

Glossary of Common PC Setups

and When to Use Them






















Introduction

There are two parts to each PC: the **setup** and the **solution**. During the setup, you place a few pieces. Your goal in the setup is to maximize the chance for a solution with your remaining pieces.

Beginning PC players will often spam PCO (in the form of TSZ + LOJ box), but this is not very strong in general, not least because it places over 4 pieces during setup. The [PC Info guide](#) includes a variety of strong setups for each PC (from 1st to 7th); the majority of these place at most 4 pieces. Ideally, you should learn to build all of these, but the problem with this method is that there are a *huge number of setups to memorize*. So, in practice, many good PC players don't do this. Instead, we learn a few very common and strong shapes and try to think about the best ones to build for a given PC and how.

1st ([best chance field](#)), 2nd ([save O/T setups](#)), 3rd ([four.lol setups](#)), and 7th ([mostly 100% setups](#)) are very well studied, so this guide is going to focus on freestyle methods for 4th to 6th instead (although that's not to say you can't apply these to other PCs, just that you're better off following their methods instead). The most important idea to keep in mind when you freestyle is to **KNOW YOUR BAGS**. The fixed 7-bag structure for each PC is exactly why the recommended setups above are so strong, and this is exactly what will tell you whether or not you're likely to get that second T in time on a given PC. Below is a [four.lol chart](#) that summarizes the bag structure of each PC.

Pieces Used

No.	Hold	Current Bag (Leftover)	Next Bag	Subsequent Bag
1st				
2nd				
3rd				
4th				
5th				
6th				
7th				

The rest of this guide will be about the common setups (listed in order of how important they are to know), followed by a few tips for freestyling and saving pieces. Most of these setups are popular enough to warrant their own names.¹ (The ones without common names have given placeholder names.) Note that *many of these shapes can be built in different ways*: for example, you can build a box with LOJ or LZL. However, the solutions may look slightly different due to being left with different pieces for the solve.²

It is not easy to learn setups (or else I would not have written this guide). One possible strategy (which I use) is to use Four-Tris and edit the desired pieces into your queue, and then (using four.lol as a reference) try to build the setup over and over until you commit it to memory.

¹ A lot of these setups really need better names.

² Message Bladewood#0139 if you think any of this is wrong.

Common Setups

Box

- The most fundamental PC setup
- Good whenever you have L/J/T for solve
- Many ways to build
- Avoid using many Ts to build boxes
- Most common way to deal with single O during setup
- 4x4 is 100% on missing-SZ 4th, 3x4 is 100% on 7th



Perfect Clear Opener / PCO

- Uses many SZ in setup but needs T for setup
- Essentially a box + T
- Good when you have an extra T piece, not very strong otherwise (you would need an L/J for the solve)
- Pretty good for 1st for some reason
- Usually handles multiple SZ well



- [Example solves](#)

Sakana's Jaws

- Named after Sakana by Galactoid because he noticed that Sakana used it a lot
- Needs one L/J in setup
- Usually uses many SZ in setup
- The only 100% 4-piece setup (ILSZ) for 1st and pretty good in general
- Okay for 2nd if you hold the remaining piece
- Often on par with Feet



- [Example builds](#)
- [Example solve patterns](#)

Braindead O 3rd / Jawbreaker

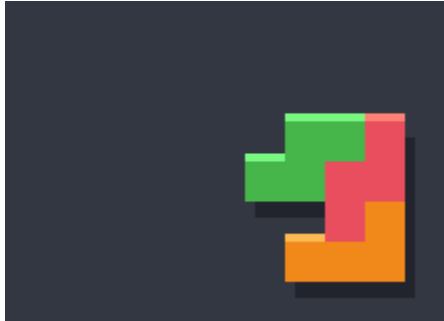
- Distinctive L/J placement
- Frequent Jaws followup for ILSZ 1st, extra O 3rd, and certain 5ths
- Places many more pieces than necessary but still 90% for extra O 3rd and very easy to solve
- Can also be built for extra I 3rd if you're lucky
- Almost always needs T for solve



- [Examples for 1st, 3rd](#); note that the T 3rd setups are redundant
- [All possible builds for 5th](#)
- [All possible solves](#)

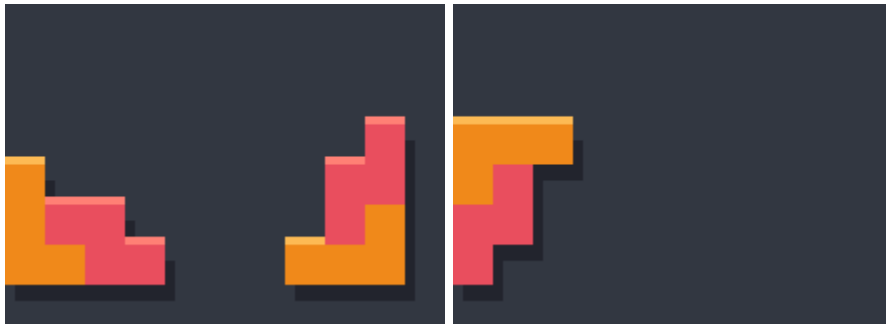
LSZ

- Upside-down counterpart to Jaws for early L/J
- Probably good but usually there are better options (like Feet)
- Easy to convert into PCO by adding T



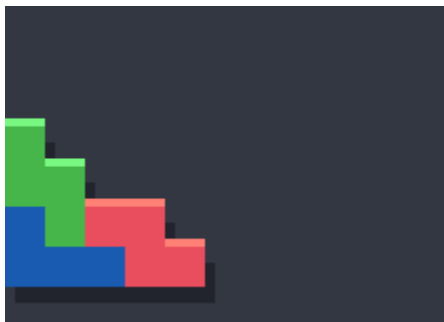
LZ / JS

- Left form is good with multiple Zs, middle form is good with multiple Ss
- Preferable to LS / JZ



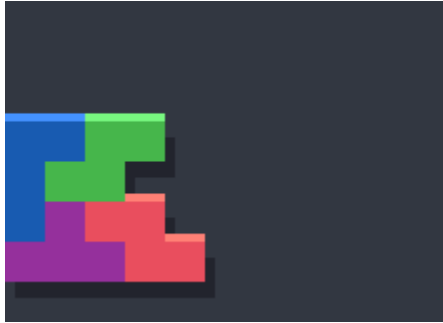
Feet

- Needs L/J for setup
- Uses many SZ in setup
- Strong when you have a lot of upcoming S/Z
- Very versatile, easy to convert into Anti-PCO or box
- Often on par with Jaws



Anti-PCO

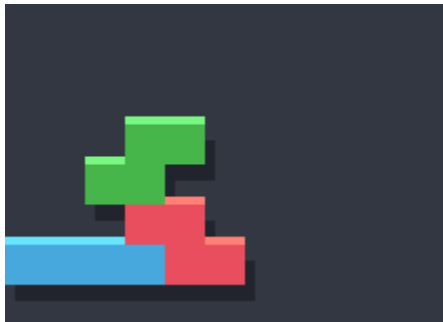
- So named because it looks like the negation of PCO
- Needs LT or JT for setup
- Often uses many SZ in setup
- Very good when you have an extra T piece, bad without T, really bad without TI (because I is often used to skim the middle of the indent)



- [Example builds](#)
- [Example placements of T](#) (usually attached to the setup itself)

Marfung's Dragon / ISZ

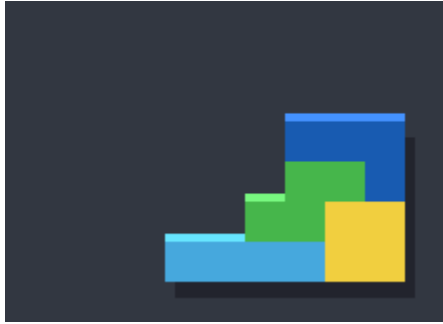
- 98% for missing-LJ 4th with O placed
- 99% for ISZ 7th but really hard to solve
- Left part requires either a T tuck or a skim, make sure to check that the skim actually works



- [Example builds](#)
- [Example solve patterns](#)

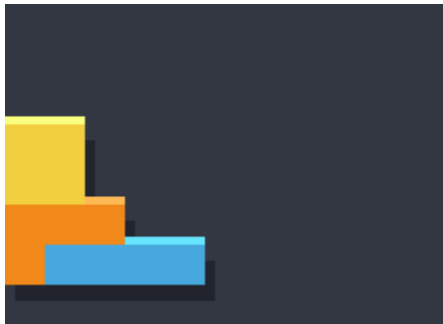
Legs / Shoe / IJSO

- 99.5% for 1st, 100% for extra O/I/L/J 3rd
- Really good in general (when you can build it, which means you need early O to build), usually needs L/J for solve
- Easy to convert into a box



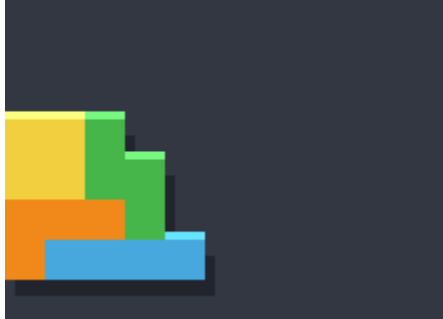
Legs (the original) / ILO

- Easy to convert into a box
- Makes horizontal J shape



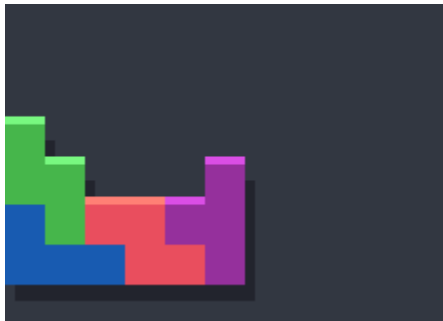
ILSO

- A little weaker than IJSO, still pretty good though
- Makes vertical L shape



Tub / Bowl

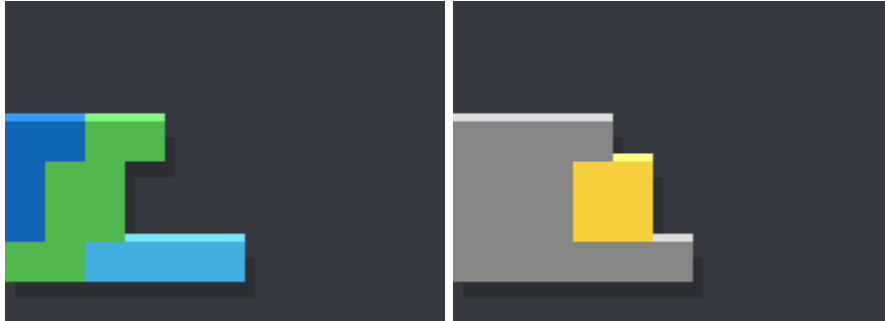
- Good setup for 2nd save O
- Good with multiple Ts
- Weaker than Anti-PCO but much easier to solve, basically a box + TS / TZ—in practice this (with T placed) is not done unless you see a solve with 3 pieces placed
- Has a 100% build for 7th
- Building this shape with the tall part against the wall sometimes allows for 180 solutions



- [Example setups](#)
- [Example 180 solve](#)

Jeague's Cradle / Extra S/Z 3rd setup

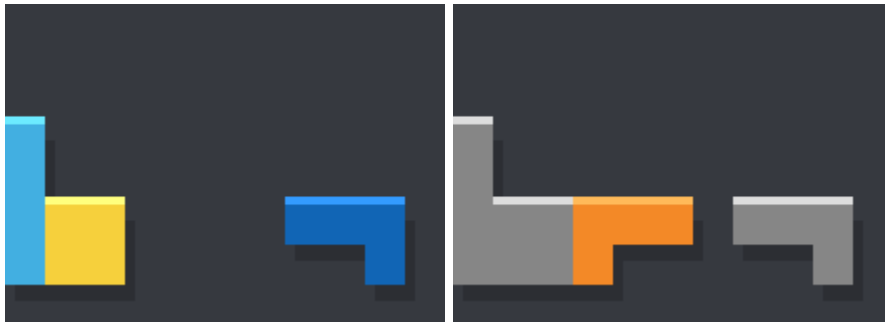
- Valuable to know because it can potentially save a run from extra S/Z 3rd, but not likely to build
- 100% on I + S/Z 5th
- Good way to deal with multiple SZ and single O during setup
- Makes vertical J shape
- Often not as good without O placed (because you usually don't have a better spot for the O)



- [Example setups](#)

Marfung's Antidote

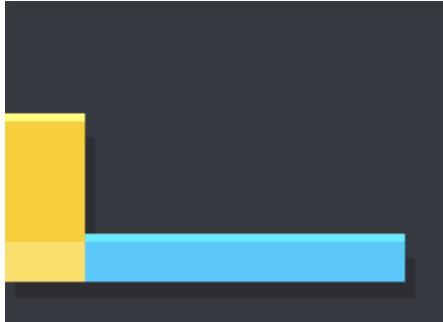
- Backup setup for extra O 3rd whenever you have early LJT
- 3p setup is decent in general but Jaws is preferable
- Placing L (as depicted in the diagram) reduces chance from 94% to 90% (with early T)



- [3p and 4p builds](#)
- [Example solve patterns](#)

I skim

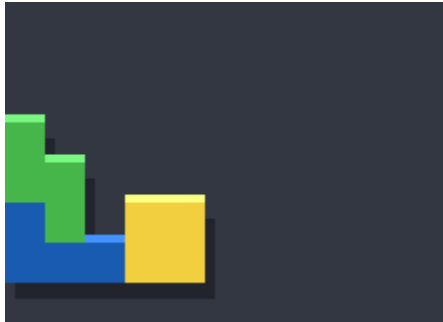
- Most commonly done when you have 2 Is during setup
- Effectively turns the 4L PC into a 3L PC--this tends to require you to think differently



- [Example setups](#)

smdbs' favorite LO / LI choice setup

- Can convert into a box using LO / LI
- Don't use this if you're not sure you have L coming up



- [Example setups](#)

Elephant

- Looks like an elephant
- Good way to deal with single O
- 98.33% for 1st, 100% for no-S 6th
- Creates floating L shape; can be difficult to fill the part underneath



Freestyle Tips

In PC mode, you will frequently face a choice between saving different pieces for the next PC. Sometimes it isn't obvious what to save. Here are some helpful guidelines—*sometimes you will need to make a judgment* as for which of these is most important for a given PC.

- In general: $T > L/J > O = I > S/Z$
 - 2nd:
 - 1) save T
 - 2) avoid saving single L/J (either both or neither)
 - 3rd: $T > O^3 > L/J = I \gg S/Z$
 - 4th:
 - 1) save at least 1 of L and J
 - 2) save T
 - 5th: avoid SZ
 - 6th: $T > I^4 > L/J > O > S/Z$
 - 7th:
 - 1) avoid double-piece setups
 - 2) make sure you have at least 1 of JLT
-
- Single O is bad (because it's usually handled by building a box with LJ in setup) but double O is good (because you can stack Os to decrease the board size)
 - T/L/J are usually good to save (due to parity) but awkward to freestyle if you have all 3 of them because you're forced to waste multiple good pieces on setup instead of solution
 - Between LZ and LS, LZ is generally better
 - Try to get rid of S/Z during setup and avoid using more than 2 of L/J/T in setup if you can
 - Bottom-heavy setups are preferred to top-heavy setups because it's harder to fill in the bottom of a top-heavy setup than the reverse
 - A good setup should be flexible (it can accommodate for many different pieces), should not have piece dependencies you aren't certain you can fill, and should prefer consuming bad pieces over good pieces
 - Try to take into account the next pieces in queue when freestyling, and pay attention to the queue every time you place a piece during setup—sometimes your initial plan may not work out and you will have to improvise more creatively

³ T is better than O because even though the [extra O setup](#) is very strong, it can't always be built, namely when you have early LJT.

⁴ I is very important on 6th and I have no idea why.