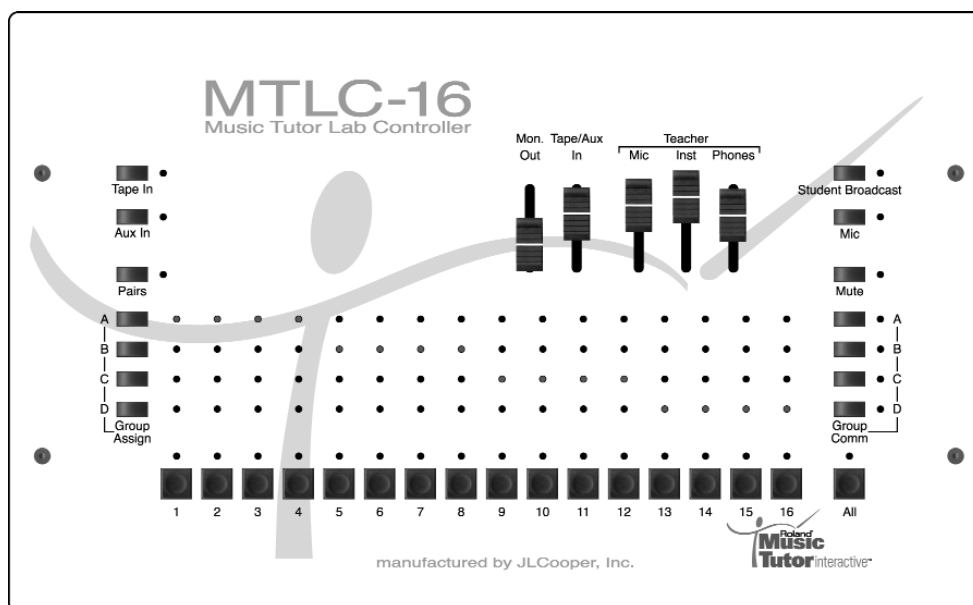


MTLC-16

Music Tutor Lab Controller

Owner's Manual and User's Guide



Educator's Foreword

Welcome to the Roland family! We want to thank you for making the Roland MTLC-16 Lab Communication Console a vital part of your classroom environment.

As educators in the 21st-century, we are faced with ever-growing competition for our students' time and focus. Listening to CDs and MP3s, watching movies and videos, and interacting with computers and the Internet, are all examples of activities that are replacing the time students used to spend learning musical instruments. Because today's children are exposed to technology on a daily basis, they accept it as part of the natural landscape. They pursue information in an interactive manner, and they tend to reject old-style broadcast learning. As a result, we as music educators must utilize technology so that teaching is more effective and learning is more fun.

Listening to CDs and MP3s is aurally stimulating. Watching movies and videos is visually stimulating. Interacting with computers and the internet is mentally stimulating. This is why so many music teachers find it difficult to get students excited about learning a musical instrument—especially in a traditional manner. If you could simultaneously listen to the music of Mozart, follow the score, and share the experience with friends, why would you want to practice solo scales and chords? The “interactive-generation” finds multimedia experiences more fulfilling.

Thanks to the MTLC-16, learning a musical instrument does not have to be boring—it can actually be fun! The MTLC-16 is a lab communication console that combines aural and visual reinforcement of musical concepts with the Music Tutor Philosophy. This includes performance-quality stereo sounds, as well as the ability to interact with musical notation (both intuitively and creatively), seamless integration of musical examples from SMFs or any audio source, and the ability to visualize transposed scores and create altered arrangements. While this technology is state-of-the-art, it is very easy to use—absolutely intuitive! Learning and playing take precedence over memorizing features and, as a result, the MTLC-16 is virtually transparent to the teacher and student.

This is why the Roland MTLC-16 Lab Communication Console is a perfect group piano teaching tool. With it, the focus is on learning and playing, incorporating technology in a way that is effective and enjoyable. Product features may be important to a roomful of engineers, but we as music educators need practical tools. The Roland MTLC-16 Lab Communication Console makes music learning aurally, visually, and mentally stimulating—like listening to CDs and MP3s, watching movies and videos, or interacting with computers and the Internet. This is why both teachers and students embrace it as a perfect group piano teaching tool.

MTLC-16 Features

What Is It?

The MTLC-16 is an integrated stereo hardware/software lab teaching system that includes animated music notation, an electronic gradebook, and drag 'n' drop classroom management tools. It consists of several integrated components.

The MTLC-16 is a “break-out” product for group piano teaching. It features stereo sound, computerized record-keeping, and most important—visual display of all music lessons and literature. The MTLC-16 provides research-class technology to tutor music reading skills. Improved reading skills—long an elusive goal—are not only possible, but readily attainable for all students, especially those needing remediation.

This technology-enhanced learning can continue beyond the classroom door. The visual core of the MTLC-16 is available for student purchase. Imagine the progress possible when students have this visual tutor guiding them wherever they practice. Check with your local Roland dealer or your college/university bookstore.

Stereo Music Lab Communication Console

- Communicate with up to 16 students in stereo, expandable to 32 students
- Set-up easily using supplied connectors, cables, and headsets
- Drill students alone, in groups, or in pairs
- Create up to four separate student groups
- Record student performances to an optional cassette or CD player/recorder

Virtual Lab Controller and Classroom Manager

- Control all MTLC-16 functions from a PC
- Use preset or user-created classroom configurations
- Monitor classroom rosters and grades via computer
- Instantly recall student groupings and communication settings

Visual Music Tutor

- Enhance group lessons with SMF disk playback and visual notation display
- Provide interactive music tutorials
- Record, printout and assess student performances

Virtual Sound Canvas, a GS software synthesizer

- Provide orchestrated accompaniments from 902 instrument sounds (including 26 drum kits)
- Upgrade the built-in wave-table synthesizer so SMF arrangements sound more musical on your PC

Comprehensive Group Teaching Tool

- Begin group teaching immediately by following the “Survivor’s Guide to the MTLC-16”
- Understand and apply several innovative group teaching technologies by reading the comprehensive owner’s manual
- Learn more about group teaching through the *Annotated Bibliography of Group Teaching*

Expandable Music Lab Controller

- Communicate with up to 32 students in stereo by combining two MTLC-16 lab controllers
- Reinforce musical concepts by adding an overhead TV-monitor (S-Video), a flat-panel LCD, or a gas-plasma screen
- Capture student or teacher performances via MIDI by adding a USB-equipped MIDI interface
- Experience hands-free teaching by adding a wireless mouse and/or headset

What Is Included?

The MTLC-16 Music Tutor Lab Controller is accompanied by a complete package of hardware, software, cables, and headphone/microphones, and comprehensive print materials—everything you need, whether you are a veteran group piano pedagogue, or a college/university teaching assistant conducting your very first class. Particularly important are the print materials, written by experienced keyboard educators. Included are the Owner’s Manual with step-by-step instructions, an annotated bibliography of books and articles on group keyboard teaching, and a “Survivor’s Guide” to help master the few technology components.

Hardware	Qty.
MTLC-16 Lab Communication Console	(1)
MTLC-16 AC Adapter	(1)
MTLC-1 Student Communication Boxes.....	(16)
RJ-45 Cables	(16)
Stereo headsets with built-in Microphone	(17)
1/4” to 1/4” Stereo Audio Cable	(1)
9-Pin Din Serial Computer Connector	(1)

Software	Qty.
Installation CD	(1)
<i>including:</i>	
Virtual MTLC-16 Lab Communication Package	
V-MT1 Visual Music Tutor	
VSC-88H Virtual Sound Canvas, v. 3.01	

Printed Materials	Qty.
MTLC-16 Lab Communication Console Owner’s Manual	(1)
V-MT1 Visual Music Tutor Owner’s Manual.....	(1)
VSC-88H Visual Sound Canvas Owner’s Manual	(1)
MTLC-16 QuickStart “Survivor’s Guide”	(1)
Current Software Catalog	(1)

MTLC-16 Features

What Are the Options?

There are several options to optimize your teaching lab. You may use standard recording technologies like cassette and CD-players, or add a hard-disk recorder for even more advanced functions.

However, while the Monitor section below lists options, please consider the visual monitors carefully—since students will be following these visual displays very closely in each class. Whether you select an S-video TV monitor, sleek LCD panels, a large gas plasma display, or an “In Focus” projector, size and image quality are extremely important—you may want to splurge a bit. Also listed as an option, the USB-to-MIDI interface, is another must-have. This connector utilizes the graphic displays in the “Rehearsal Window,” as well as enabling in-class recording. The USB has rapidly become *the* standard interface; it is both inexpensive and easily installed.

External Audio Player/Recorder

- Cassette Player/Recorder
- CD Player/Recorder
- Hard-Disk Player/Recorder.

Visual Monitor(s)

- TV(s) (S-Video)
- PC VGA Monitor(s)
- LCD Panel(s)
- Gas Plasma Screen(s)

Audio Monitor(s)

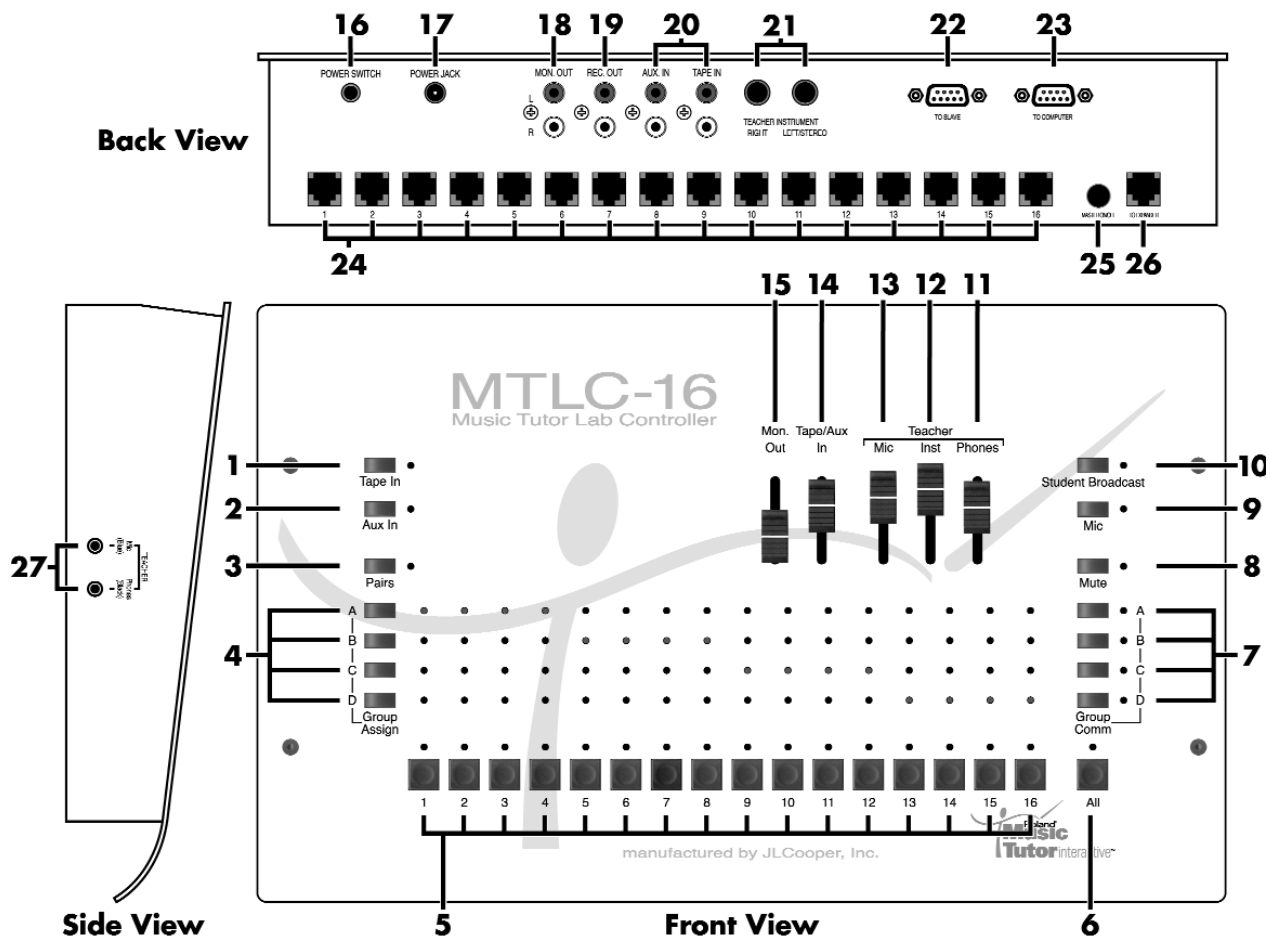
- Speaker(s) (preferably wall mounted)
- Amplifier(s) (one per speaker)

USB MIDI Interface

- MIDI Sport 2x2 (www.midiman.com)

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Names of Things and What They Do



1 [Tape In] Button

Broadcasts audio from any external audio source (e.g. tape player, CD player, or rhythm machine) to all headphones. When this button is engaged, each student can listen to and play along with the audio material. Pressing this button cancels the “Aux In” button (page 24).

2 [Aux In] Button

Broadcasts audio from any external audio source (e.g. tape player, CD player, or rhythm machine) to all headphones. When this button is engaged, each student can listen to and play along with the audio material. Pressing this button cancels the “Tape In” button (page 24).

3 [Pairs] Button

Connects adjacent students (i.e. Student “1” with Student “2”, Student “3” with Student “4”, etc.) for duet-style practicing. When this button is engaged, adjacent students can listen to, talk to, and play along with their partner (page 22).

4 [Group Assign A, B, C, D] Buttons

Connect selected students for group-style practicing. When one of these buttons (i.e. A, B, C, or D) is held down and student number buttons are engaged, the selected

students can listen to, talk to, and play for (or along with) the other selected students (page 21).

5 Student [1-16] Buttons

Establish two-way communication between teacher and student(s). When one (or several) of these buttons is engaged, the selected student(s) can listen to, talk to, and play for (or along with) the teacher. The “Mic” button must be engaged to activate the teacher’s microphone (page 20).

6 [All] Button

Establishes one-way communication between teacher and students. When this button is engaged, all students can listen to and play for (or along with) the teacher. Students will not hear other students keyboards and microphones. The “Mic” button must be engaged to activate the teacher microphone (page 23).

7 [Group Comm A, B, C, D] Buttons

Establish two-way communication between teacher and students in a selected group. When one (or several) of these buttons is engaged, the selected student group(s) can listen to, talk to, and play for (or along with) the teacher. The “Mic” button must be engaged to activate the

teacher's microphone (page 21).

8 [Mute] Button

Silences all student instruments. When this button is engaged, students can only listen to the teacher's instrument and microphone, or external audio material via "Tape In" or "Aux In" (page 25).

9 [Mic] Button

Activates the teacher's microphone. When this button is engaged, the selected student(s) or group(s) can listen to the teacher's microphone (page 20).

10 [Student Broadcast] Button

Broadcasts two-way communication between teacher and selected student(s) to all headphones. When this button is engaged, selected student(s) can listen to, talk to, and play for (or along with) the teacher while the remaining students listen (page 23).

11 [Phones] Slider

Adjusts the teacher's headphones level. Slide the slider towards the top of the MTLC-16 to increase the level and slide the slider towards the bottom of the MTLC-16 to decrease the level (page 19).

12 [Inst] Slider

Adjusts the teacher's instrument level. Slide the slider towards the top of the MTLC-16 to increase the level and slide the slider towards the bottom of the MTLC-16 to decrease the level (page 19).

13 [Mic] Slider

Adjusts the teacher's microphone level. Slide the slider towards the top of the MTLC-16 to increase the level and slide the slider towards the bottom of the MTLC-16 to decrease the level (page 19).

14 [Tape In/Aux In] Slider

Adjusts the "Tape In" and "Aux In" levels. Slide the slider towards the top of the MTLC-16 to increase the level and slide the slider towards the bottom of the MTLC-16 to decrease the level (page 24).

15 [Mon. Out] Slider

Adjusts the MTLC-16's monitor output level. Slide the slider towards the top of the MTLC-16 to increase the level and slide the slider towards the bottom of the MTLC-16 to decrease the level. This slider is only active when an external recording device and/or an external speaker system is connected to the MTLC-16 via the "Rec. Out" and "Mon. Out" jacks respectively (page 25-26).

16 [Power Switch]

Turns the MTLC-16 on and off.

17 [Power Jack]

Connects the MTLC-16 to the supplied AC power adapter.

18 [Mon. Out] Jacks

Connect the MTLC-16 to an external speaker system (e.g. stereo power-amp with speakers) (page 10).

19 [Rec. Out] Jacks

Connect the MTLC-16 to an external stereo recording device (e.g. tape recorder, CD recorder, or hard disk recorder) (page 10).

20 [Aux. In]/[Tape In] Jacks

Connect the MTLC-16 to external stereo audio sources (e.g. tape player, CD player, or rhythm machine) (page 10).

21 [Teacher Instrument] Jacks

Connect the MTLC-16 to the teacher's instrument. (page 9).

22 [To Slave] Connector

Connects the MTLC-16 ("Master") to another MTLC-16 ("Slave") for a total of 32 student stations (page 10).

23 [To Computer] Connector

Connects the MTLC-16 to a computer. When a computer is connected to the "To Computer" connector, all of the MTLC-16's buttons can be controlled via computer (page 10).

24 Student Instrument [1-16] Connectors

Connect the MTLC-16 to all student stations via RJ-45 cables and MTLC-1 Student Connector Boxes (page 9).

25 [Master On/Off] Switch

Toggles between "Master" and "Slave" status. When this button is engaged, the MTLC-16 functions as the "Master" communication console. When this button is not engaged, the MTLC-16 functions as the "Slave" communication console (page 10).

26 [To Expander] Connector

Connects the MTLC-16 to another MTLC-16 for a total of 32 student stations (page 10).

27 [Teacher] Headset Jacks

Connect the teacher's headset microphone (blue plug) and teacher's headset stereo phones (black plug).

Music Lab Installation Guide

Music Lab Installation

Room Preparation

When preparing a music teaching lab, there are many factors to consider. For example, the size and shape of the room, the availability of lighting and power outlets, as well as a room's ventilation and temperature control need to be addressed. Please consider the following physical and electrical requirements before installing your music teaching lab.

Physical Space Requirements

- Make sure there is sufficient space for all musical instruments, hardware, benches, and students. Full-size, free-standing keyboards (88-keys) require 22 square feet (including a bench and space for the student.) "Slab" keyboards (less than 88 keys) may require much less space.
- Create an effective floor plan that ensures a clear "line-of-sight" from all student keyboards to the teacher. While this is not always possible due to the constraints of a given room, it is a good ideal.
- Include a large desk or table next to the teacher keyboard if possible. This provides the teacher easy access to the communication console and/or the computer.
- Be sure that there is adequate space behind the teacher station. This allows the teacher to move easily from the teacher station to the student stations.
- Shade music lab windows to regulate sunlight. Avoid bright or direct sunlight in the lab, because heat generated by sunlight can overheat the Communication Console. Room temperature should not exceed 85 degrees during normal use. The ideal physical space will allow for regulated temperature and humidity.
- Use anti-static, or static-resistant, carpet on the floors whenever possible to lower the noise-level in your lab.

Electrical Requirements

- Once the floor plan is defined, determine the number of electrical outlets and power strips needed to supply power to all devices. Isolate the MTLC-16 Communication Console from devices such as computers or lights by plugging the devices into separate 120v wall plug receptacles. Plugging computers or rheostatic lights into the same receptacle as the MTLC-16 could cause disturbing noise and hum during operation. Use only the supplied A/C power adapter; using other A/C adapters can damage the unit and void the warranty.
- Use surge protectors on all electronic equipment in the music lab. This includes the MTLC-16 Lab Controller, the teacher's instrument and computer, the student keyboards, and all external audio devices. Check the voltage and amperage requirements for the equipment being installed and consult with building engineering staff regarding the level of required electrical service needed.
- Set the main power switch of the Music Tutor Lab Controller to the "Off" or "Out" position before connecting the A/C power adapter to a 120v wall plug receptacle. Use only the A/C power adapter supplied with the Music Tutor Lab Controller; using other A/C adapters can damage the unit and void the warranty.
- For further protection against electrical surge damage, disconnect all A/C power adapters from the wall plug receptacle during school vacations or summer breaks.

Equipment Checklist

The MTLC-16 includes all of the components needed to connect up to (16) student instruments and (1) teacher instrument. It also includes all of the software needed to control the communication console via computer, to provide visualized learning tools, and to keep track of class rosters and grades. Before installing the MTLC-16, be sure you have the following components:

Hardware

MTLC-16 Lab Communication Console	(1)
MTLC-16 AC Adapter	(1)
MTLC-1 Student Communication Boxes.....	(16)
RJ-45 Telephone-Type Connectors.....	(16)
Headsets with built-in Microphone	(17)
1/4" to 1/4" stereo audio cable	(1)
9-Pin Din Serial Computer Connector	(1)

Software

Installation CD	(1)
<i>including:</i>	
VMTLC-16 Virtual Music Tutor Lab Controller software	
V-MT1 Visual Music Tutor software	
VSC-88H Virtual Sound Canvas software	

Printed Materials

MTLC-16 Music Tutor Lab Controller Owner's Manual	(1)
V-MT1 Visual Music Tutor Owner's Manual	(1)
VSC-88H Visual Sound Canvas Owner's Manual	(1)
MTLC-16 QuickStart or "Survivor's Guide"	(1)
Current Software Catalog	(1)

MTLC-16 Installation

Set Up the Music Lab

- Place the teacher's instrument in the front and center of the lab.
- Place the Music Tutor Lab Controller(s) (MTLC-16), computer (if used), and external playback/recording devices (if used) on a table next to the teacher's instrument.
- Place student instruments in rows facing the teacher's instrument (row configuration is optional). Allow extra space behind each instrument for instructional purposes.
- Place audio monitor(s) (if used) to the side of the teacher's instrument facing the student instruments.
- Place the visual monitor(s) (if used) on a podium or wall mount near the teacher's station facing the student instruments.
- Connect all devices to an AC power strip as described in "Electrical Requirements" above.

Connect Cables

- Place one student communication box on each student instrument and insert the attached 1/4" plug into the headphone jack of each student instrument as you proceed with the installation.
- Number the student communication boxes (MTLC-1) "1" – "16."
- Connect each student communication box to the corresponding numbered outputs on the MTLC-16 using the supplied RJ-45 cables.
- Connect the headphone jack on the teacher's instrument to the "Teacher Instrument Left/Stereo" jack on the MTLC-16 using the supplied TRS (tip-ring-sleeve) cable.

Music Lab Installation Guide

- Set the “Master On/Off” button on the MTLC-16 to the “On” (“Master”) position.
- Connect the optional computer to the “To Computer” jack on the MTLC-16 using the supplied 9-pin serial cable. If sound from the computer (i.e. SMF playback) needs to be broadcast to the class, connect the computer’s head-
phone output to the “Aux. In” jack on the MTLC-16 using the appropriate cable (e.g. 1/8” to RCA cable.)
- Connect the 9-pin “To Computer” jack on the optional second MTLC-16 to the 9-pin “To Slave” jack on the first MTLC-16. Set the “Master On/Off” button on the second MTLC-16 to the “Off” (“Slave”) position. Connect the “To Expander” jack on the second MTLC-16 to the “To Expander” jack on the first MTLC-16 using a supplied RJ-45 cable.
- Connect the “Output L/R” jacks on the optional external playback/recording device to the “Tape In” jacks on the MTLC-16. Connect the “Input L/R” jacks on the playback/recording device to the “Rec. Out” jacks on the MTLC-16.
- Connect the Left and Right inputs on the optional external audio monitors to the “Mon. Out” jacks on the MTLC-16.
- Connect the optional audio monitor(s) to the “Mon. Out” jacks on the MTLC-16 using the appropriate cable(s) (e.g. RCA to 1/4”).
- Connect the optional visual monitor(s) to the monitor out jack on the computer using the cable(s) suggested in the computer and/or monitor’s manual.
- Connect a headset to each student communication box, as well as to the MTLC-16 (the jacks are on the left side of the MTLC-16.) Make sure both the “Mic” and “Phones” plugs are inserted.

Install Software

- Power up your Windows® computer; if it is already powered up, please make certain to close all programs, so none are running during the install procedure.
- Disable your computer’s virus-protection software
- Insert the self-installing MTLC-16 CD-ROM into the tray of your computer’s CD-ROM drive
- Wait until the auto-run program begins to run; it will bring you to the Installation Wizard.
- Follow the prompts; at the end of the process, you will be asked to restart the computer.
- Restart the computer; it is now ready to be used with your MTLC-16 Music Tutor Lab Controller

At this point, you may want create shortcuts on your desktop, so you can quickly open the programs. It is recommended that you create a shortcut for the MTLC-16 program wherever it is most convenient for you: the Start Menu, the Task Bar, or the Desktop itself. You will not need one for either the Visual Music Tutor (V-MT1) or the Virtual Sound Canvas (VSC-88), because these programs are automatically activated from within the MTLC-16 controller software.

Test Components

After all music lab equipment is placed, the cables are connected, and the software is installed, test each music lab component using the following procedure.

Power Up All Music Lab Components

- Student Instruments
- Teacher’s Instrument

- External Playback/Recording Device(s)
- Visual Monitor(s)
- Computer
- MTLC-16
- Audio Monitor(s)

Test the Teacher's Station

- A) Set the output level on the teacher's instrument to maximum (this gives the best signal-to-noise response.)
- B) Set the "Mic", "Inst", and "Phones" sliders on the MTLC-16 to their maximum setting.
- C) Put on the teacher's headset and play a few notes on the teacher's instrument. You should hear what you are playing. If you do not hear anything, check the teacher's instrument and teacher's headset connections.
- D) Press the "Mic" button on the MTLC-16 and say something. You should hear what you are saying. If you do not hear anything, check the teacher's headset connections.

Test Student Stations

- A) Press the "All" button on the MTLC-16.
- B) Play a few notes on the teacher's instrument while an assistant listens at student station #1. The assistant should hear what you are playing. If the assistant does not hear anything, check the student communication box to MTLC-16 "1" connections.
- C) Have an assistant adjust the output level on student instrument #1 to maximum (this gives the best signal-to-noise response.)
- D) Have the assistant play a few notes on student instrument #1. The assistant should hear what he or she is playing. If the assistant does not hear anything, check the student instrument to student communication box connections.
- E) Have the assistant say something. The assistant should hear what he or she is saying.
- F) Make adjustments in headphone and microphone levels with the level-control knobs on the side of the student communication box. All communication boxes should be adjusted to equal audio levels.
- G) Repeat steps B – F above for each remaining student station.

Secure Equipment and Cables

If all of the components are functioning properly, finalize the placement of all equipment.

- Attach each student communication box to the furniture or student keyboard, near the headphone jack on the instrument, using screws or velcro.
- Secure all power outlets and power cords.
- Secure all communication cables by either tying them together or placing them in wiring channels to avoid hazards in the classroom setting.
- Care should be taken to make sure that all cords and cables be secured in a neat and orderly fashion to avoid tripping over them and pulling them out of their sockets, which can cause damage.

Chap. 1—The Visual Music Tutor Advantage

Developing Solid Reading Skills

To pass a school's piano proficiency exam, one typically needs to play the Star-Spangled Banner, demonstrate basic harmonization and improvisation skills, and perform two-handed keyboard pieces. All these tasks require two basic skills: READING and RESPONDING accurately, in time.

It is suggested that development of eye-hand coordination is the critical skill in basic keyboard reading, and today has been made achievable like never before. At a student's first glance at a music score, the eyes can and should be guided—visually tutored—to follow the score and the fingers be trained to rhythmically, accurately respond. Whether the music score is treble or bass staff only, the full grand staff or a lead sheet, it is the eyes that should lead. This guiding and pacing of the eyes will almost “force” the timely visual recognition of notes and patterns. Then fingers will be coaxed to follow accurately and in time.

Two computer-age developments are now applied exclusively in Roland's new MTLC-16 to achieve this improved music reading, from the first lesson onward to the development of good reading habits. Both developments are commonplace computer technologies: the Standard MIDI File (SMF) and a Visual Music Tutor. The first, an SMF or digital music recording, allows the student to pace the reading/learning at any suitable tempo. The second, the V-MT, extends that flexibility by displaying the digital music so the eyes are compelled to follow along, again at the computer-guided tempo. This practical monitoring of eye-hand coordination eliminates common reading problems, instilling proficient, accurate reading.

A failsafe visual tutor is important, since the challenge for a keyboard student, whether, private or group, is a complex, recurring four-step process. First the EYE must sense the pattern; second, the BRAIN must make sense of it; third, the FINGERS must respond—and fourth, must do so IN TIME.

Research into the eye movements of keyboard players has detected many ways to monitor and train the eyes: a tachistoscope, a moving mask, a pointed finger, and others. The goal of each is to “nudge” the eyes along. Smooth, regulated movements are the goal, pacing the eye movement from left to right, measure-by-measure, “scrolling” downward one staff at a time. Fluent sightreaders typically avoid uncontrolled eye movements, particularly movements shifting backward, and concentrate on looking ahead.

Putting the Visual Tutor to Work

From the first glance of the music, the SMF and Visual Tutor work together to guide the eyes, whether a concept piece, exercise or tune. The process in short: 1) Play the SMF slowly enough so the student can follow, the first time without accompaniment tracks. 2) As skill improves, play the SMF with rhythm. 3) Finally, with increased skill and accuracy, the student adds the orchestra. Of course, the student could be following along in the score, but following the on-screen notation adds two important elements: a bouncing ball and colored note heads to attract and guide the eye, and automatic “page turns” to allow the students to read ahead.

This visual eye training displays an entire score and is available with the Notation Screen (function key F2), Rehearsal Screen (F3) or Tone/Mixer Panel (F4). This visual coaching is also suitable when practicing with Markers A & B. A practice loop can help a student painstakingly polish a segment, over and over. The visual reinforcement helps focus both the reading task, as well as the finger pattern.

There are several options that help visually reinforce the SMF being heard through the MTLC-16. The actual note display is re-sizable so the class can focus on the segment being read. Another option notates all sharps and flats in color—a practical reminder of those easily-overlooked first sharps and flats that occur in keys of G and F major. All in all, the flexible visual guide in Roland's Music Tutor is a landmark in developing strong reading skills in a group keyboard instruction.

Making Reading More Successful—A Few Tips

It is beyond the scope of this brief text to outline everything involved in developing sightreading technique, but here are a few pointers that can be practically implemented in every MTLC-equipped piano lab, as well as being used in every computer- or disk-assisted rehearsal session.

PREVIEW playing

If you look before you leap, you will not be surprised. A mental “read-through” will locate familiar and troublesome parts that can be understood before actually trying to get the fingers moving accurately and in time. Just one brief “look through.” This “look through” is enhanced further if the SMF is playing along.

SLOW playing

Merely playing a piece, either hands separately or together, at a reduced tempo will prepare the students for the real playing. This is as critical as a preview. However, the writer’s experience as a teacher and as a student indicates that both the PREVIEW and SLOW run-throughs will most likely be ignored. As teachers, we must remember that the learners want only one thing—they want to PLAY! So, we may want to assume that students will ignore the first two steps. With that in mind, let’s play!

OUTLINE playing—selectively reading the entire score while the SMF is playing

The SMF provides the rhythmic and musical propulsion; the student is visually “forced” to play selected notes (a sketch or outline of the piece) in a visually guided rhythm

- Play only FIRST BEAT of each measure
- Play only FIRST AND THIRD BEATS of each measure (either duple or triple meter)
- Play ALL BEATS
- Play ALL NOTES, including subdivisions
- At the end of this short process, students or entire class have been visually guided through four separate play-throughs

SHADOW playing—“air play” reading of the piece while the SMF is playing

Again, the SMF provides the propulsion while an “imaginary” perfect performance takes place—no wrong notes are possible.

- Move the fingers on top of keys without actually depressing any keys.
- “Play” along with these activities:
 - a) sing the note names,
 - b) sing the finger numbers, and
 - c) name each interval and direction
- Now, when the actual playing begins, the eyes have already read the score several times, and the fingers are “itching” to play

The Visual Music Tutor Advantage

PARALLEL SIGHTREADING methods—The Best Readers are Frequent Readers

Good reading habits will be strengthened further by using the following two strategies: 1) insisting that the class methods and materials have correlating disks, and 2) have students read through other parallel methods with visual/SMF guidance.

Possible parallel methods/materials could be:

1) If the class text is Alfred's *Piano Course for Adults*, then one might use the chapters in *PDM: Piano for the Developing Musician* that use parallel concepts. So, when the class was learning the dotted quarter-eighth pattern in the text, supplementary—and parallel—reading materials from another book would not only reinforce the concepts, but provide fresh new examples for reading.

2) For younger classes using Alfred's *Group Piano Method*, parallel reading materials would be those from Bastien *Piano Basics*, Hal Leonard *Student Piano Method*, Noona's *Comprehensive Piano Method*, or any other disk-based method. Again, the emphasis is simple: the more one reads, the better one reads!

- By insisting that the class method is accompanied by SMFs, every student has an individual, visual guide to help develop good reading. In addition, the Visual Tutor serves as a teaching assistant for the teacher.
- A parallel reading method is an important adjunct; however, one must keep in mind that these “read throughs” are not aiming for perfection but, rather, the visual/tactile process. Either the OUTLINE or SHADOW options are suitable.
- Provide students with a list of supplementary book/disk publications that they can read through, emphasizing popular or standard tunes
- Use other tutorial SMF disks for reading practice, especially the correlating POPULAR MUSIC materials from FJH *Piano Adventure* series, the Alfred Basic Piano Course, or the Hal Leonard Student Piano Method. In addition, both the Looney Tunes and the *Performance Plus* series from Warner Bros. provide interesting, enjoyable and challenging reading materials. Best of all, students will enjoy reading through these tunes; they'll probably forget they are learning.
- Finally, there are two more SMF series, the first with accompanying books, the second without books. By using these SMFs with the Visual Music Tutor, students will be compelled to read along with professionally-recorded MIDI files. In addition, the subtle propulsion of the SMF playback provides pressure to “keep up with the ensemble,” further strengthening keyboard reading skills.

Chap. 2—Surviving Your First Class

Survival Checklist—Before the Class

- ❑ Two months before: Order your texts and disks. As stated in the previous chapter, it is imperative that you use the basic technology of an SMF-accompanied text. Several publishers' texts with accompanying disks are listed below.

- Alfred

- Basic Group Piano Course*, Books 1-4

- Group Piano for Adults*, Books 1-2

- Piano 101*, Books 1-2

- Piano 101*, The Short Course

- Stipes

- Keyboard Musicianship*, 7th edition, Books I & II,

- Wadsworth

- Piano for the Developing Musician*, 5th edition

- Piano for Pleasure*, 4th edition

Supplementary materials from various publishers

- Turbo Music's *You're the Star* series (distributed by Hal Leonard)

- *Performance Plus* series (Warner Bros.)

- ❑ One month before: Order Visual Music Tutor (V-MT1) for student purchase at bookstore. Research suggests a vast improvement in reading skill and retention when a student uses music tutor disks (SMFs) to guide their progress. By requiring students to use a visual tutor as they study, one will see significant skill improvements.

- ❑ The day before: Make certain all things are in place, and have a “technical rehearsal” to determine that all connections are working

- A) Verify that all Text, syllabi and disks are in class (or in bookstore for student purchase)

- B) Type student names into virtual gradebook. You may use the import text option to simplify the process.

- C) Verify all MIDI & visual connections are working

- D) Make printed notes for yourself of all common MTLC-16 functions

- ❑ 30 minutes before class: Have another “technical rehearsal” to verify that everything is operational and in place—books, disks, connections, volume levels, and visual display

- A) Random check of audio communication with student stations

- B) Technical check of SMFs

- C) Technical check of monitors

- D) Technical check of MIDI communication between computer and teacher keyboard

Surviving Your First Class

The Class

Make certain you have the following materials conveniently located.

- A) Printed materials: teacher's books and disks, and all relevant handouts
- B) Verify that students have all their materials
 - 1) Text with interactive disks
 - 2) V-MT1
 - 3) Additional SMFs/Books per syllabus

Talking to the class:

To survive the first round of teacher-class communication, press ALL and the Microphone button; now the student can hear both your instrument and your voice. If this is your first class, and you find yourself inching toward panic mode, press MUTE. This will silence all student instruments and voice communication. For more detailed description of the communication options, see either the 11" X 17" (folded in half) "Survivor's Guide" or the next section of this manual.

Playing your first SMF:

The following options are the easiest to get started, and this assumes that a number of student eyes are watching you intently.

- A) Insert the SMF disk for your text into the disk drive of the digital piano, select the song, adjust the tempo and PLAY. Merely hearing the music will focus student attention on the music. OR
- B) Insert the SMF disk into the disk drive of the computer, open the MTLC-16 software and then click on "Visual Music Tutor" in the menu bar, and navigate the File menu until you select the desired song. Now, press the SPACE BAR. The music begins and students can concentrate on the music being learned.

Interactive models for successful learning:

Establishing an interactive routine that uses SMF recordings, reinforced with visual cues, will help improve student progress.

Basics

- A) Listen to song—ALL tracks on
- B) Listen to song a slower tempo—MUTE Tracks R, 1, & 2, so only Tr. 3 & 4 are playing
 - 1) Hands separately
 - 2) Hands together

Shadow Play—"air play" or mentally read through the piece while the SMF plays

- A) Moving fingers on top of keys without actually depressing any keys
- B) Other non-playing activities to mentally play the piece:
 - 1) sing notes names
 - 2) sing finger numbers
 - 3) naming intervals and direction

- C) When the actual playing begins, the eyes have read the score several times, and the fingers have been “itching” to play
- D) Using various tempi & track configurations
 - 1) SLOWLY, without SMF, either hands separately or together
 - 2) Increase tempo gradually as skill permits
 - 3) Add rhythm track (Track R)
 - a) Slow R.H.
 - b) Slow L.H.
 - 4) Add orchestra track (Track 2)
 - a) Slow R.H.
 - b) Slow L.H.
 - 5) Mute piano parts
 - 6) Find difficult spots & use Markers
 - a) Set Marker A
 - b) Set Marker B
 - c) Turn on Repeat or “loop” button, and practice this spot until it is polished
 - d) Turn Repeat button off, and continue playing
 - e) Clear Markers A & B

Outline Play—slowly play only selected notes as they occur, while listening to the musical flow of the tempo-reduced SMF

- A) First beat only
- B) First and third beats
- C) All main beats
- D) All notes
- E) Using various tempi & track configurations
 - 1) SLOWLY, without SMF, either hands separately or together
 - 2) Increase tempo gradually as skill permits
 - 3) Add rhythm track (Track R)
 - a) Slow R.H.
 - b) Slow L.H.
 - 4) Add orchestra track (Track 2)
 - a) Slow R.H.
 - b) Slow L.H.
 - 5) Mute piano parts

Surviving Your First Class

- 6) Find difficult spots & use Markers
 - a) Set Marker A
 - b) Set Marker B
 - c) Turn on Repeat or “loop” button, and practice this spot until it is polished
 - d) Turn Repeat button off, and continue playing
 - e) Clear Markers A & B
- F) Play a tempo
 - 1) Since you are near-perfection now, congratulate yourself, or
 - 2) Locate remaining difficult spots and use Markers A & B for additional spot practice

Chap. 3—Operating the MTLC-16

The Lab Communication Console is the heart of the MTLC-16 Music Lab. It provides routing capabilities similar to those of a telephone switchboard. For example, when a teacher needs to hear a particular student, or group of students, he or she can do so from the MTLC-16. When a teacher needs to arrange the class into four groups of four for quartet-style playing, he or she can do so from the MTLC-16. While rewiring a music lab for alternate configurations seems difficult, it is actually quite simple. With the MTLC-16, the following applications are all possible from the Communication Console.

Instructor Level Control

Purpose

Allows the teacher to adjust the level of his or her microphone, instrument, and headphones for comfort and usability.

Procedure

Teacher's Microphone

While speaking into the teacher's microphone, set the "Mic" slider at a comfortable listening level. Sliding the slider towards the top of the MTLC-16 increases the listening level and sliding the sliders towards the bottom of the MTLC-16 decreases the listening level.

Teacher's Instrument

While playing the teacher's instrument, set the "Inst" slider at a comfortable listening level. Sliding the slider towards the top of the MTLC-16 increases the listening level and sliding the sliders towards the bottom of the MTLC-16 decreases the listening level.

Teacher's Headphone

While playing the teacher's instrument and/or speaking into the teacher's microphone, set the "Phones" slider at a comfortable listening level. Sliding the slider towards the top of the MTLC-16 increases the listening level and sliding the sliders towards the bottom of the MTLC-16 decreases the listening level.

Details

These sliders are most commonly used for adjusting the level of the teacher's microphone, instrument, and headphones for comfort and usability. However, the microphone and instrument sliders also affect recording levels when "Mon. Out" is used for Lab Performance Recording.

- The selected student hears: "Mic" and "Instr" level changes.
- The teacher hears: "Mic," "Instr," and "Phones" level changes.
- The unselected student hears: only his or her own instrument and microphone.

Operating the MTLC-16

Single Student Practice

Purpose

Allows students to practice privately.

Procedure

The controller defaults to this mode when the power is turned on and no buttons are pressed.

Details

This application is most commonly used for single student practice. However, the teacher can monitor or communicate with any student by following the instructions for “Single and Multiple Student Monitoring and Communication.”

- Each student hears: only his or her own instrument and microphone.
- The teacher hears: only his or her own instrument and microphone.

Single and Multiple Student Monitoring and Communication

Purpose

Allows the teacher to listen to, talk to, or play the teacher’s instrument for selected students.

Procedure

- A) Press the “Mic” button on the upper right corner of the MTLC-16 to activate the teacher’s microphone. The LED next to the “Mic” button will light when the teacher’s microphone is activated.
- B) Press a student’s number button (“1-16”) on the lower row of the MTLC-16 to monitor or communicate with the selected student. The LED above a student’s number button will light when the student is selected.
- C) Press several student number buttons to monitor or communicate with multiple students simultaneously.

Details

This application is most commonly used for monitoring or communicating with a single student while the remaining students practice privately. However, the teacher can monitor or communicate with several students simultaneously by selecting several student number buttons.

- The selected student hears: the teacher’s instrument and microphone, and his or her own instrument and microphone.
- The teacher hears: the selected student’s instrument and microphone, and his or her own instrument and microphone.
- The unselected student hears: only his or her own instrument and microphone.

Group Practice

Purpose

Allows student groups to practice privately.

Procedure

- A) Assign student(s) to a group
 - i) While holding down a “Group Assign” button (A, B, C, or D), press a student’s number button (“1-16”) on the lower row of the MTLC-16.
 - ii) Repeat for each student in the group.
- B) Unassign student(s) from a group
 - i) While holding the “Group Assign” button (A, B, C, or D) you wish to alter, press the student’s number button (“1-16”) you wish to unassign on the lower row of the MTLC-16.
 - ii) Repeat for each student you wish to unassign.

Details

This application is most commonly used for group-style practice. However, the teacher can monitor or communicate with any group by following the instructions for “Group Monitoring and Communication.”

- Each student assigned to a group hears: the instruments and microphones of other students assigned to the group, and his or her own instrument and microphone
- The teacher hears: his or her own instrument and microphone.
- The unassigned student hears: only his or her own instrument and microphone.

Group Monitoring and Communication

Purpose

Allows the teacher to listen to, talk to, or play the teacher’s instrument for selected groups.

Procedure

- A) Press the “Mic” button on the upper right corner of the MTLC-16 to activate the teacher’s microphone. The LED next to the “Mic” button will light when the teacher’s microphone is activated.
- B) Assign students to a group (A, B, C, or D) by following the instructions under “Group Practice.”
- C) Press a “Group Comm” button (A, B, C, or D) on the lower right corner of the MTLC-16 to monitor or communicate with the selected group. The LED next to the “Group Comm” button will light when the group is selected.
- D) Press several “Group Comm” buttons to monitor or communicate with multiple groups.

Operating the MTL-16

Details

This application is most commonly used for monitoring or communicating with a single group while the remaining groups practice privately. However, the teacher can monitor or communicate with several groups simultaneously by selecting several “Group Comm” buttons.

- Each student assigned to a selected group hears: the teacher’s instrument and microphone, the instruments and microphones of other students assigned to the group, and his or her own instrument and microphone.
- The teacher hears: the instruments and microphones of all students in the selected group(s), and his or her own instrument and microphone.
- The unassigned student hears only his or her own instrument and microphone.

Pairs (Duet-Style) Practice

Purpose

Allows *adjacent* students (1 and 2, 3 and 4, ... 15 and 16) to practice privately.

Procedure

Press the “Pairs” button. The LED next to the “Pairs” button will light when “Pairs” is selected.

Details

This application is most commonly used for duet-style practice. However, the teacher can monitor or communicate with any pair by following the instructions for “Pairs (Duet-Style) Monitoring and Communication.”

- Each student pair hears: the instrument and microphone of the adjacent student, and his or her own instrument and microphone.
- The teacher hears: only his or her own instrument and microphone.

Pairs (Duet-Style) Monitoring and Communication

Purpose

Allows the teacher to listen to, talk to, or play the teacher’s instrument for selected pairs.

Procedure

- A) Press the “Mic” button on the upper right corner of the MTL-16 to activate the teacher’s microphone. The LED next to the “Mic” button will light when the teacher’s microphone is activated.
- B) Press the “Pairs” button. The LED next to the “Pairs” button will light when “Pairs” is selected.
- C) Press one of the adjacent students’ number buttons to monitor or communicate with the selected pair (e.g. Press “1” to select students “1 and 2.”) The LEDs above the selected pair will light when one of the students in the pair is selected.
- D) Press several adjacent students’ number buttons to monitor or communicate with multiple pairs simultaneously.

Details

This application is most commonly used for monitoring or communicating with a single pair while the remaining pairs practice privately. However, the teacher can monitor or communicate with several pairs simultaneously by selecting several student number buttons.

- Each student pair hears: the instrument and microphone of the teacher, the instrument and microphone of the adjacent student, and his or her own instrument and microphone.
- The teacher hears: the instruments and microphones of all students in the selected pair(s), and his or her own instrument and microphone.
- The unselected pair hears: the instrument and microphone of the adjacent student, and his or her own instrument and microphone.

Class Communication

Purpose

Allows the teacher to talk to or play the teacher's instrument for all students.

Procedure

- A) Press the "Mic" button on the upper right corner of the MTLC-16 to activate the teacher's microphone. The LED next to the "Mic" button will light when the teacher's microphone is activated.
- B) Press the "All" button on the lower right corner of the MTLC-16. The LED above the "All" button, as well as all of the LEDs above the student number buttons, will light when "All" is activated.

Details

This application is most commonly used for communicating with all students.

- All students hear: their own instrument (unless "Mute" is depressed) and microphone, and the teacher's instrument and microphone.
- The teacher hears: only his or her own instrument and microphone.

Student Broadcasting

Purpose

Allows the class to hear a selected student's instrument and microphone for the purposes of demonstration or example.

Procedure

- A) Press the "Student Broadcast" button on the upper right corner of the MTLC-16. The LED next to the "Student Broadcast" button will light when "Student Broadcast" is selected.
- B) Press a student's number button ("1-16") on the lower row of the MTLC-16 to broadcast the student's instrument and microphone to the entire class. The LED above a student's number button will light when the student is selected.

Operating the MTLC-16

- C) Press several student number buttons to broadcast multiple students to the class.

Details

This application is most commonly used for broadcasting a single student's instrument and microphone to the class. However, the teacher can broadcast several students simultaneously by selecting several student number buttons.

- The selected student hears: the teacher's instrument and microphone, and his or her own instrument and microphone.
- The teacher hears: the selected student's instrument and microphone, and his or her own instrument and microphone.
- The unselected student hears: the teacher's instrument and microphone, the broadcasting student's instrument and microphone, and his or her own instrument and microphone.

External Audio Broadcasting

Purpose

Allows the teacher to broadcast an external audio source (e.g. drum machine, CD player, MP3 player, etc.) to the class.

Procedure

- A) Press the "Tape In" or "Aux In" button on the upper left corner of the MTLC-16 (Pressing "Tape In" cancels "Aux In" and pressing "Aux In" cancels "Tape In.") The LED next to the "Tape In" or "Aux In" button will light when either button is selected.
- B) Press play on the external audio source.
- C) Set the "Tape/Aux In" slider at a comfortable listening level. Sliding the slider towards the top of the MTLC-16 increases the listening level and sliding the slider towards the bottom of the MTLC-16 decreases the listening level.

Details

This application is most commonly used for broadcasting an external audio source to the class while the class listens and/or plays along in private. However, the teacher can also listen to, talk to, or play the teacher's instrument for selected students, pairs, or groups by following the instructions above for the intended application.

- All students hear: the external audio source (via "Tape In" or "Aux In"), and their own instrument and microphone.
- The teacher hears: the external audio source (via "Tape In" or "Aux In"), and his or her own instrument and microphone.

Lab Performance Recording

Purpose

Allows the teacher to record: the teacher's instrument and microphone, a selected student's instrument and microphone, a selected pair's instrument and microphone, a selected group's instruments and microphones, and/or an external audio source.

Procedure

- A) Be sure an external audio player/recorder is connected to the "REC. OUT" jacks on the back of the MTLC-16 as described in the "Music Lab Installation Guide."
- B) Select student(s), pair(s), group(s), or an external audio source to be recorded by following the instructions for "Single and Multiple Student Monitoring and Communication," "Group Monitoring and Communication," "Pairs (Duet-Style) Monitoring and Communication," "Class Communication," "Student Broadcasting," and/or "External Audio Broadcasting."
- C) Set the "Tape/Aux In," "Mic," and/or "Inst" sliders at comfortable listening levels. Sliding the sliders towards the top of the MTLC-16 increases the listening level and sliding the sliders towards the bottom of the MTLC-16 decreases the listening level.
- D) Press record (or play and record) on the external audio source.
- E) While playing the instrument and/or speaking into the microphone being recorded, set the "Mon Out" slider at a satisfactory recording level. Sliding the slider towards the top of the MTLC-16 increases the recording level and sliding the slider towards the bottom of the MTLC-16 decreases the recording level.
- F) Begin the lab performance.

Details

This application is most commonly used for recording a selected student, pair, or group's lab performance while the remaining students practice privately. However, the teacher can record several students, pairs, or groups simultaneously by selecting several student number buttons or "Group Comm" buttons simultaneously. The teacher can also broadcast a performance to the class by pressing the "Student Broadcast" button. The LED next to the "Student Broadcast" button will light when "Student Broadcast" is selected.

Student Instrument Muting

Purpose

Allows the teacher to turn off all student instruments when communicating with the class.

Procedure

Press the "Mute" button on the right half of the MTLC-16. The LED next to the "Mute" button will light when "Mute" is selected.

Operating the MTLC-16

Details

This application is most commonly used for muting student instruments while the teacher is demonstrating. However, selected student instruments can be un-muted (while the others remain muted) by pressing the student's number button.

- All students hear: the teachers instrument and microphone, and/or an external audio source (if "Tape In" or "Aux In" is depressed.)
- The teacher hears: his or her own instrument and microphone, and/or an external audio source (if "Tape In" or "Aux In" is depressed.)

Classroom Speaker Monitoring

Purpose

Allows the MTLC-16 to function without headphones for demonstration purposes.

Procedure

- A) Be sure an external audio monitoring system (preferably stereo) is connected to the "Mon. Out" jacks on the back of the MTLC-16 as described in the "Music Lab Installation Guide."
- B) Set the external audio monitoring system at a comfortable listening level.
- C) Select student(s), pair(s), group(s), or an external audio source (i.e. "Tape In" or "Aux In") to be broadcast to the class by following the instructions in sections: "Single and Multiple Student Monitoring and Communication," "Group Monitoring and Communication," "Pairs (Duet-Style) Monitoring and Communication," "Class Communication," "Student Broadcasting," and/or "External Audio Broadcasting."
- D) Set the "Tape/Aux In," "Mic," and/or "Inst" sliders at comfortable listening levels. Sliding the sliders towards the top of the MTLC-16 increases the listening level and sliding the sliders towards the bottom of the MTLC-16 decreases the listening level.
- E) While playing a selected instrument(s) and/or speaking into the microphone(s) being broadcast to the class, set the "Mon Out" slider at a satisfactory listening level. Sliding the slider towards the top of the MTLC-16 increases the listening level and sliding the slider towards the bottom of the MTLC-16 decreases the listening level.
- F) Adjust the audio monitoring system if needed.

Details

This application is most commonly used for broadcasting a selected student, pair, or group to the class via external audio monitors. However, the teacher can broadcast several students, pairs, or groups simultaneously by selecting several student number buttons or "Group Comm" buttons.

Chap. 4—Operating the Virtual MTLC-16

The Virtual Communication Console (VMTLC-16) is a computer-based remote control for the MTLC-16's Lab Communication Console and more. It not only provides remote control of the Lab Communication Console, but also adds classroom customization and gradebook options. For example, when a teacher needs to hear a particular student play along with a standard MIDI file orchestration, he or she can do so from a computer without touching the Lab Communication Console. When a teacher needs to store several classroom rosters, complete with student names and grades, he or she can do so from a computer without using a traditional gradebook. Moreover, controlling all of the Lab Communication Console's buttons, customizing classroom configurations, and recalling gradebook information from a computer is actually quite simple. With the VMTLC-16 software, the following applications are all possible from a computer.

Virtual Lab Control

After opening the VMTLC-16 software on your computer, you can control all of the Lab Communication Console's buttons from the computer by clicking on button icons that appear on the screen. These button icons function just like the physical buttons on the Communication Console. Click them once to engage the button and click them again to disengage the button (an LED icon next to the button icon will light when the corresponding button icon is engaged.)

The only button icons that function differently from the physical buttons on the console are the "Group Assign" button icons (i.e. A, B, C, D). With these button icons, instead of holding down a "Group Assign" button (i.e. A, B, C, D) while selecting students, click on a "Group Assign" button icon to engage it, click on selected student number button icons to assign students to the group, and then click on the "Group Assign" button again to disengage it.

While selecting icons on the screen is the simplest way of using the VMTLC-16, there are additional ways of controlling the Lab Communication Console from the computer. These include selecting button functions from drop-down menus, or pressing a corresponding computer keyboard "shortcut" (a key or keys on the computer keyboard that act just like button icons). With this in mind, the following are applications related to Virtual Lab Control including button icons, drop-down menus, and shortcut equivalents of the Communication Console's buttons.

Roster – Student Selection

- A) Click a student number button icon (i.e. keyboard icon), or
- B) Click "Roster" in the menu-bar and click a student in the drop-down menu, or
- C) Press Alt+R, and then use the arrow keys to select a student from the drop-down menu.

Options – Additional Buttons Control

Group Assign A, B, C, and D

- A) Click a "Group Assign" button icon (i.e. A, B, C, D), or
- B) Click "Options" in the menu-bar and select "Group Assign" (i.e. A, B, C, D) from the drop-down menu, or
- C) Press Alt+O, and then use the arrow keys to select "Group Assign" (i.e. A, B, C, D), or
- D) Press Ctrl+F1, Ctrl+F2, Ctrl+F3, or Ctrl+F4.

Group Comm A, B, C, and D

- A) Click a "Group Comm" button icon (i.e. A, B, C, D), or
- B) Click "Options" in the menu-bar and select "Group Comm" (i.e. A, B, C, D) from the drop-down menu, or
- C) Press Alt+O, and then use the arrow keys to select "Group Comm" (i.e. A, B, C, D), or
- D) Press F1, F2, F3, or F4.

Operating the *Virtual* MTL-16

Mic

- A) Click the "Mic" button icon, or
- B) Click "Options" in the menu-bar and select "Mic," or
- C) Press Alt+O and then use the arrow keys to select "Mic," or
- D) Press Ctrl+M.

Mute

- A) Click the "Mute" button icon, or
- B) Click "Options" in the menu-bar and select "Mute," or
- C) Press Alt+O and then use the arrow keys to select "Mute," or
- D) Press Ctrl+U.

Student Broadcast

- A) Click the "Student Broadcast" button icon, or
- B) Click "Options" in the menu-bar and select "Student Broadcast," or
- C) Press Alt+O and then use the arrow keys to select "Student Broadcast," or Press Ctrl+T.

Pairs

- A) Click the "Pairs" button icon, or
- B) Click "Options" in the menu-bar and select "Pairs," or
- C) Press Alt+O and then use the arrow keys to select "Pairs," or
- D) Press Ctrl+T.

Clear All

- A) Click the "Clear All" button icon, or
- B) Click "Options" in the menu-bar and select "Clear All," or
- C) Press Alt+O and then use the arrow keys to select "Clear All," or
- D) Press Ctrl+Z.

Tape In

- A) Click the "Tape In" button icon, or
- B) Click "Options" in the menu-bar and select "Tape In," or
- C) Press Alt+O and then use the arrow keys to select "Tape In," or
- D) Press Ctrl+I.

Aux In

- A) Click the "Aux In" button icon, or
- B) Click "Options" in the menu-bar and select "Aux In," or
- C) Press Alt+O and then use the arrow keys to select "Aux In," or
- D) Press Ctrl+A.

Static/Adjustable – VMTLC-16 Display Customization

When the VMTLC-16 software is loaded, the computer screen should be in the “Static” mode. This means the computer screen looks and functions like its hardware counterpart, the MTLC-16 Communication Console. However, when you click “Adjustable” in the menu-bar, the computer screen switches to the “Adjustable” mode. This means the user can customize the screen, by adding names to student stations and changing the location of the student station icons, to better emulate the physical arrangement of students in the Music Lab.

While arranging student/teacher station icons on the screen takes a little setup time, it can be accomplished quickly and easily with the following buttons and icons.

[Arrange/Control] Button

- A) Click “Adjustable” in the menu-bar to put the VMTLC-16 into the “Adjustable” mode (when the VMTLC-16 is in the “Adjustable” mode, the “Arrange” button will appear in the lower left corner of the computer screen, next to the “Capture” and “Clear All” buttons)
- B) Click the “Arrange” button icon (the “Arrange” button icon should now say “Control”)
- C) Click a student station icon (over the student station number and not over the keyboard icon) and hold. Then Drag the student station icon to the desired location on the screen and release.
- D) Repeat step “c” for each student station (NOTE: the teacher’s station can also be moved.)
- E) Right-click on a Student Station Icon and select “Delete Keyboard” to delete unused student station icons.
- F) Click the “Control” button icon when all student station icons have been placed.
- G) Be sure to save the current classroom configuration by following the instructions under “Classroom Management: Save Class As.”

Box # [1] or [2] Buttons

When two MTLC-16 Communication Consoles are hooked together using the supplied cables (see the “Music Lab Installation Guide” for details), the VMTLC-16 software can accommodate (32) student stations. However, only sixteen student stations will appear on the screen at one time. To see the remaining stations, do the following.

- A) Click on the Box # “2” icon on the lower half of the screen to see Box # 2’s (16) student station icons.
- B) Click on the Box # “1” icon on the lower half of the screen to see Box # 1’s (16) student station icons.

Operating the *Virtual* MTL-16

Classroom Management

Roster – Adding Student Names

- A) Right-click on a student station icon (over the keyboard icon not the student station number.)
- B) Type the student's name in the pop-up dialogue box: first name first, followed by a space, and then the last name (NOTE: only letters and numbers are allowed.)
- C) Press "enter." The student's first name should now appear under the student station icon.

File

The VMTLC-16 stores, retrieves, and displays classroom configurations for up to 25 classes. This means all associated information—including names, student station icon locations, and gradebook information—can be saved to the computer's disk drive for recall at any time.

New Class

Creates a classroom configuration file on the computer's disk drive.

- A) Click "File" in the menu-bar and select "New Class," or
- B) Press Alt+F and then press "N," or
- C) Press Alt+F and then use the arrow keys to select "New Class."
- D) Type the class name and press enter (or click "OK.")

Open Class

- A) Opens a previously saved classroom configuration. Click "File" in the menu-bar and select "Open Class," or
- B) Press Alt+F and then press "O," or
- C) Press Alt+F and then use the arrow keys to select "New Class," or
- D) Press Ctrl+O.
- E) Click a class name and press "Enter" (or click "OK.")

Save Class

Saves the current classroom configuration to a file on the computer's disk drive.

- A) Click "File" in the menu-bar and select "Save Class," or
- B) Press Alt+F and then press "V," or
- C) Press Alt+F and then use the arrow keys to select "Save Class," or
- D) Press Ctrl+S.
- E) If the current classroom configuration has not been saved previously, type the class name and press enter (or click "OK.")

Save Class As

Saves the current classroom configuration to a file on the computer's disk drive.

- A) Click "File" in the menu-bar and select "Save Class As," or
- B) Press Alt+F and then press "E," or
- C) Press Alt+F and then use the arrow keys to select "Save Class As."
- D) Type the class name and press enter (or click "OK.")

Delete Class

Deletes the current classroom configuration file from the computer's disk drive.

- A) Click "File" in the menu-bar and select "Delete Class," or
- B) Press Alt+F and then press "D," or
- C) Press Alt+F and then use the arrow keys to select "Delete Class."
- D) Click the class name and press enter (or click "OK.")

Exit

Closes the current classroom configuration file and the VMTLC-16 Software.

- A) Click "File" in the menu-bar and select "Exit," or
- B) Press Alt+F and then press "X," or
- C) Press Alt+F and then use the arrow keys to select "Exit," or
- D) Press Ctrl+X.
- E) If the current classroom configuration has not been saved previously, type the class name and press enter (or click "OK.")

Gradebook

In order to open the "Gradebook," the current "Class" must be saved. To save the current class, see "Save Class" under "File" above. Once the current class is saved, click "Gradebook" in the menu-bar. A new window will appear with the following items.

Assignment Column

Allows the teacher to enter assignment titles (e.g. test name, performance name, etc.) for each student.

- A) Click a student name in the student name box located in the upper left corner of the screen.
- B) Click a blank cell in the Assignment Column.
- C) Type an assignment title.
- D) Press "Tab."

Score Column

Allows the teacher to enter numbered assignment scores for each student.

- A) Click a student name in the student name box located in the upper left corner of the screen.
- B) Click a blank cell in the Score Column.
- C) Type a numbered score.
- D) Press "Tab."

Operating the *Virtual* MTLC-16

Notes Column

Allows the teacher to enter notes (e.g. “Needs two-hand work,” “Don’t forget to test!,” etc.) for each student.

- A) Click a student name in the student name box located in the upper left corner of the screen.
- B) Click a blank cell in the Notes Column.
- C) Type a note.
- D) Press “Tab.”

Average Column

Numbered scores from the “Score Column” are averaged in this column.

[Print Student] Button

Prints the selected student’s gradebook records.

- A) Click a student name in the student name box located in the upper left corner of the screen.
- B) Click the “Print Student” button.

Hardware Detection

TX = “Transmit”

This virtual LED blinks when the VMTLC-16 software is “transmitting” messages to the connected communication console.

RX = “Receive”

This virtual LED blinks when the VMTLC-16 software is “receiving” messages from the connected communication console.

CD = “Carrier Detect”

This virtual LED lights when the VMTLC-16 software detects (“carrier detect[s]”) the connection of the communication console.

[Capture] Button

Makes the on/off status of the VMTLC-16’s buttons match the on/off status of the connected communication console’s buttons.

Chap. 5—Operating the V-MT1 (Visual Music Tutor)

MIDI Song Files, Notation and WYSIWYG*—the Visual Imperative

Soon after MIDI (Musical Instrument Digital Interface) was introduced in 1983, software publishers began using MIDI's power to display notes of a song file as graphic, print-worthy notation—instant music publishing. Finale® and Sibelius® are but two examples of successful music notation companies. But the primary output of these programs—and sequencing programs—is the static, printed page.

The V-MT1 is a visual sequencing/notation program, a powerful tool that is remarkable for two reasons: what it does, and almost more importantly, what it does NOT do.

What it does:

The V-MT1 plays back Standard MIDI Files (SMFs) of both type 1 and type 0. This interactive data is used to help students learn. Typical student-teacher interactions made possible by MIDI: recordings can be adjusted, so the tempo is slower; the recording's orchestration can be turned off for greater learning focus; and the MIDI file's notation can be instantly displayed in a dynamic, animated musical score that unfolds in tempo, as the recording is played back. This user-adjustable music score guides the student through the piano class, the method book, the exercises, the ensembles or some of those “for fun” pieces.

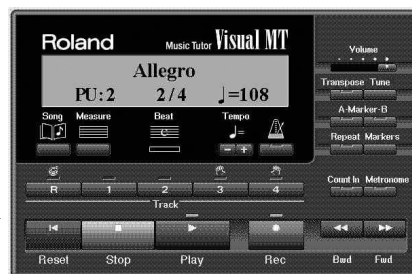
What it does NOT do:

While the V-MT1 quickly and easily prints music scores from a MIDI file (except those including copyright notices), it is designed primarily for on-screen display to fluently guide and tutor the music learner's eyes. Its sequencing functions are limited to the basics one would encounter in a real-time classroom situation, such as recording a pattern or melody and then playing it for the class. The notation functions are similarly simplified: recording a tune and displaying it in easily re-sized notation for all the class to visualize. To edit any SMF created by the Visual Music Tutor, these “after-class” edits can easily be handled by any suitable sequencing or notation program, such as Cakewalk®, Finale or Sibelius.

*WYSIWYG (what you see is what you get) is an acronym from early computing years when printed documents began to accurately reflect that of the on-screen display.

Function 1 (F1) the Panel View

F1 is the simple “panel view” that allows users to easily play an SMF. Its transport controls closely resemble those of a cassette tape player, with a few additional conveniences for music learning. Learning features include: BWD and FWD buttons to reverse or advance the recording one measure at a time, + and – buttons to allow simple tempo changes, metronome button for providing a “Professor. Rhythm,” and transpose button to allow any recording to be played back in any key.



WHY: For simplest playback, most often when students have already learned the piece, this panel view lets learners follow an interactive audio track. This is also suitable for “already fluent readers” who may prefer to follow a static printed score on the music rack.

HOW: Press F1 (function button #1) or the upper left icon in the menu bar.

Operating the VMT-1 (Visual Music Tutor)

Function 2 (F2) the Notation View

F2 is the first “notation view” that will visually guide the student as s/he learns or plays along with an SMF. This view displays the music notation of any music file, and can be re-sized in two ways: the actual notehead size can be enlarged or reduced, and each measure can be made wider or narrower. The V-MT’s visual component is enhanced further by two guides for the music reader: a bouncing ball, following the gentle arc of a “conductor” imparts a musical flow: As the actual notes of the SMF are being played, those notes are indicated in red. The bouncing ball and these red notes lead the eye along the staff, helping to establish solid reading habits. Further, a user-selectable option allows sharps and flats to be displayed in color—another way to continually remind learners of the key signature.



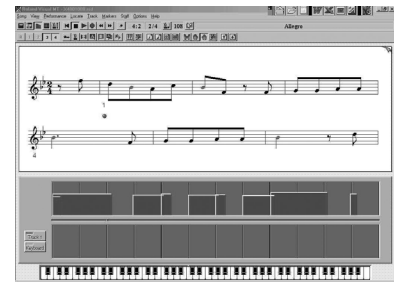
In this view, one can still access the transport controls—RESET, BWD, FWD; change the TEMPO or TRANSPPOSITION; and mute unwanted TRACKS.

WHY: As new concepts, exercises or tunes are introduced to a class, this window provides the most score options, as well as the largest notation window—up to four grand staves at one time. One gets the best display when the active window is maximized. The F2 “moving score” options will visually prompt students to move their eyes along with music, as well as highlighting the oft-forgotten black keys (sharps or flats) in other colors. This colored sharp/flat option can be turned off as skills progress.

HOW: Press F2 (function button #2) or the second icon in the upper left corner of the file menu. This window allows adjustments of tempo, transposition, tracks being played, as well as note size and measure width.

Function 3 (F3) the Rehearsal View

F3 is the “rehearsal view.” While it also contains the transport controls and “animated notation,” the bar graph immediately below the music staff is the important feature. It displays both velocity (dynamics) and duration (note length) of the SMF *recording* in a turquoise bar graph; immediately below that bar graph is another salmon bar graph that displays the *user’s* performance. A learner or entire class can now visualize the difference between whole and quarter notes, legato and staccato touches, and many other musical nuances. It’s also helpful for advanced students to visually note the dynamic contours of scales, phrases or ornaments.

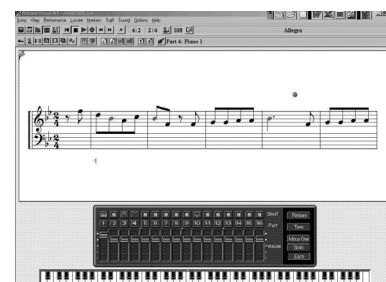


WHY: This window is particularly helpful to display differences between staccato and legato, as well as dynamic contours within a musical phrase

HOW: Press F3 (function button #3) or the third icon in the upper left menu bar. You may adjust tempo, transposition, tracks being played, as well as note size and measure width.

Function 4 (F4) the Tone or “Mixer” Window

In addition to all the interactive playback functions—tempo, track mute and transposition, this window allows the learner to focus on one particular track at a time, to play along, to change timbre, or print out that one part. In addition, the easily used “mixer” allows users to re-balance the volume levels, re-orchestrate the recording, or solo any individual part.



WHY: These simple mixing options allow teacher or student to be the “producer” and alter any part of the piano or orchestrated parts. These alterations may illustrate a musical concept, may highlight a passage, or may be used for an “I wonder how it would sound if...” exploration.

HOW: Press F4 (function button #4) or click on the fourth icon from the left (in the menu bar). In this view, you may also adjust tempo, transposition, tracks being played, as well as note size and measure width.

For More Information

For additional information about the Visual Music Tutor’s functions, see the accompanying *Owner’s Manual*. It will walk you through the functions listed above, plus describe additional tutoring options for all SMFs.

For a brief outline of commonly used functions, refer to the 11 x 17 *Survivors Guide*. It will cover the most frequently used operations of this important Music Tutor program.

Annotated Group Teaching Bibliography

When piano teachers begin teaching in groups, they realize a number of differences between private lessons and "instructing the masses." Because of this, many articles and books have been written to describe effective techniques for class teaching. The following annotated bibliography first appeared in the Winter 2001 *Roland Keyboard Educator*. It is reprinted by permission.

Group piano instruction is currently experiencing a resurgence of attention in the United States. The opportunities for group dynamics and peer interaction make group study an appealing option for the independent teacher. Benefits include additional time to spend with the students in a group class, incorporating more elements of a well-rounded musical education in a group setting, and increased income for the teacher. Group piano is at the forefront in the field of pedagogy, and the Music Teachers National Association and Roland Corporation support the philosophy and tenets of group teaching. MTNA devoted an entire day of its conference (Pedagogy Saturday March, 1999) to discussions on the topic. Recent articles in keyboard journals and magazines continue to highlight the changes that continue to occur in the area of group piano.

The purpose of this article is to provide an organized list of material on the topic of group piano accessible to the independent teacher. The focus is mainly on materials published since 1980, although a few older yet still valuable sources have been included due to their timeless nature. We hope that teachers will find in these materials new ideas and suggestions for group teaching in their own studios.

Articles

Allen, Alana. "How I Became a Group Piano Teacher." *Roland Keyboard Educator* Vol. 4, No. 2 (Spring, 2000): pp.4-5.

The shift from teaching privately to heading a studio of nearly 100 students organized into groups is addressed in this report. Beginning with grouping her students into teams of four, the author expanded her facilities, increased her income, and incorporated technology to support her growing list of interested clients. Her use of Roland technology is highlighted, and suggestions for obtaining equipment and using sequencers and computers in the piano study are offered.

Benedict, Michaele. "Try a New Approach." *Clavier* Vol. 33, No. 10 (December, 1994): pp.33-34.

With the reduction of arts programs in the schools, group lessons gain

importance as a venue by which a greater number of piano students can be reached more effectively. Benedict offers thoughts on the value of extended lesson times, supervised practice sessions, equipment use, and motivation through a merit system, which can be applied to the group class.

Bennett, Beulah Varner. "The Group – Ideal for Teaching Fundamentals." *Clavier* Vol. 11, No. 10 (December, 1972): pp.38-41.

This article centers on the idea of using the group class as a place to build a strong musical foundation for the piano student. Due to the time limitations of the private lesson and the amount of information to be covered, the teacher may often omit aspects of a comprehensive musical education that can be incorporated into a longer class period. These skills include ear training, singing, rhythm drill, orientation of the keyboard and grand staff, and development of a musical vocabulary of terms. Each of these areas is isolated and discussed with reference to appropriate concepts and activities that may be used to strengthen these specific areas of musical understanding. Ideas show great potential for use by the independent group piano teacher.

Bianchi, Louise. "For Success: Make Your Program Match Your Group." *Piano Quarterly* 101 (Spring, 1978): pp.19-22.

This article should be on every group teacher's "must read" list. The information is presented in a question/answer format, with the questions chosen by Bianchi as the most common teacher concerns about group piano classes. Six areas of concern are met with advice from the author. The opinions expressed in the answers are honest and helpful, and explanations are supported by examples from Bianchi's own experiences.

The opening questions deal with the common concerns of appropriate grouping and the possible need for periodic regrouping. Bianchi states her lack of support for regrouping, and instead encourages teachers to consider restructuring the lessons to meet the needs of the class. Questions also deal with the frequency of class meetings, preferences for the combination of group and private lessons, and the most beneficial number of students to have in a piano class. Perhaps the most informative answer comes to the question, "How long do you continue with group lessons?" Bianchi answers this with an example from her teaching experience, which may serve as inspiration to those struggling with the complexities of a class that has been together for a greater length of time. Numerous reasons are given in this article not only for using groups in the education of piano students, but also for continuing those groups in ways that aid the students in becoming strong, well-rounded musicians.

Burkett, Thomas A. "The Challenge of Group Piano Teaching and the Rewards." *Music Educators Journal* Vol. 69 (November, 1982): pp.31-33.

The various combinations of private and group lessons that may be used are approached in this article, with specific attention given to combinations that may work best for the teacher making the transition

from private to group teaching. Musicianship classes, repertoire classes, ensemble work, and technique sessions are offered as ways of blending private and group instruction. Particularly useful is the second half of the article, which goes into detail concerning the group teaching skills needed by the effective class teacher. Grouping techniques, lesson organization, understanding the learning process, and leading the group are all carefully explained. Those teachers looking for information on the beginning steps for developing a group program will want to read this article.

Carson, Carolyn. "Put a Little Classroom in Your Teaching." *Clavier* Vol. 20, No. 9 (November, 1981): p.44.

This brief article contains ideas for enhancing group lessons through motivation, creative activities and studio decoration. A short list of resources for the classroom teacher is given at the end of the article. This source serves mainly to start the flow of ideas concerning effective organization of the group studio.

Cheek, Sharon. "Misconceptions About Group Teaching." *Roland Keyboard Educator* Vol. 3, No. 4 (Fall, 1999): pp.8-10, 14.

Nine common misconceptions by parents and teachers are met with logical and innovative answers in this article. Many of the misconceptions stated are likely to be heard from parents or other teachers at some point, and knowledge of the facts supporting group piano instruction may be of great use to the independent teacher incorporating group lessons into the studio. Lack of private attention, varying learning speeds of students, and problems with individual technique are answered in such a way as to strengthen the argument for the use of group piano lessons by more and more teachers.

Chronister, Richard. "The Challenge of Group Teaching." *Clavier* Vol.15, No. 8 (October, 1976): pp.40-42.

Chronister reveals some misconceptions about group piano teaching in this article. Lack of extensive equipment is dismissed with the following comment: "A great deal of equipment, including expensive electronic labs, used badly diminishes the success of the teacher. One piano used effectively can produce marvelous results." Instead, the author places importance on the teacher's ability to teach a group as a class and not merely a collection of individuals. Ideas for sightreading, introducing new concepts, repertoire work, and performance opportunities are offered with special consideration to teaching the class as a cohesive group. Some of the pitfalls of the beginning group teacher may be allayed by applying Chronister's ideas.

Chronister, Richard. "Does Group Piano Help You Teach Reading?" *Keyboard Companion* (Winter, 1996): pp.12-16.

Chronister poses a question concerning the link between group piano study and the development of reading skills, which is answered by Christopher Hepp and Christine Hicks, Kathy Nafius, and Sue Collier.

Hepp points to specific areas in which group instruction boosts students' reading skills, including development of the musical area of reading (utilizing rhythm drills, flashcards, step-skip exercises, etc.) and a group activity he refers to as tachistoscopying. The second answer to Chronister's question is aimed more at the psychological benefits of group study with additional information given on reading activities for teams, partners and relay tasks.

Fairchild, Judith A. "Teacher's Guide to More Effective Group Piano Study." *Piano Guild Notes* (May/June, 1996): pp.4-6.

Despite this article's limitations due to its adherence to one specific method, the novice group teacher will appreciate the specific guidelines presented in this outline format. Objectives of beginning piano study are listed, and the "Ten Positive Aspects of Group Piano" may be used in extolling the benefits of group study to the parents of your students. Brief plans for ten lessons are given, with the target class being beginning students (ages 8-10) in one-hour sessions. The scope of assignments in a group setting, a detailed plan for the first class meeting, and suggestions for musicianship study are examined.

Hardy, Diane. "Group Teaching – A Complete Preparation." *American Music Teacher* (September/October, 1980): pp.18-19.

A basic introduction to the use of group teaching in the independent studio is offered with guidelines for pacing, sequencing, discipline, and activity selection. This particular teacher schedules three private lessons and one group lesson per month for each student. The group takes place in the early morning, when schedules are open and attention spans are greatest. An itinerary of a sample class includes drill, ensemble playing, theory games, listening activities, sight-reading, performing, composing and ear training. By presenting the group class as a privilege for the piano student, teachers may find their students excited about learning important musical concepts.

Jenks, Linda. "Group Piano Techniques for the Private Teacher." *American Music Teacher* Vol. 34, No. 2 (1984): pp.10-14.

Common issues associated with group piano instruction are met in this article. Included are discussions on classroom management, financial considerations, areas of teaching focus and varied uses of class piano. Noteworthy is Jenks' inclusion of a typical class piano experience, which takes the reader through an entire class meeting from the arrival of the students to previewing new assignments. The paragraphs dealing with outfitting a piano lab both encourage group piano for those not possessing a technological studio, and outline the process through which teachers may obtain a fully-equipped piano lab.

Johnson, Rebecca. "Group Lessons: They're Not Just for Beginners." *Clavier* Vol. 20, No. 10 (December, 1981): p.27.

Positive results of group teaching for more advanced students are the main focus of this article. Many teachers associate group study in

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piano with beginners, but Johnson describes her favorable use of group instruction with intermediate and advanced students as well. The benefits of group study to younger students apply equally to older children and youth. Among these benefits, Johnson mentions increased knowledge of repertoire, development of musicianship, improved listening skills, better technique, increased musical sensitivity and rhythmic stability, and greater creativity and independence of thought.

Lee, Patricia Taylor. "Making the Most of Your Teaching Day." *Clavier* Vol. 20, No. 8 (October, 1981): pp.54-55.

Ideas are presented for incorporating group lessons into the studio as a supplement to some type of individual teaching or as a replacement for the private lesson. The discussion of the value of repertoire/theory classes, partner lessons, and technique/keyboard skills/theory lessons gives the studio teacher many options to explore in the addition of group lessons to the private studio. Benefits of group dynamics are listed, and scheduling ideas are also put forth by Lee in a concise, yet helpful manner.

Loris, Susan. "Creative Ideas for Group Lessons." *Clavier* Vol. 33, No. 4 (April, 1994): pp.37-40.

Inventive ideas for fostering creativity in a group piano setting are given in this article. Suggestions for tapping into the minds of students are presented in the areas of theatrical works, rhythm exercises, theory activities, listening sessions and improvisation activities. Not only are the ideas proposed, but additional printed sources for use in the classroom are provided in the body of the article. The ideas expressed here may be used to add excitement and interest to study, thus aiding in guiding students on the path to becoming a well-rounded musician.

McCain, Claudia J. "From Private to Group Lessons." *Clavier* Vol. 27, No. 4 (April, 1988): pp.40-41.

This article is a real life chronicle of the transition of a teacher from private instruction to group lessons in the private studio. Practical advice is given from conception of the new program to its realization. Partner lessons are recommended as a starting point for the teacher unfamiliar with group ideas, as it limits the number of students that are included, but incorporates partner games, drills, and to a certain extent, classroom management. In McCain's studio, partner lessons were combined with a weekly group lesson, and sample schedules are provided to clarify the important step of time management. Suggestions for facility improvement and lesson content are also given. The author helps make the process of change from private to group lessons approachable for the independent teacher.

Perdew, Amy, Nadine Cuff, and Karen Johnson. "How and Why Boise Teachers Became Group Piano Teachers." *Roland Keyboard Educator* Vol. 4, No. 2 (Spring,2000): pp.16-19.

The excitement of group piano teaching is captured here by teachers who have made the transition from private to group teaching. Each of the three authors writes insightfully about the concerns and joys asso-

ciated with the development and continuation of a group program. From the inspiration of a group piano workshop through outfitting a studio and scheduling lessons, the teachers illuminate some of the great joys inherent in teaching piano students in groups. As Perdew states, "Any time we share an experience with others it becomes more meaningful."

A teacher's creativity and teaching skills are tested when leading group lessons, and the opportunity to teach in groups adds a spark of newness to even the most experienced teacher's schedule. Classes from preschool music readiness sessions to adult group lessons are mentioned. Students as well as the teachers find joy in studying piano with others, and avenues for expression and motivation which may not be as accessible in private study are opened.

Rowe, Charlotte. "Class Piano Lessons After 30 Good Years." *Clavier* Vol.38 (January 1999): pp.6-7.

This short article chronicles one teacher's switch from private to group teaching 30 years ago. The positive results of this transition will serve as inspiration for those considering such a switch in their own studio. The registration process, scheduling, fees and makeup lessons are explained with ease in a way that can be utilized by other teachers. Lesson content is approached, including work in technique, theory, sightreading, repertoire and improvisation.

Stevens, Kay. "Interaction: The Hidden Key to Success in Group Piano Teaching." *International Journal of Music Education* Vol.13 (1989): pp.3-10.

Interaction at a level perhaps only possible in a group class is the focus of this article. The benefits of such interaction include motivation, social acceptance, "peer learning," cooperation and acclimation to performance situations. The various levels of interaction in a group class are measured in this study, and combinations of teacher and student talk, teacher and student demonstration, and musical responsiveness are examined. Understanding of the various types of communication and levels of learning occurring in the group piano studio may be gained through study of the results of this research project.

Books

Agay, Denes, ed. *Teaching Piano: A Comprehensive Guide and Reference Book for the Instructor.* New York: Yorktown Music Press Inc., 1982.

Volume I of this two-volume set includes an article by Hazel Ghazarian Skaggs entitled "Group Piano Teaching." In this article, Skaggs lists ideas for team teaching, a course of study and activities for group piano lessons, games/rewards appropriate for groups, discipline, and studio equipment for the group classroom. Good lists of the advantages and disadvantages of group study and positive and negative aspects for the teacher are given in the article as well.

Bastien, James W. *How to Teach Piano Successfully*, 3rd ed. San Diego, CA: Neil A. Kjos Music Co., 1995.

This pedagogy text presents what is perhaps the most comprehensive information available about group piano study. Taken into account are multiple levels of group study, issues pertaining to the group environment and student involvement, and examples illustrating the many points made by Bastien. A few chapters in particular focus on the group process. The pages that are the most valuable references for group teachers are pp. 15-16, 30-31, and 82-94.

Pages 15-16 list some considerations for those wanting to teach piano in groups. The questions are intended to provoke thought for the potential group teacher. The teacher is queried as to his or her desire to work with groups of children, ability to organize activities, skill in developing interest in group learning, and belief that students will learn as much in a group setting as they would in private study.

Scheduling issues are explored on pages 30-31. Combination group and private lessons as well as small and large group lessons are explored as viable options in the independent studio. Sample grids illustrate hypothetical time and space arrangements for the studio offering group lessons.

In addition to information on class size, group activities and equipment, Bastien includes a section on music readiness, and invites consideration of yet another possible group class in the piano studio. General music concepts such as the musical alphabet, rhythm, and high and low may be taught prior to serious concentration on the physical aspects specific to piano playing. With this solid foundation of musical knowledge, students may progress more quickly through the beginning stages of piano study. In addition, exposure to the group setting in the form of a music readiness class aids in the adaptation of a student to a group class in piano. Photographs illustrate the activities and use of equipment in a group piano studio.

Clark, Frances. *Questions and Answers: Practical Advice for Piano Teachers*. Northfield, IL: The Instrumentalist Co., 1992.

Clark addresses the subject of teaching methods in her well-known format of questions and answers in this noteworthy book (pages 183-190). Questions posed by teachers range from the topic of group study versus private to discussion of disruptive students in a class setting to repertoire classes as a supplement for private piano lessons.

Enoch, Yvonne. *Group Piano Teaching*. London: Oxford University Press, 1974.

Enoch's chapter on planning the piano group covers the reasoning behind group teaching, the number of pianos and students that are ideal in a group, the number and length of lessons, classroom arrangement, preparation for teaching group piano, and the importance of parental reports. Another chapter that may prove inspirational to the group piano teacher is chapter eight, in which the author offers hints and information to other teachers. This checklist is worth reading frequently, because it contains a number of items for teachers to remember or consider in group teaching. Many of these items are second

nature to the group teacher, but others may need constant notice and work in order to become incorporated in the techniques of the teacher.

Some parts of this book are rather dated. For instance, a disclaimer from the author at the beginning states that she stopped using dummy keyboards since first printing of the book, even though they are promoted as a good teaching tool in the text. Also, chapters covering content of the first lesson, first term, first year and beyond focus on one specific sequencing, which may not coincide with other teachers' philosophies.

Kowalchyk, Gayle and E. L. Lancaster. *Alfred's Basic Piano Library: Group Piano Course, Teacher's Handbook, Books 1-2*. Van Nuys, CA: Alfred Publishing Co., Inc., 1997.

Kowalchyk and Lancaster provide a course specifically designed for group piano instruction. To be noted here is the eight-page supplement in the front of the teacher handbook aimed at dealing with practical issues of group teaching. This same supplement may be found in the front of the teacher handbook to books 3-4 of this series as well.

General information concerning advantages of group teaching (a list of sixteen items), types of groups, equipment needs for large and small groups, the process of grouping students, and scheduling lessons is useful to the independent teacher. Teachers may find the lesson planning segment especially valuable due to its focus on organizing the lesson, classroom management, effective teaching techniques and effective use of technology. The classroom management portion, in particular, emphasizes suggestions for the teacher including the importance of eye contact, benefits of specific feedback, proper balance of talking and playing, inclusion of every student, use of humor, and the need for variety in student tasks. Effective teaching techniques applicable to specific areas like new concepts, ear training, technique, rhythm drills, composition and improvisation, sight reading, and ensemble work direct the teacher's focus in appropriate and creative ways.

Lyke, James, Yvonne Enoch, and Geoffrey Haydon. *Creative Piano Teaching*, 3rd ed. Champaign, IL: Stipes Publishing Co., 1996.

Chapter four of *Creative Piano Teaching* is an essay by James Lyke addressing the issue of private, group, or a combination of both in piano study. Common falsehoods discouraging teachers from teaching in groups such as lack of equipment and emphasis on keyboard skills above performance are addressed and explained. Basic equipment for group teaching is listed in the chapter, and independent teachers may be surprised at the uncomplicated setting in which group piano may be taught effectively. Lyke's list of essentials for a working group teaching situation is worth study by the teacher. Grouping, teaching without "telling," and modeling are among the items isolated by the author as necessities for a well-run group piano class.

The combination approach to piano teaching where private lessons are supplemented with musicianship classes is given consideration as well. Specific guidelines for planning lessons with proper sequencing and content are precise yet helpful to the group teacher. A sample pre-print-

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ed planning form is found at the end of the chapter.

Mehr, Norman. *Group Piano Teaching*. Evanston, IL: Summy-Birchard Co., 1965.

This practical handbook for the group teacher approaches group study on a philosophical and educational level. The first chapter, "The Dynamics of Group Teaching," explores the variables at work in group interaction. Chapter two, "Philosophy and Psychology of Music Education," presents general concepts of learning theory and process. Important ideas concern the need to focus not only on the music but also on the child, and the inherent ability present in every child. Implications for group teaching involve the setting of standards and sequencing of concepts. Chapter three presents a short list of do's for the group piano teacher.

Proceedings from Pedagogy Saturday III. Los Angeles, CA: MTNA National Conference, March 20, 1999.
Available from MTNA.

The topic of MTNA Pedagogy Saturday III, "Three or More: Beyond the Traditional Private Lesson," echoes the emphasis on group teaching in the field of pedagogy. More than 150 moderators and panelists contributed teaching ideas that reach beyond the private studio. Texts of the speakers' and panelists' presentations along with reports of the panel discussions are presented here and display the gamut of pedagogical thinking presently at work in the area of group teaching.

The four chapters in the volume cover "three or more" teaching, pedagogical and practical advantages of group instruction, necessary teaching skills for group teaching, and ways in which teachers may acquire these necessary skills. Necessary skills discussed by the distinguished panelists encompass basic psychological principles, group dynamics, language, lesson design and assessment, learning styles, and personality profiles. Workshop attendance and membership in professional organizations are two highly recommended ways in which teachers may acquire effective group teaching skills.

Robinson, Helene and Richard L. Jarvis, ed. *Teaching Piano in Classroom and Studio*. Washington: MENC, 1967.

Despite its publication date, this resource from Music Educators National Conference is one of the most insightful in terms of philosophy, group management, and principles of good teaching. Some segments of the book deal with group piano in the public schools, but many others are directly applicable to group piano in the independent studio. Five chapters in particular warrant consideration by the group teacher.

Chapter one addresses the educational significance of piano study. Basic philosophical foundations of group instruction are introduced and explained. The aesthetics of music study are also included in this chapter, which may help the beginning group teacher to convince parents of the value of group instruction.

Chapter two contains a fabulous list of advantages of group piano study from an educational viewpoint. Social factors, creative activity

and ensemble experience are all listed as virtues of the group piano class. A concluding paragraph in the chapter links these advantages with recommendations for teachers and parents.

Chapter four examines the qualifications of a good piano class teacher. Knowledge of the subject, ability to organize the subject, understanding of people and some distinct personal characteristics are identified by the authors as important points for the effective teacher. As the authors emphasize, however, some areas of competency may be stronger than others, and group teachers may do a fine job with small weaknesses in certain areas.

Strong recommendations should be made for study of the principles of good piano teaching found in chapter six. Twenty-one principles are listed, and as a group they define the basic tenets of music education and education in general. Among the notable inclusions are the following ideas:

"Ask, rather than tell."

"Give experience before rules whenever possible."

"Relate new material to the familiar."

"Introduce only one or two new kinds of learning at a time."

Chapter eight encourages teacher flexibility and conviction in good group management. Following segments address sightreading, technique and interpretation of piano literature in the group class. Appendix B does a fine job of giving advice to parents on their involvement in their child's musical education.

Thompson, John et al. *Teaching Piano in Classes: Expert Opinions, Plans, and Advice for Practical Teachers*. Philadelphia, PA: Theodore Presser Co, 1932.

This 78-page booklet contains contributions from ten leading pedagogues of the 1930s. Despite its publication date, this resource contains pertinent information on a variety of topics concerning group instruction. Of particular interest are articles by John Thompson ("How to Make the Most of Class Piano Teaching"), Hope Kammerer ("The Piano Class Teacher and the Parent"), Caroline Groll-Verhoeff ("Piano Instruction Problems Solved Through Experience"), Mary Bush Hauck ("Planning a Practical Piano Class"), and Addye Yeagain Hall ("The Conduct of the Piano Class").

In his chapter, John Thompson provides the reader with an overview of attributes and skills necessary for a good group piano teacher, among them a background of knowledge in educational psychology, pedagogy and various methods. Kammerer addresses the parental role in the group lesson, with emphasis on parents' "homework" and the help that parents can give in the lesson and in the home. Groll-Verhoeff writes of her transition from being a studio teacher to becoming a group teacher, incorporating ideas about equipment, studio space and classroom rules that may be of use to the group pedagogue. Hauck lists advantages of class instruction, along with ideas for the number of students in a class, length of the lesson, a model for the development of a group lesson and some particularly interesting general remarks. Hall discusses the teacher's role as the conductor of the musical growth of the class.

Dissertations and Theses

Diehl, Lily Pan. An Investigation of the Relative Effectiveness of Group and Individual Piano Instruction on Young Beginners in an Independent Music Studio Utilizing an Electropiano Laboratory. D.M.A. diss., University of Southern California, 1980.

This research study focuses on the effects of group and individual piano instruction on musical achievement for piano students ranging from the ages of six and a half to nine and a half. Five aspects of musical achievement were measured, including aural discrimination, knowledge of musical symbols, public performance, sightreading and transposition. Out of these five skills, the results in four categories were constant between private and group study. In sightreading, however, the author found a significantly higher level of performance in the students who received piano instruction in groups. Students of the age of eight who studied in groups scored even higher than their private study counterparts in the sightreading portion of the research. In addition, males who studied in groups achieved a significant difference in the category of public performance. This data may serve to direct the independent teacher toward group instruction, with particular emphasis on the development of sightreading skills.

Magrath, Dorothy Jane. An Approach to the Teaching of Theory/Musicianship Classes for the Pre-College Pianist as a Supplement to Private Instruction. D.M. diss., Northwestern University, 1982.

Emphasis on developing basic musical understanding beyond that required to play a given piano piece is the focus in this dissertation. Spiral learning, in which concepts are transferred from the piece in which they were first encountered to other works, is advocated through classes supplementing private piano lessons. A thorough integration of concepts encompassing style, theory, analysis and aural awareness is recommended.

Valuable sources contained in this dissertation include learning objectives, a curriculum and suggestions for teaching the previously mentioned concepts. Procedures and appropriate materials for attainment of these objectives are proposed. Textbooks and workbooks that may be useful to the teacher in a group setting are listed in one of the appendices.

Rogers, William Forrest. The Effect of Group and Individual Piano Instruction on Selected Aspects of Musical Achievement. Ed.D. diss., Columbia University, 1974.

The purpose of this study was to investigate the effects of different modes of instruction on student achievement levels. Rogers measured the students' abilities in aural discrimination, knowledge of musical symbols, sightreading, transposition and improvisation before and after the period of study. Sixty-four students aged 7-9 participated in the study, which took place in a school in Harlem, New York.

Results of the study indicated the group students tested higher in all

five areas of ability than their counterparts who had private instruction. This may be attributed to several factors, including teacher training, peer interaction, supervised practice and more instructional time for the group piano students. Conclusions of the study focus on the greater achievement levels of the group students; no measurable difference was found in students of varying sex or age. An interesting point to note is that participating teachers having experience in both group and private methods unanimously favored group piano over the more traditional private instructional approach.

Shender, Marie. An Evaluation of the Effectiveness of a Group Piano Program using Electronic Keyboard and Computer Technology. Ed.D. diss, Columbia Teachers College, 1998.

This study identifies the educational benefits and drawbacks of a sample group piano program through feedback from students, parents and teachers associated with the program. Parents reported musical growth through the program, and students expressed enjoyment of group activities involving piano lessons, group songs and use of other instruments. High motivation was cited as a benefit, while lack of individualized attention was mentioned as a problem. Competition between students was regarded as healthy because it encouraged students to progress more quickly. Advantages and disadvantages of group instruction are discussed, with recommendations given for students, parents and teachers taking part in piano classes. Integration of technology into the group piano classroom is cited as a benefit, and exposure to musical software in the home is also linked to increased musical growth by the student.

Skiba, Marlene. Foundations of Group Piano for the Independent Teacher. M.A. thesis, Northeastern Illinois University, 1988.

Three main aspects of group teaching are discussed in this scholarly yet accessible work. Group dynamics, the history of group learning and a methodology for developing an effective group program in the private studio serve as the headings for the three sections. Chapters 1-3 focus on understanding the cognitive process, behavioral patterns and ways in which the group teacher can channel competitive and cooperative personalities to provide a conducive learning environment for the students. A great deal of historical background is included in this section. The author deals with the task of explaining the role of the group and the individual's functions within an educational setting. Group cohesiveness is given careful consideration.

Chapters 4-6 contain an overview of the history of group learning. The results of a statistical survey of members of the Illinois State Music Teachers Association are given, and the interpretation of these results is given at a later point in the thesis. A difference in the profiles of the private and group teacher in the independent studio present points to ponder. For instance, results indicate that group teachers tend to be more schooled in the areas of psychology, child development, group teaching and improvisation. They are more likely to have a teaching studio outside of the home, and also may own more teaching aids than the private teacher. Group teachers tend to be more innovative, more achievement-oriented and more interested in group activities in all

Annotated Group Teaching Bibliography

areas of their lives. They incorporate more musicianship classes, improvisation, accompanying, harmonization, ensemble work, theory and ear training into their lessons than does the typical private teacher.

The last section covers almost every notable facet of group instruction of interest to the independent teacher. Topics range from the teacher's personal qualifications to forming and maintaining groups of piano students. Many questions may be answered in this informative third section of Skiba's thesis.

Additional References

Bradley, J. "Ideas for Great Group Piano Classes."

American Suzuki Journal Vol.23, No. 3 (1995): pp.36-37.

Lee, J. "Group Piano Lessons: A Practical Guide." Music Teacher Vol.60 (October, 1981): p.24.

Rose-Joubert, M. "Group Piano Teaching: The Other Side of the Coin – A Personal Experience." ISME (1990): pp.204-207.

Williams, Roderick Rockhill. Group Piano Instruction: Its Relationship to Private Piano Teaching. Ph.D. diss., Columbia Pacific University, 1990.

Installing the USB MIDISport Interface

Because the Virtual MTLC-16 software connects the serial port of the computer with the serial port on the MTLC-16 to synchronize the software and hardware, it is essential that you connect the computer with the teacher's keyboard via a suitable MIDI interface. Since the serial port is already occupied, the practical options are either the parallel (printer) or the USB port. It is strongly recommended that you use the USB port, so you can use the parallel port for printing tasks in your music lab. The Midiman USB MIDISPORT 2X2 interface is recommended, is self-powered, and installs easily. It provides 2 IN and 2 OUT ports, handling all the MTLC/V-MT needs, as well as allowing room for some expansion at a later date.

HARDWARE installation:

(On a PC: You must be running Windows 98 to properly use the MIDISport)

- 1) Attach the MIDISport to your USB port with the standard USB cable included with the MIDISport package.
- 2) A computer USB port is a small (1/8" x 3/8"), rectangular female connector, sometimes found in pairs.
- 3) Insert the male end of the USB cable into the USB port on the back of your computer.
- 4) Take the six-sided end of the USB cable and plug it in to the USB port on the back panel of the MIDISPORT. This male end of your USB cable is almost square (1/4" x 1/4") and should fit into the female USB connector of your MIDISport.
- 5) Power up your computer so you can install the software drivers.

SOFTWARE Installation

- 1) For the hardware to communicate with the software, you need to install the "drivers." A software driver is a special, dedicated program that makes a MIDI interface accessible to a software application.
- 2) The complete instructions are included in a "Read Me" file included on the MIDISport CD-ROM. Read it carefully; the following text is a brief overview of the procedure.
- 3) Double click on the filename to open it. It will guide you through the instructions to properly install your driver software.
- 4) For complete installation instructions, you may also go to the website:

<http://www.midiman.com/manuals/pdf/usb2x2man.pdf>

CONNECTING the COMPUTER to the TEACHER KEYBOARD

- 1) Connect the MIDISport 2X2 to the computer via the USB port, using the cables provided
- 2) Connect the MIDI OUT of the teacher keyboard to the Input-A of the MIDISport with a MIDI cable of appropriate length; the shorter the better for this application.
- 3) Then connect Output-A of the MIDISport 2x2 to the MIDI IN of the teacher keyboard
- 4) Another MIDI OUT—Output-B—can be connected to additional keyboards or sound modules
- 5) Another MIDI IN—Input B—can be connected to an additional controller

IMPORTANT NOTE: To use the MIDISport, the USB/MIDI Thru switch should be in the IN position, so the MIDISport will work as a MIDI interface

Appendix

Using the MIDISport with your MTLC-16

- 1) After the MIDISPORT driver has been installed, you will need to select that interface in the Visual Music Tutor (V-MT1) software.
- 2) Open the V-MT1 software and navigate the File menu until you see the Options menu
- 3) Use the Options menu to pull down the Connection Setup option
- 4) Then proceed with the selection until you have selected the INput as MIDISport 2X2 and the OUTput as MIDISport 2X2, taking care to select the options that correlate with the MIDI cables and connections that you have made
- 5) Now you can record class examples, print them out, as well as illustrating touch and duration in the Rehearsal window (F3)

JLCooper Electronics Limited Factory Warranty

JLCooper Electronics ("JLCooper") warrants this product to be free of defects in materials or workmanship for a period of 12 months from the date of purchase.

This warranty is non-transferable and the benefits apply to the original owner. Proof of purchase in the form of an itemized sales receipt is required for warranty coverage.

To receive service under this warranty, customers in the United States should contact the JLCooper factory at (310) 322-9990 and talk to a service technician.

If necessary, a Return Authorization number may be issued.

For our customers outside the United States, it is recommended that you first contact your Dealer or Distributor, since they may offer their own service or support policy.

If local support is not obtainable, please send a FAX to JLCooper's Service Department at (310) 335-0110, with a detailed description of the service required.

Upon issuance of return authorization, the product should be properly packed and shipped to Service Department, JLCooper Electronics, 142 Arena St., El Segundo, CA 90245.

Please include the following: copy of the sales receipt, your name and address (no P.O. Boxes, please), a brief description of the problem, and any other related items discussed with the service department and considered necessary to evaluate the product or effect a repair. The return authorization number must be clearly written on the outside of the package.

JLCooper will, without charge for parts or labor, either repair or replace the defective part(s). Shipping costs are not covered by this warranty.

JLCooper's normal repair turn around time at the factory is approximately 15 business days, from receipt of product to shipping. Your actual turn around time will include return shipping.

Actual turn around time will vary depending upon many factors including the repeatability of the customer's reported complaint, the availability of parts required for repair, the availability of related products needed to evaluate the product if necessary.

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