Film-Tech

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# Installation & User Manual for the Model TM-1 Sound Monitor

ATTENTION INSTALLER:

These TM-1 Monitors are equipped with a new switch latching circuit. It replaces the mechanical latch mechanism built into older push buttons with an electronic equivalent.

The operation of the switches remains the same. The only difference will be that Left, Center, and Right channels will be selected each time the TM-1 Monitor is powered up.

These units are designed with a sticker that reads "TM1-EL"

TM-1 Monitor Back View
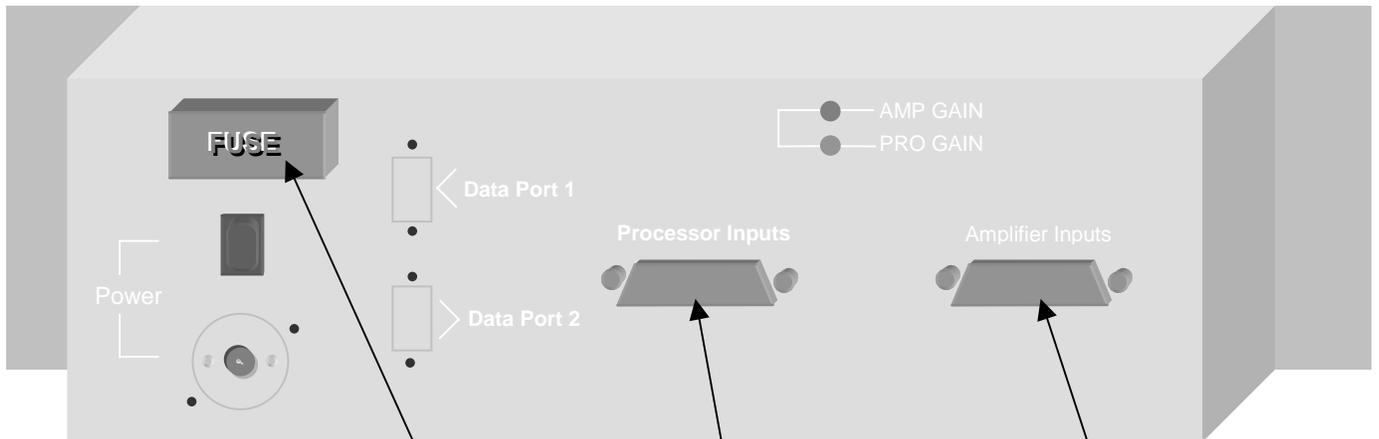
Fuse Holder
(1.5 Amp Fuse)

DB25 Processor Input
Connector (THX pin-out)

Accepts Odyssey Input 25
card or the TM1-BI card)

**Can be connected directly
to the output of Sony
Processors.

Also accepts the 25/5
parallel input card.

DB37 Amplifier Input
connector. Also
contains the Hearing
Impaired output.

Accepts the Odyssey
TMAMP37 Card

FUSE

Power

Data Port 1

Data Port 2

AMP GAIN

PRO GAIN

Processor Inputs

Amplifier Inputs
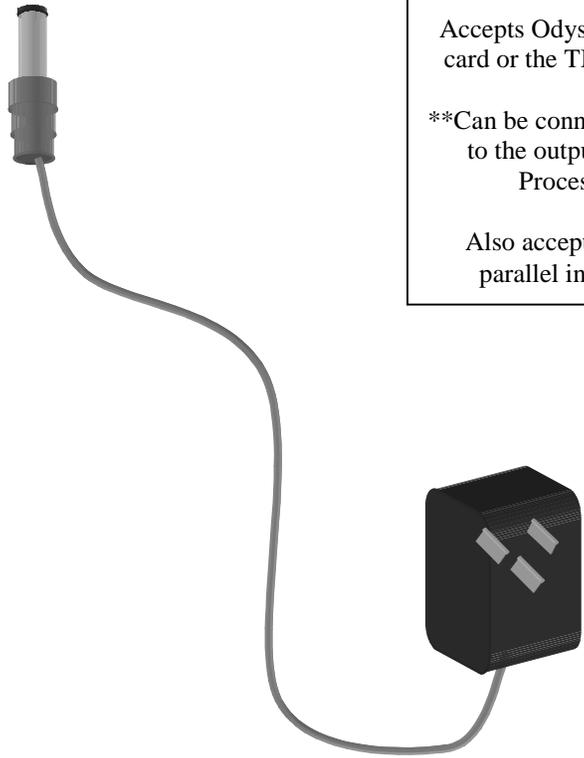
TM-1 Sound Monitor

This product is intended for commercial use and for installation in an equipment cabinet designed for commercial use. This installation manual is for use by qualified personnel only. Do not open the unit or perform any servicing unless you are qualified to do so.

Connect the Power Con power connector to the monitor before plugging into the power receptacle. For protection against electric shock, a three-pin, correctly wired and earthed power outlet must be used. Do not us a ground-lifting adapter and never cut the ground pin on the three-prong plug.

Check that the correct fuse has been installed. To reduce the risk of fire, replace with fuse only with the same type and rating.

Input DB25 Board Configuration
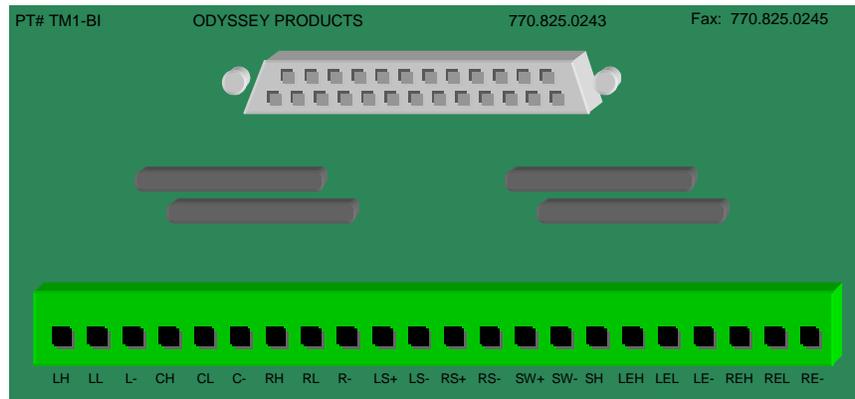# (Compatible with THX and Sony Pin-outs)

Channel	Terminals On Card	DB25 Pin
Left Shield	SH	1
Left Plus	L+	2
Left Minus	L-	14
Center Shield	SH	4
Center Plus	C+	5
Center Minus	C-	17
Right Shield	SH	7
Right Plus	R+	8
Right Minus	R-	20
Left Surround Shield	SH	9
Left Surround Plus	LS+	23
Left Surround Minus	LS-	10
Right Surround Shield	SH	22
Right Surround Plus	RS+	24
Right Surround Minus	RS-	11
Subwoofer Shield	SH	13
Subwoofer Plus	SW+	25
Subwoofer Minus	SW-	12
Left Extra Shield	SH	15
Left Extra Plus	LE+	16
Left Extra Minus	LE-	3
Right Extra Shield	SH	18
Right Extra Plus	RE+	19
Right Extra Minus	RE-	6

Pin-outs of the TMAMP37 Card

When used on the back of the Model TM-1 Monitor

Screw Terminals (on card)		*DB37 Pin*
1	Left Low	1
2	Left Mid	20
3	Left High	2
4	Left Minus (-)	21, 3
6	Center Low	22
7	Center Mid	4
8	Center High	23
9	Center Minus (-)	5, 24
11	Right Low	6
12	Right Mid	25
13	Right High	7
14	Right Minus (-)	26, 8
16	Left Surround +	27
17	Left Surround -	9
18	Right Surround +	28
19	Right Surround -	10
20	Subwoofer	29
21	Subwoofer-	11
22	Earth	30
23	Earth	12
24	Left Extra Low	31
25	Left Extra Mid	13
26	Left Extra High	32
27	Left Extra Minus (-)	14, 33
29	Right Extra Low	15
30	Right Extra Mid	34
31	Right Extra High	16
32	Right Extra Minus(-)	35, 17
36	Hearing Impaired Sum +	37
37	Hearing Impaired Sun – (earth)	19

The Odyssey Products TM1-BI Bi-Amp Processor Input Adapter Card for the Odyssey TM-1 Monitor

PT# TM1-BI   ODYSSEY PRODUCTS   770.825.0243   Fax: 770.825.0245

LH LL L- CH CL C- RH RL R- LS+ LS- RS+ RS- SW+ SW- SH LEH LEL LE- REH REL RE-

1. Plug the TM1-BI card into the DB25 Processor Input connector on the back of the Odyssey TM-1 Monitor.

2. Connect the bi-amped outputs from the processor to the screw-type connector on the TM1-BI card.

3. Connection is made to the 3.5-mm spacing connector on the TM1-BI board as follows.

L.H	-	Left Channel High Frequency	**L.L**	-	Left Channel Low Frequency
L-	-	Left Channel Minus (Ground from CP500)	**C.H**	-	Center Channel High Frequency
C.L	-	Center Channel Low Frequency	**C-**	-	Center Channel Minus
R.H	-	Right Channel High Frequency	**R.L**	-	Right Channel Low Frequency
R-	-	Right Channel Minus	**SH**	-	Audio Shield (if necessary)
LS+	-	Left Surround Plus	**LS-**	-	Left Surround Minus
RS+	-	Right Surround Minus	**RS-**	-	Right Surround Minus
SW+	-	Subwoofer Plus	**SW-**	-	Subwoofer Minus
LE.H	-	Left Extra High Frequency	**LE.L**	-	Left Extra Low Frequency
LE-	-	Left Extra Minus	**RE.H**	-	Right Extra High Frequency
RE.L	-	Right Extra Low Frequency	**RE-**	-	Right Extra Minus

User Manual for the TM-1 Sound Monitor

1	2	3	4	5
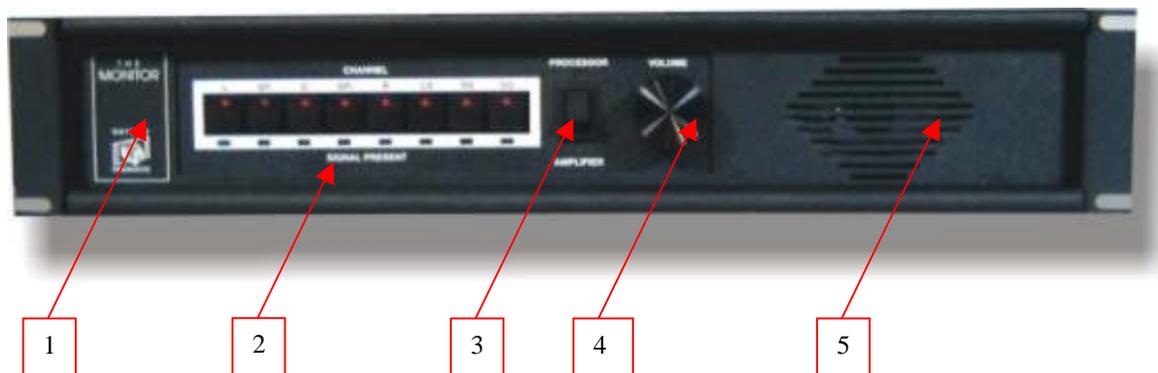
Front Panel Features

1. *Channel Select Buttons* – Select one or all of the monitored channels.

2. *Signal Present Indicators* – Indicates audio information on amplifier channels.

3. *Processor/Amplifiers Selector Switch* – Selects whether processor or amplifier inputs.

4. *Volume Control* – Controls the volume of the internal speaker.

5. *Speaker*

The TM-1 Monitor provides monitoring of the following channels:

- L, C, R (Left Channel, Center Channel, and Right Channel)

- SP1 and SP2 (Special 1 and Special 2) – can be used to monitor Left Center and Right Center Channels, or Left EX and Right EX Surround Channels.

- LS, RS, SW (Left Surround, Right Surround, Subwoofer or Sub-Bass)

Select the channel to be monitored by pushing the appropriate Channel Select button on the TM-1. Once the button is pushed that channel remains selected until the button is pushed again. A red LED on the button will light when the button is activated. Pushing all eight Channel Select buttons will cause all channels to be heard simultaneously on the monitor speaker.

The Signal Present LED's under each switch indicate audio information on the amplifier channel. These LED's are independent of the Channel Select buttons, and the Processor/Amplifier switch.

The Processor/Amplifier switch selects between the signals coming from the Analog Processor, and the signals coming from the output of the power amplifiers.

The Volume control varies the level of the internal speaker, but does not change an input levels, or the Hearing-Impaired output level.

For bi-amplified and tri-amplified sound systems: When monitoring a stage channel in amplifier mode, what is monitored is a sum of the low, mid and high frequencies.
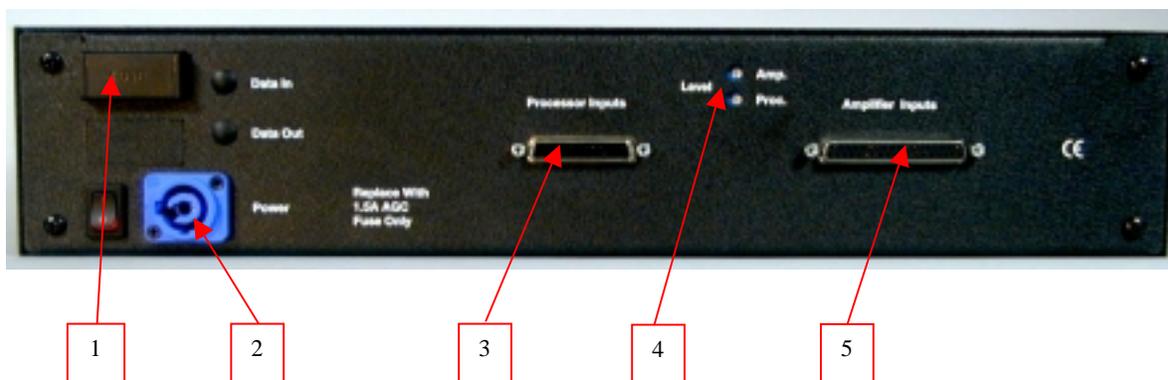
Back Panel Features

1. Fuse Holder – accepts fuses 1 ¼" X ¼" AGC fuses

2. Powercon Power Connector – Connector for the external plug-in transformer.

3. Processor Inputs Connector – DB25 female connector, accepts Odyssey Breakout Boards.

4. Input Level Adjustment Potentiometers – 1 each for processor level and amplifier level.

5. Amplifier Inputs Connector – DB37 female connector, accepts Odyssey Output 37 Card.

The external power pack is terminated with a blue Powercon connector. It is unplugged from the TM-1 by pulling back on the metal tab and twisting the connector counter-clockwise slightly. Pull the connector straight out of the socket. The powercon connector is plugged in by inserting it straight into the socket, then twisting clockwise slightly until the metal tab slicks forward and locks.

To remove the fuse, pull the fuse holder cover down until it unlocks. Slide the cover out like a drawer. Remove the fuse from the clip. To close the fuse holder, push the cover in and then up slightly until is clicks into place. The correct fuse is a 1 ¼" X ¼" AGC Normal Blow Fuse (1.5 Amps)

The processor Inputs connector is a DB25 female. It has the same pin configuration as a THX monitor. It will accept the following Odyssey breakout cards:

- Model Input 25 – wires from a passive processor are terminated to the on-board terminal strip.

- Model Input 25/2 – same as the Input 25, but with an extra DB25 connector.

- Model TM1-BI – sums the low and high frequencies on the stage channels from a bi-amplified analog processor

It can also be hooked up directly to the Monitor Out Connector on the Sony DFP 3000 Processor.

The Amplifier Inputs connector is a DB37 female. It accepts the Odyssey Breakout Card Model Output37. Wires from the amplifier outputs are connected to the terminal strips on the Output37 card.

Refer to the above pages for a complete list of the pin configurations for the DB connectors and the breakout cards.

There are two input level control potentiometers that are accessed from the back of the TM-1. There is one for processor levels, and one for amplifier levels. These are used to trim the two sets of inputs until the sound levels match switching between Processor to Amplifier on the front panel.

The TM-1 Monitor also provides a Hearing-Impaired output. This output can be used to feed hearing-impaired assisted devices. It is a fixed-level signal formed from summing Left, Center, and Right Channels (internally). This output is not affected by the Volume Control, or by the Input Level Adjustment Potentiometers.

Warranty Information

Equipment manufactured by Odyssey Products is warranted against defects in materials and workmanship for a one-year period from the date of shipment. There are no other express or implied warranties.

Returns

During the warranty period, Odyssey will repair or replace, at its option, components which prove defective. Equipment must be returned shipped prepaid to Odyssey. Defects caused by modifications, misuse or accidents or shipping damage caused by inadequate packaging for service return are not covered by this warranty. A Return Authorization Number must be obtained from Odyssey or its agents prior to returning any products. The Return Authorization Number must be marked on all paperwork and labels

Please send all returns to:

> Odyssey Products
> 5845 Oakbrook Parkway, Suite G
> Norcross, GA 30093
>
> Phone 770-825-0243
> Fax 770-825-0245