



A board game for 2 players by **Martijn Althuisen**

INTRODUCTION

Tixel is a two-player abstract game that's a follow-up to Tix. The aim of the game is to be the last player able to make a legal move. Chaining moves is invaluable as this temporarily unlocks three additional move types. If a tixel that is moved becomes inactive at its end position — i.e., it's sacrificed — a player can take an extra move if he so chooses; aside from placing or moving a tixel, he can now remove a tixel from the board, activate an inactive tixel, or pivot an active tixel to reorient its hollow side.

COMPONENTS

- Board modules (four 3x3 or six 2x3 modules)
- 20 pieces in 2 colours (10 each)
- Carrying case

GAME RULES

Use the board modules to make the default 6x6 board. Alternatively you can create any other board shape using the modules.

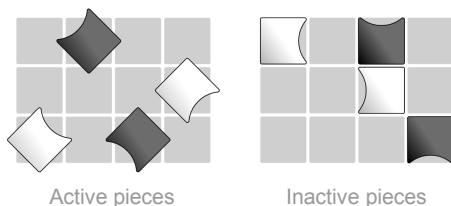
Each player has ten pieces of one color. Initially all the pieces are off the board, forming players' pools.

White always moves first. After the first move, players alternate turns throughout the game.

Pieces

An on-board piece can be either active or inactive. Active pieces are those pivoted by 45 degrees, whereas inactive ones are aligned to the grid.

Only active pieces can be moved (*see 'Sliding pieces'*). The corners of an active piece stick out to the four orthogonally neighbouring spaces. No other active pieces can rest on those spaces. Therefore, two active pieces can never be orthogonally adjacent to one another.



A player's turn

In his turn a player must either **place** or **slide** a piece.

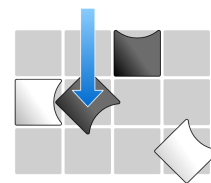
Placing pieces

In a turn, a player is allowed to place a new piece only if he has at least one other **active and slidable** piece on the board **at the beginning of the turn** (excluding placement of the first piece of each of the players, of course).

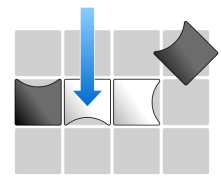
A player takes a piece from his pool and places it on an empty board space.

If all of the spaces orthogonally to the chosen space are empty, the piece has to be placed in the active stance.

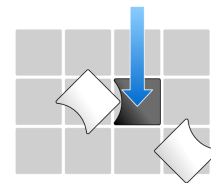
If an orthogonally adjacent space has an inactive piece on it and its hollow side is facing the newly placed piece, the new piece must also be placed in the active stance.



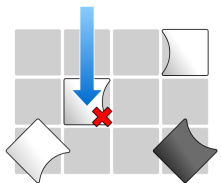
Valid placement



Valid placement



Valid placement



Invalid placement;
A piece placed on this space
has to be made active.

Sliding pieces

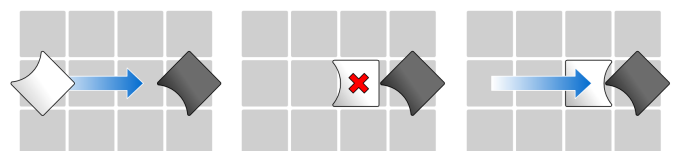
An active piece can be slid any number of empty spaces in a row or column.

The sliding piece is first pivoted to an inactive stance (aligned to the grid in order to fit between neighbouring inactive pieces), then slid to the desired space **and activated if possible**.

A piece may be pivoted **any amount** before sliding.

Any active piece that is adjacent to the slide path gets deactivated by the sliding piece. Adjacent pieces are deactivated by pivoting them in clockwise or anti-clockwise fashion, depending on how the sliding piece passes them.

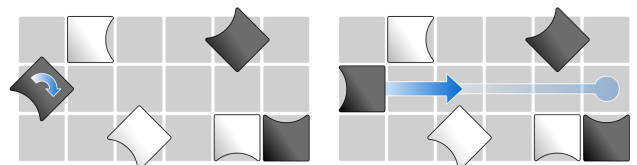
You can only slide to a space in front of another active piece if the hollow side of the sliding piece is facing the active piece.



The white piece wants
to slide to the space
directly in front of
the black piece.

It cannot slide
there ...

... unless its hollow side
is first pivoted to face
the black piece.

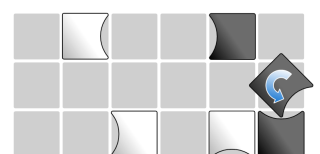


Step 1: Temporarily pivot the piece
to an inactive stance.

Step 2: Slide the piece towards
the desired space ...



... whilst deactivating all the
pieces that are adjacent to
the slide path.

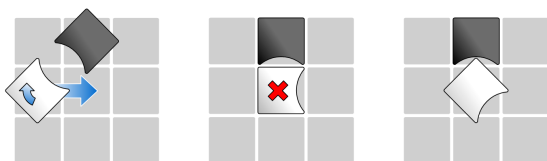


Step 3: At the desired space, pivot
the piece back to an active stance
(if possible).

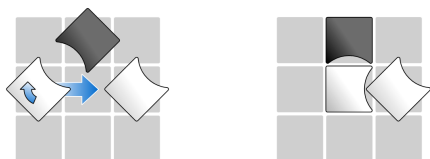
Sacrificing pieces and Bonus moves

When a player **slides** a piece in such a way that it becomes inactive, he gets a bonus move. This is called sacrificing a piece.

If this situation repeats, the player gets another bonus move, and so on, as long as he keeps sacrificing pieces.



The white piece cannot be sacrificed by sliding it next to the black piece. It remains active after the slide.



Now though, the white piece can be sacrificed. It cannot remain active as there now is another active piece on an adjacent space.

The bonus move is **optional**, a player may choose to end his turn instead.

As a bonus move, a player may do one of the following:

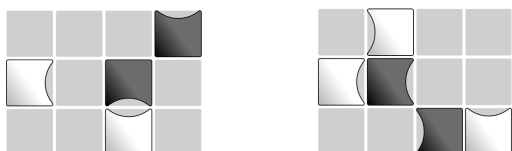
- **Place** a piece (see 'Placing pieces').
- **Slide** a piece (see 'Sliding pieces').
- **Activate** an inactive piece.
- **Pick up** a piece (and put it back in his pool).
- **Pivot** an active piece to reorient its hollow side (the piece remains active).

Activating pieces

A player may pivot one of his inactive pieces to any desired active stance.

The piece to be activated may not be adjacent to other **active** pieces.

If an adjacent space has an inactive piece on it, its hollow side must be facing the piece that the player wants to activate.



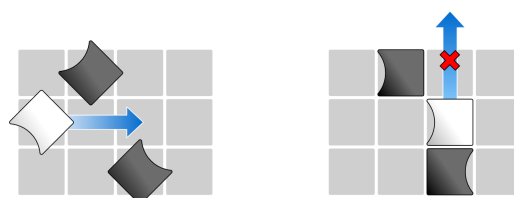
These pieces can be activated.

These can't.

Picking up pieces

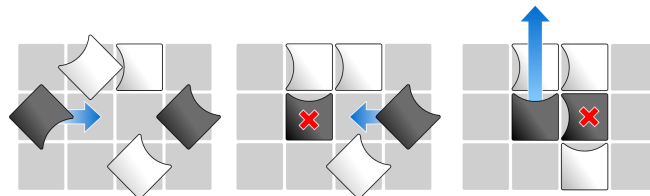
A player may pick up one of his on-board pieces and put it back in his pool.

The piece that was sacrificed to gain the bonus move cannot be picked up straight away.



The white piece is sacrificed by sliding it next to the rightmost black piece.

That same white piece (which was just sacrificed) cannot be picked up in the resulting bonus move.



The black piece on the left side is sacrificed ...

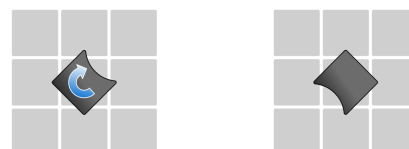
... but it cannot be picked up. Then the black piece on the right side is sacrificed ...

... and now the black piece that was initially sacrificed can be picked up.

Pivoting pieces

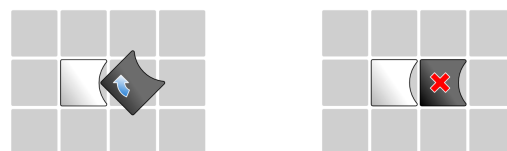
A player may pivot one of his active pieces in quarter turn increments so that its hollow side points in a different direction.

A piece that is pivoted must remain active. It may not be pivoted to an inactive stance.



Active pieces must be pivoted in quarter turn increments ...

... so that they remain active.



Pivoting pieces so that they take on an inactive stance ...

... is not allowed.

Ending the game

When a player is unable to make a legal move, he loses.

Players can agree to declare a game a draw.

COMBINING BOARD MODULE SETS

When combining multiple sets of board modules, determine the correct amount of pieces **per player** as follows:

$$(\text{number_of_board_squares} / 3) - 2$$

Round results to the nearest integer.

Halves are rounded up, unless both players are expert players.

small print: the above formula works for boards up to about 80 squares. Beyond that the more precise formula to use is:

$$(\text{number_of_board_squares} * 0,335) - 2$$