

Stand-by Priority:
This is to define the reaction of the phonograph after pressing the "Stand-by" key (see Function Keys).
Low: The phonograph terminates all functions first and then goes into Stand-by mode.
High: The phonograph immediately goes into stand-by mode after pressing the "Stand-by" key.

Enable clearing code?:
The combined pressing of the "MUTE" key and the "REJECT" key gives you the possibility to clear the whole title memory. Therefore you have to press the following sequence within 10 seconds: Mute, Reject, Reject, Reject. Use the "*" key to activate or deactivate this function.
No: Function deactivated.
Yes: Function activated.
The function keys F1 to F4 can be programmed according to the following list. To change the function use the "v" key to select between the following possibilities:

Stand-by: Stand-by function. After pressing this function key the phonograph goes into stand-by mode (see /2.3.3.3 "General Settings / Stand-by Priority"). After pressing the function key once more this mode is stopped.

Free Credits: Free credit function (see: /2.1.5 "Settings / Free Credits").

Voice Cancel: Use this function to cancel the soloists voice from a music title. This can be done using customary music CDs. The quality of the voice canceling depends on the recording method of the CD. Ideally CDs are recorded having the voices within the middle of the stereo signal. Use this function i.e. for Karaokee events.

Background Music: Background function (see /2.2.5 "Settings / Background").

Switch Channels: Karaokee-CD's (Video) normally have the music including voice recorded to the right channel and music without voice recorded to the left channel. Use this predefined function to toggle between:
- Play left channel
- Play right channel
- Play in stereo

Change MIC Volume After pressing the corresponding function key you may use the slide controls of the wired remote control to vary the volume of the connected MIC. To terminate function press this function key again.

Unassigned: The function key is deactivated.
Service program for ESVI Technology

2.3.4 > Display

Settings for the liquid crystal display in the operators panel (LCD).

2.3.4.1 Display Pages 1

<table>
<thead>
<tr>
<th>Display Pages 1</th>
<th>Seconds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pricing:</td>
<td></td>
</tr>
<tr>
<td>Current Title:</td>
<td></td>
</tr>
<tr>
<td>NSM MUSIC:</td>
<td></td>
</tr>
<tr>
<td>Top Hits:</td>
<td></td>
</tr>
</tbody>
</table>

Used to set the display time for several standard pages. Enter "0" to turn off the corresponding page.

**Pricing:**
Time in seconds for displaying the price information.

**Current Title:**
Time in seconds for displaying the actually played title/track.

**NSM MUSIC:**
Time in seconds for displaying the NSM MUSIK logo.

**Top Hits:**
Time in seconds for displaying the "10 Top-Hits".

**Top CDs:**
Time in seconds for displaying the "10 Top-Discs".

2.3.4.2 Display Pages 2

<table>
<thead>
<tr>
<th>Display Pages 2</th>
<th>Seconds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Msg:</td>
<td></td>
</tr>
<tr>
<td>Next Tracks:</td>
<td></td>
</tr>
<tr>
<td>Happy Hour:</td>
<td></td>
</tr>
<tr>
<td>Free Credits:</td>
<td></td>
</tr>
</tbody>
</table>

**Local Msg:**
Time in seconds for displaying a local message (see /2.3.4.4 "Local Message").

**Next Tracks:**
Time in seconds for displaying the next title to be played.

**Happy Hour:**
Time in seconds for displaying the "Happy-Hour" information (see /2.1.2.2 "Price List #2").

**Free Credits:**
Time in seconds for displaying the "Free Credit" information.

**Date & Time:**
Time in seconds for displaying the "Date and Time" information.
Local Message

You have the possibility to enter a 2-line local message which is displayed while the phonograph is in stand-by mode if activated via /2.3.4.2.

Usage:

Regard the layout of the number keys of the remote control (1/ABC, 2/DEF, 0/Sym). The first pressing of key "1" works as "A", two times pressing gives you a "B" and so on. Use key "0" to enter symbols.

Use "*" key to switch between upper and lower case. Save your message by pressing the "Hit" key.

The "C" key has different functions:

4. If the background of the display is darkened, e.g. after pressing the "Hit" key, pressing the "C" key will terminate/cancel this entry mode.

5. If the background of the display is high-lighted, e.g. after entering a character, you are in entry mode. Pressing the "C" key works as 'delete previous character'.

6. Press and hold the "C" key for 3 s to re-build the original entry (undo).

The corresponding key on the IR remote control is named "VIP" key.

Regard that different characters have different width. So it may happen that the local message is not displayed correctly in stand-by mode if you enter to much wide characters.

Key-Pad

Several 6 digit codes can be defined to activate different functions via the operators key pad.

To activate the corresponding function first press "C" key twice then press "*" key twice followed by your 6 digit code for the desired function.

Codes:

<table>
<thead>
<tr>
<th>Key Codes 1</th>
<th>Key Codes 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Credit</td>
<td>Free Credit</td>
</tr>
<tr>
<td>Background Mode</td>
<td>Background Mode</td>
</tr>
<tr>
<td>Deleting Selections</td>
<td>Deleting Selections</td>
</tr>
<tr>
<td>Deleting Credits</td>
<td>Deleting Credits</td>
</tr>
</tbody>
</table>

Free Credit
Code for activating the free credit function.

Background Mode
Code for activating the background mode.

Deleting Selections
Code for deleting the title memory.

Deleting Credits
Code for deleting of still existing credits.
**Reject Title**
Code for interrupting the now playing title (reject).

**Volume Control**
Code for changing the volume via the key pad. For changing the volume just use the arrow keys afterwards.

/2.3.6 >Data Transmission

Data transmission to a printer or personal computer (PC).
/2.4 Selection

<table>
<thead>
<tr>
<th>Selection</th>
<th>Max. CDs/Tracks: 36</th>
<th>Overplay Limitation: 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable Albums?</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Enable Hits?</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

Settings concerning the title selection.

**Max CDs/Tracks:**
The number of selectable CDs and tracks/titles can be limited. Thus to avoid selection of not existing titles by mistake.

**Max CDs** Number of installed CDs in the CD-changer. Use this function if you have not equipped all CD trays.

**Max Tracks** Number of selectable tracks per CD. Use this function to define the number of titles/tracks you are able to display on the title strips.

**Overplay Limitation:**
The number of equal titles to be stored in the title memory while selection can be limited. If this value is exceeded the corresponding title will not be stored in the title memory again but credits are deducted for it.

**Enable Album:**
Use this function to enable album selection (selected as track 00). Use the "a" key to toggle (Yes/No).

Yes: Album selection enabled.
No: Album selection disabled.

**Enable Hits:**
Use this function to enable hit selection. Use the "s" key to toggle (Yes/No).

Yes: Hit selection enabled.
No: Hit selection disabled.
Settings concerning the reproduction of CDs.

**Play Mode:**
Define the playing sequence for the selected titles. Use the arrow keys to toggle and confirm your selection by pressing the “Hit” key.
- Normal: Selected titles are played in sequence of selection.
- Random: Selected titles are played randomly.

**Max. Playing Time**
Define the maximum playing time in minutes for one title. After this time limit is reached the title will be faded out.

**Max. Titles Same Disc:**
This function is used to define the maximum number of titles played from the same CD. If this value is reached the next title is played from another CD. Use this function to get more variety of music reproduction.
Enter “0” to deactivate this function.
2.6 >Credit & Selection Decay

Settings for automatically or manually deleting of existing credits or title selections in the title memory.

2.6.1 Delete Credits

The credit memory is cleared.
Use arrow keys or key “1” to select YES and confirm selection by pressing the "Hit" key.

2.6.2 Delete Selections

The title memory is cleared.
Use arrow keys or key “1” to select YES and confirm selection by pressing the "Hit" key.

2.6.3 Decay Times

Credits Idle:
After this programmed time (in minutes) the automated deleting of existing credits is started if the phonograph is in stand-by mode.

Credits Power-Off:
After this programmed time (in minutes) the automated deleting of existing credits is started if the phonograph is powered-off.

Selections Power-Off:
After this programmed time (in minutes) the automated deleting of existing selection in the title memory is started if the phonograph is powered-off.
Service program for ESVI Technology

/3. Bookkeeping

/3.1 Popularity

/3.1.1 Last reset

Friday, 01/07/2000 16:14
Press key to continue...

Displays date and time the popularity counter was cleared at last.

/3.1.2 Show Least Selected CD

Display of all CD popularities in order of least played CDs. Example: 051:03 = CD51 was selected 3 times.
The display is capable of displaying 18 entries on each page. Press any key to turn pages.

/3.1.3 Show Most Selected CD

Display of all CD popularities in order of most played CDs.
The display is capable of displaying 18 entries on each page. Press any key to turn pages.
3.1.4 Show Most Selected Titles

<table>
<thead>
<tr>
<th>S/N</th>
<th>Title</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>020</td>
<td>04:08</td>
<td>023</td>
</tr>
<tr>
<td>020</td>
<td>05:00</td>
<td>022</td>
</tr>
<tr>
<td>023</td>
<td>03:05</td>
<td></td>
</tr>
<tr>
<td>022</td>
<td>01:05</td>
<td></td>
</tr>
<tr>
<td>022</td>
<td>01:03</td>
<td></td>
</tr>
<tr>
<td>031</td>
<td>03:02</td>
<td></td>
</tr>
</tbody>
</table>

Display of all title popularities in order of most played title. Example: 020*04:08 = title 20*04 was played 8 times. The display is capable of displaying 18 entries on each page. Press any key to turn pages.

3.1.5 Reset Popularity

All Popularity counters are set to “0”.
Use arrow keys or key “1” to select YES and confirm selection by pressing the “Hit” key.

3.2 Accounting within period

- Last reset
- Accounting Global
- Accounting Main Jukebox
- Accounting For Selectors
- Reset Accounting Data

All accounting data within one accounting period.

3.2.1 Last reset

Friday, 01/07/2000 16:14
Press key to continue...

Display of date and time the accounting data were deleted the last time.

3.2.2 Accounting Global

- Play Report
- Paid Credits Per Hour
- Event Log
- Power On/Off Periods

General accounting data within the accounting period.
Service program for ESVI Technology

/3.2.2.1 Play Report

<table>
<thead>
<tr>
<th>Play Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular Titles: 5</td>
</tr>
<tr>
<td>Background Titles: 0</td>
</tr>
<tr>
<td>Autoplay Titles: 0</td>
</tr>
<tr>
<td>Advertisement Titles:</td>
</tr>
</tbody>
</table>

Display of all playing results.

Regular Titles
Playing of "normally selected" titles.

Background Titles
Playing of background titles.

Auto-Play Titles
Playing of auto-Play titles.

Advertisement Titles
Playing of advertisement titles.

/3.2.2.2 Paid Credits Per Hour

<table>
<thead>
<tr>
<th>Time</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>0:</td>
<td>15:16</td>
</tr>
<tr>
<td>1:</td>
<td>0:27</td>
</tr>
<tr>
<td>2:</td>
<td>10:18</td>
</tr>
<tr>
<td>3:</td>
<td>11:13</td>
</tr>
<tr>
<td>4:</td>
<td>12:19</td>
</tr>
<tr>
<td>5:</td>
<td>13:22</td>
</tr>
<tr>
<td>6:</td>
<td>14:23</td>
</tr>
<tr>
<td>7:</td>
<td>15:24</td>
</tr>
</tbody>
</table>

Display of earned credits per each hour a day, within the accounting period. i.e. 13: 68, means between 1.00 and 2.00 p.m. you have earned money for 68 credits.

<table>
<thead>
<tr>
<th>Time</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0:</td>
<td>15:100%</td>
</tr>
<tr>
<td>1:</td>
<td>0:0%</td>
</tr>
<tr>
<td>2:</td>
<td>10:0%</td>
</tr>
<tr>
<td>3:</td>
<td>11:0%</td>
</tr>
<tr>
<td>4:</td>
<td>12:0%</td>
</tr>
<tr>
<td>5:</td>
<td>13:0%</td>
</tr>
<tr>
<td>6:</td>
<td>14:0%</td>
</tr>
<tr>
<td>7:</td>
<td>15:0%</td>
</tr>
</tbody>
</table>

Press the "%" key to toggle to percentage display. i.e. 15: 24%, means between 3.00 and 4.00 p.m. you have earned 24% of the total cash box.

Use this information to find out at which time of a day you make the greatest amount. Thus to decide whether different prices for different times should be activated or not (see /2.1 Price Lists & Time Windows). Also you may find out that your idea was good to place HAPPY HOUR time (Price List #2) at this times as you did.

/3.2.2.3 Event Log

<table>
<thead>
<tr>
<th>Event Log</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background Music: 0</td>
</tr>
<tr>
<td>Start Activations: 0</td>
</tr>
<tr>
<td>Title Display Movings: 0</td>
</tr>
<tr>
<td>Microphone Detection: 0</td>
</tr>
<tr>
<td>AUX In Detection: 0</td>
</tr>
</tbody>
</table>

Display the number of several events.

Use this function to find out if the phonograph is placed well at this location, how it is used, and which functions are used how often or not.
Background Music:
Number of activating the background mode.

Mute Activations:
Number of activating the MUTE function via remote control.

Title Display Movings:
Number of moves of the title display.

Microphone Detections:
Number of detecting a signal at "MIC"-input.
A microphone is detected if the audio level of a signal at the "MIC"-input reaches a defined level.

Aux-In Detections:
Number of detecting a signal at "AUX-in"-input.
An AUX-in-signal is detected if the audio level of a signal at the "AUX-in" input reaches a defined level.

<table>
<thead>
<tr>
<th>Event Log</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title Rejects:</td>
</tr>
<tr>
<td>Key Code Inputs:</td>
</tr>
<tr>
<td>Service Mode Activations:</td>
</tr>
<tr>
<td>Power On Time:</td>
</tr>
</tbody>
</table>

Press any key to turn pages to display more events.

Title Rejects:
Number of detecting a "Reject" key pressing.

Key Code Inputs:
Number of detecting a key code entries (see 2.3.6 Key-Codes).

Service Mode Activations:
Number of detecting an action on the service switch.

Power On Time:
The power-on time (in hours:minutes) of this phonograph since the last reset.

/3.2.2.4 Power On/Off Periods

<table>
<thead>
<tr>
<th>Power On/Off Periods</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/15/95 09:17 - 01/15/00 22:59</td>
</tr>
<tr>
<td>01/14/00 06:20 - 01/14/05 23:17</td>
</tr>
<tr>
<td>01/12/00 09:15 - 01/12/00 22:17</td>
</tr>
<tr>
<td>01/12/00 09:15 - 01/12/00 22:17</td>
</tr>
<tr>
<td>01/10/00 09:13 - 01/12/00 01:14</td>
</tr>
<tr>
<td>01/10/00 10:17 - 01/10/00 22:32</td>
</tr>
</tbody>
</table>

Get a list of the last 6 power-on periods.
Here you can find out at which times the phonograph is normally powered on and off.
Service program for ESVI Technology

3.2.3 Accounting Within Period For Main Jukebox

| Cash Takings | 300 |

Bookkeeping data of the main phonograph (w/o Selectors).

3.2.3.1 Cash Takings

Display of the cash takings in monetary units of this phonograph.

3.2.3.2 Monetary Entries

| Coins/Bills | 0 |

Number of coins and bills per channel of this phonograph:
C1-C6: Number of inserted coins.
B1-B2: Number of inserted bills.

3.2.3.3 Selections

| Selections | 0 |

Listing of the frequency of title selections at this phonograph.

**Total Titles:**
Total number of title selections.

**Regular Titles:**
Number of normal title selections.

**Special Titles:**
Number of paid for “special selections”.

**Albums:**
Number of album selections.

**Overplay Regular:**
Number of not played “overplay selections” of regular (normal) titles. That are these titles which were selected although the overplay limit was reached.

**Overplay Special:**
Number of not played “overplay selections” of special titles. That are these titles which were selected although the overplay limit was reached.
/3.2.3.4 Credits

![Credit Table]

Display of given credits of this phonograph.

**Normal:**
Number of credits based on price list #1 (Normal Price List).

**Happy Hour:**
Number of credits based on price list #2 (Happy-Hour Price List).

**Special 1:**
Number of credits based on price list #3 (Special1 Price List).

**Special 2:**
Number of credits based on price list #4 (Special2 Price List).

Press any key to turn to next page displaying given credits.

![Credit Table]

**Service:** Number of credits given at pulling the service switch (see /2.1.5.3 No.Credits Service Mode)

**Free credits:** Number of given free credits.

/3.2.4 Accounting Within Period For Selectors
Description refer to /3.2.3 "Accounting Within Period For Main Jukebox".

/3.2.4.1 Cash Takings
Display the cash takings in monetary units of all connected Selectors.
Description see /3.2.3.1.

/3.2.4.2 Monetary Entries
Number of coins and bills per channel of all connected Selectors.
Description see /3.2.3.2.

/3.2.4.3 Selections
Listing of the frequency of title selections at all connected Selectors.
Description see /3.2.3.3.

/3.2.4.4 Credits
Display of given credits at all connected Selectors.
Description see /3.2.3.4.


Service program for ESVI Technology

/3.2.5 Reset Accounting Data

All bookkeeping data are set to "0".
Use the arrow keys or key "1" or key "2" to select Yes / No. Press the "Hit" key to confirm your selection.

/3.3 Accounting Total

The cumulated data of all accounting information.
These information cannot be reset.

/3.3.1 >Accounting Global

General accounting information within the accounting period.

/3.3.1.1 Play Report

Display of all playing results. Description see /3.2.2.1

/3.3.2 Accounting Total For Main Jukebox

Bookkeeping data of this phonograph (w/o Selectors). Description refer to "/3.2.3 Accounting Within Period For Main Jukebox."

/3.3.2.1 Cash Takings

Display off the cash takings in monetary units of this phonograph (w/o Selectors). Description see /3.2.3.1.

/3.3.2.2 Monetary Entries

B - 50

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Number of coins and bills per channel of this phonograph (w/o Selectors). Description see /3.2.3.2.

/3.3.2.3 Selections
Listing of the frequency of title selections at this phonograph (w/o Selectors). Description see /3.2.3.3.

/3.3.2.4 Credits
Display of given credits at this phonograph (w/o Selectors). Description see /3.2.3.4. – Normal, Happy Hour, Special 1, Special 2, Service, Free Credits

/3.3.3 Accounting Total For Selectors
Bookkeeping data of all connected Selectors. Description see /3.2.3 “Accounting For Main Jukebox”.

/3.3.3.1 Cash Takings
Display off the cash takings in monetary units of all connected Selectors. Description see /3.2.3.1.

/3.3.3.2 Monetary Entries
Number of coins and bills per channel of all connected Selectors. Description see /3.2.3.2.

/3.3.3.3 Selections
Listing of the frequency of title selections at all connected Selectors. Description see /3.2.3.3.

/3.3.3.4 Credits
Display of given credits at all connected Selectors. Description see /3.2.3.4.
Service program for ESVI Technology

3.4 Send or Print

For data exchange the bookkeeping data may send to the DataPrint (see accessories) or to a connected PC.

**Target:**

With the key "*" you may chose between the following possibilities:

- **DataPrinter – ES5 Full:** The bookkeeping data within accounting period will be sent to the DataPrint, compatible to the ES5-Technology.

- **DataPrinter – ES5 Hitlist:** The popularity and hit list will be sent to the DataPrint, compatible to the ES5-Technology.

- **DataPrinter Accounting:** All bookkeeping data within accounting period will be sent to the DataPrint.

- **DataPrinter Full:** All bookkeeping data within accounting period, and the accumulated data will be sent to the DataPrint.

- **PC – Full (XML):** All bookkeeping data within accounting period, and the accumulated data will be sent to a connected PC.

**Note when using DataPrint:**

Connect the DataPrint to the BACTA interface via a serial interface adapter. (25pol male to 9pol female). The interface adapter you may purchase at a computer shop.

**Note when using a PC:**

Connect a PC or a Notebook to the RS232 interface via a NULL-MODEM Cable. A NULL-MODEM Cable (25pol female to 25pol female) you may purchase at a computer shop. Wiring of the NULL-MODEM Cable: 2/3, 4/5, 6/8/20, 1/1, 7/7.

For data transmission to the PC you may use the program "HyperTerminal" within accessories of Windows95/98. The data will be send in the XML-format and displayed on the screen. With "HyperTerminal" you may use the function "Transmission/Receive file" to record the XML-data to the hard disk.

**Confirm:**

To confirm the selected transmission type, activate the field **Confirm** and press "Hit".

---

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Connect the DataPrint to the BACTA-interface respectively a PC to the RS232-interface and press the "Hit" button. The data transmission is started.

After data transmission to the DataPrint or a PC, the machine will ask to clear the accounting data and/or the popularity counters. Activate the field "Yes" if you like to clear the corresponding data, or press "C" to skip this function.
Service program for ESVI Technology

/4 >Service Functions

This menu offers functions for testing the phonograph.

Attention: These functions should be performed only by authorized service staff.

/4.1 >CD Changer

Test- and adjustment functions for the CD changer MBC III used in this phonograph.

/4.1.1 >CD-Changer Adjustment

Adjustment for the CD changer MBC III.

/4.1.1.1 Adjust Gripper Reference

The adjustment of the gripper reference is performed automatically. First the already stored reference values will be displayed:

Adjust Gripper Reference

<table>
<thead>
<tr>
<th>Current</th>
<th>Inner Distance: 19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Outer Distance: 17</td>
</tr>
<tr>
<td></td>
<td>Total Range: 1165</td>
</tr>
<tr>
<td></td>
<td>Press Hit to Start - C to Cancel</td>
</tr>
</tbody>
</table>

Afterwards press the "Hit" key to start the new adjustment procedure, or press the "C" key to cancel.

If the function is completed the following message is displayed:

Adjust Gripper Reference

New Gripper settings have been saved successfully.
Press any key to continue

Press any key to display the new reference values.
The adjustment is completed and the new values are saved.
Press any key to terminate this function.

Note: For best function of the CD changer the values of "Inner-" and "Outer Distance" should be in the range of "12" to "25". The difference of both values should be less/equal to "5". This value "Total Range" is the distance in motor steps between inner and outer gripper position and is for your information only.
4.1.1.2 Adjust Lift Reference

First the actually stored reference values are displayed.

<table>
<thead>
<tr>
<th>Adjust Lift Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current:</td>
</tr>
<tr>
<td>Sync Distance: 23</td>
</tr>
<tr>
<td>Corrected Distance: 23</td>
</tr>
<tr>
<td>Press Hit to Start - C to Cancel</td>
</tr>
</tbody>
</table>

Press the “Hit” key to start the new adjustment procedure, or press “C” key to cancel.

Follow the instructions on the display:

<table>
<thead>
<tr>
<th>Adjust Lift Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEP 1</td>
</tr>
<tr>
<td>Press Lift down firmly</td>
</tr>
<tr>
<td>* Press H when done (C - Cancel)</td>
</tr>
</tbody>
</table>

Step 1:
Press the lift down firmly to the bottom of the CD changer. Afterwards press the “Hit” key.

<table>
<thead>
<tr>
<th>Adjust Lift Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEP 2</td>
</tr>
<tr>
<td>2 3 4 Move Tray</td>
</tr>
<tr>
<td>Up/Down Arrows</td>
</tr>
<tr>
<td>H - Save</td>
</tr>
<tr>
<td>C - Cancel</td>
</tr>
</tbody>
</table>

Step 2:
The lift automatically moves to position 49 of the CD magazine. In this position you can check if the gripper perfectly moves the CD tray out of / into the magazine. Therefore use the following keys:

Key "2": Grip left CD tray
Key "3": Replace CD tray
Key "4": Grip right CD tray.

Use the arrow keys Up / Down to move the lift in single steps to adjust the height. Afterwards press the “Hit” key.

<table>
<thead>
<tr>
<th>Adjust Lift Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Lift settings have been saved successfully.</td>
</tr>
<tr>
<td>Press any key to continue</td>
</tr>
</tbody>
</table>

Press any key to display the new reference values.
The adjustment is completed and the new values are saved.
Press any key to terminate this function.

Date: 10/17/2000
Service program for ESVI Technology

4.1.2 CD-Changer Test

Functions to test the CD changer.

4.1.2.1 CD-Changer Opto Test

The 5 optos in the MBC III CD changer can be checked automatically if they are defective, or dirty, or if they have not enough brightness.

Uled-Reference: This reference value for the supply voltage of the optos should be in the range of 165 to 195.

sLift: The value for this opto which controls the synchronization of the lift height should be in the range of 25 to 80.

sGrO, sGrI: The values for these optos controlling the position of the grippers ("Gripper Outer" and "Gripper Inner") should be in the range of 25 to 80.

sGrL, sGrR The values for these optos controlling the positions "Gripper Right" and "Gripper Left" should be in the range of 15 to 75.

Please note: If a 50 CD changer is installed, sGrL and sGrR will show 00.

The displayed values indicate the switching level of the optos in percent of the supply voltage. As lower the value is, as sensitive is the opto. A value 100 indicates that this opto is dead, a value 0 indicates stray light.

If the values are not in a "normal" range you should better change the corresponding opto.

Press any key to quit this function.

4.1.2.2 Interactive CD-Changer Test

Functions for manually control the CD changer.

This test is performed on two levels:

1. "Changer" to control the changer mechanism (robotics) and to place a CD on the player. You may move the lift up and down, perform single motor steps, hold and replace CDs, or load the next/previous CD automatically. This level is active after starting the test. After a CD is placed on the player the program turns to level 2.

2. "Player" to control the CD-player, respectively to play a CD. You may check functions like Play, Pause, Stop, Next, Previous, Search forward/backward, or Load next or previous CD, Position to next track/previous track, or Restore the CD. After a CD is restored to its magazine place the program turns back to level 1.
The operator keys have different function depending on the active level. The operators display shows the assigned function symbols.
Service program for ESVI Technology

4.2 > CPU & Memory Test

Test functions for CPU and memory.

4.2.1 CPU Test

The Test passed successfully
Press any key to continue

Functions to test the micro controller on the CB CENTRAL UNIT.
Press any key to quit this function.

4.2.2 Volatile Memory Test

Testing 200100 - 2001FF

The main memory of the micro controller is tested for correct functioning.
Each address of the respective memory location checked is displayed.
Press "C" to cancel this function, or press any other key to quit the terminated test.

4.2.3 Non Volatile Memory Test

Testing 200200 - 2002FF

This battery buffered memory is tested for correct functioning. Each address of the respective memory location checked is displayed.
Press "C" to cancel this function, or press any other key to quit the terminated test.

4.3 I/O Test

Functions for testing operating devices, inputs, and outputs.
4.3.1 Test Display

Function to test the operators display (LCD). Several test patterns are scrolled through the display horizontally and vertically. Check that all pixels are displayed. Use the following keys:

"Hit": Stop the test pattern.
"4": Continue the test.
"C": Quit the test.

4.3.2 Key pad Test

The key pad layout is displayed on the operators display. On each key press of the key pad (or the remote control) the corresponding symbol is displayed inverted. Also the rocker button for moving the title display can be checked. To quit this test routine you must press the "C" key twice.

4.3.3 Input Ports

Reserved.
Functions to test the input ports of the CB CENTRAL UNIT.

4.3.4 Output Ports

Reserved.
Functions to test the output ports of the CB CENTRAL UNIT.

4.3.5 Remote Control

Reserved.
Functions to test the IR remote control or the wired remote control.
4.4 Title Assembly Test

Functions to test the title display types 7x16, 13x8, and 25x4.

<table>
<thead>
<tr>
<th>Title Display Continuance Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type: 25x4</td>
</tr>
<tr>
<td>Outputs: Moving Pickup Right</td>
</tr>
<tr>
<td>Inputs: 1 2 3 - - - R</td>
</tr>
</tbody>
</table>

On activating the title display all input and output states will be displayed.
- **Type**: Type of title display unit which is connected
- **Outputs**: The actually performed action
- **Inputs**: The input status of opto couplers and keys

4.5 Continuance Tests

Continuous run test for the CD changer and for the title display. While a continuance test is running the number of turns (Pxxx) and the number of occurred errors (E000) is displayed in the upper right corner of the display. Press "C" key to cancel this test routine.

4.5.1 Total Continuance Test

Combination of "Play Selected 16sec" and "Continuance test Title Assembly".

4.5.2 Play All (16sec)

All CDs are played for 16 seconds each.

4.5.3 Play Selected (16sec)

Up to 8 different titles may be selected to be used for this test.
To start the test: Select [Hit here to Start] using the arrow keys and press the "Hit" key. Entering track 99 means the last track of the CD should be played.

**Note**: If you enter "99" for track number the last track of the corresponding CD is played always. This may be helpful to check if the CD player plays the outer tracks of a CD correctly.
The selected titles are repeatedly played for 16 seconds each.

/4.5.4 Load All

<table>
<thead>
<tr>
<th>Load All</th>
<th>POOV RUPO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Loaded</td>
<td></td>
</tr>
<tr>
<td>1.00-Loaded</td>
<td></td>
</tr>
<tr>
<td>2-Loaded</td>
<td></td>
</tr>
<tr>
<td>99-Loaded</td>
<td></td>
</tr>
<tr>
<td>3-Loaded</td>
<td></td>
</tr>
<tr>
<td>98-Loaded</td>
<td></td>
</tr>
<tr>
<td>4-Loaded</td>
<td></td>
</tr>
</tbody>
</table>

All CDs are repeatedly loaded from and restored into the magazine.

/4.5.5 Load Selected

<table>
<thead>
<tr>
<th>Load Selected</th>
<th>Enter disc sequence:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 25 50 51</td>
<td>1 106</td>
</tr>
<tr>
<td>75 1</td>
<td>Hit here to Start</td>
</tr>
</tbody>
</table>

Up to 8 different CDs may be selected to be used for this test. To start the test: Select Hit here to Start using the arrow keys and press the "Hit" key.

<table>
<thead>
<tr>
<th>PLAY Selected (16Sec)</th>
<th>POOV RUPO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Loaded</td>
<td></td>
</tr>
<tr>
<td>25-Loaded</td>
<td></td>
</tr>
<tr>
<td>50-Loaded</td>
<td></td>
</tr>
<tr>
<td>51-Loaded</td>
<td></td>
</tr>
<tr>
<td>75-Loaded</td>
<td></td>
</tr>
<tr>
<td>1.00-Loaded</td>
<td></td>
</tr>
<tr>
<td>1-Loaded</td>
<td></td>
</tr>
</tbody>
</table>

The selected CDs are repeatedly loaded from and restored into the magazine.

/4.5.6 Twice T4 then T3

Combination of 2 times running test 4 ("Load All") followed by repeatedly running test 3 ("Play Selected 16sec"). While this test is running also the title assembly is continuously tested.
Service program for ESVI Technology

4.6 Error Logbook

The phonograph is equipped with a special memory to save all occurring errors. The last errors (up to 100 errors) are registered.

4.6.1 Show Error Log

Display of all errors occurred since the last reset. After calling this function the last page is displayed. Use arrow keys to turn pages up and down.

4.6.2 Clear Error Log

To clear the error log memory use the arrow keys to select “YES”. Press “Hit” key to confirm.

4.6.3 Automatic Lockouts

Display or Delete the automatically locked out titles. This test is identically to /2.2.6.3.
14.7 Data Transmission

Functions for serial data transmission via the RS232 interface.

14.7.1 Serial Interface Test

Reserved.
Function to test the serial interfaces.

14.7.2 Upload New Software

Using a Personal-Computer (PC) you can download a new version of the phonograph's firmware (i.e. new program).
For protection against unauthorized usage a special security code is needed (Upload Code). Get this code if necessary from your local service department.
For transmitting data a standard terminal program may be used, i.e. "HyperTerminal" (accessory from Win95®).

PC setting:
Baud rate: 38400 Baud
Protocol: X-Modem

Attention: After input of the valid security code the original firmware is deleted and the program asks for downloading the new version of firmware. The phonograph is operable again earliest after this download is completed!