

```
<?xml version="1.0" encoding="UTF-8"?>
<enderio:recipes xmlns:enderio="http://enderio.com/recipes" xmlns:xsi="http://www.w3.
org/2001/XMLSchema-instance" xsi:schemaLocation="http://enderio.com/recipes recipes.
xsd ">
```

```
<!--
```

These are the built-in recipes. You cannot change this file, it is a reference for you only and will be generated every time the game starts.

To make changes to the recipes, copy the recipes you want to change to a file in the 'user' folder. To disable a recipe, add an attribute "disabled" and set it to true, e.g.: <recipe name="Gear" disabled="true" />

You can also disable all built-in recipes with the setting "loadCoreRecipes" in the Ender IO config file, so that only your files in the 'user' folder will be loaded. Please be advised that a number of recipes are absolutely needed, so you will have to copy those over into a 'user' file for the game to load.

Item specifications can reference an alias, an ore dictionary name, a block or an item. You can force the type by prefixing the value with "oredict:", "block:" or "item:". Recipes that have items that cannot be found in-game are either skipped or an error, depending on their "required" attribute.

More information on the syntax can be found in the recipes.xsd file. An XML editor will display that as tooltips when editing this file.

```
-->
```

```
<recipe name="Simple Stirling Generator" required="true">
  <crafting>
    <grid size="3x3">
      <item name="minecraft:stonebrick:0" /><item name="minecraft:furnace" /><item
name="minecraft:stonebrick:0" />
      <item name="minecraft:stonebrick:0" /><item name="SIMPLE_CHASSIS"/><item name="
minecraft:stonebrick:0" />
      <item name="GEAR_IRON" /><item name="minecraft:piston" /><item name="
GEAR_IRON" />
    </grid>
    <output name="enderio:block_simple_stirling_generator" />
  </crafting>
</recipe>

<recipe name="Stirling Generator" required="true">
  <crafting>
    <grid size="3x3">
      <item name="minecraft:stonebrick:0" /><item name="minecraft:furnace" /><item
name="minecraft:stonebrick:0" />
      <item name="ingotDarkSteel" /><item name="CHASSIS" /><item name="
ingotDarkSteel" />
      <item name="GEAR_DARKSTEEL" /><item name="minecraft:piston" /><item name="
GEAR_DARKSTEEL" />
    </grid>
    <output name="enderio:block_stirling_generator" />
  </crafting>
</recipe>

<recipe name="Stirling Generator, Upgrade" required="true">
  <crafting upgrade="true">
    <grid size="3x2">
      <item name="ingotDarkSteel" /><item name="enderio:
block_simple_stirling_generator" /><item name="ingotDarkSteel" />
      <item name="GEAR_DARKSTEEL" /><item name="CHASSIS" /><item name="
GEAR_DARKSTEEL" />
    </grid>
    <output name="enderio:block_stirling_generator" />
  </crafting>
```

```

</recipe>

<recipe name="Combustion Generator" required="true">
  <crafting>
    <grid size="3x3">
      <item name="ingotDarkSteel" /><item name="ELECTRICAL_STEEL" /><item name="
ingotDarkSteel" />
      <item name="enderio:block_tank:0" /><item name="CHASSIS" /><item name="enderio:
block_tank:0" />
      <item name="GEAR_DARKSTEEL" /><item name="minecraft:piston" /><item name="
GEAR_DARKSTEEL" />
    </grid>
    <output name="enderio:block_combustion_generator" />
  </crafting>
</recipe>

<recipe name="Enhanced Combustion Generator" required="true">
  <crafting>
    <grid size="3x3">
      <item name="ingotEndSteel" /><item name="ELECTRICAL_STEEL" /><item name="
ingotEndSteel" />
      <item name="enderio:block_tank:1" /><item name="ENHANCED_CHASSIS" /><item
name="enderio:block_tank:1" />
      <item name="GEAR_VIBRANT" /><item name="minecraft:piston" /><item name="
GEAR_VIBRANT" />
    </grid>
    <output name="enderio:block_enhanced_combustion_generator" />
  </crafting>
</recipe>

<recipe name="Enhanced Combustion Generator, Upgrade" required="true">
  <crafting upgrade="true">
    <grid size="3x3">
      <item name="ingotEndSteel" /><item name="enderio:block_combustion_generator"
/><item name="ingotEndSteel" />
      <item name="enderio:block_tank:1" /><item name="ENHANCED_CHASSIS" /><item
name="enderio:block_tank:1" />
      <item name="GEAR_VIBRANT" /><item /><item name="GEAR_VIBRANT" />
    </grid>
    <output name="enderio:block_enhanced_combustion_generator" />
  </crafting>
</recipe>

<recipe name="Zombie Generator" required="true">
  <crafting>
    <grid size="3x3">
      <item name="ELECTRICAL_STEEL" /><item name="ELECTRICAL_STEEL" /><item name="
ELECTRICAL_STEEL" />
      <item name="FUSED_QUARTZ" /><item name="ZOMBIE_ELECTRODE" /><item name="
FUSED_QUARTZ" />
      <item name="FUSED_QUARTZ" /><item name="FUSED_QUARTZ" /><item name="
FUSED_QUARTZ" />
    </grid>
    <output name="enderio:block_zombie_generator" />
  </crafting>
</recipe>

<recipe name="Killer Joe" required="true">
  <crafting>
    <grid size="3x3">
      <item name="DARK_STEEL" /><item name="DARK_STEEL" /><item name="DARK_STEEL" />
      <item name="FUSED_QUARTZ" /><item name="FRANKEN_ZOMBIE" /><item name="
FUSED_QUARTZ" />
      <item name="FUSED_QUARTZ" /><item name="FUSED_QUARTZ" /><item name="
FUSED_QUARTZ" />
    </grid>
    <output name="enderio:block_killer_joe" />
  </crafting>

```

```

</recipe>

<recipe name="Frank'n'Zombie Generator" required="true">
  <crafting>
    <grid size="3x3">
      <item name="SOULARIUM" /><item name="SOULARIUM" /><item name="SOULARIUM" />
      <item name="FUSED_QUARTZ" /><item name="FRANKEN_ZOMBIE" /><item name="
FUSED_QUARTZ" />
      <item name="FUSED_QUARTZ" /><item name="FUSED_QUARTZ" /><item name="
FUSED_QUARTZ" />
    </grid>
    <output name="enderio:block_franken_zombie_generator" />
  </crafting>
</recipe>

<recipe name="Ender Generator" required="true">
  <crafting>
    <grid size="3x3">
      <item name="END_STEEL" /><item name="END_STEEL" /><item name="END_STEEL" />
      <item name="FUSED_QUARTZ" /><item name="ENDER_RESONATOR" /><item name="
FUSED_QUARTZ" />
      <item name="FUSED_QUARTZ" /><item name="FUSED_QUARTZ" /><item name="
FUSED_QUARTZ" />
    </grid>
    <output name="enderio:block_ender_generator" />
  </crafting>
</recipe>

<recipe name="Wired Charger" required="true">
  <crafting>
    <grid size="3x3">
      <item name="ELECTRICAL_STEEL" /><item name="ELECTRICAL_STEEL" /><item name="
ELECTRICAL_STEEL" />
      <item name="ELECTRICAL_STEEL" /><item name="CHASSIS" /><item name="
ELECTRICAL_STEEL" />
      <item name="ELECTRICAL_STEEL" /><item name="ELECTRICAL_STEEL" /><item name="
ELECTRICAL_STEEL" />
    </grid>
    <output name="enderio:block_wired_charger" />
  </crafting>
</recipe>

<recipe name="Wired Charger, Upgrade" required="true">
  <crafting upgrade="true">
    <grid size="3x3">
      <item name="ELECTRICAL_STEEL" /><item /><item name="ELECTRICAL_STEEL" />
      <item /><item name="CHASSIS" /><item />
      <item name="ELECTRICAL_STEEL" /><item name="enderio:
block_simple_wired_charger" /><item name="ELECTRICAL_STEEL" />
    </grid>
    <output name="enderio:block_wired_charger" />
  </crafting>
</recipe>

<recipe name="Simple Wired Charger" required="true">
  <crafting>
    <grid size="3x3">
      <item name="oredict:cobblestone" /><item name="ELECTRICAL_STEEL" /><item name="
oredict:cobblestone" />
      <item name="ELECTRICAL_STEEL" /><item name="SIMPLE_CHASSIS" /><item name="
ELECTRICAL_STEEL" />
      <item name="oredict:cobblestone" /><item name="ELECTRICAL_STEEL" /><item name="
oredict:cobblestone" />
    </grid>
    <output name="enderio:block_simple_wired_charger" />
  </crafting>
</recipe>

```

```

<recipe name="Enhanced Wired Charger" required="true">
  <crafting>
    <grid size="3x3">
      <item name="ELECTRICAL_STEEL" /><item name="END_STEEL" /><item name="
ELECTRICAL_STEEL" />
      <item name="ELECTRICAL_STEEL" /><item name="ENHANCED_CHASSIS" /><item name="
ELECTRICAL_STEEL" />
      <item name="GEAR_VIBRANT" /><item name="ELECTRICAL_STEEL" /><item name="
GEAR_VIBRANT" />
    </grid>
    <output name="enderio:block_enhanced_wired_charger" />
  </crafting>
</recipe>

<recipe name="Enhanced Wired Charger, Upgrade" required="true">
  <crafting upgrade="true">
    <grid size="3x3">
      <item /><item name="END_STEEL" /><item />
      <item /><item name="ENHANCED_CHASSIS" /><item />
      <item name="GEAR_VIBRANT" /><item name="enderio:block_wired_charger" /><item
name="GEAR_VIBRANT" />
    </grid>
    <output name="enderio:block_enhanced_wired_charger" />
  </crafting>
</recipe>

<recipe name="Wireless Charger" required="true">
  <crafting>
    <grid size="3x3">
      <item name="ELECTRICAL_STEEL" /><item name="ELECTRICAL_STEEL" /><item name="
ELECTRICAL_STEEL" />
      <item name="ELECTRICAL_STEEL" /><item name="ENDER_RESONATOR" /><item name="
ELECTRICAL_STEEL" />
      <item name="ELECTRICAL_STEEL" /><item name="CAPACITOR1" /><item name="
ELECTRICAL_STEEL" />
    </grid>
    <output name="enderio:block_wireless_charger" />
  </crafting>
</recipe>

<recipe name="Wireless Charger (Antenna)" required="true">
  <crafting>
    <grid size="3x3">
      <item name="itemWirelessDish" /><item name="ENDER_RESONATOR" /><item name="
itemWirelessDish" />
      <item name="itemWirelessDish" /><item name="CHASSIS" /><item name="
itemWirelessDish" />
      <item /><item name="CAPACITOR2" /><item />
    </grid>
    <output name="enderio:block_normal_wireless_charger" />
  </crafting>
</recipe>

<recipe name="Wireless Charger (Antenna), Upgrade" required="true">
  <crafting upgrade="true">
    <grid size="3x3">
      <item name="itemWirelessDish" /><item name="enderio:block_wireless_charger"
/><item name="itemWirelessDish" />
      <item name="itemWirelessDish" /><item name="CHASSIS" /><item name="
itemWirelessDish" />
      <item /><item name="CAPACITOR2" /><item />
    </grid>
    <output name="enderio:block_normal_wireless_charger" />
  </crafting>
</recipe>

<recipe name="Wireless Charger (Antenna, enhanced)" required="true">
  <crafting>

```

```

        <grid size="3x3">
            <item name="itemWirelessDish" /><item name="ENDER_RESONATOR" /><item name="
itemWirelessDish" />
            <item name="itemWirelessDish" /><item name="ENHANCED_CHASSIS" /><item name="
itemWirelessDish" />
            <item /><item name="CAPACITOR3" /><item />
        </grid>
        <output name="enderio:block_enhanced_wireless_charger" />
    </crafting>
</recipe>

<recipe name="Wireless Charger (Antenna, enhanced), Upgrade 1" required="true">
    <crafting upgrade="true">
        <grid size="3x3">
            <item name="itemWirelessDish" /><item name="enderio:block_wireless_charger"
/><item name="itemWirelessDish" />
            <item name="itemWirelessDish" /><item name="ENHANCED_CHASSIS" /><item name="
itemWirelessDish" />
            <item /><item name="CAPACITOR3" /><item />
        </grid>
        <output name="enderio:block_enhanced_wireless_charger" />
    </crafting>
</recipe>

<recipe name="Wireless Charger (Antenna, enhanced), Upgrade 2" required="true">
    <crafting upgrade="true">
        <grid size="3x3">
            <item /><item name="enderio:block_normal_wireless_charger" /><item />
            <item /><item name="ENHANCED_CHASSIS" /><item />
            <item /><item name="CAPACITOR3" /><item />
        </grid>
        <output name="enderio:block_enhanced_wireless_charger" />
    </crafting>
</recipe>

<recipe name="Wireless Charger (Antenna, extension" required="true">
    <crafting>
        <grid size="3x3">
            <item /><item name="itemWirelessDish" /><item />
            <item name="itemWirelessDish" /><item name="END_STEEL" /><item name="
itemWirelessDish" />
            <item /><item name="itemWirelessDish" /><item />
        </grid>
        <output name="enderio:block_wireless_charger_extension" />
    </crafting>
</recipe>

<recipe name="Powered Spawner" required="true">
    <crafting>
        <grid size="3x3">
            <item name="ELECTRICAL_STEEL" /><item name="itemSkull" /><item name="
ELECTRICAL_STEEL" />
            <item name="ELECTRICAL_STEEL" /><item name="SOUL_CHASSIS" /><item name="
ELECTRICAL_STEEL" />
            <item name="VIBRANT_CRYSTAL" /><item name="ZOMBIE_CONTROLLER" /><item name="
VIBRANT_CRYSTAL" />
        </grid>
        <output name="enderio:block_powered_spawner" />
    </crafting>
</recipe>

<recipe name="Reservoir" required="true">
    <crafting>
        <grid size="3x3">
            <item name="blockGlassHardened" /><item name="FUSED_QUARTZ" /><item name="
blockGlassHardened" />
            <item name="blockGlassHardened" /><item name="item:minecraft:cauldron" /><item
name="blockGlassHardened" />

```

```

        <item name="blockGlassHardened" /><item name="FUSED_QUARTZ" /><item name="
blockGlassHardened" />
    </grid>
    <output name="enderio:block_reservoir" amount="4" />
</crafting>
</recipe>

<recipe name="Omni Reservoir" required="true">
    <crafting>
        <grid size="3x3">
            <item name="blockGlass" /><item name="FUSED_QUARTZ" /><item name="blockGlass"
/>
            <item name="blockGlass" /><item name="item:minecraft:cauldron" /><item name="
blockGlass" />
            <item name="blockGlass" /><item name="FUSED_QUARTZ" /><item name="blockGlass"
/>
        </grid>
        <output name="enderio:block_omni_reservoir" amount="4" />
    </crafting>
</recipe>

<recipe name="Tank" required="true">
    <crafting>
        <grid size="3x3">
            <item name="IRON" /><item name="barsIron" /><item name="IRON" />
            <item name="barsIron" /><item name="blockGlass" /><item name="barsIron" />
            <item name="IRON" /><item name="barsIron" /><item name="IRON" />
        </grid>
        <output name="enderio:block_tank:0" />
    </crafting>
</recipe>

<recipe name="Tank 2" required="true">
    <crafting>
        <grid size="3x3">
            <item name="DARK_STEEL" /><item name="enderio:block_dark_iron_bars" /><item
name="DARK_STEEL" />
            <item name="enderio:block_dark_iron_bars" /><item name="blockGlassHardened"
/><item name="enderio:block_dark_iron_bars" />
            <item name="DARK_STEEL" /><item name="enderio:block_dark_iron_bars" /><item
name="DARK_STEEL" />
        </grid>
        <output name="enderio:block_tank:1" />
    </crafting>
</recipe>

<recipe name="Simple Alloy Smelter" required="true">
    <crafting>
        <grid size="3x3">
            <item name="IRON" /><item name="IRON" /><item name="IRON" />
            <item name="minecraft:furnace" /><item name="SIMPLE_CHASSIS"/><item name="
minecraft:furnace" />
            <item name="GEAR_STONE" /><item name="item:minecraft:bucket" /><item name="
GEAR_STONE" />
        </grid>
        <output name="enderio:block_simple_alloy_smelter" />
    </crafting>
</recipe>

<recipe name="Simple Furnace" required="true">
    <crafting>
        <grid size="3x3">
            <item name="IRON" /><item name="minecraft:furnace" /><item name="IRON" />
            <item name="minecraft:stonebrick:0" /><item name="SIMPLE_CHASSIS"/><item name="
minecraft:stonebrick:0" />
            <item name="GEAR_STONE" /><item name="item:minecraft:bucket" /><item name="
GEAR_STONE" />
        </grid>

```

```

        <output name="enderio:block_simple_furnace" />
    </crafting>
</recipe>

<recipe name="Alloy Smelter" required="true">
    <crafting>
        <grid size="3x3">
            <item name="ingotDarkSteel" /><item name="minecraft:furnace" /><item name="
ingotDarkSteel" />
            <item name="minecraft:furnace" /><item name="CHASSIS" /><item name="minecraft:
furnace" />
            <item name="GEAR_DARKSTEEL" /><item name="item:minecraft:cauldron" /><item
name="GEAR_DARKSTEEL" />
        </grid>
        <output name="enderio:block_alloy_smelter" />
    </crafting>
</recipe>

<recipe name="Alloy Smelter, Upgrade" required="true">
    <crafting upgrade="true">
        <grid size="3x3">
            <item name="ingotDarkSteel" /><item /><item name="ingotDarkSteel" />
            <item name="enderio:block_simple_alloy_smelter" /><item name="CHASSIS" /><item
name="enderio:block_simple_furnace" />
            <item name="GEAR_DARKSTEEL" /><item /><item name="GEAR_DARKSTEEL" />
        </grid>
        <output name="enderio:block_alloy_smelter" />
    </crafting>
</recipe>

<recipe name="Enhanced Alloy Smelter" required="true">
    <crafting>
        <grid size="3x3">
            <item name="ingotEndSteel" /><item name="minecraft:furnace" /><item name="
ingotEndSteel" />
            <item name="minecraft:furnace" /><item name="ENHANCED_CHASSIS" /><item name="
minecraft:furnace" />
            <item name="GEAR_VIBRANT" /><item name="item:minecraft:cauldron" /><item name="
GEAR_VIBRANT" />
        </grid>
        <output name="enderio:block_enhanced_alloy_smelter" />
    </crafting>
</recipe>

<recipe name="Enhanced Alloy Smelter, Upgrade" required="true">
    <crafting upgrade="true">
        <grid size="3x2">
            <item name="ingotEndSteel" /><item name="enderio:block_alloy_smelter" /><item
name="ingotEndSteel" />
            <item name="GEAR_VIBRANT" /><item name="ENHANCED_CHASSIS" /><item name="
GEAR_VIBRANT" />
        </grid>
        <output name="enderio:block_enhanced_alloy_smelter" />
    </crafting>
</recipe>

<recipe name="The Vat" required="true">
    <crafting>
        <grid size="3x3">
            <item name="ELECTRICAL_STEEL" /><item name="item:minecraft:cauldron" /><item
name="ELECTRICAL_STEEL" />
            <item name="enderio:block_tank:0" /><item name="CHASSIS" /><item name="enderio:
block_tank:0" />
            <item name="ingotDarkSteel" /><item name="minecraft:furnace" /><item name="
ingotDarkSteel" />
        </grid>
        <output name="enderio:block_vat" />
    </crafting>

```

```

</recipe>

<recipe name="The Enhanced Vat" required="true">
  <crafting>
    <grid size="3x3">
      <item name="ELECTRICAL_STEEL" /><item name="item:minecraft:cauldron" /><item
name="ELECTRICAL_STEEL" />
      <item name="enderio:block_tank:1" /><item name="ENHANCED_CHASSIS" /><item
name="enderio:block_tank:1" />
      <item name="ingotEndSteel" /><item name="minecraft:furnace" /><item name="
ingotEndSteel" />
    </grid>
    <output name="enderio:block_enhanced_vat" />
  </crafting>
</recipe>

<recipe name="The Enhanced Vat, Upgrade" required="true">
  <crafting upgrade="true">
    <grid size="3x2">
      <item name="ingotEndSteel" /><item name="enderio:block_vat" /><item name="
ingotEndSteel" />
      <item name="enderio:block_tank:1" /><item name="ENHANCED_CHASSIS" /><item
name="enderio:block_tank:1" />
    </grid>
    <output name="enderio:block_enhanced_vat" />
  </crafting>
</recipe>

<recipe name="Painter" required="true">
  <crafting>
    <grid size="3x3">
      <item name="gemQuartz" /><item name="gemDiamond" /><item name="gemQuartz" />
      <item name="GEAR_IRON" /><item name="CHASSIS" /><item name="GEAR_IRON" />
      <item name="ELECTRICAL_STEEL" /><item name="ELECTRICAL_STEEL" /><item name="
ELECTRICAL_STEEL" />
    </grid>
    <output name="enderio:blockPainter" />
  </crafting>
</recipe>

<recipe name="Farming Station" required="true">
  <crafting>
    <grid size="3x3">
      <item name="VIBRANT_CRYSTAL" /><item name="ZOMBIE_CONTROLLER" /><item name="
VIBRANT_CRYSTAL" />
      <item name="SOULARIUM" /><item name="SOUL_CHASSIS" /><item name="SOULARIUM" />
      <item name="GEAR_ENERGIZED" /><item name="PULSATING_CRYSTAL" /><item name="
GEAR_ENERGIZED" />
    </grid>
    <output name="enderio:block_farm_station" />
  </crafting>
</recipe>

<recipe name="Transceiver" required="true">
  <crafting>
    <grid size="3x3">
      <item name="ELECTRICAL_STEEL" /><item name="ENDER_RESONATOR" /><item name="
ELECTRICAL_STEEL" />
      <item name="FUSED_QUARTZ" /><item name="ENDER_CRYSTAL" /><item name="
FUSED_QUARTZ" />
      <item name="ELECTRICAL_STEEL" /><item name="CAPACITOR3" /><item name="
ELECTRICAL_STEEL" />
    </grid>
    <output name="enderio:block_transceiver" />
  </crafting>
</recipe>

<recipe name="Solar Panel 1" required="true">

```



```

    <crafting>
      <grid size="3x3">
        <item name="ELECTRICAL_STEEL" /><item name="FUSED_GLASS" /><item name="
ELECTRICAL_STEEL" />
        <item name="itemPlatePhotovoltaic" /><item name="itemPlatePhotovoltaic"
/><item name="itemPlatePhotovoltaic" />
        <item name="POWDER_INFINITY" /><item name="GEAR_IRON" /><item name="
POWDER_INFINITY" />
      </grid>
      <output name="SOLAR_1" />
    </crafting>
  </recipe>

  <recipe name="Solar Panel 2" required="true">
    <crafting>
      <grid size="3x3">
        <item name="ENERGETIC_ALLOY" /><item name="FUSED_QUARTZ" /><item name="
ENERGETIC_ALLOY" />
        <item name="itemPlatePhotovoltaic" /><item name="itemPlatePhotovoltaic"
/><item name="itemPlatePhotovoltaic" />
        <item name="CAPACITOR1" /><item name="minecraft:daylight_detector" /><item
name="CAPACITOR1" />
      </grid>
      <output name="SOLAR_2" />
    </crafting>
  </recipe>

  <recipe name="Solar Panel 2, Upgrade" required="true">
    <crafting>
      <grid size="3x3">
        <item name="ENERGETIC_ALLOY" /><item name="FUSED_QUARTZ" /><item name="
ENERGETIC_ALLOY" />
        <item /><item name="SOLAR_1" /><item />
        <item name="CAPACITOR1" /><item name="minecraft:daylight_detector" /><item
name="CAPACITOR1" />
      </grid>
      <output name="SOLAR_2" />
    </crafting>
  </recipe>

  <recipe name="Solar Panel 3" required="true">
    <crafting>
      <grid size="3x3">
        <item name="PULSATING_IRON" /><item name="ENLIGHTED_QUARTZ" /><item name="
PULSATING_IRON" />
        <item name="itemPlatePhotovoltaic" /><item name="itemPlatePhotovoltaic"
/><item name="itemPlatePhotovoltaic" />
        <item name="CAPACITOR2" /><item name="minecraft:daylight_detector" /><item
name="CAPACITOR2" />
      </grid>
      <output name="SOLAR_3" />
    </crafting>
  </recipe>

  <recipe name="Solar Panel 3, Upgrade" required="true">
    <crafting>
      <grid size="3x3">
        <item name="PULSATING_IRON" /><item name="ENLIGHTED_QUARTZ" /><item name="
PULSATING_IRON" />
        <item name="ENERGETIC_ALLOY" /><item name="dustCoal" /><item name="
ENERGETIC_ALLOY" />
        <item name="CAPACITOR1" /><item name="SOLAR_2" /><item name="CAPACITOR1" />
      </grid>
      <output name="SOLAR_3" />
    </crafting>
  </recipe>

  <recipe name="Solar Panel 4" required="true">

```

```

    <crafting>
      <grid size="3x3">
        <item name="VIBRANT_ALLOY" /><item name="DARK_QUARTZ" /><item name="
VIBRANT_ALLOY" />
        <item name="itemPlatePhotovoltaic" /><item name="itemPlatePhotovoltaic"
/><item name="itemPlatePhotovoltaic" />
        <item name="CAPACITOR3" /><item name="minecraft:daylight_detector" /><item
name="CAPACITOR3" />
      </grid>
      <output name="SOLAR_4" />
    </crafting>
  </recipe>

  <recipe name="Solar Panel 4, Upgrade" required="true">
    <crafting>
      <grid size="3x3">
        <item name="VIBRANT_ALLOY" /><item name="DARK_QUARTZ" /><item name="
VIBRANT_ALLOY" />
        <item name="VIBRANT_ALLOY" /><item name="oredict:glowstone" /><item name="
VIBRANT_ALLOY" />
        <item name="CAPACITOR2" /><item name="SOLAR_3" /><item name="CAPACITOR2" />
      </grid>
      <output name="SOLAR_4" />
    </crafting>
  </recipe>

  <recipe name="Enchanter" required="true">
    <crafting>
      <grid size="3x3">
        <item name="gemDiamond" /><item name="minecraft:book" /><item name="
gemDiamond" />
        <item name="DARK_STEEL" /><item name="DARK_STEEL" /><item name="DARK_STEEL" />
        <item /><item name="DARK_STEEL" /><item />
      </grid>
      <output name="enderio:block_enchanter" />
    </crafting>
  </recipe>

  <recipe name="Vacuum Chest" required="true">
    <crafting>
      <grid size="3x3">
        <item name="IRON" /><item name="IRON" /><item name="IRON" />
        <item name="IRON" /><item name="chestWood" /><item name="IRON" />
        <item name="IRON" /><item name="PULSATING_CRYSTAL" /><item name="IRON" />
      </grid>
      <output name="enderio:block_vacuum_chest" />
    </crafting>
  </recipe>

  <recipe name="XP Vacuum" required="true">
    <crafting>
      <grid size="3x3">
        <item name="IRON" /><item name="IRON" /><item name="IRON" />
        <item name="IRON" /><item name="enderio:item_xp_transfer" /><item name="IRON"
/>
        <item name="IRON" /><item name="PULSATING_CRYSTAL" /><item name="IRON" />
      </grid>
      <output name="enderio:block_xp_vacuum" />
    </crafting>
  </recipe>

  <recipe name="Soul Binder" required="true">
    <crafting>
      <grid size="3x3">
        <item name="SOULARIUM" /><item name="HEAD_ENDERMAN" /><item name="SOULARIUM" />
        <item name="HEAD_ZOMBIE" /><item name="SOUL_CHASSIS" /><item name="
HEAD_CREEPER" />
        <item name="SOULARIUM" /><item name="HEAD_SKELETON" /><item name="SOULARIUM" />

```

```

        </grid>
        <output name="enderio:block_soul_binder" />
    </crafting>
</recipe>

<recipe name="Attractor Obelisk" required="true">
    <crafting>
        <grid size="3x3">
            <item /><item name="ATTRACTOR_CRYSTAL" /><item />
            <item name="ENERGETIC_ALLOY" /><item name="GEAR_WOOD" /><item name="
ENERGETIC_ALLOY" />
            <item name="SOULARIUM" /><item name="SOUL_CHASSIS" /><item name="SOULARIUM" />
        </grid>
        <output name="enderio:block_attractor_obelisk" />
    </crafting>
</recipe>

<recipe name="Aversion Obelisk" required="true">
    <crafting>
        <grid size="3x3">
            <item /><item name="HEAD_ENDERMAN_TORMENTED" /><item />
            <item name="ENERGETIC_ALLOY" /><item name="GEAR_ENERGIZED" /><item name="
ENERGETIC_ALLOY" />
            <item name="SOULARIUM" /><item name="SOUL_CHASSIS" /><item name="SOULARIUM" />
        </grid>
        <output name="enderio:block_aversion_obelisk" />
    </crafting>
</recipe>

<recipe name="Relocator Obelisk" required="true">
    <crafting>
        <grid size="3x3">
            <item /><item name="blockPrismarine" /><item />
            <item name="blockPrismarine" /><item name="enderio:block_aversion_obelisk"
/><item name="blockPrismarine" />
            <item /><item name="GEAR_VIBRANT" /><item />
        </grid>
        <output name="enderio:block_relocator_obelisk" />
    </crafting>
</recipe>

<recipe name="Inhibitor Obelisk" required="true">
    <crafting>
        <grid size="3x3">
            <item /><item name="ENDER_CRYSTAL" /><item />
            <item name="ENERGETIC_ALLOY" /><item name="GEAR_IRON" /><item name="
ENERGETIC_ALLOY" />
            <item name="SOULARIUM" /><item name="SOUL_CHASSIS" /><item name="SOULARIUM" />
        </grid>
        <output name="enderio:block_inhibitor_obelisk" />
    </crafting>
</recipe>

<recipe name="Experience Obelisk" required="true">
    <crafting>
        <grid size="3x3">
            <item /><item name="enderio:item_xp_transfer" /><item />
            <item name="ENERGETIC_ALLOY" /><item name="enderio:block_tank:0" /><item name="
ENERGETIC_ALLOY" />
            <item name="SOULARIUM" /><item name="SOUL_CHASSIS" /><item name="SOULARIUM" />
        </grid>
        <output name="enderio:block_experience_obelisk" />
    </crafting>
</recipe>

<recipe name="Weather Obelisk" required="true">
    <crafting>
        <grid size="3x3">

```

```

        <item /><item name="WEATHER_CRYSTAL" /><item />
        <item name="ENERGETIC_ALLOY" /><item name="CAPACITOR3" /><item name="
ENERGETIC_ALLOY" />
        <item name="SOULARIUM" /><item name="SOUL_CHASSIS" /><item name="SOULARIUM" />
    </grid>
    <output name="enderio:block_weather_obelisk" />
</crafting>
</recipe>

<recipe name="Light, basic" required="true">
    <crafting>
        <grid size="3x2">
            <item name="blockGlass" /><item name="blockGlass" /><item name="blockGlass" />
            <item name="IRON" /><item name="oredict:glowstone" /><item name="IRON" />
        </grid>
        <output name="LIGHT_BASIC" />
    </crafting>
</recipe>

<recipe name="Light, basic (un-invert)" required="true">
    <crafting>
        <shapeless>
            <item name="LIGHT_BASIC_INV" />
            <item name="minecraft:redstone_torch" />
        </shapeless>
        <output name="LIGHT_BASIC" />
    </crafting>
</recipe>

<recipe name="Light, basic, inverted (invert)" required="true">
    <crafting>
        <shapeless>
            <item name="LIGHT_BASIC" />
            <item name="minecraft:redstone_torch" />
        </shapeless>
        <output name="LIGHT_BASIC_INV" />
    </crafting>
</recipe>

<recipe name="Light, electric" required="true">
    <crafting>
        <grid size="3x3">
            <item name="FUSED_QUARTZ" /><item name="FUSED_QUARTZ" /><item name="
FUSED_QUARTZ" />
            <item name="SILICON" /><item name="dustGlowstone" /><item name="SILICON" />
            <item name="SILICON" /><item name="CAPACITOR1" /><item name="SILICON" />
        </grid>
        <output name="LIGHT_ELECTRIC" />
    </crafting>
</recipe>

<recipe name="Light, electric (un-invert)" required="true">
    <crafting>
        <shapeless>
            <item name="LIGHT_ELECTRIC_INV" />
            <item name="minecraft:redstone_torch" />
        </shapeless>
        <output name="LIGHT_ELECTRIC" />
    </crafting>
</recipe>

<recipe name="Light, electric inverted (invert)" required="true">
    <crafting>
        <shapeless>
            <item name="LIGHT_ELECTRIC" />
            <item name="minecraft:redstone_torch" />
        </shapeless>
        <output name="LIGHT_ELECTRIC_INV" />
    </crafting>
</recipe>

```

```

    </crafting>
</recipe>

<recipe name="Light, wireless (upgrade)" required="true">
  <crafting>
    <shapeless>
      <item name="LIGHT_ELECTRIC" />
      <item name="ENDER_RESONATOR" />
    </shapeless>
    <output name="LIGHT_WIRELESS" />
  </crafting>
</recipe>

<recipe name="Light, wireless (un-invert)" required="true">
  <crafting>
    <shapeless>
      <item name="LIGHT_WIRELESS_INV" />
      <item name="minecraft:redstone_torch" />
    </shapeless>
    <output name="LIGHT_WIRELESS" />
  </crafting>
</recipe>

<recipe name="Light, wireless, inverted (upgrade)" required="true">
  <crafting>
    <shapeless>
      <item name="LIGHT_ELECTRIC_INV" />
      <item name="ENDER_RESONATOR" />
    </shapeless>
    <output name="LIGHT_WIRELESS_INV" />
  </crafting>
</recipe>

<recipe name="Light, wireless, inverted (invert)" required="true">
  <crafting>
    <shapeless>
      <item name="LIGHT_WIRELESS" />
      <item name="minecraft:redstone_torch" />
    </shapeless>
    <output name="LIGHT_WIRELESS_INV" />
  </crafting>
</recipe>

<recipe name="Slice'N'Splice" required="true">
  <crafting>
    <grid size="3x3">
      <item name="SOULARIUM" /><item name="itemSkull" /><item name="SOULARIUM" />
      <item name="SOULARIUM" /><item name="SOUL_CHASSIS" /><item name="SOULARIUM" />
      <item name="GEAR_ENERGIZED" /><item name="barsIron" /><item name="
GEAR_ENERGIZED" />
    </grid>
    <output name="enderio:block_slice_and_splice" />
  </crafting>
</recipe>

<recipe name="Slice'N'Splice (Dark Bars)" required="true">
  <crafting>
    <grid size="3x3">
      <item name="SOULARIUM" /><item name="itemSkull" /><item name="SOULARIUM" />
      <item name="SOULARIUM" /><item name="SOUL_CHASSIS" /><item name="SOULARIUM" />
      <item name="GEAR_ENERGIZED" /><item name="enderio:block_dark_ironBars"
/><item name="GEAR_ENERGIZED" />
    </grid>
    <output name="enderio:block_slice_and_splice" />
  </crafting>
</recipe>
<!-- <recipe name="Slice'N'Splice, mirrored" required="true">
  <crafting>

```

```

    <grid size="3x3">
      <item name="SOULARIUM" /><item name="itemSkull" /><item name="SOULARIUM" />
      <item name="minecraft:shears" /><item name="SOUL_CHASSIS" /><item name="
minecraft:iron_axe" />
      <item name="SOULARIUM" /><item name="SOULARIUM" /><item name="SOULARIUM" />
    </grid>
    <output name="enderio:block_slice_and_splice" />
  </crafting>
</recipe> -->

<recipe name="Item Buffer" required="true">
  <crafting>
    <grid size="3x3">
      <item name="IRON" /><item name="ELECTRICAL_STEEL" /><item name="IRON" />
      <item name="ELECTRICAL_STEEL" /><item name="chestWood" /><item name="
ELECTRICAL_STEEL" />
      <item name="IRON" /><item name="ELECTRICAL_STEEL" /><item name="IRON" />
    </grid>
    <output name="enderio:block_buffer:0" />
  </crafting>
</recipe>

<recipe name="Power Buffer" required="true">
  <crafting>
    <grid size="3x3">
      <item name="IRON" /><item name="ELECTRICAL_STEEL" /><item name="IRON" />
      <item name="ELECTRICAL_STEEL" /><item name="CHASSIS" /><item name="
ELECTRICAL_STEEL" />
      <item name="IRON" /><item name="ELECTRICAL_STEEL" /><item name="IRON" />
    </grid>
    <output name="enderio:block_buffer:1" />
  </crafting>
</recipe>

<recipe name="Omni Buffer" required="true">
  <crafting>
    <shapeless>
      <item name="enderio:block_buffer:0" />
      <item name="enderio:block_buffer:1" />
    </shapeless>
    <output name="enderio:block_buffer:2" />
  </crafting>
</recipe>

<recipe name="Travel Anchor" required="true">
  <crafting>
    <grid size="3x3">
      <item name="IRON" /><item name="CONDUIT_BINDER" /><item name="IRON" />
      <item name="CONDUIT_BINDER" /><item name="PULSATING_CRYSTAL" /><item name="
CONDUIT_BINDER" />
      <item name="IRON" /><item name="CONDUIT_BINDER" /><item name="IRON" />
    </grid>
    <output name="enderio:block_travel_anchor" />
  </crafting>
</recipe>

<recipe name="TelePad" required="true">
  <crafting>
    <grid size="3x3">
      <item name="FUSED_QUARTZ" /><item name="VIBRANT_ALLOY" /><item name="
FUSED_QUARTZ" />
      <item name="DARK_STEEL" /><item name="enderio:block_travel_anchor" /><item
name="DARK_STEEL" />
      <item name="DARK_STEEL" /><item name="CAPACITOR1" /><item name="DARK_STEEL" />
    </grid>
    <output name="enderio:block_tele_pad" />
  </crafting>
</recipe>

```

```

<recipe name="DialingDevice" required="true">
  <crafting>
    <grid size="3x3">
      <item/><item name="ELECTRICAL_STEEL" /><item/>
      <item/><item name="ENDER_RESONATOR" /><item/>
      <item name="DARK_STEEL" /><item name="CAPACITOR3" /><item name="DARK_STEEL" />
    </grid>
    <output name="enderio:block_dialing_device" />
  </crafting>
</recipe>

<recipe name="ImpulseHopper" required="true">
  <crafting>
    <grid size="3x3">
      <item name="ELECTRICAL_STEEL"/><item name="minecraft:hopper" /><item name="
ELECTRICAL_STEEL"/>
      <item name="GEAR_ENERGIZED"/><item name="CHASSIS" /><item name="GEAR_ENERGIZED"
/>
      <item name="ELECTRICAL_STEEL" /><item name="REDSTONE_ALLOY" /><item name="
ELECTRICAL_STEEL" />
    </grid>
    <output name="enderio:block_impulse_hopper" />
  </crafting>
</recipe>

<recipe name="Crafter" required="true">
  <crafting>
    <grid size="3x3">
      <item name="itemSilicon"/><item name="itemSilicon" /><item name="itemSilicon"/>
      <item name="IRON"/><item name="CHASSIS" /><item name="IRON"/>
      <item name="GEAR_IRON" /><item name="oredict:workbench" /><item name="
GEAR_IRON" />
    </grid>
    <output name="enderio:block_crafter" />
  </crafting>
</recipe>

<recipe name="SimpleCrafter" required="true">
  <crafting>
    <grid size="3x3">
      <item name="itemSilicon"/><item name="itemSilicon" /><item name="itemSilicon"/>
      <item name="IRON"/><item name="SIMPLE_CHASSIS" /><item name="IRON"/>
      <item name="GEAR_STONE" /><item name="oredict:workbench" /><item name="
GEAR_STONE" />
    </grid>
    <output name="enderio:block_simple_crafter" />
  </crafting>
</recipe>

<recipe name="Crafter, Upgrade" required="true">
  <crafting>
    <grid size="3x2">
      <item /><item name="enderio:block_simple_crafter" /><item />
      <item name="GEAR_IRON" /><item name="CHASSIS" /><item name="GEAR_IRON" />
    </grid>
    <output name="enderio:block_crafter" />
  </crafting>
</recipe>

<recipe name="Lava Generator" required="true">
  <crafting>
    <grid size="3x3">
      <item name="ingotBrickNetherGlazed"/><item name="ingotBrickNetherGlazed"
/><item name="ingotBrickNetherGlazed"/>
      <item name="ingotBrickNetherGlazed"/><item name="CHASSIS" /><item name="
ingotBrickNetherGlazed"/>
      <item name="ingotBrickNetherGlazed" /><item name="enderio:block_tank:0"

```

```
/><item name="ingotBrickNetherGlazed" />
  </grid>
  <output name="enderio:block_lava_generator" />
</crafting>
</recipe>

<recipe name="Niard" required="true">
  <crafting>
    <grid size="3x3">
      <item name="item:minecraft:bucket"/><item name="enderio:block_tank:0" /><item
name="item:minecraft:bucket"/>
      <item name="minecraft:piston"/><item name="CHASSIS" /><item name="minecraft:
piston"/>
      <item name="ELECTRICAL_STEEL" /><item name="enderio:block_dark_ironBars"
/><item name="ELECTRICAL_STEEL" />
    </grid>
    <output name="enderio:block_niard" />
  </crafting>
</recipe>

</enderio:recipes>
```