DUAL FINANCE



Market Maker Deck

Nov 2022

Dual Investment Pools (DIP)

Option vaults, users selling calls or puts, makers provide streaming bids

DIP Specifications:

https://docs.google.com/document/d/1ktUkdblc6F92V91z_6e-l _Hx0ge27VRvc_vu3eQbMx0/edit?usp=sharing

API Documentation:

https://beta.dual.finance/api_docs/index.html#/documentation/API_Description

DIP Trade Lifecycle

Pre-Trade (1-2)

- 1. Deposit USDC to Dual Settlement Account to allow bids to reach the oracle
- 2. Bids for BTC, ETH & SOL options streamed via REST API
- 3. Users execute against provided quote with vega spread

Execution (3-5)

- 4. Premium debited from Settlement Account, credited to User at execution
- 5. DIP tokens minted & deposited to market makers account

Post-Trade (6-7)

- 6. Exercise prior to 12:00 UTC on expiration
- 7. Top up premium as required to keep sufficient buffer to continue bidding

Rehypothecated Lending Pools (RLP)

WIP: Borrow tokens from collateral pools to get delta neutral

- DIPs are fully collateralized in tokens for calls, USDC for puts
- Allow for borrowing by depositing full exercise settlement value. Akin to early exercise but you have the ability to put back the tokens to get back USDC
- Interest rate paid will be a function of utilization
- Token return required prior to DIP expiration
- Default will cancel any open option rewards

Staking Options Marketplace (SOM)

WIP: Marketplace for Staking Options (SO) to be traded

- Opportunistically provide liquidity to illiquid options
- Buy gamma at discounted implied vols
- Users able to cash out earned SO rewards to USDC
- Partner projects naturally bootstrap their options market

Market Maker Options

DUAL Options unlocked by achieving the following Milestones & Volume thresholds

Milestone/ Notional Traded	Qty f(Uptime %)	Exp <mark>ir</mark> ation	Strike OTM %
API Integration + Test Trade + 1mo 90% Uptime*	25,000,000	30 <mark>mon</mark> th	Max(\$0.05, 25%)
\$1M	10,000,000 * U%	24 month	150%
\$100M	10,000,000 * U%	18 month	100%
\$1B	10,000,000 * U%	12 month	75%
Each Additional \$1B	5,000,000 * U%	9 month	50%

Incentive Conditions

- 1. * Successive Maker integrations receive 65% of the prior, Max of 5
- 2. All option rewards subject to remaining Makers token allocation, initially 12% of total supply
- 3. Qty * % Uptime since the test trade comp<mark>lete</mark>d as determined by streaming quotes for all UI contracts with bid > backstop price
- 4. Strikes & Expiration will be calculated upon achieving the milestone based on observable DUAL price via oracle
- 5. Any Wash Trading or other manipulative practices to earn Maker rewards is strictly forbidden & subject to forfeiture of all options

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Web3 Incentive Liquidity Infrastructure

APPENDIX

- 1. Option Pricing
- 2. Vol Spread Fee

Option Pricing

~165% Realized Volatility observed from a broad sample of altcoins 1 year following listing Assuming volume traded correlates to token appreciation & more mature token, lower IV. Investor round valuation \$67.5M, \$0.0675 DUAL price

Milestone/	Notional					
Traded		Est. Value	Pric	e		Vol
API Integra						
Trade		\$624,500		\$0.03	320	170%
\$1M		\$209,844		\$0.03	320	170%
\$100M		\$287,092		\$0.05	500	165%
\$1B		\$421,236		\$0.10	000	150%
Each Addit	cional \$1B	\$477,582		\$0.25	500	150%

Vol Spread Fee

Makers DIP bids initially marked down by the following implied volatility spreads ($\Delta\sigma$), ranging from 2% to 5%. Vega calculation with backstop volatility parameters used to dollarize the end price displayed to Users

$$\Delta \sigma \, \{ egin{array}{ccc} -0.06 \Delta + 0.05 & 0 < \Delta \leq 0.5 \ -0.06 (1 - \Delta) + 0.05 & 0.5 < \Delta < 1 \end{array}$$