General Infos

> SmartContract (SOL): https://github.com/samclassix/frankencoin-utils/blob/main/contracts/LiquidityController.sol

> ABI (JSON): https://github.com/samclassix/frankencoin-utils/blob/main/abi/LiquidityController.json

Deployment No. 1 - 0x10A0DDB46361b3F1d6405eFffc1Db96771bAb85F

> https://github.com/samclassix/frankencoin-utils/tree/main/ignition/deployments/dep1

Swap Exact Input Single through SC

> https://polygonscan.com/tx/0xbaafc96f0edc120e1c105d239bac01701c0683b2d8ab565f7ccee3de171ab237

Tx Input (hex)

```
0xb4580507000000000000000000000000002567e4b14b25549331fcee2b56c647a8bab16fd
0000000000000000000000000c2132d05d31c914a87c6611c10748aeb04b58e8f0000000000
00000000000000000000000000000000000000000000000000000001f40000000000000000000
0000000000000000000000000000000000000016345785d8a00000000000000000000000000000
0000000000000000000000000000000000000000000000000000000000000000000000000000
0000000000000000000000000
```

Tx Input Decoded (Json)

```json
{
  "method": "swapExactInputSingle",
  "types": [
    "address",
    "address",
    "uint24",
    "uint256",
    "uint256",
    "uint160"
  ],
  "inputs": [
    "02567e4b14b25549331fCEe2B56c647A8bAB16FD",
    "c2132D05D31c914a87C6611C10748AEb04B58e8F",
    500,
```

```json
    {
      "type": "BigNumber",
      "hex": "0x016345785d8a0000"
    },
    {
      "type": "BigNumber",
      "hex": "0x00"
    },
    {
      "type": "BigNumber",
      "hex": "0x00"
    }
  ],
  "names": [
    "tkn0",
    "tkn1",
    "fee",
    "amountIn",
    "amountOutMinimum",
    "sqrtPriceLimitX96"
  ]
}
```

Swap Exact Output Single through SC

> https://polygonscan.com/tx/0x2aa2a321add332a7345709a4f5038fd31abb53af4ea747d0bf42922f71
> f181cd

Tx Input (hex)

```
0x4c8c73140000000000000000000000002567e4b14b25549331fcee2b56c647a8bab16fd
00000000000000000000000000c2132d05d31c914a87c6611c10748aeb04b58e8f0000000000
0000000000000000000000000000000000000000000000000001f40000000000000000000000
00000000000000000000000000000000000000000000186a0000000000000000000000000000
000000000000000000000de0b6b3a764000000000000000000000000000000000000000000000
0000000000000000000000000000
```

Tx Input Decoded (Json)

```json
{
  "method": "swapExactOutputSingle",
  "types": [
    "address",
    "address",
    "uint24",
    "uint256",
    "uint256",
```

```
          "uint160"
        ],
        "inputs": [
          "02567e4b14b25549331fCEe2B56c647A8bAB16FD",
          "c2132D05D31c914a87C6611C10748AEb04B58e8F",
          500,
          {
            "type": "BigNumber",
            "hex": "0x0186a0"
          },
          {
            "type": "BigNumber",
            "hex": "0x0de0b6b3a7640000"
          },
          {
            "type": "BigNumber",
            "hex": "0x00"
          }
        ],
        "names": [
          "tkn0",
          "tkn1",
          "fee",
          "amountOut",
          "amountInMaximum",
          "sqrtPriceLimitX96"
        ]
      }
```

Deployment No. 3 - 0xaACb94eC5eE4e6742aC4472Fd275569378F0A2 B4

> https://github.com/samclassix/frankencoin-utils/tree/main/ignition/deployments/dep3

Create mint

> https://polygonscan.com/tx/0x76d5bab286491193bb472fdf74783277526c00dc443d7d3b015ecdd 939c95789

Tx Input (hex)

```
0xdd37019d000000000000000000000000002567e4b14b25549331fcee2b56c647a8bab16fd
0000000000000000000000000c2132d05d31c914a87c6611c10748aeb04b58e8f0000000000
000000000000000000000000000000000000000000000000001f4ffffffffffffffffffffff
fffffffffffffffffffffffffffffffffffffffffffbcec2ffffffffffffffffffffffffffff
fffffffffffffffffffffffffffffffbced6000000000000000000000000000000000000000
```

```
000000001634537c2627a7300000000000000000000000000000000000000000000000000
0000000003a6890000000000000000000000000000000000000000000000000000000000000
0000000000000000000000000000000000000000000000000000000000000000000000000
```

Tx Input Decoded (Json)

```
{
  "method": "mintNewPosition",
  "types": [
    "address",
    "address",
    "uint24",
    "int24",
    "int24",
    "uint256",
    "uint256",
    "uint256",
    "uint256"
  ],
  "inputs": [
    "02567e4b14b25549331fCEe2B56c647A8bAB16FD",
    "c2132D05D31c914a87C6611C10748AEb04B58e8F",
    500,
    -274750,
    -274730,
    {
      "type": "BigNumber",
      "hex": "0x01634537c2627a73"
    },
    {
      "type": "BigNumber",
      "hex": "0x03a689"
    },
    {
      "type": "BigNumber",
      "hex": "0x00"
    },
    {
      "type": "BigNumber",
      "hex": "0x00"
    }
  ],
  "names": [
    "token0",
    "token1",
    "fee",
    "tickLower",
    "tickUpper",
    "amount0Desired",
    "amount1Desired",
    "amount0Min",
```

```
      "amount1Min"
    ]
  }
```

Decrease Liquidity

> https://polygonscan.com/tx/0xbfb366ca049bd102bdeeca0952a60609ffb090d76985569a7bd455c
> 9ca6b6edc

Tx Input (hex)

0x8e5f5977000000000000000000000000000000000000000000000000000000000020a0b2
00000000000000000000000000000000000000000000000000000001df4662671a30000000000
00000000000000000000000000000000000000000000000000000000000000000000000000000
000000000000000000000000000000000000000000

Tx Input Decoded (Json)

```
{
  "method": "decreaseLiquidity",
  "types": [
    "uint256",
    "uint128",
    "uint256",
    "uint256"
  ],
  "inputs": [
    {
      "type": "BigNumber",
      "hex": "0x20a0b2"
    },
    {
      "type": "BigNumber",
      "hex": "0x1df4662671a3"
    },
    {
      "type": "BigNumber",
      "hex": "0x00"
    },
    {
      "type": "BigNumber",
      "hex": "0x00"
    }
  ],
  "names": [
    "tokenId",
    "liquidity",
```

```
        "amount0Min",
        "amount1Min"
      ]
    }
```

Collect Fee

> https://polygonscan.com/tx/0xbacb64eaffc1438ddcbe8a8b817606995d4eee81924db2a8c3c524bb
> ef418420

Tx Input (hex)

```
0x3a483cb000000000000000000000000000000000000000000000000000000000000020a0b2
000000000000000000000000000000000000000000000000000000000000000000
```

Tx Input Decoded (Json)

```
{
  "method": "collectFees",
  "types": [
    "uint256",
    "bool"
  ],
  "inputs": [
    {
      "type": "BigNumber",
      "hex": "0x20a0b2"
    },
    false
  ],
  "names": [
    "tokenId",
    "withdraw"
  ]
}
```

Increase Liquidity

> https://polygonscan.com/tx/0xcfece73327808255b7b219affb441c19aea27a566de463acfc1b57e457
> 2812d0

Tx Input (hex)

```
0xc691b0a10000000000000000000000000000000000000000000000000000000000020a0b2
00000000000000000000000000000000000000000000000000000000000000000000000000
000000000000000000000000000000000000000000000008b7a000000000000000000000000
00000000000000000000000000000000000000000000000000000000000000000000000000
0000000000000000000000000000000000
```

Tx Input Decoded (Json)

```
{
  "method": "increaseLiquidity",
  "types": [
    "uint256",
    "uint256",
    "uint256",
    "uint256",
    "uint256"
  ],
  "inputs": [
    {
      "type": "BigNumber",
      "hex": "0x20a0b2"
    },
    {
      "type": "BigNumber",
      "hex": "0x00"
    },
    {
      "type": "BigNumber",
      "hex": "0x8b7a"
    },
    {
      "type": "BigNumber",
      "hex": "0x00"
    },
    {
      "type": "BigNumber",
      "hex": "0x00"
    }
  ],
  "names": [
    "tokenId",
    "amount0Desired",
    "amount1Desired",
    "amount0Min",
    "amount1Min"
  ]
}
```