

Kaspa Common Stratum Protocol  
Kaspa Common Stratum Protocol is standardized by kaspapool, WoolyPooly,  
F2Pool and HumPool.

mining.subscribe

params: ["IceRiverMiner-v1.1", "EthereumStratum/1.0.0"]

result: [true, "Protocol version"]

// request:

```
{
  "id":1,
  "method":"mining.subscribe",
  "params":[
    "IceRiverMiner-v1.1",
    "EthereumStratum/1.0.0"
  ]
}
```

// response:

```
{
  "id":1,
  "result":[
    true,
    "EthereumStratum/1.0.0"
  ],
  "error":null
}
```

mining.set\_difficulty

params: [Nth integer of 2]

```
{
  "id":2,
  "method":"mining.set_difficulty",
  "params":[
    4096
  ]
}
```

mining.set\_extranonce

```
{
  "id":3,
  "method":"mining.set_extranonce",
  "params":[
    "0001"
  ]
}
```

nonce-prefix is first part of the block header nonce (in hex).

By protocol, Kaspa's nonce is 8 bytes long. The miner will pick nonce2 such that  $\text{len}(\text{nonce2}) = 8 - \text{len}(\text{nonce-prefix}) = 8 - 2 = 6$  bytes.

mining.authorize

```
params: ["username", "password"]
result: true

{
  "id":3,
  "method":"mining.authorize",
  "params":[

"kaspa:qzcd29ee8ez7xwkv9n232v1093g3q0z0t0yqklczmnfk8j8pswxt9aqq5yl.work
name",
    ""
  ]
}

{"id":3,"params":"mining.authorize","result":true}
```

```
mining.notify
params: ["jobId", "header hash"]

{
  "id":1,
  "method":"mining.notify",
  "params":[
    "34",

"2461684d90ef4e9fa55ca550ed4f9dd472d7bde502e01bf45ab7a3336d43cc9d4b9c7b48
86010000"
  ]
}
```

```
mining.submit
params: [ "username", "jobId", "nonce" ]
result: true / false

{
  "id":140,
  "method":"mining.submit",
  "params":[

"kaspa:qzcd29ee8ez7xwkv9n232v1093g3q0z0t0yqklczmnfk8j8pswxt9aqq5yl.work
name",
    "34",
    "00011f7a5745732a"
  ]
}

{"id":140,"result":true,"error":null} // accepted share response
{"id":140,"result":null,"error":[30,"Low difficulty share",null]} //
rejected share response
```

nonce2 is the second part of the nonce.