MARTIN AUDIO

MICT3B DEDICATED SYSTEM CONTROL

PLUG-IN CARD

USER’S GUIDE

July 1996
WARNING

THIS USER GUIDE MUST BE READ IN CONJUNCTION WITH M800/M1200 AMPLIFIER OWNERS MANUAL. THE MICT3B CANNOT BE USED WITH ANY OTHER AMPLIFIERS EXCEPT THE MARTIN AUDIO M800 AND M1200.

BEFORE ATTEMPTING THE INSTALLATION OR ADJUSTMENT OF THE MICT3B CARD ALL MAINS MUST BE DISCONNECTED FROM THE AMPLIFIER(S).
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1 INTRODUCTION

WARNING: All mains must be disconnected from the amplifier before the installation or adjustment of the MICT3B is carried out.

The MICT3B plug-in reconfigurable system control card allows for easy control of the Martin Audio ICT300 and ICS Sub Bass speaker. When installed in either the M800 or M1200 amplifier all EQ and crossover functions can be achieved without the need for separate controllers. Simple to use circuit board jumper plugs allow the user to configure the system in a variety of different ways. The most common of these would be stereo operation of ICT300 either as a single cabinet a side or as 2 cabinets a side in parallel, with the correct system EQ applied. The option to drive this stereo system full range or as a 120Hz high pass system is available along with the crossover facility to send a low pass signal to a second amplifier for larger bi-amped systems. In this mode a standard stereo input is required. Furthermore for the mono applications, the MICT3B allows the amplifier to be ‘split’ so that Channel A (left channel) is used solely for full range or high pass into 2 x ICT300, and Channel B (right channel) is used solely for sub bass into 1 x ICS300 cabinet.

WARNING: Bridge mono operation cannot be selected when plug-in cards are installed.
2 CONFIGURING THE PLUG-IN CARD

It is recommended that configuring and installation of the plug-in cards is carried out by your Martin Audio dealer. However, with care, this is a simple and straightforward operation if the following instructions are carried out.

WARNING: Always ensure that the amplifier is disconnected from the AC mains before the lid is removed.

2.1 Choosing Mode of Operation

Before installing the plug-in card, one of the following methods of system operation must be determined and certain jumper plugs on the plug-in card moved to the correct positions for that particular mode of operation.

Method 1
Stereo operation of ICT300’s driven with a full range signal (1 or 2 ICT300’s can be connected to either side of the amplifier in this mode). See 2.2 for instructions.

Method 2
Same as method 1 but with only mid/high signal being fed to the ICT300’s (normally in this mode ICS300 sub bass cabinets would be required - driven bi-amped from a separate amplifier). See 2.3 for instructions.

Method 3
Split mono operation using 1 or 2 ICT300’s on the left channel of the amplifier and 1 x ICS300 sub bass cabinet on the right hand channel of the amplifier. See 2.4 for instructions.
2.2 Method 1

If Method 1 is required, the jumper plug positions must be as follows.

The two jumper plugs marked full range/high pass must be in the positions marked full range.

**WARNING:** Check that the jumper plug marked split/normal is in the normal position and that the jumper plug marked stereo/mono is in the stereo position. Diagram 1 will assist you in pinpointing the position of these jumper plugs on the plug-in card. If separate bi-amplified ICS300 sub bass operation is required please follow instructions as in 2.3a below.
2.3 Method 2

If Method 2 is required, the jumper plugs positions must be as follows. The two jumper plugs marked full range/high pass must be in the positions marked high pass.

WARNING: Check that the jumper plug marked split/normal is in the normal position and that the jumper plug marked stereo/mono is in the stereo position. Diagram 1 will assist you in pinpointing the position of these jumper plugs on the plug-in card. Normally in this mode, the ICS300 sub bass cabinets would be required as the ICT300 are now only handling mid/high signals and no bass response is available from the ICT300 cabinets in this mode.

2.3a Sub Bass Connections

To operate ICS300 sub bass cabinets in this mode would require the use of a further amplifier. The sub bass feed to this separate amplifier is now available from the bottom most XLR’s on the rear of the M1200 amplifier into which the plug-in card is to be installed.

The line level signal that is present on these XLR outputs is a 120Hz low pass signal (the ICT300 in high pass mode would receive a 120Hz high pass signal). To connect the line level low pass outputs to the inputs on the sub bass amp would require two high quality signal cables each terminated with 1 x female XLR and 1 x male XLR.

Pin 1, 2 and 3 must be connected at the ‘female’ end whilst at the ‘male’ end Pin 2 and 3 are connected but Pin 1 is not. See diagram 2.

![Diagram 2]

NOTE: Irrespective of high pass/full range jumper positions, a 120Hz low pass signal is always present at the two lower XLR outputs when stereo operation is chosen.
2.4 Method 3

If Method 3 'split' mono mode is required, the jumper plug marked split/normal must be in the split position and the jumper plug marked stereo/mono must be in the mono position.

NOTE: Only alter the jumper plugs on the plug-in card. Do not confuse this with the bridge mono slider switch on the main mother board which must always be in the stereo position whilst the MICT3B card is installed.

The jumper plugs marked high pass/full range must be positioned to give the required result (i.e., if the ICT300's are required to run full range, place the jumpers in the full range position or if required only as mid top cabinets, the jumpers must be in the high pass position). Diagram 1 will assist you in pinpointing the position of the jumpers plugs on the plug-in cards.
3  INSTALLATION OF PLUG-IN CARD

Once the plug-in card has been configured for the correct method of use as in 2.2, 2.3, 2.4 it can now be plugged into the larger ‘mother’ circuit within the amplifier.

WARNING: Always disconnect the amplifier from the mains AC before attempting to insert or remove the plug-in card.

NOTE: If you have any doubt regarding the installation or reconfiguring of your plug-in card your local Martin Audio Dealer will do this for you.

Remove amplifier lid by removing the six screws which hold it in place.

With the amplifier front panel facing towards you, you will see located on the left hand side, just behind the front panel, a large circuit board with two sets of connector pins pointing up from this board. Any bypass jumper plugs in place on these connector pins must be removed and retained for possible further use (see diagram 3). It is onto these connector pins that the plug-in card must be installed. Holding the plug-in card upright with the two connector plugs pointing downwards and with the jumper plugs facing to the right, gently locate the two connection plugs over the connection pins ensuring that all pins line up with the plugs. Once you are certain that everything is truly aligned, gently push the plug-in card downward at the same time keeping the plug-in card upright (if you attempt to push downward whilst holding the plug-in card at an angle damage will occur to the connecting pins). Once the plug-in card is fully pushed home, ensure that all pins are correctly inserted into the plug.

NOTE: If at any time in the future you wish to use the amplifier without the cards fitted, the bypass jumpers must be reinstalled on the card connector pins.

WARNING: Ensure at this point that the bridge/stereo switch on the large ‘mother’ board is in the stereo position.
Replace lid and secure firmly.

Make sure that volume gain potentiometers on the front panel are turned fully anti-clockwise before reconnecting the amplifier to the mains AC.

Connect the loudspeakers as described in the amplifier owners handbook and with a signal applied to the amplifier slowly turn the amplifier volume gain potentiometers clockwise.

**WARNING:** If any hum or distortion is heard at this point turn the amplifier down and disconnect from the mains before rechecking the installation procedure. If a problem persists return the amplifier to an approved Martin Audio dealer for checking.