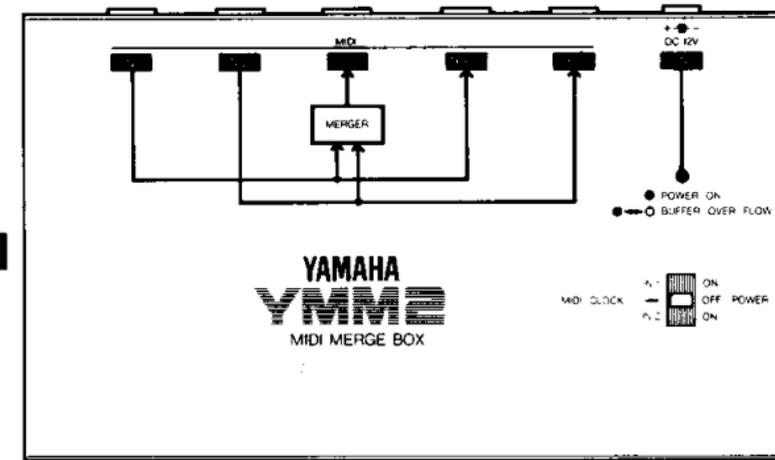


# YAMAHA

**MIDI Merge Box**  
**Boitier de melange MIDI**  
**MIDI-signalkoppler**

## YMM2

**Operating Manual**  
**Mode d'emploi**  
**Bedienungsanleitung**



*Congratulations on your purchase of a Yamaha YMM2 MIDI MERGE BOX! The YMM2 MIDI MERGE BOX has been designed to expand the versatility and applications potential of MIDI music systems, making a whole new range of system configurations possible. Naturally, it has been designed and constructed to Yamaha's strict quality standards, offering high performance and solid reliability. In order to make full use of the YMM2's performance and capabilities, we urge you to read this operation manual thoroughly before using the YMM2.*

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## PRECAUTIONS

### 1. AVOID EXCESSIVE HEAT AND HUMIDITY

Keep the unit away from locations where it is likely to be exposed to high temperatures or humidity—such as near radiators, stoves, etc.

### 2. AVOID PHYSICAL SHOCKS

Strong physical shocks to the unit can cause damage. Handle it with care.

### 3. AVOID STRONG ELECTROMAGNETIC FIELDS

The YMM2 employs digital microprocessor circuitry. To prevent data errors, keep it away from sources of electromagnetic radiation such as transformers, pumps, refrigerators, TV sets, etc.

### 4. HANDLE CABLES CAREFULLY

Always plug and unplug cables by gripping the cable connector, not the cord.

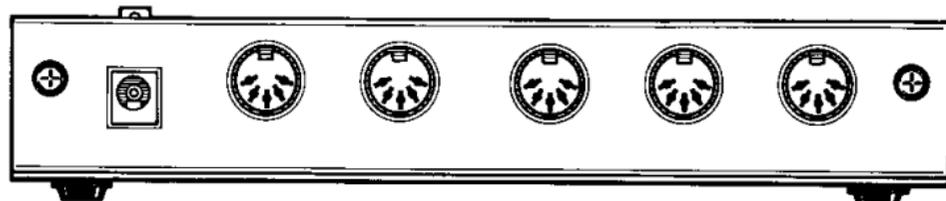
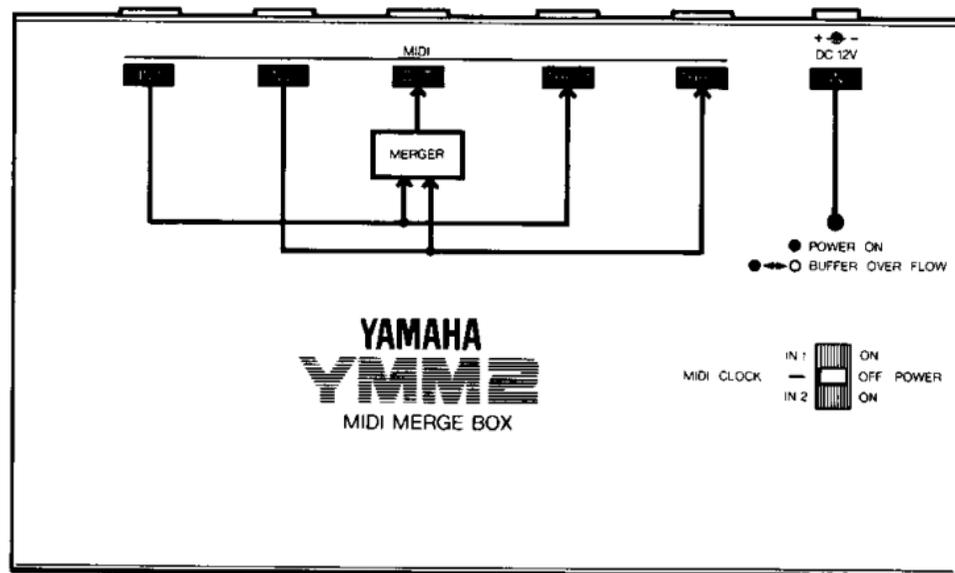
### 5. CLEAN WITH A SOFT DRY CLOTH

Never use solvents such as benzine or thinner to clean the unit. Wipe clean with a soft, dry cloth.

## POWER SUPPLY

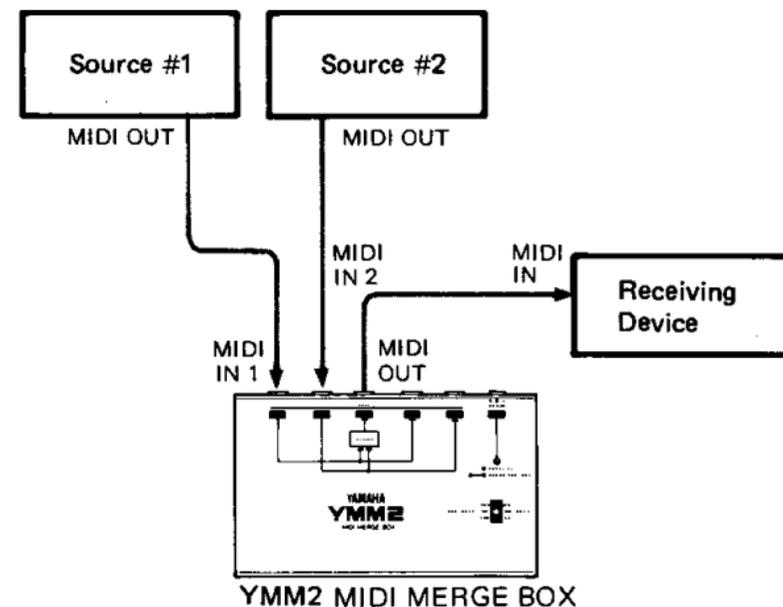
The YMM2 receives its power from an external PA-1 power adaptor. Plug the adaptor's output cable into the socket provided on the rear panel of the YMM2, then plug the adaptor itself into a convenient AC wall socket. Be sure that your local line voltage matches that specified on the PA-1.

## BASIC OPERATION



The YMM2 has 5 MIDI terminals; IN 1, IN 2, OUT, THRU 1 and THRU 2. Basically, two separate MIDI signals supplied to the IN 1 and IN 2 terminals are combined (merged) and delivered as one MIDI signal via the OUT terminal.

The THRU 1 and THRU 2 terminals output the signals received at the respective IN 1 and IN 2 terminals without modification. This means that you can carry the signals received at IN 1 and IN 2 on to other equipment with no effect from the YMM2.



## MIDI CLOCK SELECTION

If the MIDI signals supplied to the IN 1 and IN 2 terminals both include the MIDI clock signal, the two clocks will conflict and cause misoperation of the equipment receiving the merged signal from the OUT terminal. To avoid this, a MIDI clock filter can be switched into either the IN 1 or IN 2 channels. This is done using the POWER ON/OFF switch, which has two ON positions (MIDI CLOCK IN 1, MIDI CLOCK IN 2). If set to the IN 1 position, only the MIDI clock signal appearing at the IN 1 terminal will be merged into the output signal. If IN 2 is selected, only the MIDI clock signal appearing at the IN 2 terminal will be merged into the output signal.

## POWER ON/BUFFER OVERFLOW INDICATOR

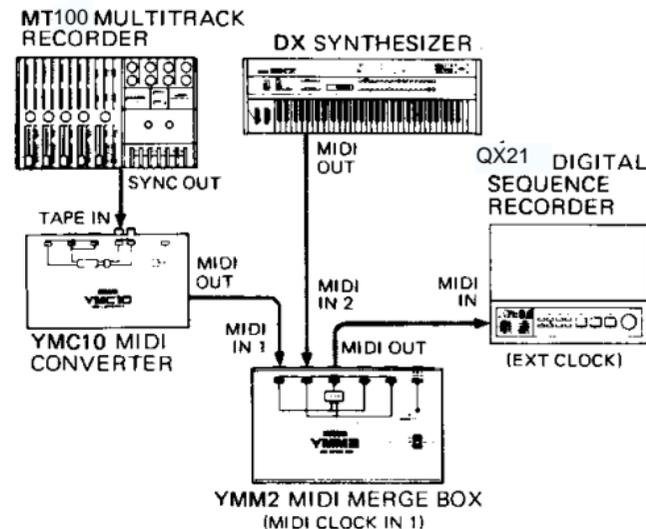
The red LED marked POWER ON/BUFFER OVERFLOW will light continuously when power is applied and operation is normal. If too much MIDI data is received simultaneously, however, the LED will flash to indicate that a buffer overflow has occurred. This can happen if extremely complex MIDI data is applied to both the IN 1 and IN 2 terminals simultaneously.

## SAMPLE APPLICATIONS

The following are just a few examples of applications for the YMM2 MIDI MERGE BOX. Your own specific needs will dictate the setup you actually use, but these examples may provide you with some ideas.

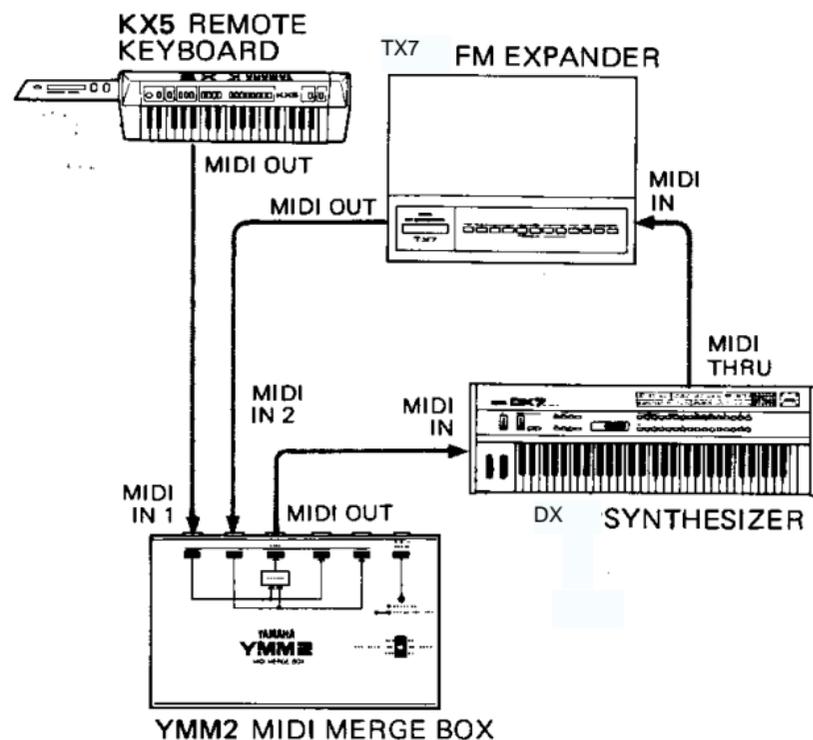
### 1. SEQUENCER RECORDING SYNCHRONIZED TO TAPE

This system uses the YMM2 in a multitrack recording setup including the YMC10 MIDI Converter and a Digital Sequence Recorder such as the QX21. Normally the sync track recorded on the multitrack tape recorder would be used to simply synchronize playback of a rhythm machine and/or sequencer to material recorded on other tracks of the tape. With the YMM2, however, it is possible to synchronize a QX21 sequencer for recording. The MIDI output from the YMC10 is fed to IN 1 of the YMM2, and the YMM2 power switch is set to MIDI CLOCK IN 1. The MIDI output from a DX synthesizer is then fed to YMM2 IN 2. The merged output from the YMM2 is fed to the QX21 sequencer, and the QX21 is set to external synchronization (EXT CLOCK). When the tape is played back and the QX21 set to record, the QX21 record tempo will be controlled by the sync track, allowing you to record to the QX21 keeping perfect time with other material already recorded on the tape.



## 2. PLAYING THE DX7/TX7 COMBINATION FROM A REMOTE KEYBOARD

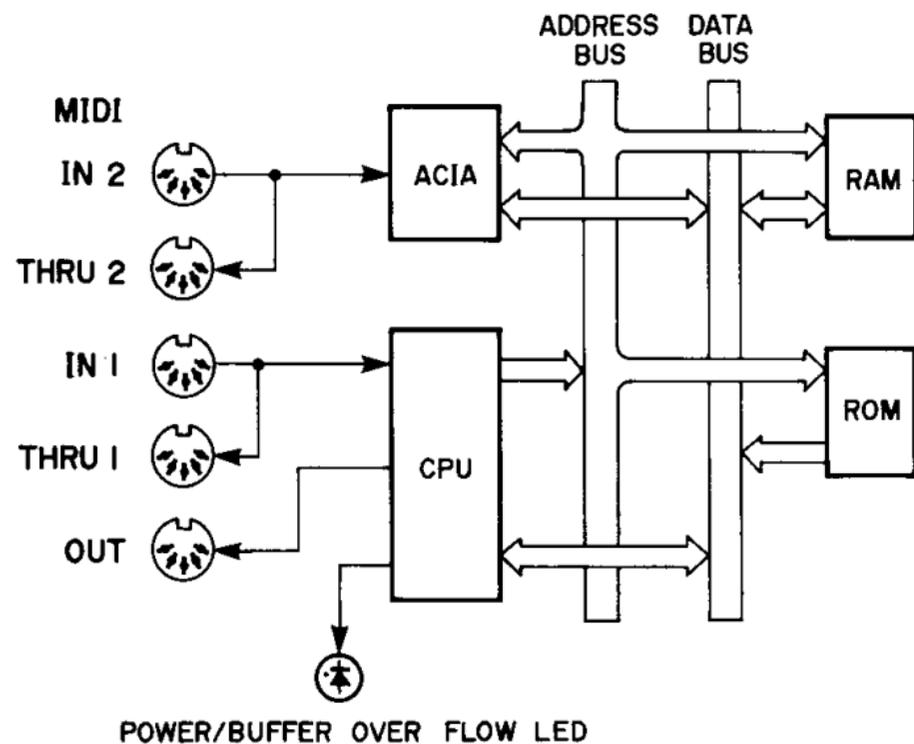
In addition to providing dual tone generators, one of the big advantages of combining the TX7 FM expander with the DX7 synthesizer is that the TX7 provides independent function memories for each of the DX7's 32 voices as well as its own. This capability, however, requires that the TX7 MIDI OUT is connected to the DX7 MIDI IN and vice-versa. With the YMM2 it is possible to play the DX7/TX7 combination from a KX5 Remote Keyboard while retaining this function-recall capability. The MIDI output from the KX5 is simply merged with that from the TX7 and fed to the DX7's MIDI IN terminal. When a new voice number is selected from the KX5, the corresponding function data is loaded into the DX7 from the TX7.



## SPECIFICATIONS

Function	MIDI Merge Box
Indicator	POWER/BUFFER OVERFLOW LED x 1
Switch	POWER (MIDI CLOCK IN 1/IN 2) x 1
Terminals	MIDI IN 1, MIDI IN 2, MIDI OUT, MIDI THRU 1, MIDI THRU 2, DC IN
Dimensions (W x H x D)	190 mm x 35 mm x 112 mm (7-1/2" x 1-3/8" x 4-3/8")
Weight	650 g (1.4 lbs)
Accessory	U.S.: PA-1 AC adaptor, 120 VAC, 3W BRITAIN: PA-1 AC adaptor, 240 VAC, 3W EUROPE: PA-1 AC adaptor, 220-240VAC, 3W

**BLOCK DIAGRAM  
SCHEMA FONCTIONNEL  
BLOCKDIAGRAMM**



**SERVICE**

The YMM2 is supported by Yamaha's worldwide network of factory trained and qualified dealer service personnel. In the event of a problem, contact your nearest Yamaha dealer.

**SERVICE**

Le YMM2 bénéficie du soutien du réseau mondial de techniciens d'entretien formés en usine et agréés Yamaha. En cas de problème, adressez-vous au revendeur Yamaha le plus proche.

**KUNDENDIENST**

Das fabrikgeschulte und qualifizierte Kundendienstpersonal des weltweiten Yamaha-Netztes ist mit dem YMM2 bestens vertraut. Treten Sie im Falle eines Problems mit Ihrer nächsten Yamaha-Kundendienststelle in Verbindung.