



Contents

[Introduction](#)

[Hardware Requirements](#)

[Object of Game](#)

[Play Instructions](#)

[Play Tutorial](#)

[Menu Reference](#)

[Toolbar Reference](#)

[Status Line Reference](#)

[Puzzle Design](#)

[Game Piece Design](#)

[Registration Info](#)

[Future Enhancements](#)

[Contributing Puzzles / Pieces](#)

[Technical Support](#)

[Permission to Copy](#)

[Disclaimer and Warranty](#)



Introduction



Version 1.0

Combine 'Em 1.0 is being released as Shareware. If you enjoy this game and plan to continue using it, you must pay the registration fee to the author.

Registering may be the only way to obtain future updates and new puzzle disks.



Object of Game

Combine 'Em is a single-player puzzle game. The object is to eliminate combiner pieces, thru combination or some other method, until there's only one combiner piece left. You'll do this by sliding the pieces into each other and possibly blowing up walls or extra pieces that may be in your way. All the puzzles are "external" to the game, too, so you can easily design puzzles and share them with others.



Play Instructions

Pieces

There are three basic types of pieces used in Combine 'Em -- the Combiners, the Blockers, and the Bombs.

Combiners



This is a small sample of the Combiners. There can be up to 12 levels, A thru L, with up to six pieces stored in each (as indicated by the small number in the lower right corner of the piece)

Blockers



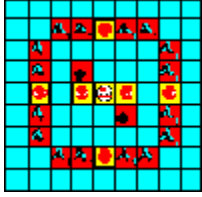
There are two types of blockers. The first one, pictured on the left, is a standard blocker. It can't be moved and won't combine with anything. However, it can be destroyed by a Bomb. The Bomb Proof blocker, pictured on the right, can't be moved, won't combine, and can't be destroyed. Bomb Proof blockers are on the board for the duration of the puzzle.

Bombs



The Bomb, illustrated to the left, can be used to eliminate most pieces (except the Bomb Proof Blocker). If a bomb is pushed into a standard blocker, a Combiner, or another bomb, both will be destroyed. The Bomb will not be destroyed if a Combiner is pushed against it. The bomb itself must be in motion to be activated. Furthermore, the edges of the game board and the bomb-proof blockers are padded. Bombs pushed against them will stop, but not explode.

Game Board



The Game Board is a simple grid, with a maximum size of 50x50. The actual size can change from puzzle to puzzle. A sample 9 by 9 board is shown here.

Moving Pieces

The Bombs and Combiners can be moved. To move a piece, there must be an open block opposite the direction of motion to allow you to push the piece. There must also, of course, be somewhere for the piece to go. For example, if you want to move a piece up, there must be an open square below and an open square (or combinable piece) above.

As you move your mouse cursor along the game board, it'll change between an X, a slashed O symbol (NOT), and an up, down, left, or right arrow. Whenever the cursor is over the out-of-bounds edge of the board, the cursor will be an X. The NOT symbol will appear whenever the cursor is over any piece on the game board, indicating that you can't push from that square. When the cursor's over an unoccupied square, it will become an arrow reflecting the current direction of push. When near the right side of the square it'll be a right-pointing arrow, when near the top it'll point up, etc. To push, simply make the cursor point in the desired direction and click. If there's a movable piece on that side, it'll get a push and move.

The distance the piece moves will depend on the puzzle. Each puzzle has a built-in maximum distance. Pushing a piece on a wide open board will move the piece the maximum distance. However, the piece will stop early if it hits a wall or another piece.

Combining Pieces

Only pieces on the same level will combine. To combine them, simply slide one piece into another. When a moving piece hits a combinable piece, it'll be absorbed into the combinable piece and the combined piece will stop. The resulting piece will be the total of pieces in the original pair. For example if an A3 combines with an A2, the resulting piece will be an A5.

If the newly combined piece is at or above the threshold necessary to advance in level, one unit of the next level will be created. Using the above example, if the threshold was 4, a B1 piece would be generated instead of the A5. Note that in this case there's a net loss of one A level piece since an A2 and an A2 would also produce a B1. This may or may not be desirable, depending on the puzzle. Some puzzles may purposely contain extra pieces. The only way to solve such a puzzle may be to "lose" the extra pieces thru this type of lossy combining. Remember that the objective is to end up with exactly one combiner of any type on the board. Whether you get rid of combiners thru combination, lossy combination, or explosion doesn't matter -- and there

could be several ways to accomplish the objective

As with the slide distance, the number of pieces required by each level for promotion will change with the puzzle. Furthermore, a puzzle can use different thresholds for each level. For example, within a given puzzle, it may take only two A's to create a B but four B's to create a C.



Play Tutorial

In this tutorial, I'll attempt to point out how some of the previously discussed pieces and functions are used while solving an actual puzzle. This is a simple puzzle with several possible solutions. I'll illustrate just one.

To begin, start Combine 'Em (if not already running). A very simple default puzzle will be loaded. We'll use this one for the tutorial

If you're not happy with the window size, you can resize it in the "usual" way. The board will grow or shrink as necessary to remain square and fill the window.

Move your mouse cursor over the window and note how the cursor changes depending on where you are, as discussed earlier. You should now experiment with the mouse to become familiar with how the arrows change, depending on where the cursor is over an empty block. Once you're comfortable with getting the arrow pointed in the direction you want, you can safely proceed with this tutorial.

Let's analyze the board for a moment. There seem to be 16 A level components, and all contain one piece (A1). There are also a few blockers, a couple bombs, and one bomb-proof blocker in the center.

A glance at the Puzzle Stats screen tells us that two A's are required to make a B, two B's are required to make a C, and four C's are required to make a D. If everything combines, those 16 A's will create eight B's. The eight B's should then combine into four C's. The four C's should combine into one D to solve the puzzle. It seems that, for this puzzle, we have exactly the right number of pieces. We shouldn't have to get rid of any extras.

Let's start by creating B's. First, slide the left-most A in the top row to the right. That'll create a B1. Then, keeping the mouse over the same empty square, slide the A directly below it down. This'll combine it with another A and create a second B. Do the same type of thing in all four corners of the pattern, creating eight B1's against the blockers.

Now, let's experiment with the bombs a little. We really don't need them to solve this puzzle, but it doesn't hurt to play. Slide the upper left bomb down and note that it and the blocker below it disappear. Then slide the lower right bomb up to remove it and the blocker above it

Next, let's create the C's. First, slide the B's on the left to the right completely across the board to combine with the B's on the right. Since this puzzle limits motion to one block per push, you'll need several pushes to move the B's across the board. To finish creating C's, slide the top B's down to combine with the bottom ones. You'll now have four C1's

The final step is to simply combine all four C's into one D. There are, again, several equally acceptable ways to do this. My way is as follows: First, slide the two right C's to the left two blocks each. Then, slide the top C down into the center C to

create a C2 and slide the new C2 down into the lower right C to create a C3. Finally, slide both bottom C's down one notch and slide one sideways into the other to create a D1 and solve the puzzle.



Menu Reference

File...

Restart Puzzle

Resets board to the initial setup for the current puzzle

Load Position

Loads a partially-solved puzzle saved with the Save Position command

Save Position

Saves the current partially-solved puzzle

Load Puzzle

Loads a new puzzle file

Exit

Exits Combine 'Em

View...

Toolbar

Shows or hides the Toolbar

Status Bar

Shows or hides the Status Bar

Settings...

Sound

Turns on or off the game sounds.

Help...

On-Line Manual

Starts the on-line manual

Game Details

Displays slide distance and all promotion levels for the current puzzle

About Combine 'Em

About screen!



Toolbar Reference



Load Puzzle

See File... Load Puzzle menu selection



Restart Puzzle

See File... Restart Puzzle menu selection



Exit

See File... Exit menu selection



On-Line Manual

See Help... On-Line Manual menu selection



Registration Info

The registration fee for combine 'Em is \$20 US. Payment must be in US funds. Canadian checks are acceptable. However, European registrations must be accompanied by payment in either US currency or a check drawn on a US bank. Eurocheques or checks drawn on overseas banks can't be accepted.

When you register, you will receive a registered copy of the latest version of Combine 'Em without the "annoyance" screens. The version that you receive will probably be later than the shareware version, since I intend to release the latest and greatest only to registered users.

Once registered, you can purchase puzzle and piece library disks as they become available. The current cost is \$3 per disk. All shipments will be on 3.5" high density disks. 5.25" and low-density disks will not be available.

Upgrades will be available to registered users inexpensively. The exact price will be determined by the number of disks required for the upgrade, since much of the upgrade fee goes toward producing and shipping the disks.

Non-registered users will be on their own to find and acquire any upgrades to the shareware version or any component libraries that they may want. I will not under any circumstances ship disks to non-registered users!

Registered users of any of my other products (currently Mah Jongg -V-G-A-, Mah Jongg / Windows, Laser!, Perfect Fit, and TrainSIM) can register Combine 'Em and have all privileges of registration for the "preferred customer" price of \$14. If you request this discount registration, please include the name and serial number of the game that you've already registered. To be sure that only registered users are taking advantage of this offer, I will verify all registration claims and return all questionable discount registrations.



Future Enhancements

These are some ideas I have for new features in future versions of Combine 'Em. If you have any other thoughts on what I can add to improve the game, I'd love to hear them!

Please note that this is an "ideas" list only. I make no promise or guarantee that any of them will make it into the next version, nor that there will even be a next version. That entirely depends on registrations. If it's financially worth my while to upgrade Combine 'Em, I most certainly will. On the other hand, if nobody seems to like this game (and I measure "like" by "registrations"), I can't afford to spend the time on an upgrade. I'll be too busy working on a new and hopefully more profitable product.

The first thing I'd like to add is a puzzle editing mode to let you simply click on squares of an empty board and choose a piece to place there. While the current text-editor game design method works, it's certainly not easy!

I also think there's room for a wider variety of pieces, like one-way gates, slippery squares, braking squares, teleporters, and so forth. Any thoughts on this would be appreciated!

It may also be interesting to add some animation for sliding, exploding, combining, and so forth. It won't do anything to the game play, of course, but it may be fun to look at.



Game Piece Design

The game piece file is a standard Windows bitmap. File DEFAULT.BMP contains the bitmap used for the default pieces. The pieces are 70 pixels per side, with a one pixel spacer between them. Once you understand the game, how it operates, and what the default pieces look like you should look at the DEFAULT.BMP file. The layout is so simple that this is pretty much all the explanation you'll need. In fact, because the grid is already laid out, this is the perfect template to use when designing your own pieces.

The file must be saved as a Windows bitmap file. You can use any suffix. You can also use any color depth, from 16-color up to and including 24-bit true color. However, true color piece files will only work properly on PCs equipped with true color graphics cards. For the best compatibility, I recommend that you save piece files as 256-color bitmaps..

To use a piece file, it must be specified in a puzzle file (see Puzzle Design chapter), since only puzzle files can be loaded. Also, if you distribute copies of a puzzle that uses a special piece file, be sure to include a copy of the piece file.



Hardware Requirements

Combine 'Em is a 16-bit Windows 3.1 application. It requires at least Windows 3.1, but should also work fine with Windows '95. The default piece design use only the standard Windows colors, so it will work with any video setting from 16-colors on up. Custom piece designs will probably be done in either 256-color mode (requiring a 256-color or better graphics card) or true-color mode (requiring a true-color graphics card). The pieces will scale for any resolution, although the piece size has been optimized for 800x600 or 1024x768 resolution. Running at 640x480 will result in lower graphics quality. Higher resolutions, while the pieces will scale larger to fit, won't improve the appearance.

For sound, any Windows .WAV compatible sound card should work fine. All the music is in .WAV format, so MIDI support isn't required (at least not for this version).

A mouse (or reasonable facsimile thereof) is also required, of course.

No special CPU is required. If your computer can run Windows reasonably well, it'll have no trouble with Combine 'Em.



Puzzle Design

Overview

The Combine 'Em puzzles are simple text files. This allows you to modify puzzles or create completely new & different ones with any text editor. I'm not going to provide a tutorial on editing text files here -- it's a common function way beyond the scope of this manual. If you don't yet know how to use EDIT or Notepad to edit text files, you should find adequate instructions in the DOS manual, the Windows manual or just about any one of the zillions of DOS & Windows books on the market. What I'll do is assume that you know how to create or edit a file and simply describe what needs to be in that file.

The puzzle files consist of a series of section headers enclosed in square brackets such as:

[FILES]

followed by one or more variable assignments such as:

BOARDSIZE = 10

Since most of the variables will need to be set for each game, the easiest way to create one is probably to load any existing .CEG puzzle file and make changes, additions, or deletions to it. When finished, the file must be saved with the .CEG suffix

The rest of this section will consist of a listing of the various section headers needed, the various variables that can be used in each section header, and exactly what they mean.

In the following variable assignment statements, I'll use the following substitutions:

nnn = any integer number

[1, 2] = Any one of the possibilities listed within the brackets and separated by a comma, without the brackets or comma. A 1 or 2, in this case

text = Some string of text, as described for that variable

filename = some valid path and/or file name. If a path isn't included, the file must be found in the same directory as the .CEG file (the most generic and preferred way to design puzzles).

[FILES] Section

General

The [FILES] section lists which additional files are used by this .CEG puzzle file. For this version, only a new piece file can be specified (see next section on creating a new piece file). However, future releases may allow for the various sounds (move, combine, explode, etc.) as well as backgrounds and animations/videos to be specified on a puzzle-by-puzzle basis. This will eventually let you put together a complete puzzle

package with all the pieces, backgrounds, sounds, etc. for that puzzle (or group of puzzles) based on one central theme.

PIECE = [DEFAULT, filename]

The PIECE variable lists which piece file to load for this puzzle. The key word DEFAULT will load the A-L file illustrated in this manual and used by the default game. If a piece file name is specified, that file will be loaded

[SETTINGS] Section

BOARDSIZE = nnn

BOARDSIZE specifies the number of horizontal & vertical blocks on the game board. The board is always square. You can specify a board of up to 50 blocks per side.

BACKCOLORRED = nnn

BACKCOLORRED, when combined with BACKCOLORBLUE & BACKCOLORGREEN, specifies the red, blue, and green color levels, respectively, of the board background. A value of zero turns off the color, while a value of 255 turns it on full. If all three are set to 255, the board is bright white. All three set to zero will result in a black board. Any color can be created by mixing the appropriate amounts of these three colors.

BACKCOLORGREEN = nnn

See the BACKCOLORRED description.

BACKCOLORBLUE = nnn

See the BACKCOLORRED description.

LINECOLORRED = nnn

LINECOLORRED, when combined with LINECOLORBLUE & LINECOLORGREEN, specifies the red, blue, and green color levels, respectively, of the grid lines drawn on the board. A value of zero turns off the color, while a value of 255 turns it on full. If all three are set to 255, the grid lines are bright white. All three set to zero will result in black lines. Any color can be created by mixing the appropriate amounts of these three colors. Setting these values the same as the BACKCOLOR values will result in invisible grid lines

LINECOLORGREEN = nnn

See LINECOLORRED description

LINECOLORBLUE = nnn

See LINECOLORRED description.

PROMOTIONmm = nnn

This special command is really twelve commands in one: PROMOTION01, PROMOTION02, ..., PROMOTION12. It sets the point at which each level will promote to the next. For instance, if PROMOTION01 is set to 4, four A's will have to be combined to promote to a B. If you don't specify a promotion point for a given level, it will default to 2.

SLIDELength = nnn

This variable sets the maximum slide length for the puzzle.

[LAYOUT] Section

General

The Layout section describes which piece types are where at the start of the puzzle. All the statements in this section are of the form COMMANDhhvv. COMMAND is replaced by some key word describing what's being set as explained below. The hhvv represents two two-digit integers specifying the horizontal and vertical coordinates of the grid location being set. For example, to put a blocker in the upper left corner, the command is BLOCKER0101 = 1. To put a level 2 piece next to it horizontally, the command would be LEVEL0102 = 2.

BLOCKERhhvv = 1

Places a standard blocker on square hh, vv.

LEVELhhvv = nnn

Places a Level nnn piece on square hh, vv. When you set a Level on a square, you must also set an increment. Failure to set an increment will place a Level nnn piece of size 0 on the board. This is an absolute error in game design which may cause Combine 'Em to terminate abnormally at worst or behave strange at best. Be sure to read the section on the INCRhhvv instruction below, as well as the Puzzle Design Consideration section later in this chapter.

INCRhhvv = nnn

Sets the piece at square hhvv to an increment count of nnn. When you set an Increment on a square, you must also set a level. Failure to set a level will place an undetermined-level piece of size nnn on the board. This is an absolute error in game design which may cause Combine 'Em to terminate abnormally at worst or behave strange at best. Be sure to read the section on the LEVELhhvv instruction above, as well as the Puzzle Design Consideration section later in this chapter.

BPBLOCKER = 1

Places a bomb proof Blocker at location hh, vv.

BOMB = 1

Places a Bomb at location hh, vv.

Puzzle Design Considerations

When designing a puzzle, you should keep in mind that the object is to combine or remove all combiners until only one is left. Unless part of your solution is to remove combiners by means other than combination, you must be sure to start with the exact number of pieces, depending on promotion values, to combine into exactly one piece. Note that you don't have to start with all A1 level pieces. Some of the pieces can be already promoted or can contain, for instance, two of the three pieces required for promotion. By using a separate INCR and LEVEL command for each piece on the board, you're able to initiall set pieces at any level of promotion and combination.

Don't underestimate the affect that the SlideLength parameter can have on a puzzle. Changing its setting can make a previously solvable puzzle unsolvable or a previously unsolvable puzzle solvable. Be sure to test your puzzle for solvability at your chosen slide length

Disclaimer and Warranty

LIMITED WARRANTY AND DISCLAIMER OF WARRANTY

THIS SOFTWARE AND ACCOMPANYING WRITTEN MATERIALS (INCLUDING INSTRUCTIONS FOR USE) ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. FURTHER, RON BALEWSKI DOES NOT WARRANT, GUARANTEE, OR MAKE ANY REPRESENTATIONS REGARDING THE USE, OR THE RESULTS OF USE, OF THE SOFTWARE OR WRITTEN MATERIALS IN TERMS OF CORRECTNESS, ACCURACY, RELIABILITY, CURRENTNESS, OR OTHERWISE. THE ENTIRE RISK AS TO THE RESULTS AND PERFORMANCE OF THE SOFTWARE IS ASSUMED BY YOU. IF THE SOFTWARE OR WRITTEN MATERIALS ARE DEFECTIVE, YOU, AND NOT RON BALEWSKI OR HIS DEALERS, DISTRIBUTORS, AGENTS, OR EMPLOYEES, ASSUME THE ENTIRE COST OF ALL NECESSARY SERVICING, REPAIR, OR CORRECTION.

THE ABOVE IS THE ONLY WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE THAT IS MADE BY RON BALEWSKI, ON THIS PRODUCT.

NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY RON BALEWSKI, HIS DEALERS, DISTRIBUTORS, AGENTS OR EMPLOYEES SHALL CREATE A WARRANTY OR IN ANY WAY INCREASE THE SCOPE OF THIS WARRANTY AND YOU MAY NOT RELY ON ANY SUCH INFORMATION OR ADVICE. YOU MAY HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

NEITHER RON BALEWSKI NOR ANYONE ELSE WHO HAS BEEN INVOLVED IN THE CREATION, PRODUCTION OR DELIVERY OF THIS PRODUCT SHALL BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES (INCLUDING DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, AND THE LIKE) ARISING OUT OF THE USE OR INABILITY TO USE SUCH PRODUCT EVEN IF RON BALEWSKI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

This Limited Warranty shall be governed and construed in accordance with the laws of the Commonwealth of Pennsylvania.

ACKNOWLEDGMENT

BY USING THE SHAREWARE VERSION OF COMBINE 'EM YOU ACKNOWLEDGE THAT YOU HAVE READ THIS LIMITED WARRANTY, UNDERSTAND IT, AND AGREE TO BE BOUND BY ITS' TERMS AND CONDITIONS. YOU ALSO AGREE THAT THE LIMITED WARRANTY IS THE COMPLETE AND EXCLUSIVE STATEMENT OF AGREEMENT BETWEEN THE PARTIES AND SUPERSEDE ALL PROPOSALS OR PRIOR AGREEMENTS, ORAL OR WRITTEN, AND ANY OTHER COMMUNICATIONS BETWEEN THE PARTIES RELATING TO THE SUBJECT MATTER OF THE LIMITED WARRANTY.



Contributing Puzzles / Pieces

I hope to put together a number of puzzles and pieces contributed by Combine 'Em users into library disks and make them available inexpensively to others. If you put together an interesting puzzle or nice piece set, I'd appreciate your contributing it. In return, I'll send you a couple disks of contributed stuff. This offer is valid whether or not you're a registered user. However, I won't guarantee that all the puzzles will work with this shareware version. It's highly probable that I'll add other component types to a later version of the game which may not be released as shareware. Some of the puzzles on the library disks could use those new components. I'll do my best to note which puzzles won't work with the shareware version, but no promises here.

If you're a registered user, you're also encouraged to put something together and take advantage of the free disk offer. However, you can also order library disks for \$3 each. You should probably write first to find out how many are available.



Technical Support

If you have any comments or suggestions about Combine 'Em, I can be reached by US mail at the address listed below or by E-Mail at either ronb@paradox.microserve.com (preferred) or rbalewski@aol.com. I usually check the Microserve account more often for mail, so you can expect a reply sooner if you send to that one (probably the same day unless I need to do some type of research before answering).

I now provide technical support to registered users only either via US mail or E-Mail.. If you're not registered, I'll gladly answer questions as to the current registered version number, current registration fee, current address, or anything along those lines. However, I will not help with any technical problems or questions you may have. My registered users deserve the best service I can give them, and I won't take time that should be devoted to them and give it to users who choose not to register.

I don't officially provide telephone support and therefore don't publish my telephone number. If you manage to track me down and manage to get me on the phone, I'll be glad to talk to you. However, I will not return phone calls -- collect or otherwise!! I must also warn you that I can be quite difficult to get in contact with, so you may want to send your question by mail or e-mail even if you plan to try a phone call. Your answer just might arrive by mail before you're able to get it by phone, and e-mail will most surely beat the telephone.



Permission to Copy

You have my permission to redistribute the Shareware version of Combine 'Em provided that:

1. You must include all files
2. You must not charge more than \$5 per disk for duplication & packaging
3. You must label Combine 'Em in all catalogs, on all disks, and on all packaging materials, as Shareware. Your packaging must also include the fact that the user is buying only the disk and packaging and not the software and that use of the software beyond a 30-day trial is allowed only after registration.

Any shareware distributors that want a "from-the-author" copy of Combine 'Em must make the request on their company letterhead and must include a blank, formatted disk along with a stamped, self-addressed return mailer. If you'd prefer, enclose a \$3 check to cover my costs and I'll provide the mailer, disk, and shipping. However, I will absolutely not send a disk at my expense. You the shareware dealer will probably profit from this game far more than I will, so the least you can do is pay the expense of getting a copy.



Status Line Reference

The following four indicators are provided on the status line, in the following order:

Status

Displays the status or function of whatever the mouse is currently over. While selecting functions from the menu, this will display a brief summary of what the selected menu function does. While solving a puzzle, it will display the type of piece under the mouse. If no piece is under the mouse, it'll display either "Out of bounds" or "Empty square" depending on the exact location of the mouse. When over a combiner piece, the display form will be "Level: n, Incr: n, Prom n". The Level number will be the promotion level for the piece, the Incr number will be how many objects are "combined" in that piece, and .Prom will show how many pieces of that kind must be combined for promotion.

Moves

Displays how many moves have been made so far while solving the puzzle

Time

Displays how long you've been working on this puzzle.

Pieces

Displays the number of Combiner pieces still on the board.

