PAC BOMBER

GHOSTS DROP BOMBS



Instruction Manual

MSX1 · 64 KB ROM cartridge · 1 player

An entry for the MSXdev26 contest

BONUS

Created by msxnake (Jordi Sala Clara) · v1.0 · 2026

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A word from the author

I am msxnake (Jordi Sala Clara), the author of this game, and a lover of the arcade games of old: direct, fast and addictive like no others. I wanted to add my grain of sand to those times of excitement, fun and joy, with a wink to the present day.

I hope this game pleases and entertains everyone alike. It was made with care and thoroughly tested.

- msxnake (Jordi Sala Clara)

1. The story

Nobody knows exactly how an insignificant meteorite managed to alter space-time. Even today, scientists are still asking themselves that question.

In PacWorld, a quantum singularity mixed parts of reality with imaginary ones. In an unprecedented event, Pac-Man's dreams came to life and turned a Newtonian world, until then based on eating dots, into a world made of films, video games and famous places.

And yes... the ghosts benefited too: they were given the gift of dropping bombs.

Will this be the glutton's last adventure, or just the beginning of a new saga?



2. Getting started

Loading. PAC BOMBER is a 64 KB ROM cartridge image with an **ASCII16** mapper. Insert it in a flash cartridge or open it in any MSX emulator (openMSX, WebMSX, blueMSX...). If your emulator does not detect the mapper automatically, select **ASCII16**. The game starts by itself; no disk or BASIC command is needed.

Title screen. After the "JORDI SALA PRESENTS" screen, the title shows the controls, the extra-life rule and the fruit values in turn. Press **SPACE** (or joystick button A) to start a game. Press **F1** to open the Settings screen. If you wait, the game plays a short **demo**; press SPACE to return to the title.



PAC BOMBER - title screen and Settings (F1)

3. Controls

Action	Keyboard	Joystick (port 1)
Move Pac-Man	Cursor keys	Stick
Fire / round action (see below)	SPACE	Button A
Start a game (title screen)	SPACE	Button A
Open Settings (title screen)	F1	-
Settings: choose / change / back	Cursors, SPACE, ESC	-
Skip or continue the round tally	SPACE	Button A
Enter your initials (Top Scores)	UP / DOWN change, SPACE next	-

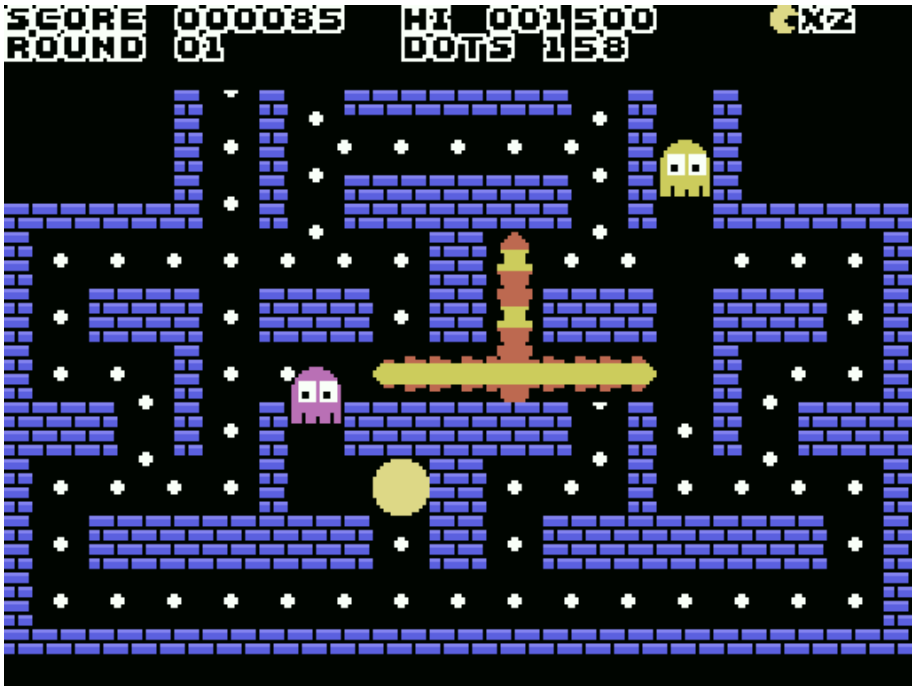
- **Movement** is continuous, in the arcade style: once Pac-Man starts walking he keeps going until he hits a wall. Press a direction just before a junction and the turn is remembered and taken as soon as the corner arrives.
- **SPACE has a different job in some rounds:** it fires your pistol in most rounds, shoots webs in round 8, opens a portal in round 13... and the later rounds hold a few surprises of their own.
- The keyboard and a joystick in port 1 can be used at the same time.

4. Settings (F1)

- **LANGUAGE**: ENGLISH or ESPAÑOL. Changes the title screen, the round introductions, the Settings and the Credits.
- **DIFFICULTY**: **EASY** - 5 lives, and a red warning dot appears at the edge of the screen when a ghost is coming along your corridor from outside the visible area. **NORMAL** - 3 lives. **INSANE** - only 1 life. Each difficulty has its own Top Scores table.
- The Settings screen also shows the **CREDITS**. Choose BACK or press ESC to return to the title.

5. The screen

The maze is taller than the screen and scrolls vertically to follow Pac-Man. The two top rows are the HUD:



ROUND 01 - a bomb has just exploded in a cross

SCORE	Your current score.
HI	The high score (the best entry in the Top Scores table).
ROUND	The round you are playing (01 to 20).
DOTS	Dots still left in the maze.
Pac-Man x N	Lives left.
Bullet icon	Shown under the lives when your pistol is loaded (in some rounds it shows a special item you are carrying).

6. How to play

Goal. Eat all the dots in the maze to clear the round. Then the round tally is shown and the next round begins with a fresh maze. Your score and lives are kept. There are 20 rounds, and each one adds its own twist.



Ghosts. The ghosts leave their house in the middle of the maze and roam the corridors. Touching a ghost costs a life.



Bombs. Every few seconds a ghost drops a bomb right where it floats. Only one bomb can be active at a time. The fuse burns for a moment and then the bomb explodes in a **cross of flames** along the corridors (up, down, left and right). The flames stop at the walls. If Pac-Man is inside the cross he loses a life. **The ghosts are fireproof**, so they happily chase you through their own flames.

Side tunnels. The tunnels on the left and right edges take you to the other side of the maze. Ghosts use them too.

After a lost life you keep the round and the dots you already ate. You come back with a short moment of invulnerability. When the last life is lost the game is over.

7. Your pistol



Pac-Man carries a one-shot pistol. Press **SPACE** to fire in the direction you are facing. Only one bullet can be on the screen.

After a shot, the pistol **reloads by eating 10 dots**: they are pressed into a new bullet. Dots eaten while the pistol is loaded are just food (they do not stack).

A ghost hit by a bullet is destroyed. It returns to the ghost house and comes out again later. Every ghost destroyed is worth **50 points in the round tally**.

Shooting a bomb makes it explode at once (+5 points). Use it to clear the way, but stay out of the cross!

Each time you destroy enough ghosts, the ghosts level up and become more dangerous, and you earn 50 points.

8. Fruit and BONUS letters

From time to time a collectible comes out of the ghost house and bounces around the maze. Only one is active at a time, and if nobody takes it, it vanishes in a harmless puff after about 30 seconds. Then the next one is born.

	**Cherry**	75 points.
	**Orange**	50 points.
	**BONUS letter**	About one collectible in five is a letter instead of a fruit.



Spell BONUS. The letters always come in order: **B, O, N, U, S**, then B again. Each **new** letter you collect is worth **100 points** in the round tally. Collect all five different letters to complete the word: a melody plays and you earn **1000 points**.

Beware of repeats: if you pick up a letter you already have in the current word, the word is broken. You lose the letters you had collected and the 100-point rewards that were not paid yet, and you start the word again. Your letters are kept from one round to the next until the word is completed or broken.

In some rounds the collectible is replaced by a special item: the snorkel in round 6 is the first one, and there are more to discover.

9. Scoring

Event	Points
Dot	5
Bomb detonated with a shot	5
Orange	50
Cherry	75
Ghosts level up (every few ghosts destroyed)	50
Ghost destroyed (paid in the round tally)	50 each
New BONUS letter (paid in the round tally)	100 each
Complete the word BONUS (round tally)	1000
Extra Bonus Stage: each second left	100

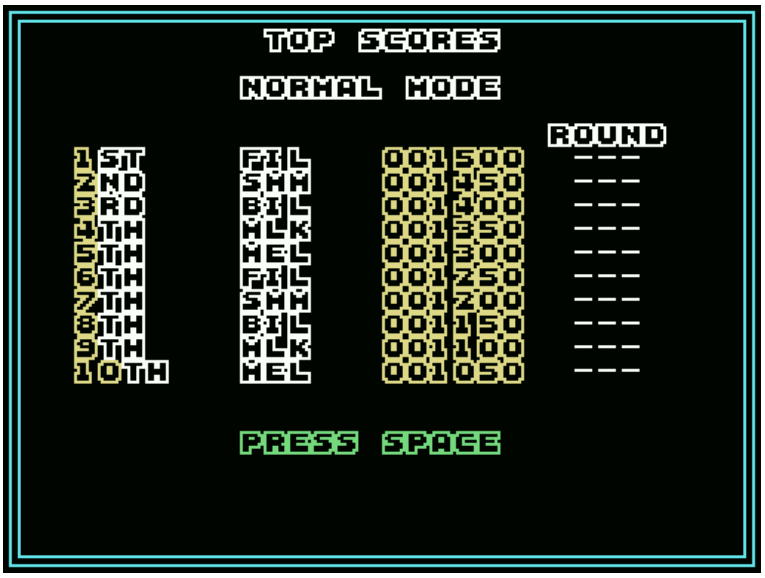
Extra lives at 2,000 and 5,000 points, and then every 10,000 points.

10. Round tally, Game Over and Top Scores

At the end of each round a tally screen shows the round, your lives and the high score, and counts your bonuses: the BONUS letters (and whether the word was completed) and the ghosts destroyed x 50 (the seconds left in the Extra Bonus Stage). The points are added one by one; press **SPACE** to skip the count, and again to continue. If you do not press anything, the next round starts by itself 8 seconds after the count ends.

When you lose your last life, GAME OVER appears. If your score is good enough for the **Top Scores** table of your difficulty (10 places), enter your three initials: UP and DOWN change the letter, SPACE moves to the next one. The table also shows the round each player reached.

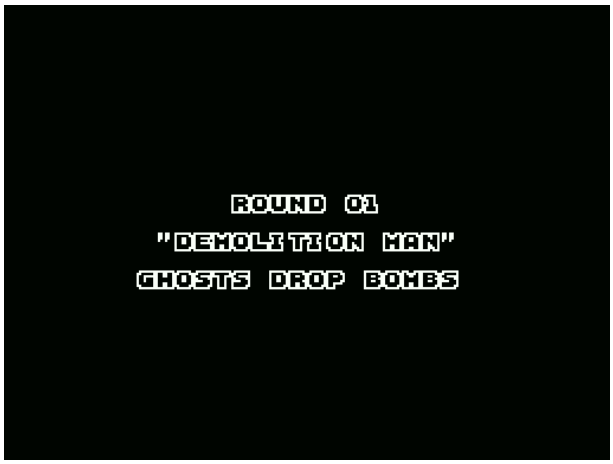
If you clear the last round, round 20, the game is complete. What happens then is for you to find out.



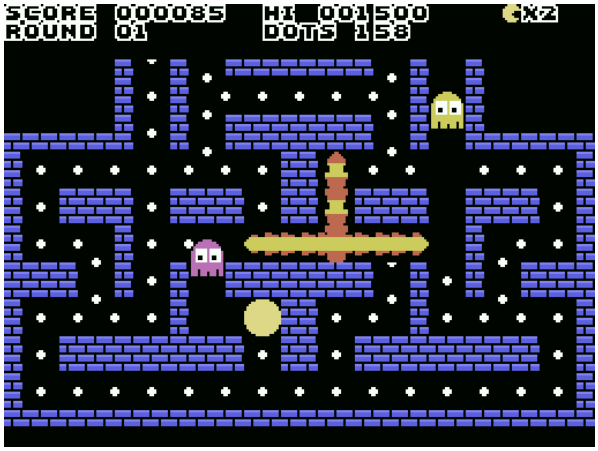
TOP SCORES - NORMAL MODE

11. The 20 rounds

Before each round an introduction screen shows its name and its special rule; press SPACE or wait 8 seconds to start. Rounds 1 to 5 are shown below, and rounds 6 to 14 are described so you know what awaits you.

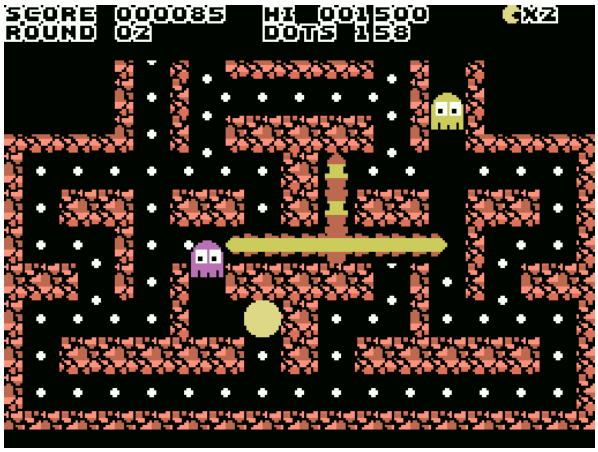


ROUND 01 · "DEMOLITION MAN"



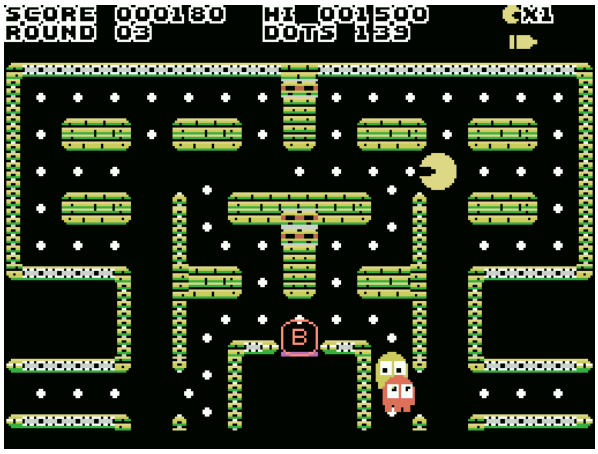
The classic rules. Ghosts drop bombs; the flames run along the corridors in a cross and stop at the walls. Eat every dot, stay out of the cross.

ROUND 02 · "CAVEMAN NINJA"



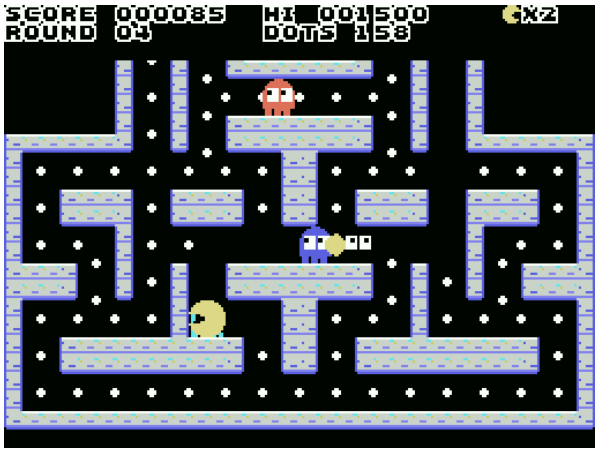
Stone walls and more destructive bombs: the blasts reach further down the corridors. Give every fuse a wider berth.

ROUND 03 · "MINEFIELD"



Watch your step: the ghosts drop mines instead of bombs. A mine stays on the floor and explodes when Pac-Man steps on it, so remember where they are.

ROUND 04 · "STARTREK"



Ghosts can teleport. A ghost that is far from you may dissolve for a few seconds (harmless while it fades) and reappear somewhere else in the maze. In this round your pistol fires a laser.

ROUND 05 · "STRAWBERRY"



Ghosts use smoke. They leave clouds behind them that cover the corridors and hide the dots and the walls. The smoke thins out and disappears after a while.

ROUND 06 · "YELLOW SUBMARINE"

Part of the maze is flooded. You need water gear (a snorkel that comes out of the ghost house) to go into the water; an oxygen bar shows how much air you have left. Air is only used while you are in the water. The ghosts drop nothing in this round.

ROUND 07 · "LODERUNNER"

A pink ghost chases you: it alternates 20 seconds of wandering with 20 seconds of hunting you down.

ROUND 08 · "SPIDERMOM"

Your gun shoots webs. The first hit freezes a ghost in place (it stops moving and bombing, but touching it is still deadly); a second shot kills it.

ROUND 09 · "LOST IN TRANSLATION"

You slowly lose your memory: every couple of seconds parts of the walls and dots fade away, until the maze is completely dark. Pac-Man, the ghosts and the HUD stay visible. Memorise the layout early!

ROUND 10 · "EXTRA BONUS STAGE"

No ghosts. Collect everything before the 40-second clock runs out. Every second left on the clock is worth 100 points at the end of the round.

ROUND 11 · "ACE AGE"

The ghosts throw snow when they are level with you and it freezes you. While frozen you crawl very slowly; shake free with five left-right pairs (ten alternate presses). No bombs here, but a ghost contact still kills.

ROUND 12 · "DUNE"

Do not stop on the sand! If Pac-Man stands still on the sand for too long the ground starts to flash as a warning, and then the giant worm swallows him. Keep moving.

ROUND 13 · "PORTALS"

SPACE opens a portal instead of firing. A ghost that runs into an open portal is sent back to the ghost house.

ROUND 14 · "PAINTBALL"

The ghosts paint the dots as they pass. A painted dot cannot be eaten straight away: run over it once to clean it (it turns white again), then come back and eat it. No bombs in this round.



ROUNDS 15 TO 20 · ???

From round 15 to round 20 you will find some very peculiar and addictive rounds. We will not say a word about them: they are a surprise. Read the introduction screen before each one... and good luck!

12. Tips

- Watch the bomb, not the ghost. A ghost can only touch you; a bomb covers four corridors at once. When you see a fuse burning, get out of its row and its column.
- Shooting a bomb before its fuse runs out can clear a corridor at a moment of your choosing, but make sure you are out of the cross.
- Dots are points, but they are also bullets. A loaded pistol is worth more than a few extra points.
- Do not waste shots at long range: a miss costs ten dots of reloading.
- Plan your BONUS: if a letter you already hold bounces towards you, avoid it.
- Learn the layout of round 9 before the lights go out.

13. Technical specifications

System	MSX1 (designed for bare MSX1)
RAM	16 KB (all variables in C000h-FFFFh)
Media	ROM cartridge image, 65,536 bytes (64 KB)
Mapper	ASCII16 MegaROM (4 banks of 16 KB)
Video	TMS9918A, SCREEN 2 (256 x 192), 16 x 16 sprites, vertical scrolling over a 256 x 320 maze
Sound	AY-3-8910 PSG, 3 channels: polyphonic jingles and sound effects
Controls	Keyboard and joystick in port 1
Video standard	50 Hz (PAL) and 60 Hz (NTSC), timing adapted automatically
Languages	English and Spanish (selectable in Settings)
Players	1
Programming	Z80 assembly, assembled with Glass
Tested on	Real hardware: Omega MSX2+ with a MegaFlashROM SCC+ SD. Emulator: openMSX, C-BIOS MSX1 (PAL and NTSC).
File	PacBomber_v1.0.rom
SHA-256	`67DCFB3CCB3A5EA545288BB537B89FAC91532C934C70461D5BD48AF1715FA4D5`

The sprite flicker you may notice when several characters share a horizontal line is caused by the MSX1 limit of four sprites per line; the game rotates the sprite order so that no one stays hidden.

14. Credits and licence

Created by msxnake (Jordi Sala Clara).

Thanks to Namco (PAC-MAN), Hudson Soft (BOMBERMAN), MSXdev and AAMSX.

Freeware. PAC BOMBER is freeware: it is free to download, copy and play, and it may not be sold. During the MSXdev26 contest it is distributed exclusively through msxdev.org. The author keeps all rights to the game.

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