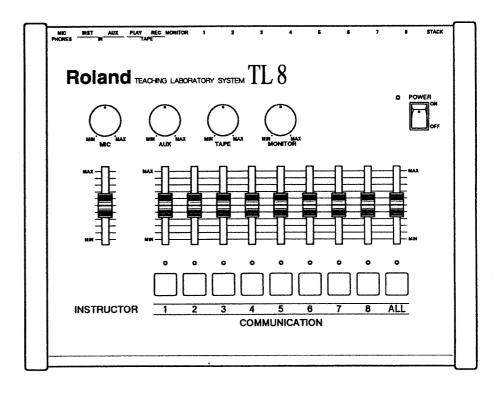
Roland

TEACHING LABORATORY SYSTEM

TL8

OWNER'S MANUAL



Thank you for purchasing the Roland TL-8 Teaching Laboratory System. The TL-8 is an instrumental music education system which can be effectively used for group lessons using electronic pianos, electronic organs, synthesizers, etc. Unlike past teaching systems, it does not require any special installation. Only a simple setup is required.

To take full advantage of the TL-8, please read this operation manual carefully.

REDATEURDS

- Up to 8 students can be instructed simultaneously using the TL-8 system. Sixteen students can be accommodated when using two TL-8s in combination.
- Simple operation facilitates group or private lessons.
- The TL-8 can easily be connected to external devices, such as tape decks, CD players or rhythm machines. This lets you create variety in your lessons by letting students listen to, play and record music.
- No special installation is required for the TL-8. It can easily be setup in several different ways (using connection boxes and cables), depending on the number of students or the size of the classroom.

TABLE OF CONTENTS

■ IMPORTANT NOTES · · · · · 3	Connecting External Devices		
■ PANEL DESCRIPTIONS · · · · · 4	1. Connection to the AUX Jacks · · · · · 17		
	2. Connection to the TAPE PLAY Jacks · · · · · 18		
PREPARATION	3. Connection to the TAPE REC Jacks · · · · · 19		
1. How to set up the TLC-2 7	4. Connection to the MONITOR Jacks · · · · · 19		
2. BASIC CONNECTIONS · · · · · 8	5. Stacking (connecting) two TL-8s · · · · · 20		
2 - 1. Setup for the student's system · · · · · · 9			
2 - 2. Setup for the teacher's system · · · · · · 10	Lessons using "ISM" (examples)		
2 - 3. Connection of the AC adaptor · · · · · · 10	1. Private Lessons · · · · 21		
3. VOLUME CONTROL 11	2. General Lessons 22		
	3. Ensemble Lessons · · · · 23		
TEACHING METHODS			
1. Private Lessons	■ SPECIFICATIONS · · · · · 24		
2. Group Lessons · · · · · 14			
3. General Lessons · · · · · 15			

IMPORTANT NOTES

Be sure to use only the adaptor supplied with the unit. Use of any other power adaptor could result in damage, malfunction, or electric shock.

[Power Supply]

- When making any connections with other devices, always turn off the power to all equipment first; this will help prevent damage or malfunction.
- Do not use this unit on the same power circuit with any device that will generate line noise, such as a motor or variable lighting system.
- The power supply required for this unit is shown on its nameplate. Ensure that the line voltage of your installation meets this requirement.
- Avoid damaging the power cord; do not step on it, place heavy objects on it etc.
- When disconnecting the AC adaptor from the outlet, grasp the plug itself; never pull on the cord.
- If the unit is to remain unused for a long period of time, unplug the power cord.

[Placement]

- Do not subject the unit to temperature extremes (eg. direct sunlight in an enclosed vehicle). Avoid using or storing the unit in dusty or humid areas or areas that are subject to high vibration levels.
- Using the unit near power amplifiers (or other equipment containing large transformers) may induce hum.

[Maintenance]

- For everyday cleaning wipe the unit with a soft, dry cloth (or one that has been slightly dampened with water). To remove stubborn dirt, use a mild neutral detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.
- Never use benzene, thinners, alcohol or solvents of any kind, to avoid the risk of discoloration and/or deformation.

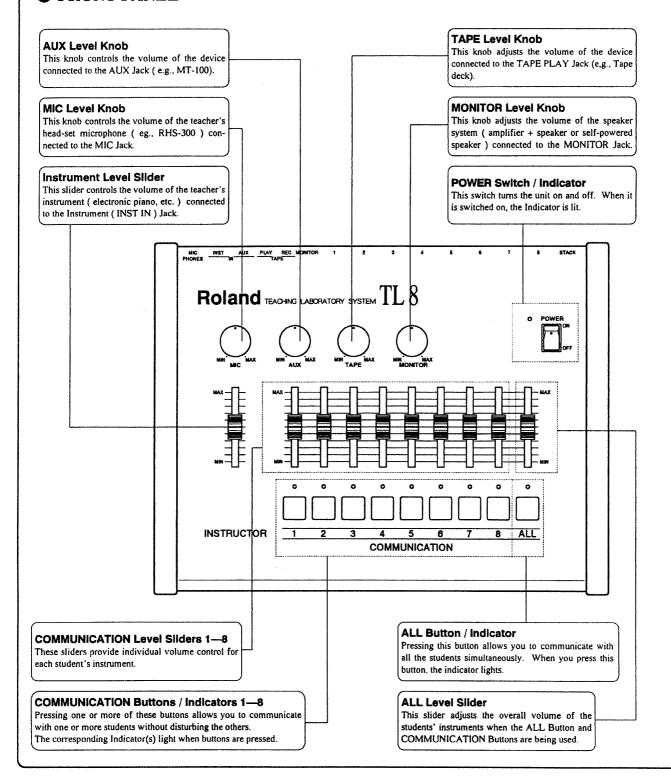
[Additional Precautions]

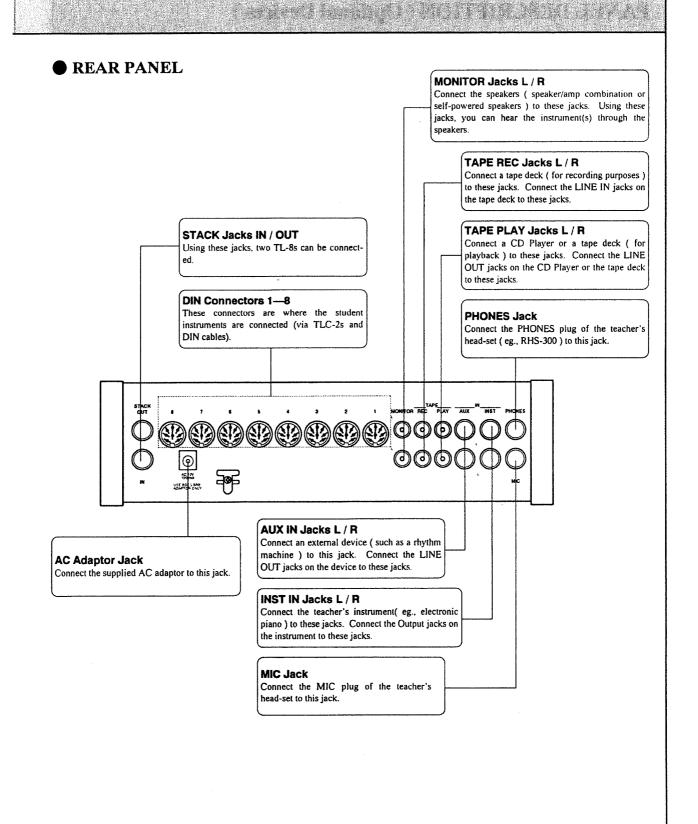
- Protect the unit from strong impact.
- Do not allow objects or liquids of any kind to penetrate the unit. In the event of such an occurrence, discontinue use immediately.
 Contact qualified service personnel as soon as possible.
- A small amount of heat will radiate from the unit, and thus should be considered normal.
- Before using the unit in a foreign country, consult with qualified service personnel.
- Should a malfunction occur (or if you suspect there is a problem) discontinue use immediately. Contact qualified service personnel as soon as possible.
- •To prevent the risk of electric shock, do not open the unit or its AC adaptor.

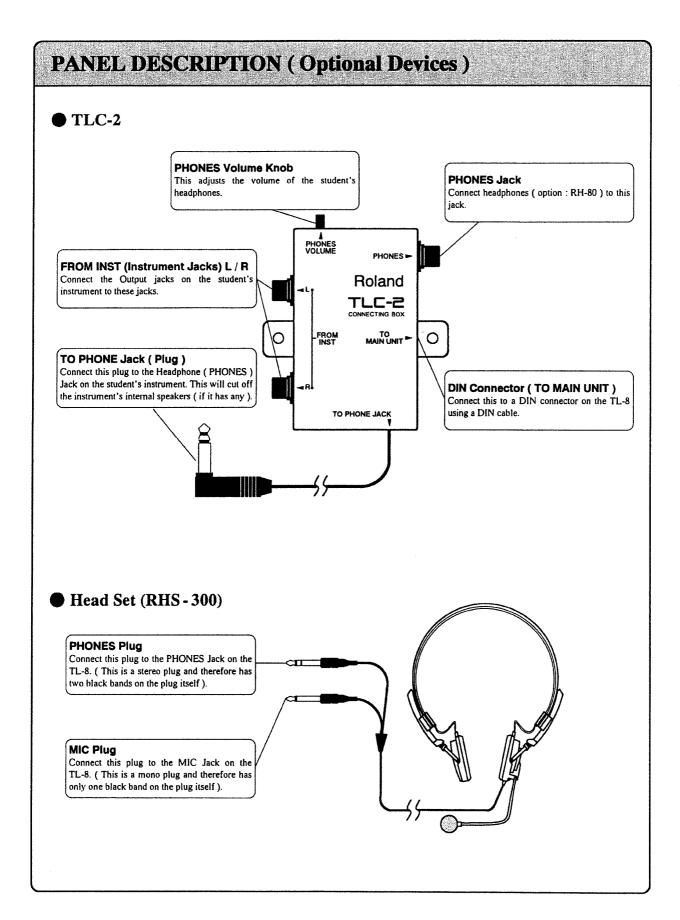
All rights reserved. No part of this publication may be reproduced in any form without the written permission of ROLAND CORPORATION.

PANIEL DIESCRIPTIONS

FRONT PANEL







PREPARATION

To use the TL-8 system, the following are required:

Example) A teacher + 8 students

١.	TL-8·····
2.	Keyboard (electronic piano / electronic organ / synthesizer, etc.)
3.	Connecting Boxes (TLC-2) · · · · · · · · · · · · · · · · · ·
ŧ.	Head Set (RHS-300)
5.	Headphones (e.g. RH-80) · · · · · · · · · · · · · · · · · · ·
5.	DIN Cords · · · · · · · · · · · · · · · · · · ·
7.	Standard Audio Cables

1. How to set up the TLC-2

Connect a TLC-2 to each student instrument as follows.

If possible, firmly attach each TLC-2 to a desk, table, bench, or to the instrument itself. This will help reduce the possibility of damage to the cables connected to the unit.

● To use ep series pianos (ep-3, ep-5, ep-7):

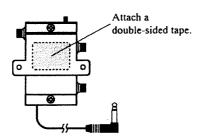
Remove the two screws on the rear of the piano. Attach the TLC-2 using the same screws.

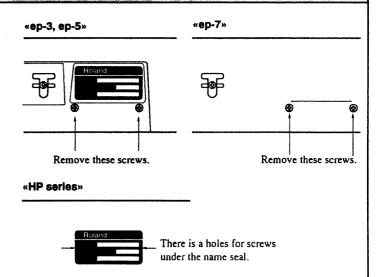
• To use HP series pianos:

Place the TLC-2 over the holes under the name plate on the piano, and attach it using the screws supplied with the TLC-2.

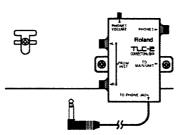
To use instruments other than those of the ep or HP series:

Attach the TLC-2 where you like (such as to a stand, table, desk, etc.) using the supplied double-sided tape.



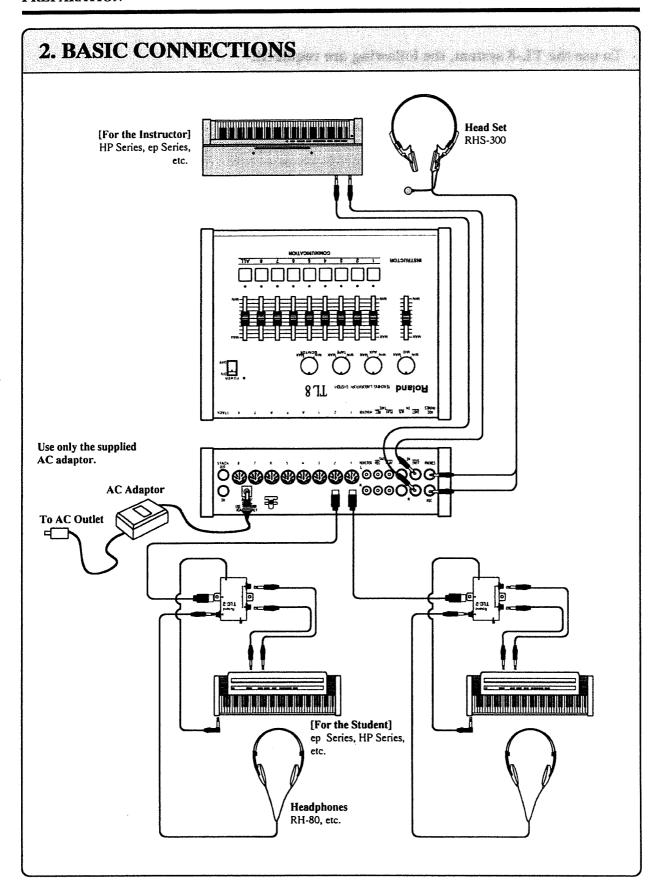


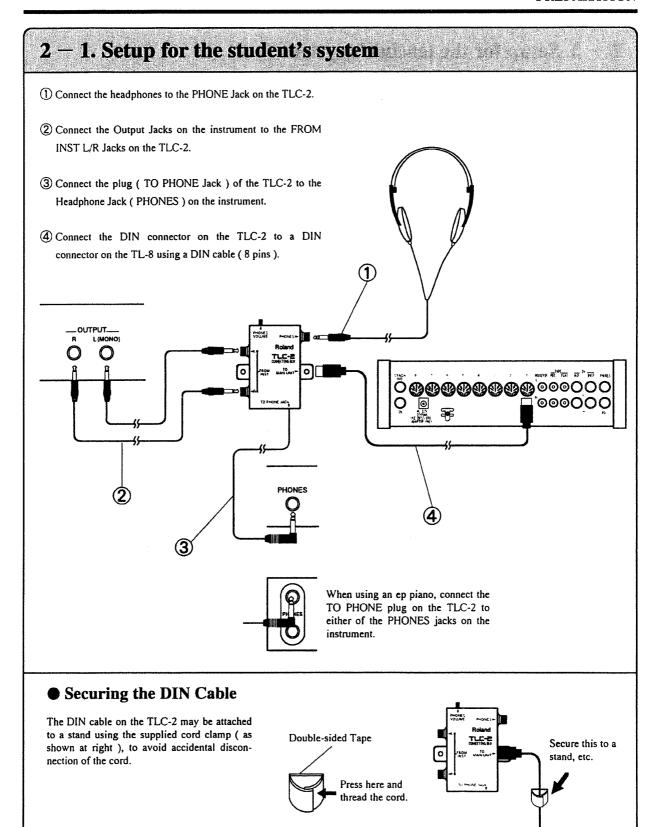
[Setting example] ep-7

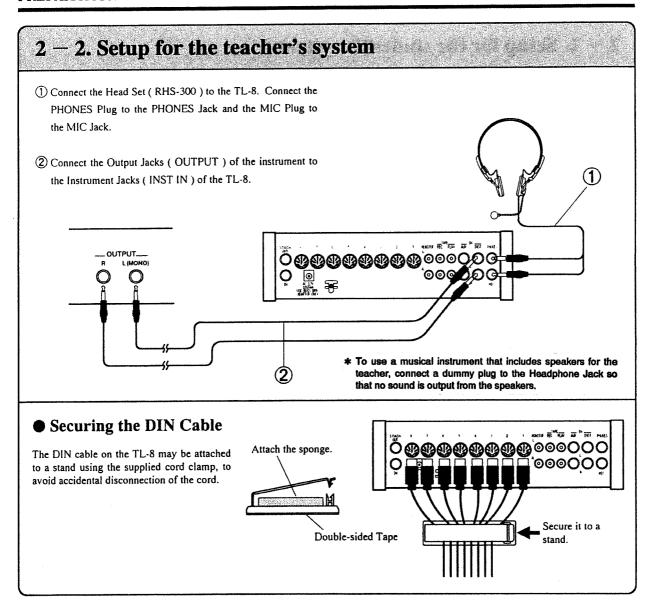


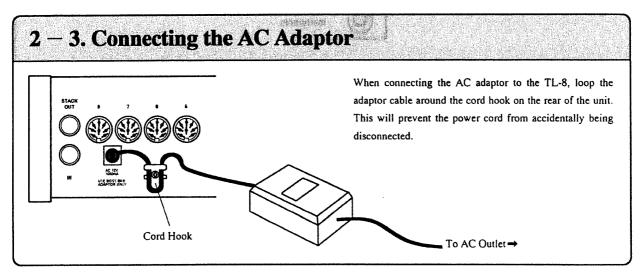
If you use the double-sided tape to attach the TLC-2 vertically to a surface covered with vinyl, the unit may eventually fall off. If you must attach the TL-8 to a vinyl surface, ensure that the installation is horizontal (ie., sitting on top of something rather than stuck to the side).

If you attach the TLC-2 to a painted surface, the paint may peel off when you try to remove the tape.







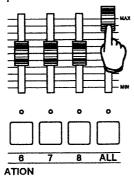


3. VOLUME CONTROL

① Switch on the TL-8. (The indicator will light.)



- ② Switch on each student instrument. Set the volume control (VOLUME) of each instrument to just below (by about 20 percent) the MAX position.
- ③ Switch on the teacher's instrument. Set the volume control (VOLUME) of the instrument to just below MAX.
- 4 Set the ALL Level Slider on the TL-8 to the MAX position.



[What the Instructor should do]

- (5) Adjust the microphone volume of the head-set using the MIC Level Knob.
- * Be sure to position the microphone directly in front of your mouth.
- 6 Adjust the volume of the teacher's instrument with the Instrument Level Slider.

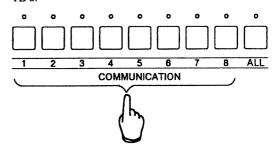


Volume control of the microphone.

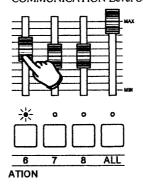


Volume Control of the instrument.

TL-8.



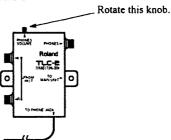
(8) Adjust the volume of the student's instrument (heard through the teacher's head-set) using the corresponding COMMUNICATION Level Slider.



 Repeat steps 7 and 8 for each student instrument connected to the TL-8.

[What each Student should do]

M Adjust the volume of the instrument (obtained through the headphones) using the PHONES Level Knob on the TLC-2.



TEACHING METHODS

Teaching Variations

The TL-8 allows you to teach your students in three different ways.

- Private Lessons (studying without a teacher, monitoring, individual teaching)
- Group Lessons (teaching a part of the class while the other students study by themselves)
- General Lessons (teaching the whole class / teacher's demonstrations and performances)

■ Why Group Lessons?

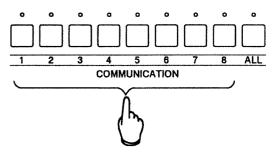
Group lessons are considered to be effective for the following reasons:

- Each student can cultivate his or her own ability.
- Students can stimulate each other in a group situation.
- Students will acquire a cooperative spirit and develop a sense of personal responsibility.
- By listening to performances of class-mates, students will learn to appreciate the ability of others. It will also help each student identify strengths and weaknesses in his or her own performances.
- Group critique of a performance can help a student identify personal strengths and weaknesses.
- · Performing for others helps develop concentration and performance skills.
- Social and interpersonal skills are developed/enhanced by the group experience.
 - * Group lessons can include ensembles, solo performances, music theory, analysis, ear training, musical notation, reading music, arranging, composition, etc. That is, it is totally different from simply "learning to play music well", which is often the goal of private lessons.

1. Private Lessons

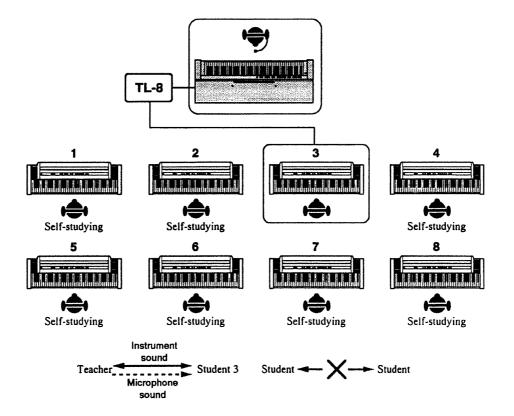
Press one of the eight COMMUNICATION Buttons (the indicator will light). You and the selected student will be able to hear each other's instrument. You can also speak to the student through the head-set microphone.

★ All the other students will be studying by themselves at this time.



Press one of the buttons.

[Example] When COMMUNICATION Button 3 is turned on:



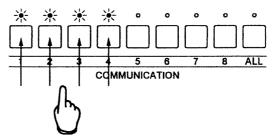
Teaching Examples

- As each student studies alone, monitor (*) individual progress using COMMUNICATION Buttons 1—8.
 - (*) "Monitor" means that a teacher does not play his or her instrument, or speak to a student through the microphone, but simply listens to the student's performance.
- Select one student and provide individual instruction by demonstration and verbal communication.

2. Group Lessons

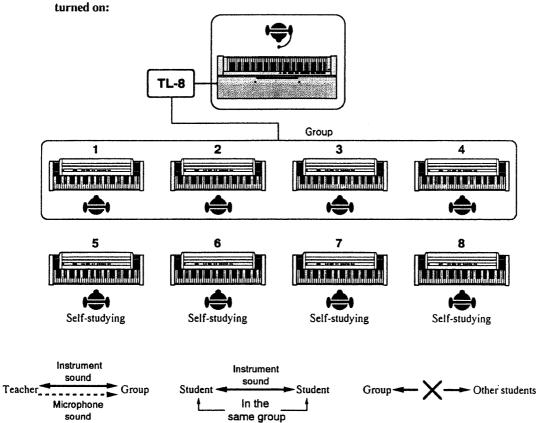
You can turn on more than one COMMUNICATION Button at the same time. The selected students will be in one group and will be able to hear each other's instruments. You can then speak to them through the microphone or demonstrate using your keyboard.

* The other students (whose COMMUNICATION Buttons are turned off) will be studying by themselves.



Turn on the buttons which correspond to the students to be in the group.

[Example] When COMMUNICATION Buttons 1—4 are



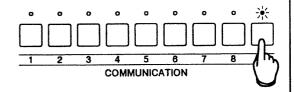
Teaching Examples

- Select two students. Have one play the melody part and the other the chord part. Provide instruction as required.
- Have the group play in concert.
- Select one student in the group and let the other students listen to his or her performance (model performance).

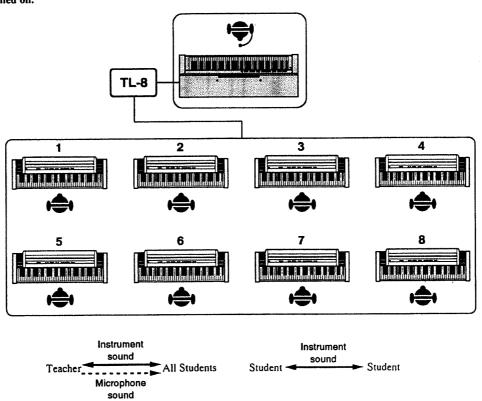
3. General Lessons

Press the ALL Button (the indicator lights up), and all the students can hear each other's instrument sounds.

The teacher can let all the students listen to his demonstration performance or talk to them through the microphone.



★ The ALL Button has the first priority, and therefore works even when the COMMUNICATION Buttons have already been turned on.



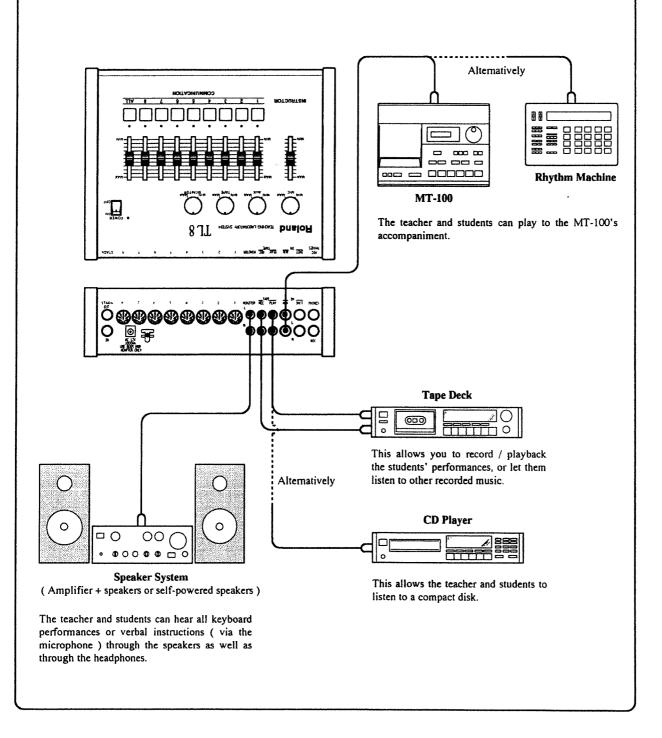
Teaching Examples

- Make all the students play together with the signal given by the teacher.
- Have the model performance of a certain student listened to by another student.
- Have all the students listen to the teacher's demonstration performance.

Connecting External Devices

By connecting external devices (such as a tape deck or CD player) to the TL-8, you can make your lessons even more interesting.

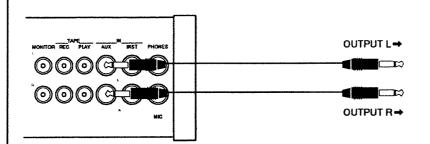
★ The signal from the device connected to the AUX/TAPE PLAY Jacks will always be sent to the teacher and all the students, no matter how you operate the panel buttons.

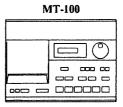


1. Connection to the AUX Jacks

Connect the output jacks of an MT-100, an electronic metronome, a rhythm machine, etc. to these input jacks.

(We recommend you connect an accompaniment device to encourage practice.)







Rhythm Machine

[Volume Control]

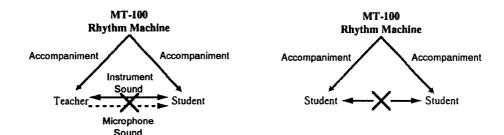
Adjust the volume with the AUX Level Knob or the volume control on the external device.



Examples

● When students study by themselves, they can practice playing to the accompaniment of the MT-100 or rhythm machine. (Students can practice with accompaniment without being interrupted by other students.)

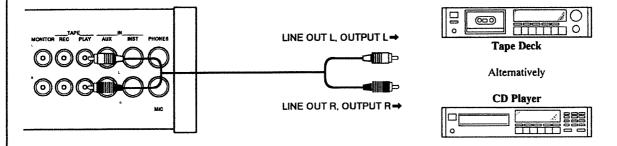
.....



● When you teach students in a Group or General Lesson, they can play in concert to the accompaniment of the MT-100 or rhythm machine.

2. Connection to the TAPE PLAY Jacks

Connect the Line Out jacks of a tape deck or a CD player to these jacks.



.....

[Volume Control]

Adjust the volume using the TAPE Level Knob or the volume control on the external device.



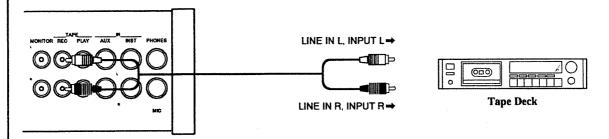
Examples

- You can playback a student's performance recorded on a tape to let the student(s) hear it.
- You can let the students listen to a prerecorded tape or compact disk.

3. Connection to the TAPE REC Jacks

You can connect a recording device (tape deck, etc) to the TL-8 to record student performances.

Connect the TAPE REC Jacks on the TL-8 to the input jacks (LINE IN, INPUT, etc.) on the recording device.



[Recording Level Control]

Adjust the volume using the recording level control knob (REC LEVEL, etc) on the recording device connected to the TL-8.

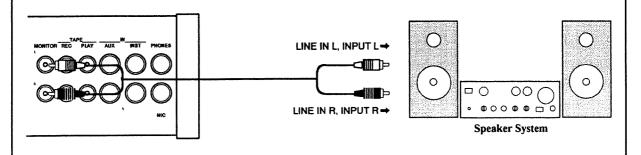
NOTES

When the TAPE PLAY and TAPE REC Jacks on the TL-8 are connected to one tape deck, set the TAPE Level Knob on the TL-8 to the MIN position before you start recording. If the TAPE Level Knob is not set to MIN, abnormal sounds may be produced.

4. Connection to the MONITOR Jacks

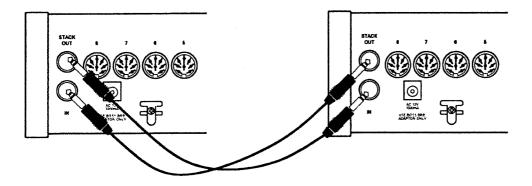
You can connect speakers (amplifiers + speakers or self-powered speakers) to the TL-8. By doing so, the teacher and students will be able to hear everything connected into the TL-8 system.

Connect the MONITOR Jacks to the input jacks (LINE IN, INPUT etc.) on the amplifier.



5. Stacking (Connecting) two TL-8s

You can connect two TL-8s using the STACK Jacks on the rear panels. Doing so will allow the system to accommodate up to 16 students. With the supplied stacking cables, connect the STACK OUT jack on the first unit to the STACK IN jack on the second. Then connect the STACK OUT jack on the second unit to the STACK IN jack on the first.



When you connect two TL-8s, you can teach Private or Group lessons by using the COMMUNICATION Buttons on the unit to which the students are connected.

NOTES

- The ALL Button is effective only on the relevant unit. That is, for General lessons, switch on both ALL Buttons.
- The sound of any external device connected to a TL-8 is not output through the STACK OUT Jacks. Therefore the sound cannot be heard on a connected TL-8.

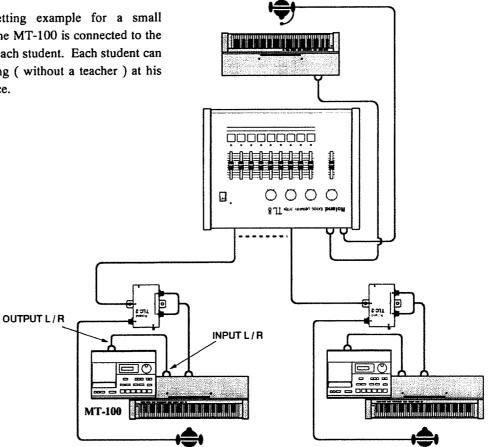
Lessons using "ISM" (Examples)

What is "ISM" (Intelligent System of Music)?

"ISM" is a unique system developed by Roland to make the best use of electronic musical instruments. By using Roland digital instruments and special hardware and software, the ISM system allows everyone to enjoy creating music.

1. Private Lessons

This is a setting example for a small classroom. One MT-100 is connected to the HP piano for each student. Each student can practice playing (without a teacher) at his or her own pace.

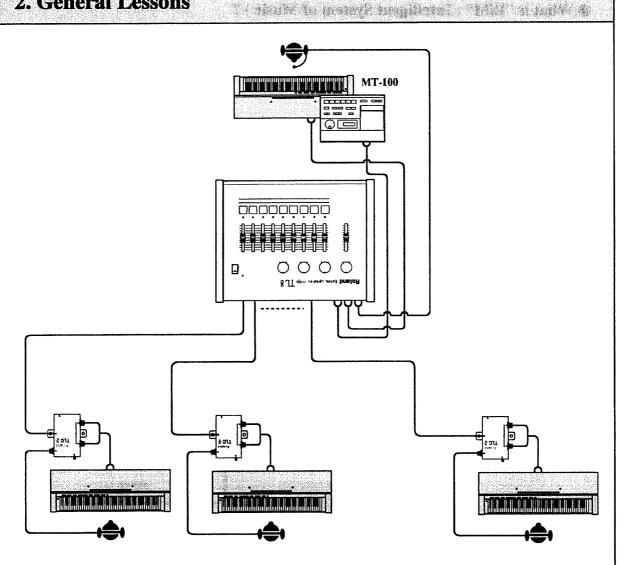


Teaching Example

Let each student practice at his or her own tempo. You can then monitor their progress using the COMMUNICATION Buttons. Provide personal instruction as required.

This setup can be used for teaching a different song to each student.

2. General Lessons



This setup is ideal for teaching many students who are at the same general level. When you have 7 or 8 students, General lessons may be easier and more suitable than Private lessons.

Teaching Example

You can have all the students practice the same music (right hand / left hand part practice, etc.) to the rhythm and accompaniment of the MT-100.

3. Ensemble Lessons This setup is ideal for ensemble practice. 00000000 0000 ₽. INPUT OUTPUT Mixer MT-100 **Drum Pad** Synthesizer Piano

Teaching Example

You can have your students play one song in different parts. Each student practices playing in his or her own tempo to the accompaniment of the MT-100.

 Student 1
 Practices Melody (Piano)
 → Private Lesson

 Student 2
 Practices Bass (Synthesizer)
 → Private Lesson

 Student 3
 Practices Rhythm (Drum Pad)
 → Private Lesson

When the students have reached equal (or near equal) performance levels, start ensemble practice. Have the ensemble play to the accompaniment of the teacher's MT-100.

SPECIFICATIONS

TL-8: Teaching Laboratory System

● Controls Communication Buttons/Indicators × 8

Communication Level Sliders × 8

All Button/Indicator
All Level Slider
Instrument Level Slider
MIC Level Knob
AUX Level Knob

TAPE Level Knob

Monitor Level Knob

Power Switch/Indicator

● Connectors DIN Connectors (lock type) × 8

Stack Jack IN/OUT (1/4 inch stereo phone jack) \times 2 Phones Jack (for Instructor : 1/4 inch stereo phone jack)

MIC Jack (for Instructor: 1/4 inch phone jack)

Instrument Jack L/R (for Instructor: 1/4 inch phone jack)

AUX Jack L/R (1/4 inch phone jack) × 2

TAPE PLAY Jack L/R (RCA phono jack) × 2

TAPE REC Jack L/R (RCA phono jack) × 2

Monitor Jack L/R (RCA phono jack) × 2

● Power Supply AC12V: BOSS AC Adaptor BRB-120/-220/-240E/-240A

● Current Draw 1000mA (BOSS AC Adaptor BRB-120/-220/-240E/-240A)

● **Dimensions** 305 (W) × 246 (D) × 89 (H)mm

12-1/16 (W) × 9-11/16 (D) × 3-9/16 (H) inches

● Weight 2.9kg/6 lbs-7 oz

● Accesories AC Adaptor: BOSS AC Adaptor BRB-120/-220/-240E/-240A

Stack Cord (1/4 inch stereo phone plug cord) × 1

Cord Clamp × 1

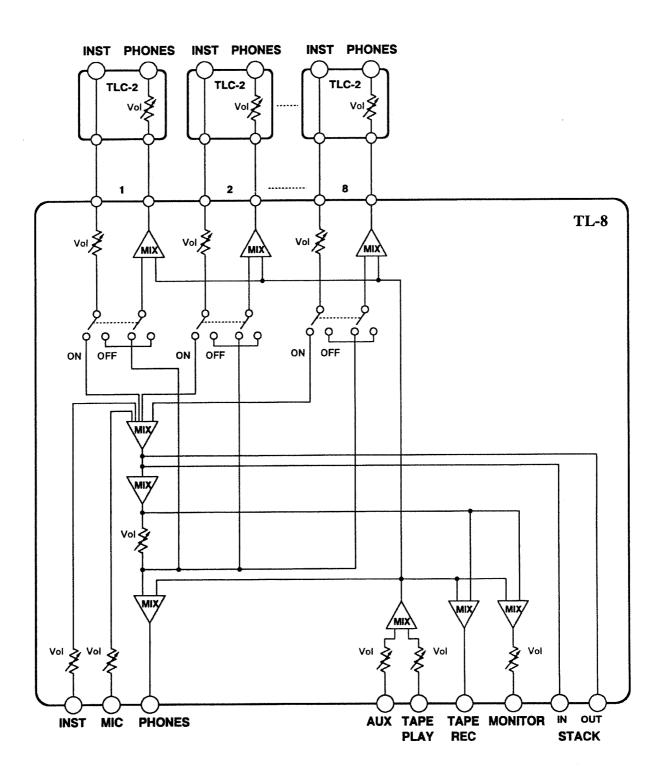
● Options Connecting Box : TLC-2

Connection Cord (TL-8 ←→ TLC-2)DIN plug, lock type cord: TC-5 (5m)/TC-10 (10m)

Head Set: RHS-300 Headphones: RH-80

* Specifications are subject to change without notice.

Signal Flow



IMPORTANT: THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.

BLUE : NEUTRAL BROWN : LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK. The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

Information

•When you need repair service, call your local Roland Service Station or the authorized Roland distributor in your country as shown below.

Roland Corp US
7200 Dominion Circle
Los Angeles, CA. 90040 - 3647
U. S. A.
12 (213)685 - 5141

CANADA

Rotand Canada Music Ltd. (Head Office) 5480 Parkwood Richmond B. C., V6V 2M4 CANADA \$\pi\$ (604)270 - 6626

Roland Canada Music Ltd. 9425 Transcanadienne Service Rd. N., St. Laurent, Quebec H4S 1V3 CANADA 25 (514)335 - 2009

Roland Canada Music Ltd.

346 Watline Avenue,
Mississauga, Ontario L4Z 1X2
CANADA

(416)890 - 6488

AUSTRALIA

Roland Corporation (Australia)Pty. Ltd. (Head Office) 38 Campbell Avenue Dee Why West. NSW 2099 AUSTRALIA 12 (02)982 - 8266

Roland Corporation (Australia)Pty. Ltd. (Melbourne Office) 50 Garden Street South Yarra, Victoria 3141 AUSTRALIA \$\pi\$ (03)241 - 1254

NEW ZEALAND

Roland Corporation (NZ)Ltd. 97 Mt. Eden Road, Mt, Eden, Auckland 3 NEW ZEALAND \$\pi\$ (09)3098 - 715

UNITED KINGDOM

Roland(UK)Ltd.
Rye Close
Ancells Business Park
Fleet
Hampshire GU13 8UY
UNITED KINGDOM
0252 - 816181

Roland Elektronische Musikinstrumente Handelsgesellschaft mbH. Oststrasse 96, 2000 Norderstedt GERMANY 10 040/52 60 090

GERMANY

BELGIUM / HOLLAND / LUXEMBOURG Roland Benelux N. V. Houtstraat I B - 2260 Oevel - Westerlo BELGIUM 12 (0032)14 - 575811

DENMARK Roland Scandinavia as Langebrogade 6 Box 1937 DK - 1023 Copenhagen K. DENMARK 13 31 - 95 31 11

SWEDEN
Roland Scandinavia as
DanvikCenter 28 A, 2 tr.
S - 131 30 Nacka,
SWEDEN
\$\text{T} 08 - 702 00 20

NORWAY
Roland Scandinavia
Avd. Norge
Lilleakerveien 2
Postboks 95 Lilleaker
N - 0216 Oslo 2
NORWAY
1002 - 73 00 74

FINLAND Fazer Musik Inc. Lansituulentie POB 169 SF - 02101 Espoo FINLAND TO - 43 50 11

ITALY
Roland Italy S. p. A.
Viale delle Industrie 8
20020 ARESE MILANO
ITALY
202 - 93581311

SPAIN Roland Electronics de España, S. A. Calle Bolivia 239 08020 Barcelona SPAIN 1193 - 308 - 1000

SWITZ ERLAND Musitronic AG Gerberstrasse 5, CH - 4410 Liestal SWITZERLAND 27 061/921 16 15

Roland CK (Switzerland) AG Hauptstrasse 21/Postfach CH - 4456 Tenniken SWITZERLAND 1061/98 60 55 Repair Service by Musitronic AG

FRANCE Musikengro 102 Avenue Jean - Jaures 69007 Lyon Cedex 07 FRANCE 7(7)858 - 54 60

Musikengro (Paris Office)
Centre Region Parisienne
41 rue Charles - Fourier.
94400 Vitry s/Seine
FRANCE
10 (1)4680 86 62

AUSTRIA E. Dematte & Co. Neu - Rum Siemens - Strasse 4 A - 6021 Innsbruck Box 591 AUSTRIA TX (0512)63 451

GREECE
V. Dimitriadis & Co. Ltd.
2 Phidiou Str., GR 106 78
Athens
GREECE
12 1 - 3620130

PORTUGAL
Casa Caius Instrumentos
Musicais Lda.
Rua de Santa Catarina 131
Porto
PORTUGAL
27 02 - 38 44 56

HUNGARY Intermusica Ltd. Warehouse Area 'DEPO' Budapest. P.O. Box 3, 2045 Torokbalint HUNGARY \$\Pi\$ (1)1888905

ISRAEL
D.J.A. International Ltd.
25 Pinsker St.,
Tel Aviv
ISRAEL
25 03 - 283015

BRAZIL

FORESIGHT Corporation R. Alvarenga 591 CEP - 05509 Sao Paulo BRAZIL FAX: (011)210 - 0286

HONG KONG Tom Lee Music Co., Ltd. Service Division 22 - 32 Pun Shan Street, Tsuen Wan, New Territories, HONG KONG \$\frac{T}{2}\$ 415 - 0911

SINGAPORE
Swee Lee Company
Bras Basah Complex #03 - 23
Singapore 0178
SINGAPORE
\$\frac{1}{2}3367886

THAILAND Theera Music Co., Ltd. 330 Verng Nakorn Kasem, Soi 2 Bangkok 10100, THAILAND TH 2248821

MALAYSIA
Syarikat Bentley
No.142, Jalan Bukit Bintang
55100 Kuala Lumpur
MALAYSIA
22421288

INDONESIA
PT Galestra Inti
Kompleks Perkantoran
Duta Merlin Blok C/59
JI. Gajah mada No.3 - 5
Jakarta 10130
INDONESIA

© (021) 354604, 354606

TURKEY
Barkat Sanayl ve Ticaret
Siraselviler Cad. 86/6 Taksim
Istanbul
TURKEY
149 93 24

CYPRUS
Radex Sound Equipment Ltd.
17 Panteli Katelari Str.
P.O.Box 2046, Nicosia
CYPRUS

453426, 466423

As of JUL 7, 1991

Roland®02347412



Roland