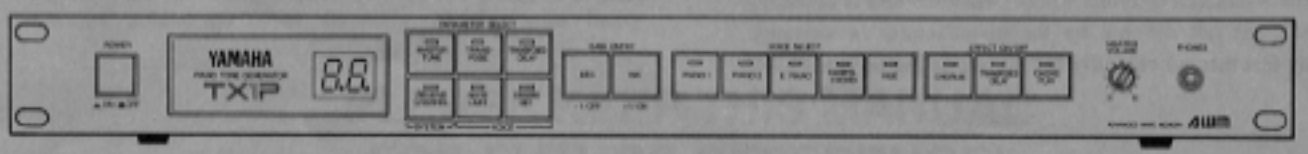
YAMAHA

PIANO TONE GENERATOR
GENERATEUR DE TONALITE DE PIANO
PIANO – TONGENERATOR
GENERADOR DE TONOS DE PIANO

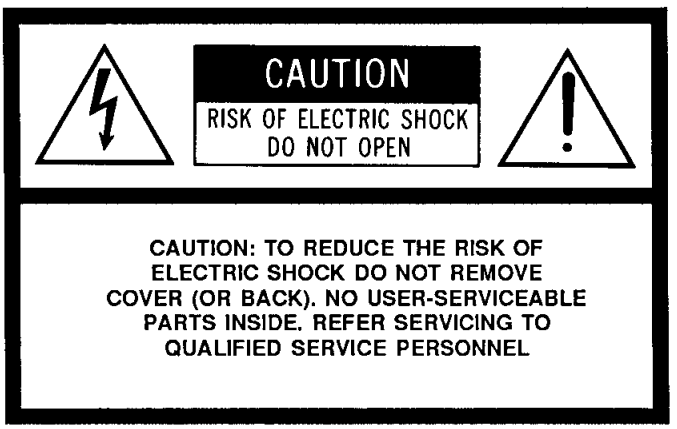
TX1P

OPERATING MANUAL
MANUEL D'UTILISATION
BEDIENUNGSANLEITUNG
MANUAL DE INSTRUCCIONES



SPECIAL MESSAGE SECTION

Yamaha Digital Musical Instrument Products will have either a label similar to the graphic shown below or a molded/stamped facsimile of the graphic on its enclosure.
The explanation of these graphics appears on this page. Please observe all cautions indicated.



The Exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenace (servicing) instructions in the literature accompanying the product.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

ELECTROMAGNETIC INTERFERENCE (RFI): Your Yamaha Digital Musical Instrument Product has been type tested and found to comply with all applicable regulations. However, if it is installed in the immediate proximity of other electronic devices, some form of interference may occur. For additional RFI information see FCC information section located in this manual.

IMPORTANT NOTICE: This product has been tested and approved by independent safety testing laboratories in order that you may be sure that when it is properly installed and used in its normal and customary manner, all foreseeable risks have been eliminated. DO NOT modify this unit or commision others to do so unless speicfically authorized by Yamaha. Product performance and /or safety standards may be diminished. Claims filled under the expressed warranty may be denied if the unit is/has been modified. Implied warranties may also be affected.

SPECIFICATIONS SUBJECT TO CHANGE: The information contained in this manual is believed to be correct at the time of printing. Yamaha reserves the right to change or modify specifications at any time without notice or obligation to update existing units.

NOTICE: Service charges incurred due to a lack of knowledge relating to how a function or effect works (when the unit is operating as designed), are not covered by the manufacturer' s warranty. Please study this manual carefully before requesting service.

STATIC ELECTRICITY CAUTION: Some Yamaha Digital Musical Instrument products have modules that plug into the unit to perform various functions. The contents of a plug-in module can be altered/damaged by static electricity discharges. Static electricity build-ups are more likely to occur during cold winter months (or in areas with very dry climates) when the natural humidity is low. To avoid possible damage to the plug-in module, touch any metal object (a metal desk lamp, a door knob, etc.) before handling the module. If static electricity is a problem in your area, you may want to have your carpet treated with a substance that reduces static electricity build-up. See your local carpet retailer for professional advice that relates to your specific situation.

Model _____

Serial No. _____

Purchase Date _____

This information on safety is provided to comply with U.S.A. laws, but should be observed by users in all countries.

IMPORTANT
SAFETY AND INSTALLATION INSTRUCTIONS
INFORMATION RELATING TO POSSIBLE PERSONAL INJURY, ELECTRIC SHOCK AND FIRE HAZARD POSSIBILITIES HAS BEEN INCLUDED IN THIS LIST.

WARNING - When using electronic products, basic precautions should always be followed, including the following:

1. Read all Safety and Installation Instructions, Supplemental Marking and Special Message Section data, and any applicable assembly instructions BEFORE using this product.

2. Check unit weight specifications BEFORE you attempt to move this product.

3. Main power supply verification. Yamaha Digital Musical Instrument products are manufactured specifically for use with the main supply voltage used in the area where they are to be sold. The main supply voltage required by these products is printed on the name plate. For name plate location please refer to the graphic in the Special Message section. If any doubt exists please contact the nearest Yamaha Digital Musical Instrument retailer.

4. Some Yamaha Digital Musical Instrument products utilize external power supplies or adapters. Do NOT connect products of this type to any power supply or adapter other than the type described in the owners manual or as marked on the unit.

5. This product may be equipped with a plug having three prongs or a polarized line plug (one blade wider than the other). If you are unable to insert the plug into the outlet, contact an electrician to have the obsolete outlet replaced. Do NOT defeat the safety purpose of the plug. Yamaha products not having three prong or polarized line plugs incorporate construction methods and designs that do not require line plug polarization.

6. WARNING - Do NOT place objects on the power cord or place the unit in a position where any one could walk on, trip over, or roll anything over cords of any kind. An improper installation of this type can create the possibility of a fire hazard and/or personal injury.

7. Environment: Your Yamaha Digital Musical Instrument should be installed away from heat sources such as heat registers and/or other products that produce heat.

8. Ventilation: This product should be installed or positioned in a way that its placement or location does not interfere with proper ventilation.

9. Yamaha Digital Musical Instrument products are frequently incorporated into "Systems" which are assembled on carts, stands or in racks. Utilize only those carts, stands, or racks that have been designed for this purpose and observe all safety precautions supplied with the products. Pay special attention to cautions that relate to proper assembly, heavier units being mounted at the lower levels, load limits, moving instructions, maximum usable height and ventilation.

10. Yamaha Digital Musical Instrument products, either alone or in combination with amplification, headphones, or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do NOT operate at high volume levels or at a level that is uncomfortable. If you experience any discomfort, ringing in the ears, or suspect any hearing loss, you should consult an audiologist.

11. Do NOT use this product near water or in wet environments. For example, near a swimming pool, spa, in the rain, or in a wet basement.

12. Care should be taken so that objects do not fall, and liquids are not spilled into the enclosure.

13. Yamaha Digital Musical Instrument products should be serviced by a qualified service person when:
    a. The power supply/power adapter cord or plug has been damaged; or
    b. Objects have fallen, or liquid has been spilled into the products; or
    c. The unit has been exposed to rain; or
    d. The product does not operate, exhibits a marked change in performance; or
    e. The product has been dropped, or the enclosure of the product has been damaged.

14. When not in use, always turn your Yamaha Digital Musical Instrument equipment "OFF". The power supply cord should be unplugged from the outlet when the equipment is to be left unused for a long period of time.
    NOTE: In this case, some units may lose some user programmed data. Factory programmed memories will not be affected.

15. Electromagnetic Interference (RFI). Yamaha Digital Musical Instruments utilize digital (high frequency pulse) technology that may adversely affect Radio / TV reception. Please read FCC information (on page 14) for additional information.

16. Do NOT attempt to service this product beyond that described in the user maintenance section of the owners manual. All other servicing should be referred to qualified service personnel.

PLEASE KEEP THIS MANUAL FOR FUTURE REFERENCE!

INTRODUCTION

CONGRATULATIONS!

You are now the proud owner of a Yamaha TX1P Piano Tone Generator. Using Yamaha's Advanced Wave Memory tone generator system, the TX1P offers super-realistic acoustic piano, electric piano, harpsichord and vibes voices – all in a 1U rack-mount unit that can be controlled from any MIDI keyboard or sequencer. The piano voices have all the low-note richness and high-note sparkle you'd expect from a fine acoustic instrument. You can hear the harpsichord strings being plucked, and the vibes voice accurately conveys the smooth timbre of mallet on metal. The TX1P also includes three built-in effects that can add variety and life to your sound and playing style. The TX1P is an ideal addition to any MIDI keyboard or MIDI studio system.
Be sure to read this operating manual thoroughly before setting up and trying out your TX1P in order to learn how to make full use of its stunning voices, effects and other features.

CONTENTS

PRECAUTIONS

1. *AVOID EXCESSIVE HEAT, HUMIDITY, DUST AND VIBRATION*
   Keep the unit away from locations where it is likely to be exposed to high temperatures or humidity – such as near radiators, stoves, etc. Also avoid locations which are subject to excessive dust accumulation or vibration which could cause mechanical damage.

2. *AVOID PHYSICAL SHOCKS*
   Strong physical shocks to the unit can cause damage. Handle it with care.

3. *DO NOT OPEN THE UNIT OR ATTEMPT REPAIRS OR MODIFICATIONS YOURSELF*
   This product contains no user-serviceable parts. Refer all maintenance to qualified Yamaha service personnel. Opening the unit and/or tampering with the internal circuitry will void the warranty.

4. *MAKE SURE POWER IS OFF BEFORE MAKING OR REMOVING CONNECTIONS*
   Always turn the power OFF prior to connecting or disconnecting cables. This is important to prevent damage to the unit itself as well as other connected equipment.

5. *HANDLE CABLES CAREFULLY*
   Always plug and unplug cables – including the AC cord – by gripping the connector, not the cord.

6. *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.

7. *BACKUP BATTERY*
   The TX1P contains a special long-life battery which backs up the internal memory even when the power is turned OFF. With normal use the battery should last for about five years. If you notice erratic or erroneous recall of memorized data (the parameter settings, for example), have the battery replaced by qualified Yamaha service personnel. DO NOT ATTEMPT TO REPLACE THE BATTERY YOURSELF!

SPECIFICATIONS

Tone Generator
AWM (Advanced Wave Memory)

Polyphony
16 notes, maximum

Panel Controls
PARAMETER:
MASTER TUNE, RECEIVE CH., TRANSPOSE, NOTE LIMIT, TRANSPOSED DELAY
DATA ENTRY:
DEC, INC
VOICE SELECT:
PIANO 1, PIANO 2, E. PIANO, HARPSICHORD, VIBE
EFFECT:
CHORUS, TRANSPOSED DELAY, CHORD PLAY

Display
7-segment LED x 2

Connectors
FRONT PANEL:
PHONES
REAR PANEL:
MIDI IN, MIDI THRU, OUTPUT I , OUTPUT II

Power Requirements

U.S. & Canadian models	120V AC, 60 Hz
General model	220V–240V AC, 50/60 Hz

Power Consumption

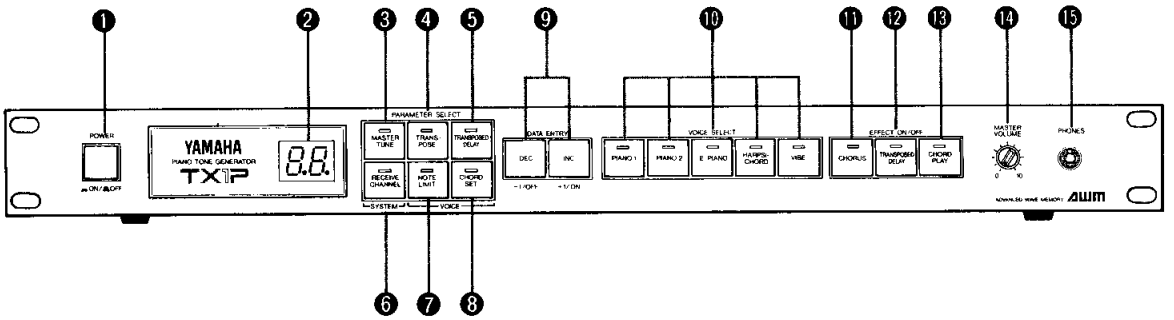
U.S. & Canadian models	15 watts
General model	15 watts

Dimensions (W x H x D)
480 mm x 45.3 mm x 279.5 mm
(18–7/8" x 1–3/4" x 11")

Weight 3.4 kg. (7.5 lbs)

• Specifications and appearance subject to change without notice.

FRONT PANEL CONTROLS



❶ ***Power Switch***
Press once to turn the power ON, press a second time to turn the power OFF. The LED display will light when the power is ON.

❷ ***LED Display***
This LED display shows the selected voice. It also displays effect and other parameters when they are selected.

❸ ***Master Tune Parameter Button***
Activates the TX1P MASTER TUNE function, permitting fine tuning over approximately a semitone range.

❹ ***Transpose Parameter Button***
Selects the TRANSPOSE function, allowing transposition of each voice individually over a ±1-octave range in semitone steps.

❺ ***Transposed Delay Parameter Button***
Accesses and allows editing of the TRANSPOSED DELAY effect parameters: DELAY TIME, PITCH SHIFT, FEEDBACK, and EFFECT LEVEL. The TRANSPOSED DELAY EFFECT button must be ON for the TRANSPOSED DELAY effect to be active.

❻ ***Receive Channel Parameter Button***
Allows the TX1P MIDI receive channel to be set to any channel from 1 to 16. The OMNI mode can also be activated so that reception is possible on all 16 channels.

❼ ***Note Limit Parameter Button***
This button selects the HI and LO NOTE LIMIT parameters which make it possible to define a limited range of notes that the controlling keyboard can "play" on the TX1P. This function is particularly useful for creating split keyboard effects using the TX1P and another tone generator (or the internal tone generator of the controlling keyboard).

❽ ***Chord Set Parameter Button***
Defines specific notes on the keyboard to play chords specified by the user instead of single notes. This function can be used to create special effects, or to make it possible to play a chord progression by playing single keys. This button accesses and allows editing of the CHORD PLAY parameters, but the CHORD PLAY EFFECT button must be ON for the CHORD PLAY effect to be active.

❾ ***Data Decrement and Increment Buttons***
The DEC (-1) and INC (+1) buttons are used to adjust the value of selected parameters. Pressing the INC button increases the value of the selected parameter, and pressing the DEC button decreases its value. Holding either button down causes continuous incrementing or decrementing.

❿ ***Voice Select Buttons (Piano 1, Piano 2, Electric Piano, Harpsichord, Vibes)***
Pressing one of these buttons selects the corresponding TX1P voice.

⓫ ***Chorus Effect Button***
Turns the CHORUS effect ON or OFF

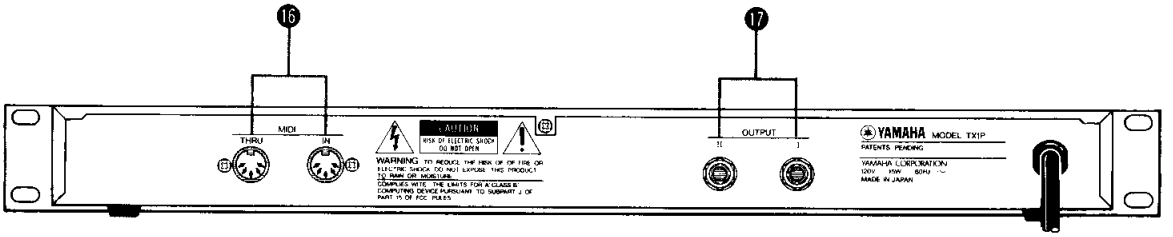
⓬ ***Transposed Delay Effect Button***
Turns the TRANSPOSED DELAY effect ON or OFF.

⓭ ***Chord Play Effect Button***
Turns the CHORD PLAY effect ON or OFF.

⓮ ***Master Volume Control***
Adjusts the output level of the rear-panel line outputs and the front-panel PHONES jack.

⓯ ***Phone Jack***
Accepts any standard pair of stereo headphones for private monitoring of the TX1P sound.

REAR PANEL CONNECTIONS



⑯ *Output I and II Jacks*

These are the main stereo outputs from the TX1P. For the best sound when using the CHORUS effect, use both outputs and connect them to a stereo sound system or the left and right channels of a sound reinforcement system. If you will be using a mono sound system, simply insert a plug into only one of the outputs.

⑰ *MIDI IN and THRU Connectors*

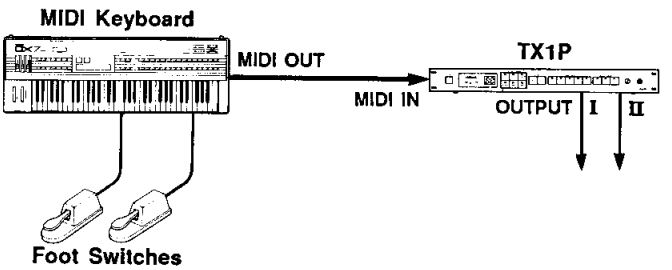
The MIDI IN connector receives the MIDI data from a MIDI keyboard or sequencer which is to control the TX1P. Use a standard MIDI cable that is no longer than 15 meters to prevent noise pickup that can cause data errors. The MIDI THRU terminal re-transmits the data received at the MIDI IN terminal so that more than one MIDI device can be connected in series.

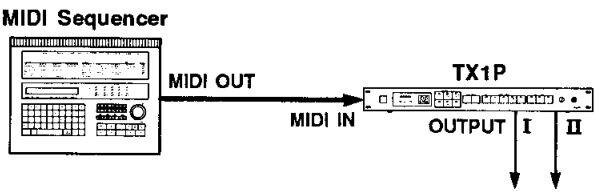
SETTING UP

If you will be using a MIDI keyboard to control the TX1P, simply connect it's MIDI OUT connector to the TX1P's MIDI IN connector using a standard MIDI cable. The controlling keyboard can be any MIDI synthesizer, master keyboard or electronic piano that transmits MIDI note velocity data (i.e. it's keyboard is touch-sensitive). Keyboards that are not touch-sensitive generally do not transmit MIDI note velocity data, and will not be able to take advantage of the TX1P's dynamic expression capability. The TX1P will also accept MIDI sustain pedal, key hold pedal (sostenuto), soft pedal and volume pedal data from your keyboard if the keyboard is capable of using these pedals. If necessary, make sure your keyboard is set up to transmit the appropriate pedal data (refer to the keyboard operation manual).

If you will be using the TX1P in a MIDI sequence system, connect the MIDI OUT connector of your sequencer (or the MIDI THRU connector of another device connected to the MIDI OUT of the sequencer) to the MIDI IN connector of the TX1P.

If possible, use both of the TX1P's OUTPUTs and connect them to the left and right channels of a stereo sound system or separate input channels of a mixing console. If only a single amplifier channel is available, use only the TX1P's OUTPUT I jack.

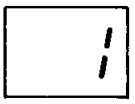




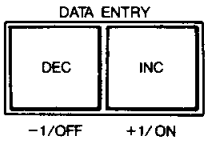
MIDI CHANNEL SELECTION

Once your system is properly set up, there's one parameter you should check before attempting to play the TX1P — the TX1P MIDI receive channel must match the MIDI transmit channel of your keyboard or sequencer. Set the TX1P MIDI receive channel as follows:

① Press the RECEIVE CHANNEL parameter button once. The RECEIVE CHANNEL button LED will light and a number (probably number "1") will appear on the LED display. This is the current TX1P MIDI receive channel number.



② Use the INC and DEC buttons to set the MIDI receive channel to match the MIDI transmit channel of your keyboard or sequencer (range: 1 — 16).



③ Press the RECEIVE CHANNEL button once more to enter the OMNI MODE selection mode (described below), or twice to return to the normal voice selection mode. The RECEIVE CHANNEL button LED will go out.

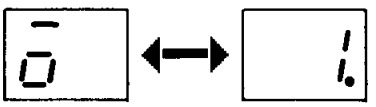
THE OMNI MODE

The TX1P also features an "OMNI" mode which can be either ON or OFF. When ON, the TX1P will receive MIDI data on all 16 channels. When OFF, reception occurs only on the select channel (see above).

① Press the RECEIVE CHANNEL parameter button twice (or once more after the channel-selection procedure described above). A small letter "o" and the current receive channel number will flash alternately on the LED display.

PRESS
TWICE

② Press the INC button to turn the OMNI mode ON. When ON, a dot will appear to the right of the channel number.* Press the RECEIVE channel button to return to the normal voice selection mode. The RECEIVE CHANNEL button LED will go out.



THE DOT INDICATES
THAT OMNI IS ON.

③ If the OMNI mode is ON (the dot to the right of the channel number is lit) and you want to turn it OFF, press the DEC button. The dot will go out and the OMNI mode will be turned OFF. Press the RECEIVE channel button to return to the normal voice selection mode. The RECEIVE CHANNEL button LED will go out.

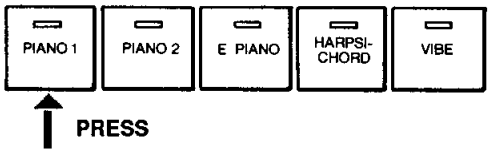
* If the OMNI mode is ON, the OMNI mode dot also appears next to the channel number in the MIDI receive channel selection mode described previously.

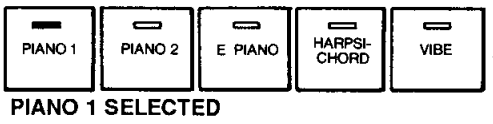
NOTE: The OMNI mode setting is memorized by the TX1P.

SELECTING AND PLAYING THE VOICES

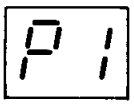
With the system properly set up and the TX1P MIDI receive channel matched to the MIDI transmit channel of your keyboard or sequencer, you should now be able to select a TX1P voice and play.

① Press the VOICE SELECT button corresponding to the voice you want to play. The LED in the selected VOICE SELECT button will light, and the selected voice name will be shown on the LED display.





PIANO 1 SELECTED

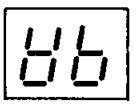


PIANO 1

PIANO 2

ELECTRIC PIANO

HARPSICHORD



VIBES

② Play the selected voice.

MIDI NOTE: It is also possible to select TX1P voices using the voice selectors on your keyboard. Normally when you press a voice selector on a MIDI keyboard, the MIDI Program Change Number corresponding to that voice is transmitted via the keyboard's MIDI OUT connector. This means that when you press voice selectors 1 through 5 on your keyboard (program change numbers 00 through 04), the corresponding TX1P voice will be selected.

THE CHORUS EFFECT

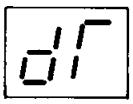
CHORUS adds a rich, "swirling" effect to the selected voice. The CHORUS effect is applied simply by pressing the CHORUS effect button while any voice is selected. The CHORUS effect button LED will light when the CHORUS effect is ON.

THE TRANSPOSED DELAY EFFECT

The TRANSPOSED DELAY effect can be used to create a single repeat, multiple repeats, a single transposed repeat or multiple transposed repeats following the initial sound. The TX1P comes with TRANSPOSED DELAY effects pre-programmed for each of the five voices, so all you need to do to try them out is to press the TRANSPOSED DELAY effect button while the desired voice is selected. The TRANSPOSED DELAY effect button LED will light and the effect will be activated. A "FACTORY TRANSPOSED DELAY SETTINGS" chart is included below for reference.

CREATING YOUR OWN TRANSPOSED DELAY EFFECTS

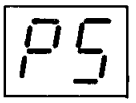
To create your own TRANSPOSED DELAY effects, it is necessary to set 4 parameters accessed by the TRANSPOSED DELAY parameter button. The four parameters – DELAY TIME, PITCH SHIFT, FEEDBACK and EFFECT LEVEL – are selected in sequence each time the TRANSPOSED DELAY PARAMETER SELECT button is pressed. Pressing the TRANSPOSED DELAY PARAMETER SELECT button a fifth time returns to the normal voice selection mode. The LED display and function related to each of the four TRANSPOSED DELAY parameters are as follows:



DELAY TIME

The DELAY TIME parameter sets the time between repeats, including the time from the initial sound until the first repeat. The delay range is from 0.01 to 1.28 seconds. DELAY TIME is the first parameter selected when the TRANSPOSED DELAY PARAMETER SELECT button is pressed. When selected, the letters "dT" flash on the LED display alternately with the current delay time value. Delay time values with NO dot after the second number indicate the corresponding time in hundredths of a second ("01" – "99"), while numbers followed by a dot indicate the corresponding time in hundredths of a second plus one second ("00." – "28." indicates 1.00 through 1.28 seconds).

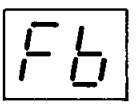
The DEC and INC buttons are used to select the desired delay time while the DELAY TIME parameter is selected. Once set to the desired value, press the TRANSPOSED DELAY PARAMETER SELECT button a second time to go on to the PITCH SHIFT parameter, below.



PITCH SHIFT

The PITCH SHIFT parameter sets the interval by which each repeat will be transposed from the preceding repeat or initial sound. The PITCH SHIFT range is from -12 (through 0) to 12, with each increment representing a semitone. The repeats can therefore be transposed up or down by a maximum of one octave. When this parameter is selected, the letters "PS" flash on the LED display alternately with the current pitch shift value.

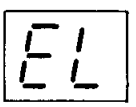
The DEC and INC buttons are used to select the desired pitch shift interval while the PITCH SHIFT parameter is selected. Once set to the desired value, press the TRANSPOSED DELAY PARAMETER SELECT button a third time to go on to the FEEDBACK parameter, below.



FEEDBACK

The value of the FEEDBACK parameter determines the number of repeats that will occur after the initial sound. The FEEDBACK range is from 0 to 7. A setting of "0" produces only a faint single repeat, while the maximum setting of "7" produces a string of repeats, the actual number of which depend on how hard the note is played. When this parameter is selected, the letters "Fb" flash on the LED display alternately with the current feedback value.

The DEC and INC buttons are used to select the desired feedback value while the FEEDBACK parameter is selected. Once set to the desired value, press the TRANSPOSED DELAY PARAMETER SELECT button a fourth time to go on to the EFFECT LEVEL parameter, below.



EFFECT LEVEL

The EFFECT LEVEL parameter determines how loud the TRANSPOSED DELAY repeats sound in relation to the initial sound. The EFFECT LEVEL range is from 0 to 99, with the maximum setting of "99" producing the loudest effect level. When this parameter is selected, the letters "EL" flash on the LED display alternately with the current effect level value.

The DEC and INC buttons are used to select the desired effect level value while the EFFECT LEVEL parameter is selected. Once set to the desired value, press the TRANSPOSED DELAY PARAMETER SELECT button a fifth time to return to the normal voice selection mode.

FACTORY TRANSPOSED DELAY SETTINGS

PARAMETER	PIANO 1	PIANO 2	E. PIANO	HARPS.	VIBES
DELAY TIME	0.05	0.03	0.1	0.04	0.14
PITCH SHIFT	+ 7	- 12	+ 7	0	0
FEEDBACK	0	0	7	7	4
EFFECT LEVEL	99	80	99	64	75

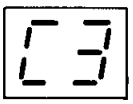
CHORD PLAY

With the CHORD PLAY effect you can specify certain notes on the keyboard to play chords rather than single notes. Your TX1P is initially programmed to play major chords on every note (C through B) for the piano voices, octaves for the harpsichord voice, and fourths for the vibes voice. You can try out the initial CHORD PLAY settings simply by pressing the CHORD PLAY EFFECT button with the desired voice selected. The CHORD PLAY EFFECT button LED will light when the effect is turned ON.

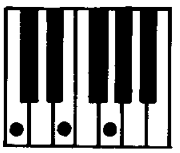
ENTERING YOUR OWN CHORD PLAY SETTINGS

① Select the voice for which you wish to enter CHORD PLAY settings.

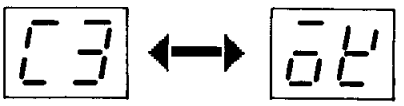
② Press the CHORD SET PARAMETER button. The CHORD SET button LED will light and "C3" will appear on the LED display.



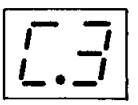
③ Play a chord with the root on the C3 (middle C) key. The chord may have up to four notes. When you release the chord, the LED display will alternately flash between "C3" and "oK" to indicate that the chord has been accepted.



PLAYING THESE KEYS WOULD PROGRAM A C–MAJOR CHORD FOR C3



④ Press the INC button to enter a chord for the next note in the scale: C#. The LED display will show "C.3," the dot after "C" representing a "#" (sharp) sign.



THIS REPRESENTS "C#3"

⑤ Play a chord with the root on C#3. As in step 3, the LED display will alternately flash between "C.3" and "oK" to indicate that the chord has been accepted after you release the chord.

⑥ Continue this process for the rest of the notes in the scale (one octave, C3 to B3). Pressing the INC button after the B3 note has been reached has no effect.

⑦ Press the CHORD SET PARAMETER button again to return to the normal voice selection mode.

RETURN TO NORMAL VOICE SELECTION MODE.

Once you have completed the chord entry process and turn the CHORD PLAY EFFECT button ON, all C notes on the keyboard will produce the chord you entered for "C3" in the appropriate octave, all C# notes will produce the chord you entered for "C.3," and so on. Notes that fall outside of the TX1P's maximum A-1 — C7 range, however, will be reproduced in the nearest octave within that range.

If you want chords to be produced only by certain notes, simply enter the required chords for those notes (using the DEC and INC buttons to select the desired notes), and the appropriate single notes for the keys that you do not wish to produce chords.

SELECTING EFFECTS FROM THE CONTROLLING KEYBOARD

The TX1P's CHORUS, TRANSPOSED DELAY and CHORD PLAY effects can be turned ON or OFF directly from the controlling keyboard by pressing the appropriate voice selector buttons on the keyboard. The chart below shows which voice selectors perform these functions.

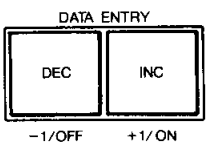
VOICE SELECTOR	EFFECT
27	CHORUS OFF
28	CHORUS ON
29	TRANSPOSED DELAY OFF
30	TRANSPOSED DELAY ON
31	CHORD PLAY OFF
32	CHORD PLAY ON

MASTER TUNE

The MASTER TUNE function is necessary when you need to match the overall tuning of the TX1P to other instruments or a recording. The pitch of the TX1P can be increased or decreased in 17 steps of approximately 3 cents each, giving a total tuning range of about a semitone.

① Press the MASTER TUNE PARAMETER button. The MASTER TUNE button LED will light and the current MASTER TUNE value will be shown on the LED display.

② Tune down or up by pressing the DEC or INC buttons, respectively. A setting of "0" produces standard pitch (A3 = 440 Hz). The lowest possible setting (-17) tunes the overall pitch of the TX1P down approximately a quarter tone; the maximum possible setting (17) tunes up approximately a quarter tone. Each increment changes the pitch by about 3 cents (one cent is one-hundredth of a semitone).



③ Press the MASTER TUNE PARAMETER button again to return to the normal voice selection mode.

RETURN TO NORMAL VOICE SELECTION MODE.

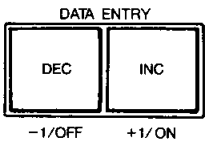
TRANSPOSE

Each TX1P voice can be individually transposed up or down in semitone steps, up to a full octave in either direction. The selected amount of transposition is individually memorized for each voice.

① Select the voice you wish to transpose.

② Press the TRANSPOSE PARAMETER button. The TRANSPOSE button LED will light and the current transpose value will be shown on the LED display.
The transpose value indicates the pitch that the TX1P will play when you play C3 on the keyboard controller. So when the display shows "C3," the selected voice is set at normal pitch — C3 = C3.

③ Use the DEC and INC buttons to set the desired transpose value. If you wanted the selected voice transposed up one major third, for example, you would set the transpose value to "E3." Sharp notes are indicated by a dot after the note name. For example, "F.3" represents F#3. You can transpose the pitch of middle C up to C one octave higher (C4) or down to C one octave lower (C2).



④ Press the TRANSPOSE PARAMETER button again to return to the normal voice selection mode.

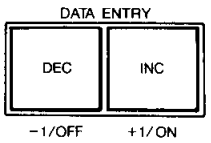
NOTE LIMIT

Using the NOTE LIMIT function, you can define a limited range of notes that a controlling keyboard can play on the TX1P. This is useful for producing split keyboard effects like playing a synthesizer bass line on the lower half of the keyboard, and a TX1P piano sound on the upper half. Since you can define both the lower and upper note limits, the TX1P can be made to respond to any group of keys – or even a single key, if you like – anywhere on the keyboard. The note limits you set are individually memorized for each voice.

① Select the voice for which you wish to program note limits.

② Press the NOTE LIMIT PARAMETER button once. The NOTE LIMIT PARAMETER button LED will light and the current low-note limit will be shown on the LED display. The letters "Lo" will flash alternately with the name of the lowest note than will be produced by the TX1P (normally "A-1").

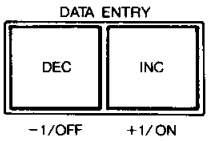
③ Use the DEC and INC buttons to select the low-note limit. If for example, you only want the TX1P to produce sound down to the C2 key (the C below middle C), set this parameter to "C2." As with other TX1P note parameters, a dot following the note name represents a sharp sign. For example, "C.3" represents C#3.



SELECT LOW–NOTE LIMIT

④ Press the NOTE LIMIT button a second time to program the high-note limit. The letters "Hi" will flash alternately with the name of the highest note than will be produced by the TX1P (normally "C7").

⑤ Use the DEC and INC buttons to select the high-note limit. If for example, you only want the TX1P to produce sound up to the C4 key (the C above middle C), set this parameter to "C4."

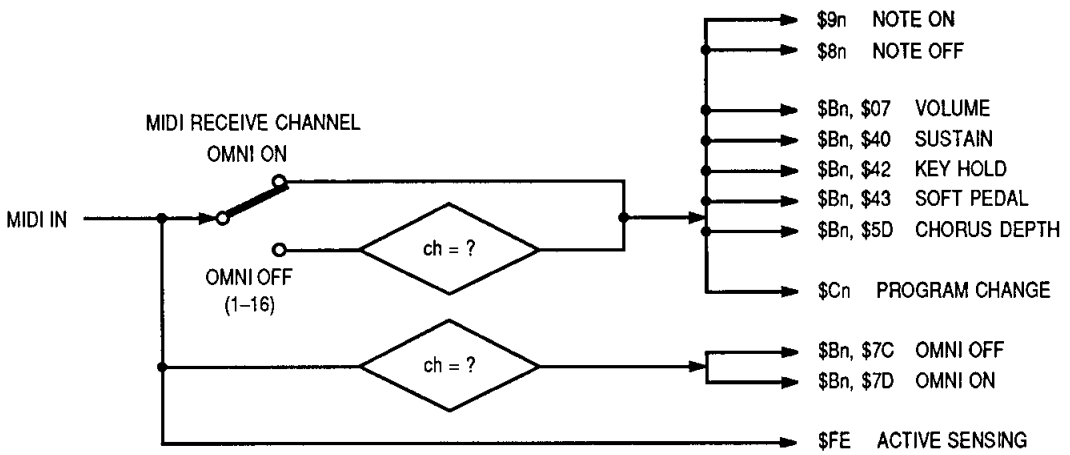


SELECT HIGH–NOTE LIMIT

⑥ Press the NOTE LIMIT button a third time to return to the normal voice selection mode.

RETURN TO NORMAL VOICE SELECTION MODE

MIDI RECEPTION CONDITIONS



FCC INFORMATION

While the following statements are provided to comply with FCC Regulations in the United States, the corrective measures listed below are applicable worldwide.

This series of Yamaha professional music equipment uses frequencies that appear in the radio frequency range and if installed in the immediate proximity of some types of audio or video devices (within three meters), interference may occur. This series of Yamaha combo equipment have been type tested and found to comply with the specifications set for a class B computing device in accordance with those specifications listed in subpart J of part 15 of the FCC rules. These rules are designed to provide a reasonable measure of protection against such interference. However, this does not guarantee that interference will not occur. If your professional music equipment should be suspected of causing interference with other electronic devices, verification can be made by turning your combo equipment off and on. If the interference continues when your equipment is off, the equipment is not the source of interference. If your equipment does appear to be the source of the interference, you should try to correct the situation by using one or more of the following measures:

Relocate either the equipment or the electronic device that is being affected by the interference. Utilize power outlets for the professional music equipment and the device being affected that are on different branch (circuit breaker or fuse) circuits, or install AC line filters.

In the case of radio or TV interference, relocate the antenna or, if the antenna lead-in is 300 ohm ribbon lead, change the lead-in the co-axial type cable.
If these corrective measures do not produce satisfactory results, please contact your authorized Yamaha professional products dealer for suggestions and/or corrective measures.
If you cannot locate a franchised Yamaha professional products dealer in your general area, contact the professional products Service Department, Yamaha Music Corporation, 6600 Orangethorpe Ave., Buena Park, CA 90620, U.S.A.

If for any reason, you should need additional information relating to radio or TV interference, you may find a booklet prepared by the Federal Communications Commission helpful:
"How to identify and Resolve Radio – TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402 – Stock No. 004-000-00345-4.

YAMAHA

TX1P ADDITIONAL INFORMATION English

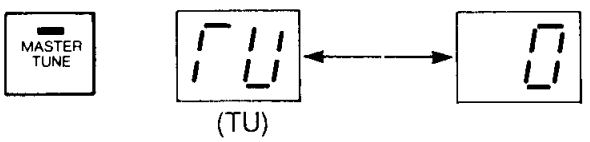
The latest version of the TX1P includes some minor changes to the MASTER TUNE function and a new function (TOUCH CURVE SELECT) which are described below. Please follow the MASTER TUNE instructions given here rather than those in the Operation Manual.

MASTER TUNE

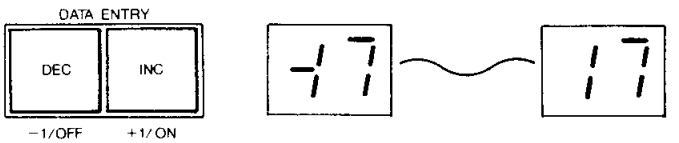
The MASTER TUNE function is necessary when you need to match the overall tuning of the TX1P to other instruments or a recording. The pitch of the TX1P can be increased or decreased in 17 steps of approximately 3 cents each (approx. ±50 cents total), giving a total tuning range of about a semitone.

① Make sure the TRANSPOSE function is not active — i.e. TRANSPOSE should be set at "C3."

② Press the MASTER TUNE PARAMETER button. The MASTER TUNE button LED will light and "TU" will alternate with the current MASTER TUNE value on the LED display.



③ Tune down or up by pressing the DEC or INC buttons, respectively. A setting of "0" produces standard pitch (A3 = 440 Hz). The lowest possible setting (-17) tunes the overall pitch of the TX1P down approximately a quarter tone; the maximum possible setting (17) tunes up approximately a quarter tone. Each increment changes the pitch by about 3 cents (one cent is one-hundredth of a semitone).



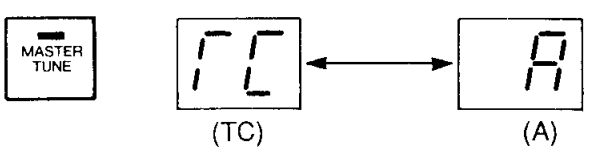
④ Press the MASTER TUNE PARAMETER button two more times to return to the normal voice selection mode.

* ***The MASTER TUNE value applies to all voices, and is retained in memory even when the power is turned OFF.***

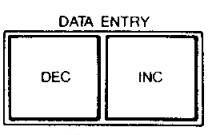
TOUCH CURVE SELECT

This function allows selection of four different "touch curves" that can be used to optimally match the dynamic response of the TX1P to the touch response of the MIDI keyboard used. This is sometimes necessary because different MIDI keyboards from different manufacturers do not always output the same "velocity" value according how hard the keys are played (pianissimo, forte, etc.).

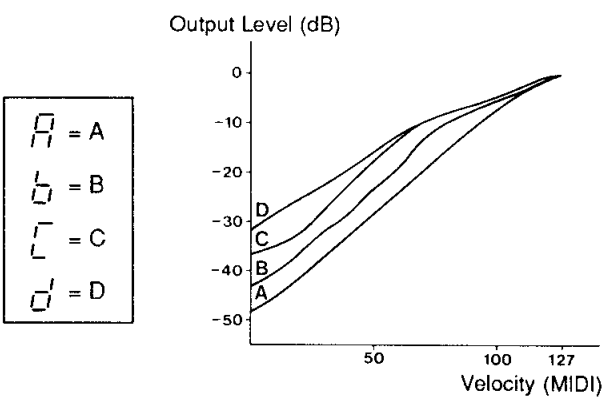
① From the normal voice selection mode, press the MASTER TUNE button twice to enter the TOUCH CURVE SELECT mode. The display will then alternate between "TC" (for "Touch Curve") and the currently selected touch curve type: A, B, C or D.



② Use the DEC and INC buttons to select the touch curve which best matches the touch response of your MIDI keyboard.



The Four Touch Curves



The A, B, C and D Touch Curves produce an increasingly narrower response (output level) range. Keyboards with a relatively piano-like touch — the PF series or KX88, for example — are best used with the "A" Touch Curve. Light-touch keyboards such as the DX7 should be used with the "C" Touch Curve.

③ Press the MASTER TUNE button again to return to the normal voice selection mode.

* ***The selected touch curve applies to all voices, and is retained in memory even when the power is turned OFF.***

R1 8812 Printed in Japan

[Piano tone generator] Date : 10/29, 1987

Model TX1P MIDI Implementation Chart Version : 1.0

Function ...		Recognized	Remarks
Basic	Default	1 - 16	memorized
Channel	Changed	1 - 16	
Mode	Default	3	
	Messages	OMNI ON/OFF	
	Altered	x	
Note Number		21 - 108	
	True voice	21 - 108	
Velocity	Note ON	o v=1-127	
	Note OFF	x	
After Touch	Key's	x	
	Ch's	x	
Pitch Bender		x	
Control Change	7	o	Volume
	64	o	Sustain
	66	o	Key hold
	67	o	Soft pedal
	93	o	Chorus
Prog Change		o 0 - 4 26 - 31 *1	
	True #	0 - 4	
System Exclusive		x	
System Common	Song Pos	x	
	Song Sel	x	
	Tune	x	
System Real Time	Clock	x	
	Commands	x	
Aux Mes- sages	Local ON/OFF	x	
	All Notes OFF	o (124-125)	
	Active Sense	o	
	Reset	x	

Notes: *1 = program number 26 - 31 are assigned as follows.

26 : chorus off		27 : chorus on	
28 : transposed delay off		29 : transposed delay on	
30 : chord play off		31 : chord play on	

Mode 1 : OMNI ON, POLY Mode 2 : OMNI ON, MONO o : Yes

Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF, MONO x : No

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