telecor inc.

TMS-MA Telecor Media Source Model A Installation Manual



Intended for use with TMS-MA Telecor Media Source Model A

April 2023 Rev. 0.0 PRELIMINARY

Telecor Inc.

6205 Kestrel Road Mississauga, Ontario Canada; L5T 2A1

Tel: (905) 564-0801 Fax: (905) 564-0806 www.telecor.com

LIMITED WARRANTY POLICY

Telecor Inc. warrants all products bearing the Telecor name to be free from defects in material and workmanship under normal use and service for a period of one year from date of delivery. Telecor will repair or replace (at our option), free of charge, any unit that is found to be defective and returned to us under warranty. Telecor warrants all other products made by others, and distributed by us, to be covered by the manufacturers' warranty period.

This warranty shall not apply to any Telecor products that have been subject to misuse, neglect, accident, modification, water, fire, lightning, paint, or used in violation of instructions furnished, repaired or altered outside of the factory. This warranty does not cover batteries, bulbs, fuses or damage caused by batteries used in connection with the product. Telecor reserves the right to make the final decision on whether there is a defect in materials or workmanship, and whether or not the product returned is within the warranty period.

This warranty covers bench repairs only. Telecor will not be responsible for any costs incurred involving on-site service calls. Repair or replacement by others, fire, transportation, labour charges, indemnity, etc., are not covered by this warranty and no responsibility for same will be assumed by us. Our liability does not extend to consequential damage.

AUTHORIZED REPAIR STATION:

All participating Distributors and Dealers are authorized to accept Telecor products for return to us for repair or replacement, or customers may return goods to us directly, providing that return authorization has been obtained.

U. S. customers are required to ship any returns or repairs to:

Telecor Inc. 2434 Jerauld Avenue Niagara Falls, New York USA, 14305

* U. S. customers must not return products to Canada

Canadian and all International customers are required to ship any returns or repairs to:

Telecor Inc. 6205 Kestrel Road Mississauga, Ontario Canada, L5T 2A1

For details on Telecor's Return Policy, see our Published Merchandise Return Policy.

E:\G-69\G-M69-B\G-M69-B_TMS-MA_Installation_Manual.docx/TH

© Copyright 2023 by Telecor Incorporated. All rights reserved. No part of this publication may be reproduced in any form, or by any means, without the prior written permission of Telecor Incorporated.

Telecor Inc. makes no representation of warranties with respect to this manual. Further, Telecor reserves the right to make changes in the specifications of the products described in this manual at any time without notice, and without obligation of Telecor to notify any persons of such revisions or changes.

www.telecor.com

FCC NOTICE

PRODUCT NAME: Telecor Media Source Model A

FCC ID: 2A9XY-TMSMA

FCC RULES: THIS PRODUCT HAS BEEN TESTED TO COMPLY WITH FCC RF

(PART 15, SUBPART C)

OPERATING ENVIRONMENT: FOR USE IN RESIDENTIAL AREAS

FCC Compliance Statement:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Notice:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Warning:

Changes or modifications not expressly approved by Telecor could void the user's authority to operate the equipment.

Radiation Exposure Statement:

This equipment complies with FCC and ISED radiation exposure limits set forth for an uncontrolled environment without restriction. The distance between users and the product should be no less than 20cm.



INDUSTRY CANADA INFORMATION

IC: 4134A-TMSMA

IC RULES: THIS PRODUCT HAS BEEN TESTED TO COMPLY WITH RF (RSS-247 Issue2 February 2017)

The Telecor Media Source Model A complies with Industry Canada ICES-003: CAN ICES-003 (B)/NMB-003(B).

Warning:

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development (ISED) Canada's license-exempt RSS(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

The device has been evaluated to meet general RF exposure requirement. The distance between user and products should be no less than 20cm.

Cet appareil contient des émetteurs/récepteurs exemptés de licence qui sont conformes aux flux RSS exempts de licence du Canada pour l'innovation, la Science et le développement économique (ISDE).Le fonctionnement est soumis aux deux conditions suivantes: (1) ce dispositif ne peut pas causer d'interférence, et (2) ce dispositif doit accepter toute interférence, y compris les interférences pouvant causer un fonctionnement indésirable du dispositif.

L'appareil a été évalué pour répondre aux exigences générales d'exposition aux RF. La distance entre l'utilisateur et les produits devraient être au moins 20 cm.

The Party Responsible for Product Compliance:

Telecor Inc. 6205 Kestrel Road Mississauga, Ontario Canada, L5T 2A1

Table of Contents

A. Intr	oductio	on	9
B. Inst	allation	1	11
B.1	Unpac	king	11
B.2	Installi	ing TMS-MA in Equipment Rack	12
B.3	Conne	ecting the TMS-MA Cables	13
	_		
C. Ove	erview		15
C.1	Front F	Panel	15
C.2	Remot	te	
D. Ope	erations	Powering On the TMS-MA	17
	D.1.1	Powering On the TMS-MA	17
	D.1.2	Playing USB Drive/SD/MMC Card Audio	17
	D.1.3	Playing Bluetooth Audio	19
	D.1.4	Playing Aux Audio	20
	D.1.5	Playing Radio Audio	20
_			
Apper	idix 1. S	Specifications	23

A. Introduction



TMS-MA Telecor Media Source Model A

The TMS-MA Telecor Media Source Model A is an all-in-one audio source device which accommodates multiple different kinds of audio sources into one single device.

The front side provides an AUX IN port, a USB slot, and a SD/MMC memory card slot. This makes it possible to play MP3 files from USB drives and SD/MMC memory cards. The TMS-MA is also capable of receiving FM radio and connecting to Bluetooth audio devices.

The rear side of the device provides a stereo output and a jack for an FM antenna (provided by customer) for improved FM reception.

The TMS-MA is designed to be installed in a 19" equipment rack. If the TMS-MA is purchased with an equipment rack, all required cables and mounting hardware for the TMS-MA will be preinstalled in the rack.

B. Installation

Once you have unpacked and inspected your TMS-MA, your next step is to install the unit in a standard 19" equipment rack and then connect the power, audio cable harness, and optional (provided by customer) antenna.

B.1 Unpacking

The following equipment is included with your TMS-MA:

- Telecor Media Source Model A (TMS-MA)
- Cable harness for connecting TMS-MA to T2/XL (CHAP-TMS-MA)¹
- 2A DC 5V Power Adapter

When you receive your TMS-MA you should unpack it carefully to verify that you have received all the parts. If you are missing any parts notify Telecor immediately. Also inspect for any damage which could have occurred during shipping. If you discover any damaged items, contact the shipping company immediately.

If the TMS-MA is ordered with a rack, the cable harness will be pre-installed in the rack.

B.2 Installing TMS-MA in Equipment Rack

The TMS-MA installs into a standard 19" equipment rack.

Materials Required TMS-MA

4 10-32 1/2" black screws (Part number: MS-1032)1 (purchased separately)

4 "tooth" lock washers (included with MS-1032 screws)

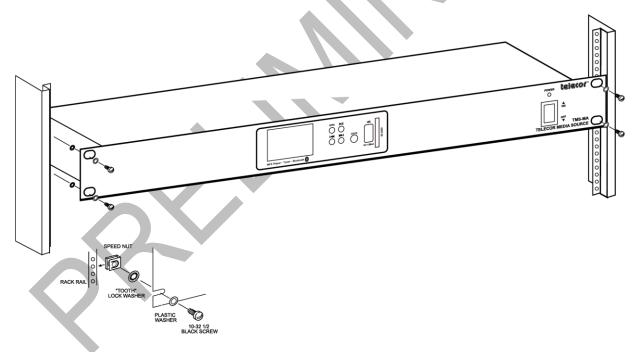
4 plastic washers (Part number: MW-10BK)¹ (purchased separately)

4 speed nuts (Part number: MN-1032)1 (purchased separately)

The TM-MA must be installed in a location with an operating temperature range of 10 to 40°C (50 to 104°F), 0-90% relatively humidity, non-condensing.

To install the TMS-MA into the equipment rack, complete the following steps:

- 1. Mount the TMS-MA in a 19" equipment rack.
- 2. Ensure that the equipment rack is properly grounded. Use "tooth" lock washers between the TMS-MA and the mounting rails of the equipment rack. The washers ensure that a chassis ground is maintained. Use the four plastic washers to protect the finish of the front panel.



Installing TMS-MA into the Equipment Rack

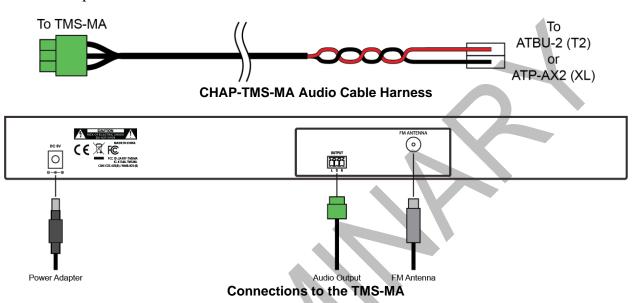
12 Installation

Purchased in bags of 50 or will be included if the TMS-MA is ordered with a rack.

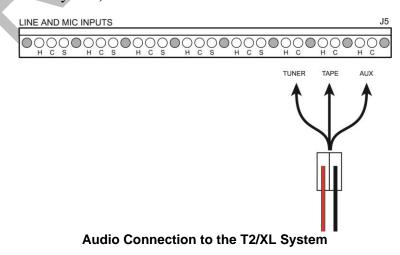
B.3 Connecting the TMS-MA Cables

Once you have mounted the TMS-MA unit into the rack, you can then connect the power, audio cable harness, and optional (provided by customer) antenna.

The CHAP-TMS-MA audio cable harness connects the TMS-MA to the Telecor II's ATBU-2 or Telecor XL's ATP-AX2. It has a 3-pin insulation displacement connector (IDC) at the TMS-MA end and a 2-pin IDC at the T2/XL end.

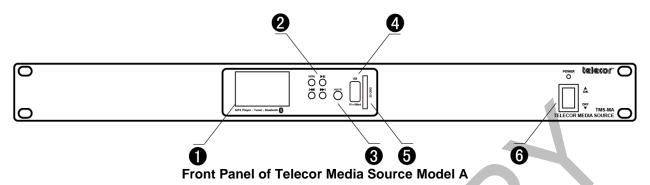


- 1. Connect the power adapter cord to the TMS-MA and plug it into the mains.
- 2. Optional: plug an FM antenna into the 75Ω antenna port and run the antenna wire along the outside of the rack.
- 3. On the rear of the TMS-MA, plug the 3-pin IDC of the CHAP-TMS-MA cable harness into the audio output port as in the above diagram.
- 4. Plug the 2-pin IDC end of the CHAP-TMS-MA audio cable harness into the **TUNER**, **TAPE** or **AUX** input of the T2/XL's Audio Input board (ATP-AX2 on an XL System or ATBU-2 on a T2 system).



C. Overview

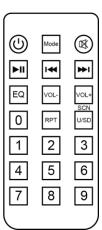
C.1 Front Panel



- 1. LCD Display: Provides information about the current operation, e.g., the current audio track or radio station.
- 2. Operational Buttons: Menu, Play/Pause, Left (►), and Right (►).
- 3. AUX IN Port: Used to connect an auxiliary input audio device.
- 4. USB Connection Port: Used to connect a USB drive.
- 5. SD/MMC Card Slot: Used to insert an SD/MMC card.
- 6. Power Switch: Supplies power to the TMS-MA. The Power LED illuminates when power is supplied.

C.2 Remote

The TMS-MA includes a remote which can be used to access its functions.



Remote for Telecor Media Source Model A

- ②: Powers the TMS-MA on/off.
- Mode: Toggles through operational modes/menus.
- (Mutes/unmutes audio.
- Play/pause audio. Context sensitive confirmation.
- : Context sensitive navigate left.
- : Context sensitive navigate right.
- EQ: Toggles equalizer mode in certain audio modes.
- Decrease volume.
- : Increase volume.
- Toggles repeat mode.
- Toggle audio source between USB drive and SD/MMC card.
- 0 to 9: Context sensitive numerical inputs.

D. Operations

D.1.1 Powering On the TMS-MA

- 1. Press the power switch on the front of the TMS-MA to ensure power is supplied. The Power LED will illuminate when power is supplied.
- 2. Press and hold **MENU** on the front of the TMS-MA or the **POWER** button on the remote until the LCD display lights up.

Note: The TMS-MA being supplied with power and being powered on are two different states. If the power supply is turned off while the TMS-MA remains powered on, it will instantly power on next time power is supplied.

D.1.2 Playing USB Drive/SD/MMC Card Audio

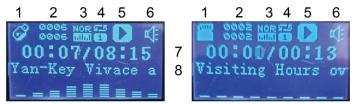
To play audio from a USB drive/SD/MMC card:

- 1. Insert the USB drive into the USB slot or the SD/MMC card into the SD/MMC card slot on the front of the TMS-MA. Once detected, the MP3 files should automatically begin playing.
- 2. If the audio files on the USB drive/SD/MMC card are not automatically detected and played, press and hold **MENU** on the front of the TMS-MA or **Mode** on the remote until the main menu appears.
- 3. Press **MENU** on the front of the TMS-MA or **Mode** on the remote until "Music" is selected.
- 4. Press **Play/Pause** on the front of the TMS-MA or the remote.



Selecting Music (USB Drive/SD/MMC Card)

When the TMS-MA is set to play audio from a USB drive/SD/MMC card, the LCD display on the front of the TMS-MA will display the following:



Playing USB Drive (Left) or SD/MMC Card (Right) Audio Display

The components of the LCD display when playing USB drive or SD/MMC card audio are as follows:

- 1. USB drive or SD/MMC card audio source indicator
- 2. Current track number (top) and total number of tracks (bottom)
- 3. Equalizer mode
- 4. Repeat mode
- 5. Play/pause state
- 6. Mute/unmute state
- 7. Current track location and current track duration
- 8. Audio file name

To switch between a connected USB drive and an inserted SD/MMC card being the audio source:

1. Press **U/SD** on the remote.

To play or pause audio:

1. Press **Play/Pause** on the front of the TMS-MA or the remote.

To mute the audio:

1. Press **Mute** on the remote.

To select a different audio file:

1. Press **Left** or **Right** on the front of the TMS-MA or the remote.

Note: The audio files will be listed in alphabetical order according to their file names.

2. Alternatively, enter the number of the audio file followed by **Play/Pause** on the remote to select that audio file, e.g., press 5 and the Play/Pause to play the fifth audio file.

To rewind or fast forward through an audio file:

1. Press and hold **Left** or **Right** on the front of the TMS-MA or the remote. Release when the desired position in the audio file has been reached.

To adjust the volume:

1. Press **Vol-** or **Vol+** on the remote.

18 Operations

To change repeat mode:

1. Press **RPT** on the remote. The available repeat modes are: 1 (repeat current audio file, R (randomized), A (all audio files), and D (only audio files in the current folder).

To change equalizer mode:

1. Press **EQ** on the remote. The available equalizer modes are: Nor (Normal), Pop, Rock, Jazz, Clas (Classical), Soft, and DBB (Dynamic Bass Boost).

D.1.3 Playing Bluetooth Audio

To play audio from a Bluetooth device:

- 1. Press and hold **MENU** on the front of the TMS-MA or **Mode** on the remote until the main menu appears.
- 2. Press **MENU** on the front of the TMS-MA or **Mode** on the remote until "Bluetooth" is selected.
- 3. Press **Play/Pause** on the front of the TMS-MA or the remote.



4. On your Bluetooth device, search for other Bluetooth devices. Select **MPLAYER C** when it is detected.

When the TMS-MA is set to play audio from a Bluetooth, the LCD display on the front of the TMS-MA will display the following:



Bluetooth Device Not Connected (Left) or Connected (Right) Display

To mute the audio:

1. Press **Mute** on the remote.

To adjust the volume:

1. Press **Vol-** or **Vol+** on the remote.

D.1.4 Playing Aux Audio

To play audio from AUX input:

- 1. Plug the AUX input device into the AUX IN port on the front of the TMS-MA.
- 2. If the AUX input device is not automatically detected and played, press and hold **MENU** on the front of the TMS-MA or **Mode** on the remote until the main menu appears.
- 3. Press **MENU** on the front of the TMS-MA or **Mode** on the remote until "AUX" is selected.
- 4. Press **Play/Pause** on the front of the TMS-MA or the remote.



Selecting AUX Input Audio

When the TMS-MA is set to play audio from AUX input, the LCD display on the front of the TMS-MA will display the following:



To play or pause audio:

1. Press **Play/Pause** on the front of the TMS-MA or the remote.

D.1.5 Playing Radio Audio

To play audio from radio:

- 1. Press and hold **MENU** on the front of the TMS-MA or **Mode** on the remote until the main menu appears.
- 2. Press **MENU** on the front of the TMS-MA or **Mode** on the remote until "Radio" is selected.
- 3. Press **Play/Pause** on the front of the TMS-MA or the remote.



Selecting AUX Input Audio

When the TMS-MA is set to play audio from radio, the LCD display on the front of the TMS-MA will display the following:



To scan for radio stations and save them to memory:

1. Press and hold **Play/Pause**. When the TMS-MA is scanning for radio stations, it will show a progress bar on the LCD display. Once finished, the detected radio stations will be saved to memory for easier navigation.

To change the radio station:

1. Press **Left** or **Right** on the front of the TMS-MA or the remote to go to the next radio station.

Note: If a radio station scan was not performed and no radio stations have been saved to memory, pressing **Left** or **Right** will change the selected radio frequency in 0.1Mhz increments. **Left** or **Right** can also be pressed and held to navigate through the frequency range.

To play or pause audio:

1. Press **Play/Pause** on the front of the TMS-MA or the remote.

To mute the audio:

1. Press **Mute** on the remote.

Appendix 1. Specifications

Inputs:	USB drive

SD/MMC memory card

FM tuner AUX input Bluetooth

Outputs: 1 x fixed audio output

Frequency range: FM 87.5 ~108.0 Mhz

Channel step: FM 50 kHz
Intermediate frequency: FM 10.7 MHz

Sensitivity: FM $2 \mu V$ at 30 dB S/N

Signal to noise ratio: FM >60 dB

Output level: 0 dB/600 ohm

Bluetooth version: 4.2

Power supply: DC+5V, 2A

Dimensions (W x H x D): 19.0" x 1.7" x 4.3" (483 x 44 x 110 mm)

Color: Black

Net Weight: 3.8 lbs (1.76 kg)

Operating temperature range: 10-40°C (50-104°F), 0-90% relative humidity,

non-condensing