Software

presents...

Micro! Deluxe

version 1.0

by Adrian B. Danieli
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Features

Beautiful 3-D, animated graphics which fully exploit the VGA's 256-color palette.
Large 4-way scrolling playfield.
20 levels of play in the shareware version, 80 in the registered version.
Intuitive joystick & keyboard controls.
Music support:
- Roland LAPC-I / MT-32 (or compatible).
- General MIDI (MPU-401 compliant).
- FM synthesis (Adlib or compatible).

Sound support:
- Sound Blaster (or compatible) digitized effects.
- Roland LAPC-I / MT-32 (or compatible).
- FM synthesis (Adlib or compatible).
- PC speaker.

Easy-to-use installation and setup program.

Requirements

286 (or higher) CPU required.
VGA card.
hard disk with 1.5 MB of disk space free.

Recommended

fast 386, 486, Pentium (or higher) CPU.
fast VGA card.
Roland LAPC-I / MT-32 (or compatible) for music.
Sound Blaster (or compatible) for digitized sound effects.

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(1.0) Objective

The object of this game is to eliminate all the spheres in the playfield by redirecting a single laser beam. You control Micro -- a cute, purple ball. By rotating and moving mirrors, pushing obstacles, and throwing switches, you'll help Micro advance through many levels of unique puzzles that range in difficulty level from the intuitively obvious to nearly impossible.

Each level has a required number of spheres you must destroy in order to proceed to the next level. Often, there are more spheres on the screen than required. Destroying all the spheres can be a very challenging task even for a quick, perceptive player (like yourself).

Users who have purchased the registered version of this game receive an additional 60 levels of brain-teasers and a level designer which allows them to create and play their own puzzle sets.

(2.0) Installation / Setup

First, run the installation program: **MINSTALL** (from a floppy or hard disk). This program will copy and decompress the game files to your hard disk in a directory you specify ("C:\MICRODLX" for example). The file MDLXSHAR.CQZ (or MDLXREGV.CQZ in the registered version) must be in the same directory as the MINSTALL executable file.

Once installation is complete, you should be in the newly-created directory we have made for this game. You will have to change to this directory each time you wish to play. Now run the setup program to configure the game: **MSETUP**.

The following music configurations are supported:

None -- if you don't own a music card or don't want music
Roland LAPC-I / MT-32 sound module (or compatible)
General MIDI (MPU-401 compliant)
FM synthesis (Adlib or compatible)

The following sound configurations are supported:

None -- if you don't want any sound effects
Sound Blaster (or compatible) single-channel digitized sound
Sound Blaster overlapping, digitized sound effects (for fast computers)
Roland LAPC-I / MT-32 sound module (or compatible)
FM synthesis (Adlib or compatible)
PC speaker

If you own a joystick, make that selection from the controller menu. The program will now calibrate your joystick: simply hold the joystick in the direction asked and press and release a button. *Note: Many computers have turbo switches. Be sure that*

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the speed the computer is running at when you calibrate the joystick is the same speed at which you play the game. This is because the joystick routines are time-sensitive.

Once you have configured the game, select the save and exit option from the main menu. You are now ready to play the game.

(3.0) Starting the Game

Change to the directory on your hard drive which contains this game (for example CD \MICRODLX), then run: **MICRODLX**. The game title screen followed by the main menu should appear. If the game crashes, or if the sound output sounds messed up, your sound/music card settings are most likely invalid. Rerun the setup program and check all the settings. Make sure everything is correct, then try to execute the game again. *Note: This game may not run correctly from within Microsoft Windows on slower systems, this includes the DOS prompt. It is suggested that you exit Windows completely to play the game.*

(3.1) The Main Menu

There are five (5) options on the main menu: Begin Play, Level Designer, High Scores, How to Play, and Exit. The Begin Play selection is explained below, the Level Designer is described in detail later on in this document.

The High Scores option displays the top five players for each level in the current puzzle set. Usually the current puzzle set will be the "normal" puzzle set, however if you are using the registered version, the high scores file of the last puzzle set played will be displayed.

The How to Play option is a brief overview of the game. It should be enough to get most people started. Reading the full documentation is recommended, however. (But we don't have to tell you that!)

The Exit option should be self-explanatory.

(4.0) Begin Play

At this sub-menu you can select the puzzle set type you wish to play. The normal puzzle set is found in both versions of this game and contains 20 different levels. Registered users have access to the registered puzzle set which includes an addition 60 levels of play, as well as custom puzzle sets which you or other registered users have created.

(4.1) Skipping Levels

Each puzzle set can contain up to a maximum of 99 levels. You may skip levels in a puzzle set by entering the appropriate skip code. After successfully completing a level, you are often given the level skip code. This code will allow you to skip over levels you've completed in the past and get right back to where you left off (or got stuck) last time. Not all levels have skip codes! The decision to include a skip code is left up to the sole discretion of the person designing the puzzle set. All levels found in the normal and registered puzzle sets include skip codes.

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(4.2) Level Information

The pre-level screen contains the following information about the level: the person who designed the level, the level number, the level name, the number of spheres in the level, and the number of spheres required to complete the level. The name of the level's author scrolls by quickly before the actual level-info screen. If this level has been created by a member of the Acumen Software development team, the words "Acumen Approved" will appear below the author's name. This is merely a way for you to distinguish between custom puzzle sets made by other users and our own.

(4.3) Game Controls

Either the keyboard or the combination of a joystick and the keyboard may be used to play this game. You maneuver Micro by pressing the arrow keys or pushing the joystick in the direction you want to walk. The spacebar (or joystick button) is the action key. You can rotate mirrors, turn the laser, or flip a switch by facing the appropriate object and pressing the action key.

Pressing F1 will display a short help box containing keystrokes and their respective action. They are:

F1	Help
F2	Sound on/off
F3	Music on/off
F4	Next song
F	Fire laser
S	Scan mode
M	Display level map
I	Object info
ESC	Abort level

The level map displays a condensed image of the entire level and is very useful in planning your strategies before you actually start moving things. Scan mode allows you to scroll around the playfield quickly without moving Micro. The "F" key fires the laser. Do this only after you've successfully solved the level -- you've only got one chance, so if it doesn't work, it's back to the beginning of the level! Object info displays the name of the object Micro is currently facing (including floor tiles).

The special function keys are self-explanatory. If you don't have the game set up for sound effects, F2 won't work. Likewise, if you don't have the game set up for music, F3 and F4 will not work. Go figure.

Note: If you find that you are unable to complete a level, you can abort it by pressing the ESC key and then restart it from the beginning.

Additional note: After firing the laser by pressing "F", you can increase or decrease its speed by pressing the "+" or "-" keys. Four possible laser speeds are available, the slowest one is used by default.

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(4.4) Floor Tiles

There are 13 floor tile types in this game, separated into two basic categories: low-friction and high-friction. Micro can walk over any floor tile, but he cannot push mirrors or blocks over high-friction surfaces. Low friction tiles have a singular grey shade (light or dark), and occasionally have arrows or a square design on their surface. High friction tiles are comprised of many different shades of white and grey; the direction of the shading is irrelevant.

(4.5) Game Objects

Micro — Our picture-perfect, purple-skinned, blue-eyed hunk of spherical muscle. He can push mirrors bigger than himself, rotate lasers with ease, and flip switches effortlessly. A word of advice: Micro makes a better door than a window -- don't let him get hit by the laserbeam!

Spheres — These come in two flavors: blue and green. In order to be destroyed by the laser, spheres must be BLUE! Use switches to change their colors. You cannot move the spheres (the idea is to bring the laserbeam to them). Green spheres will block the laserbeam.

Switches — There are two settings for each switch: blue and green. A switch can be "linked" to one or more objects on the playfield, and will have the following effect depending on the object: spheres will change from blue to green or green to blue; and mirrors, tubes, and blocks will change from a blue shade to a purple shade (or vice-versa). Switches will block the laserbeam.

Laser — As its name implies, this is the source of the laserbeam. There is only one laser per level, and Micro can't move it. He can, however, turn it to point in any of the four directions. Press the "F" key to activate the laser. If the laserbeam loops around and hits the laser, the beam will stop -- the source has been destroyed.

Mirrors — Mirrors come in two varieties and four orientations: blue/purple, and up-left/up-right/down-left/down-right. Mirrors with blue trim can be turned from left to right by Micro (not up and down), purple ones cannot be turned. Mirrors redirect the laser beam (duh!).

Tubes — Tubes come in two classic colors and two orientations: blue/purple, and vertical/horizontal. Blue tubes can be rotated by Micro, purple one cannot be rotated. If the laserbeam is traveling left or right, it may pass through the tube if it is in a horizontal orientation, but it will be blocked if the tube is in a vertical orientation. Similar when the beam is traveling up and down...

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Blocks	There are two "block" types: one large block that obstructs the laserbeam, and four small blocks through which the beam can pass in between. Also, blocks come in two colors (you guessed it: purple and blue). Purple blocks are fixed; Micro cannot move them. Blue blocks are movable.
One-way Mirrors	Similar to real one-way mirrors where you can see through one side but not the other, these objects only allow the beam to pass when entered from the green end. Micro can push these objects, but they cannot be rotated.
Beam Splitters	Beam splitters divide the beam into two orthogonal beams. That is, if a beam enters a splitter from the bottom OR top, the two resulting beams will travel left AND right. The beam must enter from the green end. Micro cannot rotate these objects, but he can move them.

(4.6) End of Level

At the end of the level a status screen appears displaying the level number, the level name, the total number of spheres found on the level, the number of spheres required to successfully complete the level, the number of spheres you hit, and the total time it took you to play the level. Additional comments will tell you if you reached the goal (yeah!) or, if not, what happened.

Upon successfully completing a level, the level skip code will appear if the puzzle set designer has included one. High scores for each level are ranked by the number of spheres hit followed by the fastest time (for example, someone who hit 10 spheres in 3 minutes would be ranked lower than someone who hit 11 spheres in 30 minutes). You have the option to replay the last level again for a better time if you wish.

Note: You may repeat any level any number of times. If at first you don't succeed, try and try again. There's no losing!

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(5.0) Level Designer (registered users only)

This designer was created to make it very easy for you to get your puzzle idea into a real level quickly without mastering a difficult interface. You'll find the level designer is well designed and aesthetically pleasing -- not a programmers-only level-hacking tool. Every level distributed in the registered and shareware versions of this game was created using this same tool.

Basically, the screen is broken up into two parts: the large top section contains a downsized view of the entire level (an 18x14 grid), the bottom section contains the current menu and options. In addition, basic instructions can be found to the right of the grid. Each of the three menus (Piece, Level, and File) are described in detail below.

(5.1) The Piece Menu

This is the default menu and can also be selected by pressing the letter "P". This menu contains the 49 pieces which are used in the game. The top row is dedicated to floor tiles: 7 low-friction and 6 high-friction. The other two rows contain the two spheres, the four laser orientations, all the mirror types & orientations, tubes, blocks, one-way mirrors, beam splitters, the two switch types, and four striking poses of Micro.

Use the arrow keys (or joystick) to find the piece you want to place on the playfield. Press ENTER or the SPACEBAR to select it. Now the placement box jumps to the playfield grid. Again, use the arrow keys to find the spot where you want the piece to go. Press the SPACEBAR. You can continue placing this same piece as many times as you wish. Press the ENTER key when you want to jump down to the piece menu.

(5.2) The Level Menu

This menu's selections allow you to enter the level's name, enter your name (the author), view the number of spheres required to complete the level, view the skip level code for this level, edit switch links, or view current level statistics (including any warnings and/or problems). Select this menu by pressing the "L" key.

The level's name and the author's name can contain any alphanumerical characters, but are limited to 30 characters each. Pressing ESC while entering text will erase whatever has been typed; ESC again will abort the selection.

The number of spheres required must be a number between 1 and 99 (inclusive).

The skip level code can be any 4-digit number. Pressing ENTER without entering a number will result in NO skip code for this level.

The "edit switch links" selection allows you to attach or link certain objects to a switch. There must be switches already placed in the level before you can use this option. The interface is the same as placing a piece: position the cursor over the object you wish to link. If it is a valid object (i.e. it is linkable, only spheres, mirrors, tubes, and blocks are) the display will prompt you for a number. You'll notice that each switch has a number overlaid on top of it; use this number when linking an object to a certain switch. If you press the SPACEBAR, the link for the current piece will be removed. Press ENTER when you're finished. *Note: Replacing an object that is linked will remove the link completely (changing a blue sphere to green for example). Also, replacing a switch with another object (except another switch) will destroy ALL links that switch had.*

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The statistics screen displays all the information about the level you're currently working on: it's name, the author's name, the level code (if any), the number of spheres in the level, the number of spheres required, the number of switches, and any warnings or problems. The program checks the current level to make sure it is playable. If it is not, errors (or warnings) will be displayed. Here are the level-creation rules:

There must be one and only one Micro per level.
There must be one and only one laser per level.
There must be at least one sphere per screen, but no more than 99.
The number of spheres required must be equal to or less than the total number of spheres on the level.
Blue spheres and green spheres cannot be linked to the same switch.
No more than 9 switches are allowed on each level.
No more than two beam splitters are allowed per level.

Once all these rules have been met, the level "should" be playable. The program cannot guarantee this, however, since the level itself may contain logic faults -- there may be no way to complete it successfully. How can this happen? Well, you could design a level with a laser, spheres, and Micro... all appears well. But, you trap Micro in the corner behind immovable blocks with no means of escape. Therefore, no one can get past this level. This is why it is VERY important to ALWAYS test your levels before saving them in a puzzle set to distribute later.

Note: You can save an unplayable level (if you're in the middle of designing it and you have to stop), however, the game will skip over it if you decide to play the puzzle set until everything is fixed.

(5.3) The File Menu

The file menu is accessed by pressing the "F" key. There are six options available: Clear/New level, Load a level, Save this level, Delete a level, Test this level, and Exit.

The clear/new level selection clears the playfield grid. If you have changes since your last save, you are asked to make sure you really want to do this.

To load an existing level, select the load option. You will be presented with a list of puzzle sets found in the current directory (if any). Use the arrow keys to select a puzzle set (pressing "M" will skip to the next screen if all the levels can't fit on one screen). Next, the level names will appear. The current level number and it's skip level code (if it has one) will be displayed. If the level is unplayable, a red asterisk will appear to the left of the level name. Use the arrow keys to select a level, or "M" to see more screens. Pressing ESC at any time will abort the load.

After pressing the save option, the statistics screen found in the Level menu will again appear. You will be told if the level will be saved as playable or unplayable. After pressing a key, a small menu will appear with three options: (M)odify an existing puzzle set, (C)reate a new puzzle set, or (Q)uick save in *last puzzle set* as *last level number*. The Quick save feature will only be active if the level you're working on was retrieved from an existing puzzle set. Hit the appropriate letter to advance. If you chose create a new

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puzzle set, you'll be prompted for a legal DOS filename (8 characters maximum) followed by a longer puzzle set name (30 characters maximum). If you chose to modify an existing puzzle set (i.e. add/replace a level) you'll have to select a puzzle set as described above in the load option. Now, a list of levels will appear. If you wish to replace a level, select that level number and hit the "R" key. If you wish to insert this level before or after an existing level, select the appropriate level number then hit the "B" key for before, or "A" key for after. The level will then be saved. *Note: a maximum of 99 levels can be saved in any one puzzle set. If there are already 99 levels in a puzzle set, you'll only be able to replace an existing one.*

The delete level option is very similar to the load option with the obvious difference in that you're deleting a level, not loading it.

To test out the level you're currently designing, choose the test level selection. Again, the statistics screen will appear telling you whether or not the level is playable. If it is, you will jump into game mode. The only difference is that no level information is displayed.

When you wish to exit the level designer, select the exit option or hit the ESC key from this menu. Hitting ESC from any other menu will being you to the file menu.

That's all!!! Now get out there and start making some REAL levels. Feel free to send us some of your best work (sorry we can't return disks without postage). Remember, custom puzzle sets can be distributed freely. However, only registered users can play them so tell all your friends to register if they want to play 'em. Or, invite them over your house, but DON'T give them a copy of the registered version... how would game companies succeed if you did?!?

Thank you!

Adrian B. Danieli
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(6.0) How to Order

You can order the full version of this game which includes 60 additional levels, access to custom puzzle sets, and the ability to design your own -- for only $12.00. If you would also like a printed copy of the game's postscript manual, send $15.00. Please read ORDER.TXT for details. Make checks or money orders payable to Acumen Software and send to:

Acumen Software
404 Stone Church Road
Tiverton, RI 02878-2813
U.S.A.

Note: We can only accept checks drawn on U.S. banks in U.S. funds. Sorry, we cannot handle credit card orders at this time.

(6.1) How to Contact Acumen Software

U.S. Mail:
Acumen Software
404 Stone Church Road
Tiverton, RI 02878-2813

Internet E-mail:
adrian@mit.edu

World-Wide-Web:
http://www.mit.edu:8001/afs/athena.mit.edu/user/a/d/adrian/www/acumen.html

Due to our busy schedules, the possibility of a delayed response should not be unexpected. Thank you for your patience.

(6.2) Legal stuff

Acumen Software reserves the exclusive copyright to this program. This version replaces all previous versions, which are now withdrawn from shareware. This program is provided "as-is". No warranties of any kind, express or implied, are made as to it. We will provide no remedy for indirect, consequential, punitive or incidental damages arising from it, including such from negligence, strict liability, or breach of warranty or contract, even after notice of the possibility of such damages.

(7.0) Credits

Original game idea	Adrian B. Danieli
Game design / implementation	" " "
Graphics system programmer	" " "
Font	" " "
Raytraced sprites	" " "
Backgrounds & other stuff	" " "
Sound system programmer	" " "
Digitized sound effects	" " "
FM synthesis effects	" " "
Roland LAPC-I / MT-32 effects	" " "
PC speaker bloops	" " "
Music system programmer	" " "
Acumen Theme Song	" " "
Micro Theme music	" " "
Magnetic Mind (end puzzle set music)	" " "
Selections from the Nutcracker	Tchaikovsky
Controller interface programmer	Adrian B. Danieli
Setup & Installation programs	" " "
Documentation	" " "
Assistance	Brian A. Zabel
Puzzle sets and levels	Adrian B. Danieli
	Brian A. Zabel
	Alexis M. Danieli
Alpha Tester	Brian A. Zabel
Beta Testers	" " "
	Tommy Ng

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