

# Using Ledger wallet with ethers on Sei

Prerequisites:

1. Make sure you have a Ethereum app installed on your Ledger device.
2. Enable blind signing in the Ethereum app settings (needed for precompile examples and working with contracts in general).
3. Linux users may need to add a udev rule to allow access to the device. You can find the script to add a rule in the Ledger repo [here\(opens in a new tab\)](#)
4. .

## Sending funds example

```
import {LedgerSigner} from
"@ethers-ext/signer-ledger" ; import Transport from
"@ledgerhq/hw-transport-node-hid" ; import {ethers} from
"ethers" ;
const
send
=
async (signer :
LedgerSigner , amount :
string , toAddress :
string ) => { // Create a transaction const
transaction
= { to : toAddress , value :
ethers .parseEther (amount) , gasPrice :
ethers .parseUnits ( '200' ,
'gwei' ) , }
// Send the transaction signer .sendTransaction (transaction) .then ((tx) => { console .log (tx); }); }
const
testApp
=
async () => { const
rpcUrl
=
"https://evm-rpc-testnet.sei-apis.com" ;
const
provider
=
new
ethers .JsonRpcProvider (rpcUrl); const
signer
```

```

=
new
LedgerSigner (Transport , provider);
await
send (signer ,
"5" ,
"<0xAddress>" ); // Send 5 Sei
};

```

## Send funds to native Sei address via precompile

```

import {LedgerSigner} from
"@ethers-ext/signer-ledger" ; import Transport from
"@ledgerhq/hw-transport-node-hid" ; import {ethers} from
"ethers" ;
import { BANK_PRECOMPILE_ABI , BANK_PRECOMPILE_ADDRESS , } from
"@sei-js/evm" ;
const
sendNative
=
async (signer :
LedgerSigner , amount :
string , nativeAddress :
string ) => { const
contract
=
new
ethers .Contract ( BANK_PRECOMPILE_ADDRESS ,
BANK_PRECOMPILE_ABI , signer); const
overrides
= { value :
ethers .parseEther (amount) }
try { const
result
=
await
contract .sendNative (nativeAddress , overrides); console .log ( "SendNativeResult: " , result); } catch (e) { console .log (e) }
const

```

```

testApp
=
async () => { const
rpcUrl
=
"https://evm-rpc-testnet.sei-apis.com" ;
const
nativeAddress
=
"seiAddress" const
provider
=
new
ethers .JsonRpcProvider (rpcUrl); const
signer
=
new
LedgerSigner (Transport , provider);
await
sendNative (signer ,
"5" , nativeAddress); };

```

## Staking via precompile example

```

import {LedgerSigner} from
"@ethers-ext/signer-ledger" ; import Transport from
"@ledgerhq/hw-transport-node-hid" ; import {ethers , toUtf8String} from
"ethers" ;
import { STAKING_PRECOMPILE_ABI , STAKING_PRECOMPILE_ADDRESS } from
"@sei-js/evm" ;
const
stake
=
async (signer :
LedgerSigner , amount : string , fromAddress :
string , validatorAddress :
string ) => { const
contract
=

```

```

new
ethers .Contract ( STAKING_PRECOMPILE_ADDRESS ,
STAKING_PRECOMPILE_ABI , signer); const
overrides
= { from : fromAddress , value :
ethers .parseEther (amount) ,
//staking 3.5 sei gasLimit :
ethers .parseEther ( '0.000000000001' ) }
console .log ( "Staking " , overrides) contract .delegate (validatorAddress , overrides) .then ((result) => { console .log (
"DelegateResult: " ,
toUtf8String (result)); }); }
const
testApp
=
async () => { const
validatorAddress
=
"seivaloperAddress" ; const
rpcUrl
=
"https://evm-rpc-testnet.sei-apis.com" ;
const
provider
=
new
ethers .JsonRpcProvider (rpcUrl); const
signer
=
new
LedgerSigner (Transport , provider);
const
defaultAddress
=
await
signer .getAddress ();
await
stake (signer ,
"5" , defaultAddress , validatorAddress); // stake 5 Sei }; Last updated on August 21, 2024

```

