Digital Loudspeaker Processor

OPERATORS MANUAL

HSL-24

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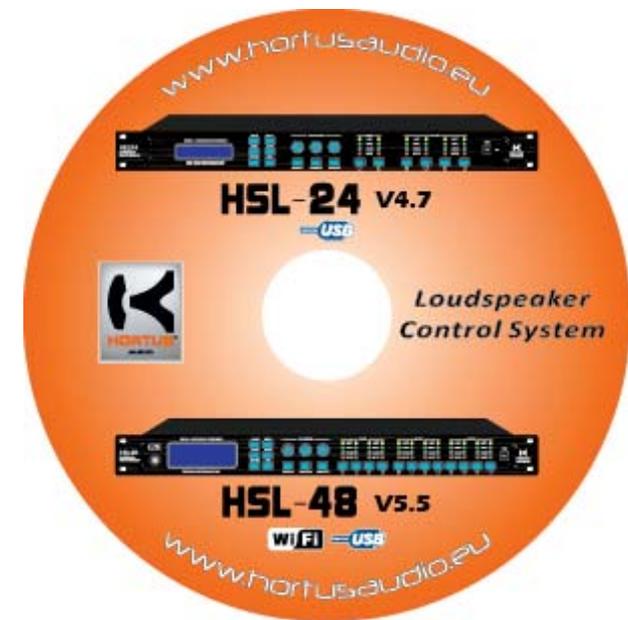
PLEASE PRINT CLEARLY

PRODUCT RETURN INFORMATION

SRA #: _____ (If sending product to Crown factory service.)   Model: _____   Serial Number: _____   Purchase Date: _____

Individual or Business Name: _____

Phone #: _____   Fax #: _____   E-Mail: _____

Street Address (please, no P.O. Boxes): _____

City: _____   State/Prov: _____   Postal Code: _____   Country: _____

Nature of problem: _____
_____
_____

Other equipment in your system: _____

RECALL MENU:

Recall to PC : Recall all channel parameters into PC only.

Recall to Device: Recall all channel parameters into Device.
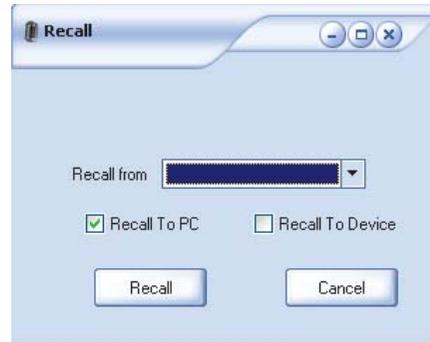
LOCK XOVER MENU:

Lock Xover can let the user locking the parameters that others can't view or edit this data.
There are 4 locking type:

1. No Lock (do not lock)
2. Lock Xover (locking all parameters except gain ,mute)
3. Lock Xover+Gain (locking all parameters except mute)
4. Lock Xover+Gain+Mute(locking all parameters)

EDIT PASSWORD MENU:

Setting the Xover's password, the default password is 000000.When locking, User must remember the password.

LOCK/UNLOCK PANEL MENU:

Lock or unlock the panel , when locking ,all the buttons are disable.

EQ UNIT MENU:

User can switch the EQ unit , use Q value or bandwidth(per octave).

Important Safety Instructions

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with a dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturers instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.
12) Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15) Use the mains plug to disconnect the apparatus from the mains.
16) WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.
17) DO NOT EXPOSE THIS EQUIPMENT TO DRIPPING OR SPLASHING AND ENSURE THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, ARE PLACED ON THE EQUIPMENT.
18) THE MAINS PLUG OF THE POWER SUPPLY CORD SHALL REMAIN READILY OPERABLE.

Press
NEXT→

```
O1            Limiter
Threshold=+20dBu
```

Limiter threshold ,in dBu

Press
NEXT→

```
O1            Limiter
At:20ms Re:200ms
```

Limiter attack time and release time

Input Channel Menu

```
IN：A            Gain
    Gain=+0. 0dB
```

Press channel button in long time, enter this edit menu.

```
IN:AB          Gain
    Gain=+0. 0dB
```

Press channel button in long time, enter this edit menu and do not release channel button, press other channel button, it will enter multi channel edit mode.These channel parameters will be edited simultaneously.

Notice: In Multi-channel edit mode, only the date have been modified will available in these channel , others data will keep still.

Press
NEXT→

```
IN:A    Eq: 1  PEQ
1K00  Q=0. 71  +0. 0dB
```

EQ filter , press FUN button to switch filter parameters(filter type filter frequency, bandwidth or Q, etc)

Press
NEXT→

```
IN:A    Eq: 2  PEQ
1K00  Q=0. 71  +0. 0dB
```

EQ filter , press FUN button to switch filter parameters(filter type filter frequency, bandwidth or Q, etc)

Utility Menu

```
XOVER MENU
Load Xover
```

Load xover sub-menu

Press
ENTER

```
LOAD  XOVER
1. Empty
```

Select a xover .Press ENTER button to load .

```
XOVER MENU
Store Xover
```

Store xover sub-menu

Press
ENTER

```
STORE XOVER
1. Empty
```

Select a xover that want to be store. Press ENTER button to confirm .

```
XOVER MENU
Copy Xover
```

Duplicate xover sub-menu

Press
ENTER

```
SELECT A XOVER
1. ABCD
```

Select a source xover that want to be copied .Press ENTER button to confirm .

Press
ENTER

```
COPY  TO XOVER
2. Empty
```

Select a destination xover. Press ENTER button to confirm .

```
XOVER MENU
Erase Xover
```

Delete xover sub-menu

Press
ENTER

```
ERASE XOVER
1. ABCD
```

Select a xover that want to be delete. Press ENTER button to confirm .

CONTROL PANEL

←BACK   Previous menu
NEXT→   Next menu
MENU   Main menu
ENTER   Confirm
EXIT   Back previous menu
FUN   Shift function (In EQ or Crossover menu)

Channel Button:

1. Press button in short time, mute this channel
2. Press button in long time, edit this channel
3. Press button in long time, when display screen go into edit state, press other channel button, edit these channels in same time.

Panel Menu

Press MENU button

MAIN MENU
XoverSubMenu

Press NEXT→

MAIN MENU
System subMenu

Press ENTER

XOVER MENU
Load Xover

Press ENTER

SYSTEM MENU
Lock Panel

Press NEXT→

XOVER MENU
Store Xover

Press NEXT→

SYSTEM MENU
Version info

Press NEXT→

XOVER MENU
Copy Xover

Press NEXT→

XOVER MENU
Erase Xover

Press NEXT→

XOVER MENU
Lock Xover

System Menu
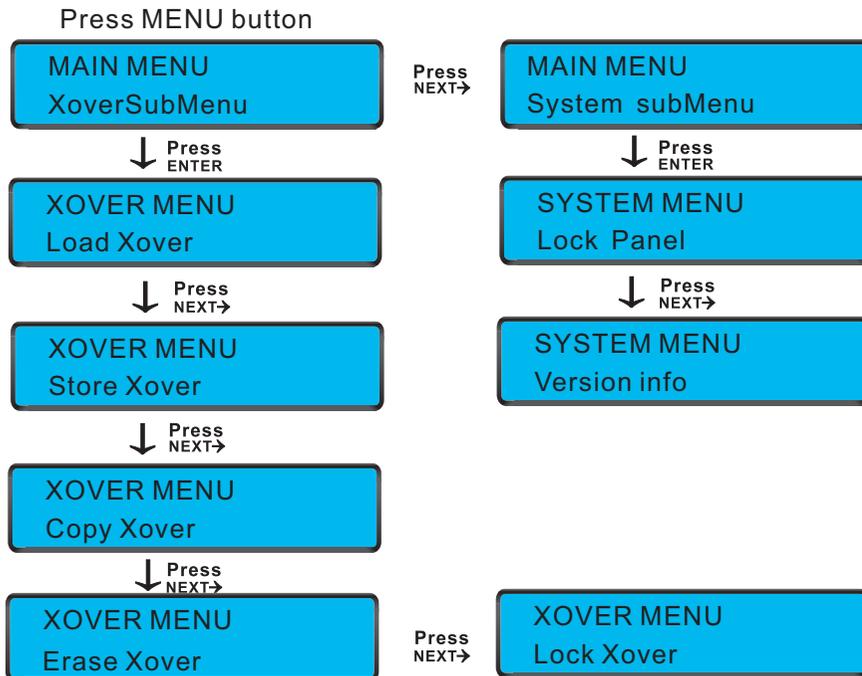
SYSTEM MENU
Lock Panel

When lock panel, all the button are disable

Press ENTER

INPUT   PASSWORD:
000000
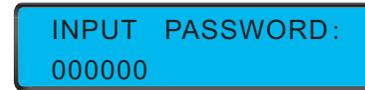
After Inputing password,press ENTER button to confirm,press BACK or NEXT button to switch password character

Press ENTER

LOCK   PANEL:
Locking. . Done!

Lock panel done

Software
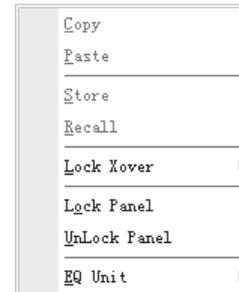
Main software menu instruction:

Copy
Paste
Store
Recall
Lock Xover   ▶
Lock Panel
UnLock Panel
EQ Unit   ▶

COPY MENU: Only A ,B channel can copy each other
Only 1,2,3,4,5,6 can copy each other

PASTE MENU: When selecting one channel and click copy menu and select another channel ,press paste menu, channel parameters duplication is done.

Store
Name: Xover
Store To:
11. Empty
12. Empty
13. Empty
14. Empty
15. Empty
16. Empty
17. Empty
18. Empty

STORE MENU:

Store all the channel parameters into device.

```
┌─────────────────────────┐
│ XOVER MENU              │
│ Lock Xover              │
└─────────────────────────┘
```
Lock xover menu

↓ Press
ENTER

```
┌─────────────────────────┐
│ INPUT  PASSWROD         │
│ 000000                  │
└─────────────────────────┘
```
Input password , default password is
000000,press NEXT or BACK button
to switch the password position.
Press ENTER button to confirm.

↓ Press
ENTER

```
┌─────────────────────────┐
│                         │
│                         │
└─────────────────────────┘
```
There are 4 locking type:

1. No Lock (do not lock)
2. Lock Xover (locking all parameters except gain ,mute)
3. Lock Xover+Gain (locking all parameters except mute)
4. Lock Xover+Gain+Mute(locking all parameters)

↓ ENTER

```
┌─────────────────────────┐
│ NEW  PASSWROD ?         │
│ No/Yes                  │
└─────────────────────────┘
```
If want to set a new password, select YES.
Press ENTER button to confirm.

↓ Select YES
Press ENTER

```
┌─────────────────────────┐
│ NEW  PASSWROD :         │
│ 000000                  │
└─────────────────────────┘
```
Setting a new password ,Press ENTER
button to confirm. Press BACK or NEXT
button to switch password position.

Output Channel Menu

```
┌─────────────────────────┐
│ O1            Gain      │
│   Gain=+0. 0dB          │
└─────────────────────────┘
```
Press channel button in long time, enter
this edit menu.

```
┌─────────────────────────┐
│ O123          Gain      │
│   Gain=+0. 0dB          │
└─────────────────────────┘
```
Press channel button in long time, enter
this edit menu and do not release channel
button, press other channel button, it will
enter multi channel edit mode.These
channel parameters will be edited
simultaneously.

**Notice: In Multi-channel edit mode, only the date have been modified
will available in these channel , others data will keep still.**

↓ Press
NEXT→

```
┌─────────────────────────┐
│ O1            Route     │
│   Route=A               │
└─────────────────────────┘
```
Source selection, A or B or A+B

↓ Press
NEXT→

```
┌─────────────────────────┐
│ O1            Polarity  │
│   Polarity=+            │
└─────────────────────────┘
```
Polarity selection, + or -

↓ Press
NEXT→

```
┌─────────────────────────┐
│ O1            Delay     │
│   Delay=00. 0ms         │
└─────────────────────────┘
```
Delay selection, in millisecond.

↓ Press
NEXT→

```
┌─────────────────────────┐
│ O1            HPF       │
│ 22. 1  LiRil −24dB      │
└─────────────────────────┘
```
High pass filter , press FUN button to
switch filter parameters(filter type
filter frequency, filter slope, etc)

↓ Press
NEXT→

```
┌─────────────────────────┐
│ O1            LPF       │
│ 18K7  LiRil −24dB       │
└─────────────────────────┘
```
Low pass filter , press FUN button to
switch filter parameters(filter type
filter frequency, filter slope, etc)

↓ Press
NEXT→

```
┌─────────────────────────┐
│ O1        Eq：1  PEQ    │
│ 1K00  Q=0. 71  +0. 0dB  │
└─────────────────────────┘
```
EQ filter , press FUN button to
switch filter parameters(filter type
filter frequency, bandwidth or Q, etc)

↓ Press
NEXT→

```
┌─────────────────────────┐
│ O1        Eq：2  PEQ    │
│ 2K00  Q=0. 71  +0. 0dB  │
└─────────────────────────┘
```
EQ filter , press FUN button to
switch filter parameters(filter type
filter frequency, bandwidth or Q, etc)