# PPG
# HDU EXPANDER
# MANUAL

01.06.1987 Software Version 1.5

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## 2.Setting Up
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To set up your PPG Expander 1 (Tapestreamer)
or PPG Expander complete ( with additional Hard Disk), read the following
instructions .


## 3.Unpacking
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The PPG Expander box contains

-  PPG Expander
-  ownersmanual
-  1 flatcable   for Expander Version 1 (Tapestreamer)
-  1 flatcables for Expander Version 2 (additional Hard Disk)
-  2 data cartridges for Expander Version 1
-  1 data cartridges  extra for Expander complete
-  1 powerchord


## 4. Connecting the PPG Expander 1 (Tapestreamer)
##    or the PPG Expander complete  (Hard Disk and Tapestreamer)
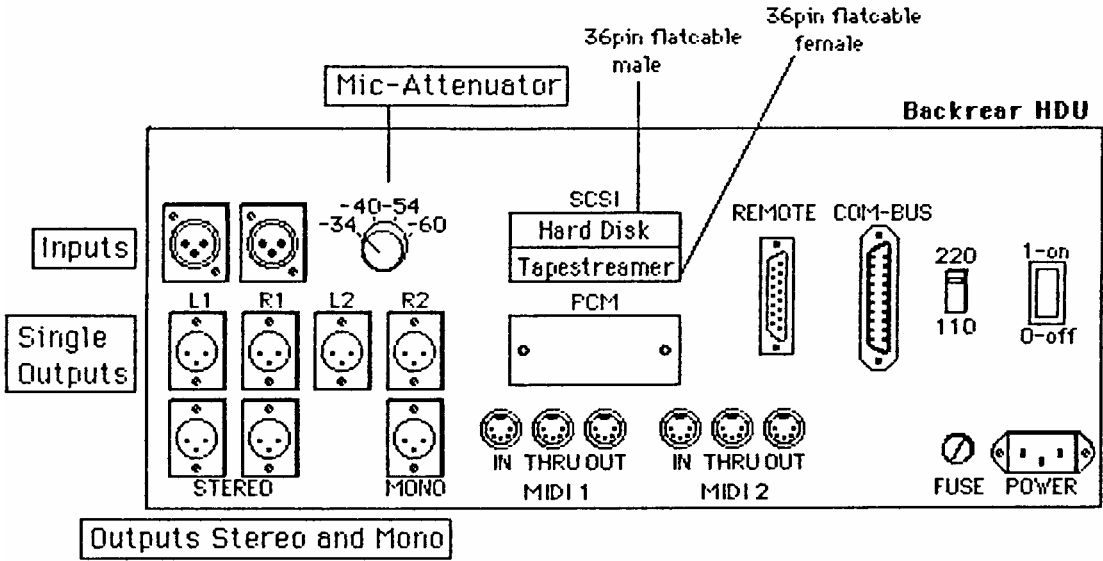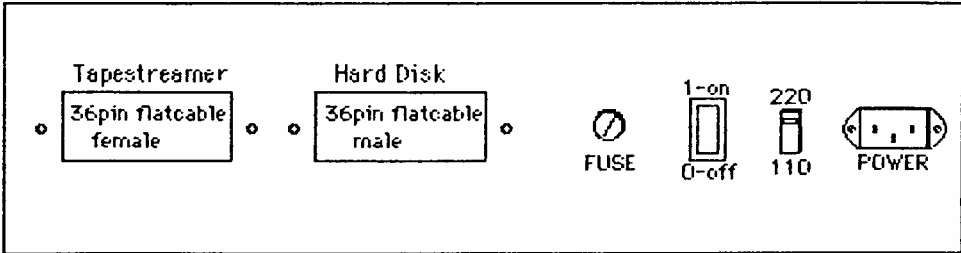-------------------------------------------------------------------

Place your Expander  on the top of the PPG HDU.
Connect the  36 pin  flatcable (female) for Tape  Streamer to the back of
PPG HDU by inserting one of the  connectors into the SCSI port (below) and
the other one into the first port (from the left side) of the PPG Expander
(see diagram next Page).

If  you  are   owner  of  a  "PPG  Expander  complete"  connect  the  second
delivered 36pin flatcable (male) to the back of the PPG HDU by inserting
one of the connector into the SCSI port (at the top) and the other one into
the second port (from the left side) of the PPG Expander
( see diagram next Page 2).

Attach the power cord to the PPG HDU and to the PPG Expander, and plug
the power cords into an AC-outlet.

Tapestreamer

| 36pin flatcable female |

Hard Disk

| 36pin flatcable male |

FUSE

1-on
0-off

220
110

POWER

Mic-Attenuator

36pin flatcable male

36pin flatcable female

**Backrear HDU**

Inputs

-40 -54
-34    -60

SCSI

| Hard Disk |
| Tapestreamer |

REMOTE   COM-BUS

Single Outputs

L1   R1   L2   R2

PCM

220
110

1-on
0-off

STEREO        MONO

IN THRU OUT   IN THRU OUT
MIDI 1          MIDI 2

FUSE  POWER

Outputs Stereo and Mono

## 5.General Survey
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In order to save the entire  contents of the PPG HDU Hard Disk Unit you
need **two data cartridges.**
For the HDU with the "PPG Expander complete" (with an additional Hard
Disk) you need **three data cartridges.**

Tape 1 - contains the **Directory** data and "**World**" and sound data
            from track 0-7 of the HDU Harddisk Unit.
Tape 2 - contains the sound data from track 8+9 of the HDU Hard Disk
            and of the Expander Hard Disk , when existing.
Tape 3 - contains the sound data from track 0-7 of the
            Expander Hard Disk.

## 6. Starting up the PPG  Expander
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Switch on the PPG Expander at first, directly after that the PPG HDU.
It is necessary to start up the units in this line, because the PPG HDU
must recognize that an Expander is connected, when starting up.

## 7. PPG Expander 1 (Tapestreamer)

To work with the Tapestreamer there are only two operations necessary
**SAVE** and  **LOAD.**

## 8.  The SAVE function

Press    [ ↵ ]    and    [ 0 ]

Move cursor to the Sub Page field and enter:

[ 0 ]    and    [ 2 ]

The display shows the following Page:

```
┌──────────────────────────────────────────┬───────────────────────────┬────┐
│          ***Tapestreamer***              │    ***Harddisk***         │ SR │
│   ┌──────┐   ┌──────┐                     │ ┌─────┐ ┌────────┐        ├────┤
│   │ Load │   │ Save │                     │ │ Init│ │ Format │ HD: 0  │    │
│   └──────┘   └──────┘                     │ └─────┘ └────────┘        ├────┤
│ Date: 19 . 02 . 1987                      │         Zyl. 1            │ ES │
│                                           │                           ├────┤
│ N:                                        │                           │    │
├──────────────────────────────────────────┴──────┬──────┬──────┬──────┼────┤
│  0 02  DIAGNOSTIC                                │      │      │      │ EX │
└──────────────────────────────────────────────────┴──────┴──────┴──────┴────┘
```

Before you start the save procedure we recommend to use the date and name feature for an easy identification of your data cartridges.

Now insert an empty data cartridge.

Move cursor to the field **SAVE** and press **EX**

The display shows: **System check**

If the tape is recognized: **Tape is empty. OK?** or

In case the tape has already been used: **Overwrite tape 1 ?** (2 or 3)

occures. In both cases confirm with **1** or escape with

**0** or **ES**

If you have confirmed with **1** the commentary shows

**SAVE in progress !**

Below the **LOAD** and **SAVE** fields the active zylinder number of the Hard Disk is displayed.

Zyl.: 01 to 015. These zylinders contain the **Directory** and **World** data. After this operation is completed an auto-verify is executed immediately. The zylinder numbers count from 01 to 015 again. If no error is detected the save procedure moves on from zyl.: 16 up to 810. This takes approx. 10 min. time. After that the commentary asks:

**Verify Data ?**

You have now the choice to verify the saved data or terminate the SAVE operation.
By either pressing **1** for yes, or **0** for no.

## 9. The Load function:

Go to the Streamer Control Page as described in Section 8
Insert **Tape 1** of the data cartridges into the drive.

Move the cursor to the field **LOAD** and press **EX**

The display shows : **System Check**

When the data cartridge is recognized the message **Tape 1 inserted**

and the name and date of the cartridge are displayed. Then the question appears in the comment line:

**Load this Tape ?**

Now you can confirm this question with

**1** or refuse with **0**

After confirming the loading procedure starts. After approx. 10 min. the process is finished, and a verify run can happen to ensure that all data is loaded perfectly.

Press **1** to verify or **0** to terminate the load operation

## 10. The Second Hard Disk

The second Harddisk doubles the recording length of your HDU. After the Expander is installed in your system the first time, it is necessery to initialize the recording directory of the **HDU**. Therefore proceed as described in the HDU manual Section K 2 (**INITDIR**).

Now the HDU is prepared to record with twice the length for each track as before. If you do this on Page 0, you will see that the bars in the trackdisplay now move with half the speed as before.