OPERATING INSTRUCTIONS

FOR NSM–PHONOGRAPHS

ES V–CD TECHNOLOGY

to
Technical Information, Assy

176 393	THE PERFORMER GRAND II
176 352	THE WIZARD/ OLD FASHION WIZARD
176 514	THE PERFORMER CLASSIC
176 610	CD HIDE–AWAY II
176 598	FIREBIRD II
176 705	THE PERFORMER WALL

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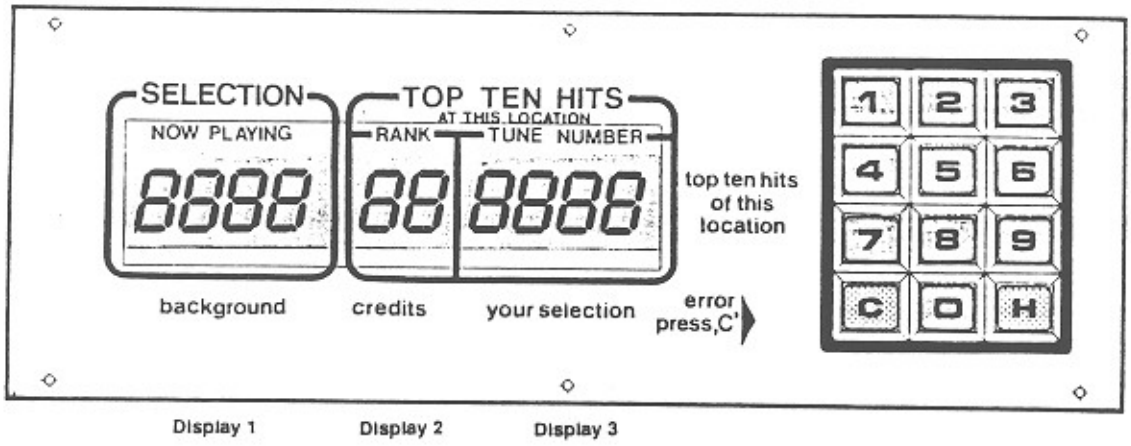
SELECTOR and DISPLAY PANEL



1 PLAYING SEQUENCE

The functional sequence, starting with "power on", standby credit, selection and playing of selected title to the rest position is described below.
The technical assembly and the working together of the components can be seen in the "electronic schematics". Compare the descriptions with the illustration of the display / keyboard above.

1.1 Operation after Switching on

Immediately after switch–on the memory components –on the CONTROL UNIT– and all preprogrammed values are checked.
Display 1 shows then for 2 sec. the program index
If an error is found during checking, error display Er xx is then shown for 2 sec.
With Er 31 (unverified memory contents) and Er 40 (price settings incorrect) Display 1 shows the correct program step with Pxxx which needs to be reprogrammed. See programming manual.
With other Er–numbers in display 3, even during operation, proceed according to the instructions in "Trouble Shooting".

1.2 Standby

Hit display:
The microprocessor of the CONTROL UNIT finds out the ten most played titles of the 30 titles just played before (at this phonograph).
On Display 3 the title numbers of the 10 most popular titles, whose rankings (1–10) are shown on Display 2, are changed in intervals of 2 sec. Also the lamp "top ten hits" lights up.
When pushing "H", the hit display can be stopped for 16 sec; every press the key "H" causes an advance to the next hit.
Note: When the popularity counters are erased (program step P033), the hit parade is erased too. In that case "0" appears for ranking until records are played again.

Autoplay mode:
A time interval can be set by programming the command group P 11x for playing of incentive titles.

Conditions for an incentive title to be played:

- Phonograph in standby mode
- No credit available
- Microphone switch not being used
- No muting

1.3 Credits (not for HIDE–AWAY)

See unit description "Coin and Bill Validation".

After insertion of a coin the hit display is interrupted, lamp "10 top hits" goes off and lamps "credit" and "your selection" light up. Display 2 shows the number of credits.
For every selection credit is deducted.
If not enough credits are available for the selection, the lamp "credit" flashes.
If no more coins are inserted within 16 sec. or no selector key is pressed, the mode changes to "hit display".
Free–credit switch (add. key), below the mechanical coin acceptor or on the adapter PCB with electronic coin validators, is only possible when the cabinet lid is open and the cabinet interlock switch is in service position (press add. button once = 1 credit). These credits are not registered statistically.
Attention! The machine is furnished with an interlock switch which must be manually set in service position (pull out). The switch resets automatically when closing the lid.
Note: Credits remain stored during "power off/on" (P049 = 0).
If the computer detects no activity on the phonograph within a time, the stored credit is cancelled (P049 = time).

1.4 Title display

By pushing the keys respectively title holders are moved into the corresponding direction. Upon each key operation two new CD–covers including titlestrips are shown. In case of a limitation of selectable CDs by programming P042 only the corresponding title holders are shown.
Note: A problem with the title display will initiate error code "Er 9x". Following instructions in "Trouble Shooting".

1.5 Selection

Title Selection: The four–digit number of the desired title has to be entered (2 digits each for CD–No. and title). "Credit" and "your selection" light up. The selection can be corrected by pressing "C" up to 2 sec. after pressing the 4th digit.

Album Selection: When entering Track 00, all titles of a CD are automatically played (i.e. 0300 = all titles of CD 03).

With open cabinet switch (interlock lever pulled out) no credit is deducted when selecting. If the entry is incorrect, e.g. higher than the programmed number of CD titles which can be selected or an unallowed selection of albums, "error" flashes. In that case, press "C" and repeat the selection.
One credit is deducted for each selection of a title. With album selections credits are deducted as per the programming in program step P066. When programming "0", album selection is blocked. If there is not enough credit available, "credit" lamp flashes.
16 sec. after selection "hit display" is switched on automatically again.
Note: If a background or incentive title is playing during selection, the volume is fading and the selected tune is being played.

1.6 Play Mode

After selection of a title the CD which is to be played corresponding to the entries in the selection storage is transported to the player and then played.
Just before start the number of the title is shown on Display 1 ("selection now playing"). After the disc is played, the display is erased and the CD is transported back to its magazine space.
Note: If a error occurs with the CD changer or the player, "Er 7x" or "Er 6x" appears for 2 sec. In that case proceed according to the description in "Trouble Shooting".

Limiting playing time for a title (track)
By programming P045 the time that a title is to be played maximum can be set in minutes.
After expiration of this time the volume for that title is fading and then muted.
When setting "0" (default), there is no limit in playing time.

Sequence of tunes playing
By programming P046 one can set in which sequence the selected titles are played.
Settings: 0 = in sequence of selection (FIFO)
1 = in numerically increasing sequence
2 = random sequence

Limit of Playing Titles on the same CD
One can set by programming P047 how many titles can be played consecutively on the same CD.
With 0 (default) there is no limit.

Attention!
When playing a test compact disc, the description that comes with the test disc is to be exactly adhered to.
By any means, it is to be avoided to give sine signals with peak signal "0dB" at full volume level to the loudspeakers for more than 1 sec.
But also other unfiltered noises and high–frequency signals (which are only used for measuring purposes) can damage the amplifier and loudspeakers at full volume.
When checking channel separation, it is to take in consideration if the box is not switch to "Mono–mode" (see page 110).

1.7. Advertising

With the commands of group 12x it is possible to define timeslices for playing special CD's containing advertising information (ad).
While the ad–mode is active a title is played every x minutes (x ist the time defined in P124) after closing the currently played title. The CD's containing ad can be selected for "not to be played by normal customers" (P126).

1.8 LOCK–OUT TITLES

If one titles of a CD is bad it can be locked out for a defined time at every day by programming the steps in group P13x.

A lock out title can be defined by
- bad quality of reproduction
- bad track within the title
- shocking information.

1.9 Happy–Hour Credits

For additional animation of the audiance, a so called Happy–Hour can be programmed to be active at several days.
While active an additional bonus credit is given if the customer has payed a number of credits (defined as calculation number in P144). I.e. After 5 payed credits one Happy–Hour credit is given if the calculation number is programmed as 5. The programming of Happy–Hour is done with the P14x group of commands. See also descriptions in chapter 3.

1.10 SERVICE and MAITENANCE

With the commands of groups 15x and 16x you can

- read out errors of the phonograph with CD and date of appearence,
- test the CD changer,
- test the CD played,
- test the lamps and keys,
- install new CDs
- remove bad or not actual CDs.

Refer to "Programming of the phonograph" and "Trouble shooting"

2 ADJUSTMENTS WITH REMOTE CONTROL

The phonograph can optionally be equipped with cable–type remote control or infra–red remote control. All functions and the operation of both models are identical. Therefore, this description is valid for both of them.

The button–control box attached to the rear of the cabinet allows common control of both channels "+" or "–" and **"REJECT"**.
Information about the functions of different controls is presented in the unit description "Remote Control".

2.1 Volume Controls

We differentiate between two volumes:
1.) The normal volume of selected titles and random play titles
2.) The background volume of background titles

For selected titles and random titles or with microphone and tape mode the corresponding volume is adjustable; background volume only with background mode:
Key "I" for the left channel; Key "II" for the right channel; "+" = louder, "–" = quieter. When pushing center key (I+II), the channels are regulated together. If they were differently set, they are first "balanced" and regulated together.
When no selection is taking place, the volume for the channels are shown in Display 3 during the adjustment in steps of "1" to "31".
At "muting" function "OFF" appears in Display 1; no more titles will be played until MUTING is cancelled.
The volume set at the end is stored during "power off".
The maximum possible volume for normal and background mode can be limited By programming P051 and P052 in steps of "1" to "31".

Note: To protect the amplifiers a check is made whether an overload occurs due to mismatching.
Upon recognition of an error the volume of the corresponding channel is reduced step by step automatically by the computer until a non–critical point is reached.

2.2 Muting

The volume of both channels can be set to "0" by pressing the MUTING key; "OFF" appears on Display 1.
Re–pressing of the MUTING key or one of the VOLUME "+" keys causes the system to switch back to the previously set volume for both channels.

Note: With display "OFF" no more records are played until MUTING is switched off.

2.3 Free Credits

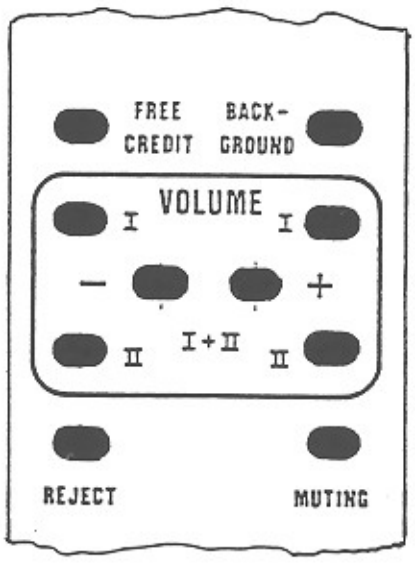
With an "open" key switch free credits programmed in program step P094 can be called up. The following free credits are possible depending upon the settings in step P094:
1.) Number of set free credits can be called up individually step by step.
2.) Unlimited free credits can be called up individually step by step.
3.) Permanent credit when pressing key "FREE CREDIT" for the first time (credit display "99").
When key "FREE CREDIT" is pressed again, permanent credit is blocked.
4.) Permanent credit automatically within the time window.

2.4 Background Music

With an "open" key switch the background mode can be switched on with the BACKGROUND key. "Background playing" lights up.
When pressing this key again, the background mode is switched off. In the background mode "random" records are played as defined in P105. The time when background musik is played is to set in P10x.
The records are played at a "specific" background volume which can be changed as desired during playing.
A "normal record", selected while background music is playing, interrupts the background disc and the selected tune is played at "normal volume".

2.5 Key Switch

A key switch at the side wall serves as protection against unauthorized calling up of free credits and switching on the background mode. When the key switch is "locked", settings from the remote control are disregarded. Key switch "open" permits programmed free credits to be called up and the background mode to be switched on.



REMOTE CONTROL

3 PROGRAMMING PRICE– AND MONETARY VALUE SETTINGS

This description is a summary of a section of the service program.
A detailed description and the corresponding tables are contained in chapter "Price Settings" and "Monetary Value Settings" in the programming manual.

Practical example for setting the "price settings" and the "monetary value settings":

1 play = 50 p
2 plays = 50 p
5 plays = 1 $ (1 £)

Programming of price settings:

Programming information	Operation	Displays 1	2	3
Switch–over from play mode to service mode	pull out plunger	**P010**	**xx**	**xxxx**
	Press key(s)		Play	price
Entering command mode	"C"	P		
Direct selection of a command, Display of previous setting in P061.	"61", "H".	**P061**	**xx**	**xxxx**
New setting in P061 "1 play/50 p".	"01", "0050", "H".	**P061**	**01**	**0050**
Advance to next command, Display of previous setting in P062.	"H"	**P062**	**xx**	**xxxx**
New setting in P062 "1 plays/50p".	"01", "0050", "H".	**P062**	**01**	**0050**
Advance to next command, Display of previous setting in P063:	"H"	**P063**	**xx**	**xxxx**
New setting in P063 "5 plays/1 $.	"05", "0100", "H".	**P063**	**05**	**0100**
Advance to next command, Display of previous setting in P064:	"H"	**P064**	**xx**	**xxxx**
For only 3 classes setting "00 0000".	"00", "0000", "H".	**P064**	**00**	**0000**
Advance to next command, Display of previous setting in P065:	"H"	**P065**	**xx**	**xxxx**
For only 3 price classes setting "00 0000".	"00", "0000", "H".	**P065**	**00**	**0000**

Caution! Press "C" key in the event of incorrect programming or when display flashes.

Press "C" key twice or close hood to **return to standard program (play mode).**

Example of Programming the monetary value settings:

Depending on the type of coin validator the individual coin channels must be programmed for the associated monetary values in the corresponding program steps. Unused channels must be programmed with the monetary value "0"!
See also chapter 3: "Programming of monetary value settings" and chapter 10: "Electr. coin– and bill acceptor".

Checking the monetary value settings: Select one program step between P071 and P075. After inserting a certain coin the channel associated with the coin is displayed, e.g. 50 pence in channel 2: Display P072 0050.

Changing the monetary settings: As an example, the 20 pence slot (channel 1) is not to be used: First enter program step P071 as described above. In the coin acceptor or on the adapter PCB of electronic coin validators the respective channel has to be blocked also so that these coins drop into the coin return.

Standard settings: The programming of standard settings is done with the command P070 and entering the number of the desired table values (see table "Monetary value settings" in the chapter "Programming of the phonograph"). The correct programming of all channels is done automatically after entering the number and pressing the key "H".

Programming information	**Press keys**	**Displays** 1	2	3
Direct selection of a command, Display of previous setting in P071.	See text.	**P071**		**xxxx**
New setting; no coin conversion	"000", "H".	**P071**		**0000**
If the standard setting according to the table is to be used thereafter, call up program step P070 (as described previously).				
Ready for standard setting P071 through P075	See text.	**P070**		
Program standard table 1.	"1", "H".	**P070**		**1**

Press "C" key twice or close cabinet hood and **return to standard program (play mode).**

4 CD CHANGE / CASH COLLECTION

- Open machine and activate cabinet switch (pull out plunger) to enter into service mode. Display 3 automatically shows the least played CD.
- By pressing "1" successively, the next best CD is shown each time.
- Unlock magazine, swing out; pull out the corresponding CD holders to change CD's. After changing push back CD holders until they lock in.
- The title information of the new inserted CD must be recognized to the juke box by calling the command P161. You also may call–up P160 if you have finished the service.
- Change corresponding title cards, unlock flip–chart unit and flap down. Get desired program tables in position with the button on the PCB of the right–hand side of the unit.
- Read counters:
  P013 = Cash total
  P016 = Counter for plays
  P017 = Number of selected titles
  P018 = Number of selected albums
  P019 = Number of overplay titles
  P020 = Number of payed credits
  P021 = Number of free credits provided
  P022 = Number of background titles played
  P023 = Number of autoplay titles
  P024 = Number of advertisement titles
  P025 = Number of Happy–Hour credits
- Erase counters: P033, and selected code number.
- After service is finished call–up P160.
  The read–in of all CD title information is done also while the cabinet is closed. If the read–in was completed the programm automatically returns to the normal play mode.

  For more information see chapter 3 "Programming the phonograph.