

## TM1 AM/FM Tuner Module



TM1

## Overview

The McIntosh TM1 AM/FM Tuner Module adds the functionality of a second McIntosh Quality Tuner to the MR85 Tuner. This Installation Guide provides the necessary instructions for successfully installing the TM1 into the MR85 Tuner. The TM1 Tuner Module is not a user installable product. It must be installed by the Technical Professionals at your McIntosh Dealer.

## Important Information

1. **Caution:** To prevent the risk of electric shock, first remove the AC Power Cord from the back of the MR85 before removing the top cover.

**CAUTION**  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN

2. Some of the semiconductor devices (CMOS and NMOS) used in the TM1 Module and MR85 Tuner are inherently sensitive to static electricity even when connected in a circuit, and can be permanently damaged by a static electricity discharge. When handling the TM1 and working inside the MR85, follow the procedures below to insure against static electricity damage.

**ATTENTION**  
DANGER D'ELECTROCUTION  
NE PAS OUVRIR



- A. Make sure the MR85 is properly grounded.
- B. Use an approved wrist strap that is grounded.
- C. Remove the TM1 from the Anti-Static Bag and work with it only after the above conditions have been met.

## Parts List

Quantity	Part Number	Description
1	049084	AM/FM Tuner Module
1	034134	Anti-Static Bag
1	049192	RAA1 Remote AM Antenna
1	049443	RAA1 Connection Cable Complete
1	171330	Seven conductor ribbon cable
1	171331	Six conductor ribbon cable
1	171332	Four conductor ribbon cable
1	040716	Installation Guide

## Step One

- A. Remove ALL connecting cables from the Rear Panel of the MR85 Tuner.
- B. Remove the four screws from the sides of the MR85 Tuner.
- C. Remove the two screws that secure the MR85 Top Cover to the Rear Panel.
- D. Lift off the MR85 Top Cover by grasping the rear sides of the top cover and lifting up and away from the MR85 Tuner.

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## Step Two

- A. Remove the MR85 Inside Connector Cover which is secured with two Philips Head Screws and is located on the Right Side of the Rear Panel, as you face the rear of the unit. Refer to figures 1 and 2.

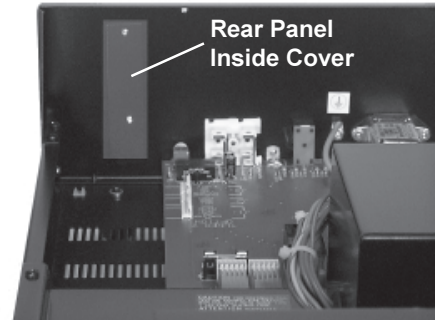


Figure 1

*Note:* Retain the two screws as they will be used later to install the Tuner Module.

- B. Find the three supplied ribbon cables that are located in the TM1 shipping carton. Refer to figure 3.

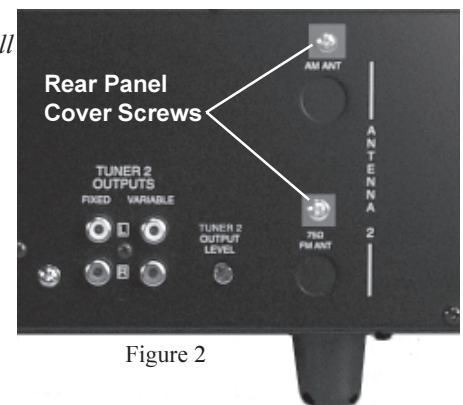


Figure 2

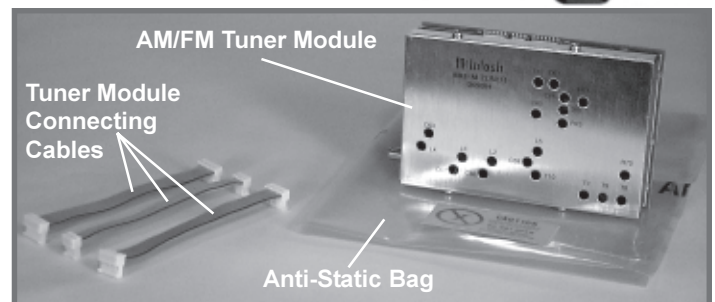


Figure 3

- C. Attach the plug of the Six Conductor Ribbon Cable to the six pin PC Board Socket "J3" as indicated on the MR85 Main PC Board. Refer to figure 4.

*Note:* The six pin Cable Plug and PC Board Socket are "keyed" to attach only in one direction, do not force it on backward.

- D. In a similar fashion, attach the plug of the Four Conductor Ribbon Cable to the four pin PC Board

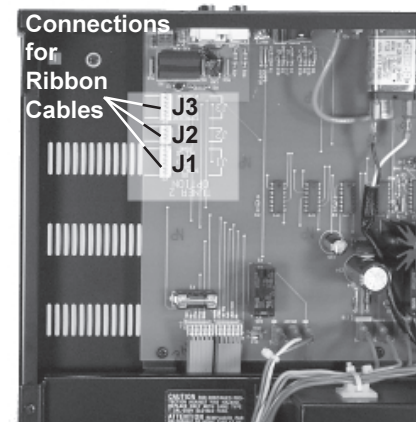


Figure 4

Socket “J2” as indicated on the MR85 Main PC Board.

- E. Also attach the plug of the Seven Conductor Ribbon Cable to the seven pin PC Board Socket “J1” as indicated on the MR85 Main PC Board.
- F. Relocate the free ends of the previously installed cables and rotate them over the top and to the right of the attached cable ends. Refer to figure 5.

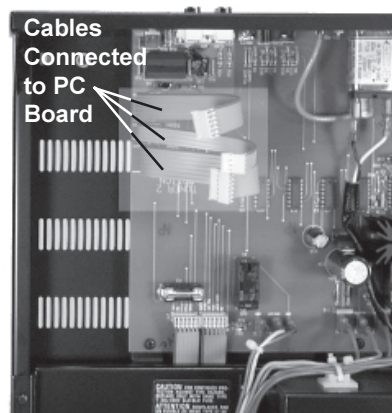


Figure 5

## Step Three

- A. Locate the AM/FM Tuner Module and remove it from the anti-static bag. Refer to figure 3.
- B. Orient the AM/FM Tuner Module so the “F” Connector, that is at the bottom of the Module, will fit through the lower opening of the MR85 Rear Panel (the cover was previously removed in Step Two) and the three PC Board Connectors are facing up. Refer to figures 6 and 7.

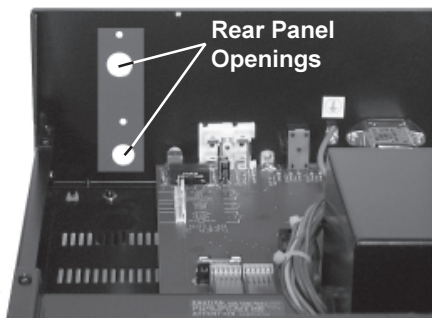


Figure 6

- C. Secure the AM/FM Tuner Module to the MR85 Rear Panel with the two Philips Head Screws that were previously removed from the rear panel in Step Two. Refer to figure 8.
- D. Attach the plug of the Six Conductor Ribbon Cable coming from the six pin PC Board Socket “J3” as indicated on the MR85 Main

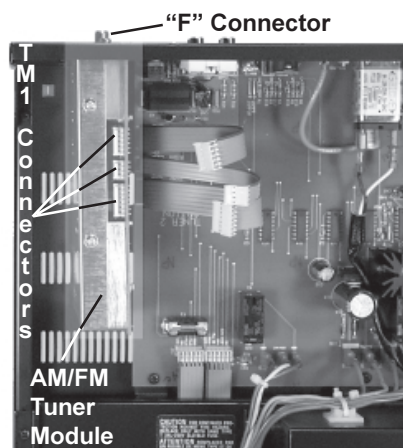


Figure 7

PC Board to the six pin PC Board Socket of the AM/FM Tuner Module, which is located closest to the MR85 Rear Panel. Refer to figure 9.

*Note: The six pin Cable Plug and PC Board Socket are “keyed” to attach only in one direction, do not force it on backward.*

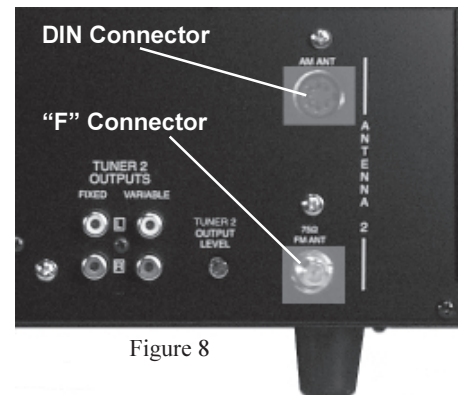


Figure 8

- E. In a similar fashion, attach the plug of the Four Conductor Ribbon Cable coming from the six pin PC Board Socket “J2” as indicated on the MR85 Main PC Board to the four pin PC Board Socket of the AM/FM Tuner Module, which is the middle one of the three in-line connectors.

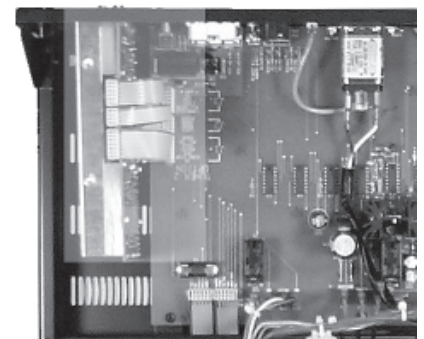


Figure 9

- E. Also attach the remaining plug of the Seven Conductor Ribbon Cable coming from the seven pin PC Board Socket “J1” as indicated on the MR85 Main PC Board to the seven pin PC Board Socket of the AM/FM Tuner Module, which is located closest to the MR85 Front Panel.

## Step Four

- A. Reinstall the MR85 Top Cover by reversing the procedure of Step One “D”.
- B. Secure the MR85 Top Cover to the MR85 Rear Panel with the two screws that were previously removed.
- C. Reinstall the four screws to the sides of the MR85 Tuner.
- D. Reconnect the hookup Connecting Cables to the Rear Panel of the MR85 Tuner.
- E. Switch AC Power On to the MR85 Tuner and verify that the “TUNER 2” is now functioning properly.

*Note: Refer to the MR85 Owner’s Manual for Operational Details.*

**McIntosh<sup>®</sup>**

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