Film-Tech

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10 CHANNEL CINEMA BOOTH MONITOR

MN610

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SMART

USER'S GUIDE

CONTENTS

SMART products are designed to deliver unsurpassed quality in workmanship and performance. The following information gives detailed instructions on the installation and operation of the SMART MN610 Cinema Booth Monitor. We strongly encourage new owners of the MN610 to thoroughly read this entire manual before placing their new SMART product into service. This will ensure that the MN610 will be operated properly to give the superior performance that it was designed to deliver.

INTRODUCTION

The MN610 is a 10 channel booth monitor that monitors both sound processor and amplifier outputs while incorporating a number of advanced features:

- **10 Channels.** The MN610's 20 inputs are split between processor and amplifier banks of 10 each. The banks are selectable using the MODE button located on the front panel.

- **Balanced Inputs.** To avoid ground loop hum, the MN610 has balanced inputs on all channels.

- **THX Standard DB25 Processor Input.** Connecting a processor with a THX Standard output is quick and easy.

- **Biamp/Triamp Monitoring.** Both the processor and amplifier banks provide Biamp and Triamp monitoring for the Left, Center and Right channels.

- **Multiple Channel Monitoring.** The multiple pushbutton interface allows the user to add in all ten channels on either bank to the output amplifier.

- **Multiple Outputs.** There are three different ways to monitor from the built-in 10 Watt Power Amplifier:
  1. Built in 3 1/2" speaker.
  2. 1/4" phono rear panel external speaker jack.
  3. 1/4" front panel headphone jack.

INSTALLATION

1. **Mount the MN610 in a convenient 3 1/2" rack space using four rack bolts.** Ideally, the monitor should be located between the processor and the amplifiers.
2. **Using shielded pair wire, connect the outputs of the processor to the appropriate inputs on the monitor.** For balanced outputs, tie the positive (+) terminal of the processor to the positive (+) terminal on the monitor, and tie the negative (-) terminal of the processor to the negative (-) terminal on the monitor. For unbalanced outputs, use the ground terminal (GND, E) on the processor to tie to the negative (-) terminal on the monitor. Tie the shield of the cable to the ground (GND, E) at the processor, leaving the shield unconnected at the monitor.
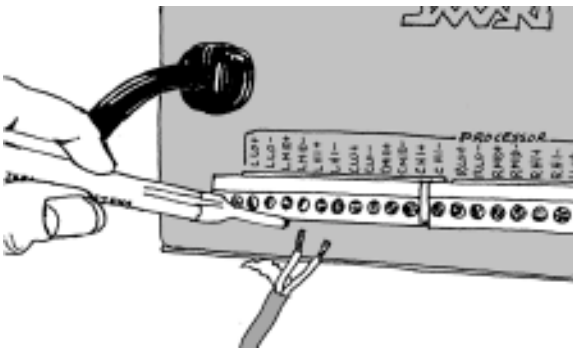
Alternatively, if the processor has a THX Standard output for monitoring, connect the DB25 cable to the appropriate jacks on the processor and monitor. Do NOT apply signal to both the terminal block and DB25 connector inputs for the same signal. LEFT REAR, RIGHT REAR, and any MID or HI frequency terminal block inputs may be safely used in conjunction with the DB25 connector.

3. **Using unshielded pair wire, connect the outputs of the amplifier to the appropriate inputs on the monitor.** As with a balanced processor, tie the positive (+) terminal of the amplifier to the positive (+) terminal of the monitor. Tie the negative (-) terminal of the amplifier to the negative (-) terminal of the monitor.

   Single Frequency Band Monitoring. For single frequency Left, Center and Right

THX Standard DB25 Pinouts	
Signal	Pin
Left +	2
Left -	14
Center +	5
Center -	17
Right +	8
Right -	20
Left Wall +	23
Left Wall -	10
Right Wall +	24
Right Wall -	11
SubWoofer +	25
SubWoofer -	12
Left Extra +	16
Left Extra -	3
Right Extra +	19
Right Extra -	6

channels, use the corresponding "Lo" inputs.
Split Frequency Band (Biamp, Triamp) Monitoring.
For Biamped Left, Center and Right channels, use the "Lo" inputs for the low frequency band, and the "Hi" Inputs for the higher frequency band. For Triamped Left, Center, and Right channels, use the "Lo" for low, "Mid" for middle and "Hi" for high frequency bands.

4. **Set the processor and amplifier gain trimpots for the desired level.** After the processor and amplifiers have been set up and calibrated for optimal presentation, run pink noise through the processor set at the cal point volume level. Select processor mode and a channel with pink noise on the monitor. Using a tuning wand or equivalent, adjust the P Gain Trimpot (located on the front of the monitor unit) until the third

Signal Presence LED just comes on. Change to amplifier mode on the monitor, and repeat using the A Gain Trimpot. The monitor volume knob may be turned down during this adjustment. If the monitor sound level is not high enough, these pots may be adjusted clockwise for additional gain.

5. **Add an external speaker (*optional*).** The MN610 provides a 1/4"/6.3mm external speaker jack on the rear of the unit. Wire a 4 or 8 ohm speaker to a mono 1/4" phono jack and insert in the jack labeled EXTERNAL SPEAKER. When the external speaker jack is used, the built-in speaker is disconnected.

Operation

Power is applied to the unit when the red POWER LED on the front panel is lit. The 1/4" mono HEADPHONE jack allows for better listening in a noisy booth environment. It is wired in parallel with the internal/external speaker outputs. The main VOLUME knob controls the volume for all outputs.

The SIGNAL LEVEL LEDs indicate the relative amplitude of monitored signals. The levels displayed are not calibrated to any standard audio measurement. The level indicated is also not affected by the output level set by the VOLUME knob.

The MODE switch selects either the processor or amplifier bank of inputs for monitoring.

Pushing a switch to the "in" position adds the corresponding channel to the monitoring mix. *Note: Since monitoring more than one channel "adds" the channels together before the final amplification, monitoring many channels at once may cause overload distortion. While this is not dangerous to the monitor, it will not accurately represent the sound quality of the system.*