US Options Margin

The following calculations apply only to Reg T Margin and Cash. See our Portfolio Margin page for US Options requirements in a Portfolio Margin account. FINRA and the NYSE have imposed rules to limit small investor day trading. Customers that these organizations classify as Pattern Day Traders are subject to Day Trading Restrictions for US Securities.

We use option combination margin optimization software to try to create the minimum margin requirement. However, due to the system requirements required to determine the optimal solution, we cannot always guarantee the optimal combination in all cases. Please note that we do not support option exercises, assignments or deliveries which may result in an account being non-compliant with margin requirements. For additional information about the handling of options on expiration Friday, please see Annex 1 in the end of this article.

Note:

These formulas make use of the functions *Maximum (x, y, ..), Minimum (x, y, ..) and If (x, y, z)*. The *Maximum* function returns the greatest value of all parameters separated by commas within the paranthesis. As an example, *Maximum (500, 2000, 1500)* would return the value 2000. The *Minimum* function returns the least value of all parameters separated by commas within the paranthesis. As an example, *Minimum (500, 2000, 1500)* would return the value of 500. The *If*function checks a condition and if true uses formula y and if false formula z. As an example *If (20 < 0, 30, 60)* would return the value 60.

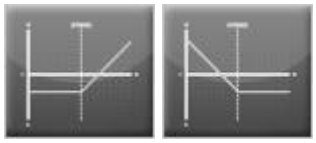
Brokers can and do set their own "house margin" requirements above the Reg. T or statutory minimum. For option spreads in VIX securities, we may charge an additional minimum house margin requirement of $150. For option positions that meet the definition of a "universal" spread under CBOE Rule 12.3(a)(5), we may charge an additional house requirement of 102% of the net maximum market loss associated with the spread (*i.e.*, net long option position price – net short option position price * 102%), if greater than the statutory requirement.

Combination Type

The following tables show option margin requirements for each type of margin combination. Click a link below to learn more:

- Long Call or Put
- Short Naked Call
- Short Naked Put
- Covered Calls
- Covered Puts
- Call Spread
- Put Spread
- Collar
- Long Call and Put
- Short Call and Put
- Long Butterfly
- Short Butterfly Put
- Short Butterfly Call
- Long Box Spread
- Short Box Spread
- Conversion
- Reverse Conversion
- Protective Put

- Protective Call
- Iron Condor



Long Call or Put

Reg T Margin	
Initial/RegT End of Day Margin	None
Maintenance Margin	Same as Initial
Cash	Same as Initial

Short Naked Call

Reg T Margin	
Initial/RegT End of Day Margin	**Stock Options** [1] Call Price + Maximum ((20% [2] * Underlying Price - Out of the Money Amount), (10% * Underlying Price)) **Index Options** [1] Call Price + Maximum ((15% [3] * Underlying Price - Out of the Money Amount), (10% * Underlying Price)) **World Currency Options** [1] Call Price + Maximum ((4% [2] * Underlying Price - Out of the Money Amount), (0.75% * Underlying Price)) **Cash Basket Option** [1] In the Money Amount
Maintenance Margin	Same as Initial
Cash	N/A

Short Naked Put

Reg T Margin	
Initial/RegT End of Day Margin	**Stock Options**[1] Put Price + Maximum ((20%[2] * Underlying Price - Out of the Money Amount), (10% * Strike Price)) **Index Options**[1] Put Price + Maximum ((15%[3] * Underlying Price - Out of the Money Amount), (10% * Strike Price)) **World Currency Options**[1] Put Price + Maximum ((4%[2] * Underlying Price - Out of the Money Amount), (0.75% * Underlying Price)) **Cash Basket Option**[1] In the Money Amount
Maintenance Margin	Same as Initial
Cash	Put Strike Price

Covered Calls

Short an option with an equity position held to cover full exercise upon assignment of the option contract.

Reg T Margin	
Initial/RegT End of Day Margin	Initial Stock Margin Requirement + MAX((In the Money Amount),(MIN(price of the option),(price of the stock)))[4]
Maintenance Margin	Initial Stock Margin Requirement + MAX((In the Money Amount),(MIN(price of the option),(price of the stock)))[4]
Cash	Stock paid in full or None

Covered Puts

Short an option with an equity position held to cover full exercise upon assignment of the option contract.

Reg T Margin	
Initial/RegT End of Day Margin	Initial Stock Margin Requirement + In the Money Amount
Maintenance Margin	Initial Stock Margin Requirement + In the Money Amount
Cash	N/A

Call Spread

A long and short position of equal number of calls on the same underlying (and same multiplier) if the long position expires on or after the short position.

Reg T Margin	
Initial/RegT End of Day Margin	Maximum (Strike Long Call - Strike Short Call, 0)
Maintenance Margin	Same as Initial
Cash	Same as Initial if both options are European-style cash-settled Otherwise, N/A.

Put Spread

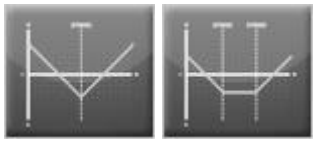
A long and short position of equal number of puts on the same underlying (and same multiplier) if the long position expires on or after the short position.

Reg T Margin	
Initial/RegT End of Day Margin	Maximum (Short Put Strike - Long Put Strike, 0)
Maintenance Margin	Same as Initial
Cash	Same as Margin Account Both options must be European style cash settled.

Collar

Long put and long underlying with short call. Put and call must have same expiration date, same underlying (and same multiplier), and put exercise price must be lower than call exercise price.

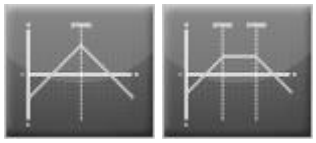
Reg T Margin	
Initial/RegT End of Day Margin	Initial Stock Margin Requirement + In the Money Call Amount **Equity with Loan Value of Long Stock** Minimum (Current Market Value, Call Aggregate Exercise Price)
Maintenance Margin	Minimum (((10% * Put Exercise Price) + Out of the-Money Put Amount), (25% * Call Exercise Price))
Cash	N/A



Long Call and Put

Buy a call and a put.

Reg T Margin	
Initial/RegT End of Day Margin	Margined as two long options.
Maintenance Margin	Same as Initial
Cash	Same as Margin Account



Short Call and Put

Sell a call and a put.

Reg T Margin	
Initial/RegT End of Day Margin	If Initial Margin Short Put > Initial Short Call, then Initial Margin Short Put + Price Short Call else If Initial Margin Short Call >= Initial Short Put, then Initial Margin Short Call + Price Short Put
Maintenance Margin	Same as Initial
Cash	N/A

Long Butterfly

Two short options of the same series (class, multiplier, strike price, expiration) offset by one long option of the same type (put or call) with a higher strike price and one long option of the same type with a lower strike price. All component options must have the same expiration, same underlying, and intervals between exercise prices must be equal.

Reg T Margin	
Initial/RegT End of Day Margin	None
Maintenance Margin	Same as Initial
Cash	None Both options must be European-style cash-settled.

Short Butterfly Put

Two long put options of the same series offset by one short put option with a higher strike price and one short put option with a lower strike price. All component options must have the same expiration, same underlying, and intervals between exercise prices must be equal.

Reg T Margin	
Initial/RegT End of Day Margin	((Highest Put Options Strike - Middle Put Options Strike) + (Middle Put Options Strike - Lowest Put Option Strike))
Maintenance Margin	Same as Initial
Cash	N/A

Short Butterfly Call

Two long call options of the same series offset by one short call option with a higher strike price and one short call option with a lower strike price. All component options must have the same expiration, same underlying, and intervals between exercise prices must be equal.

Reg T Margin	
Initial/RegT End of Day Margin	((Highest Call Options Strike - Middle Call Options Strike) + (Middle Call Options Strike - Lowest Call Option Strike))
Maintenance Margin	Must maintain initial margin.
Cash	N/A

Long Box Spread

Long call and short put with the same exercise price ("buy side") coupled with a long put and short call with the same exercise price ("sell side"). Buy side exercise price is lower than the sell side exercise price. All component options must have the same expiration, and underlying (multiplier).

Reg T Margin	
Initial/RegT End of Day Margin	None
Maintenance Margin	Same as Initial
Cash	N/A

Short Box Spread

Long call and short put with the same exercise price ("buy side") coupled with a long put and short call with the same exercise price ("sell side"). Buy side exercise price is higher than the sell side exercise price. All component options must have the same expiration, and underlying (multiplier).

Reg T Margin	
Initial/RegT End of Day Margin	MAX(1.02 x cost to close, Long Call Strike – Short Call Strike)
Maintenance Margin	Same as Initial
Cash	N/A

Conversion

Long put and long underlying with short call. Put and call must have the same expiration date, underlying (multiplier), and exercise price.

Reg T Margin	
Initial/RegT End of Day Margin	Initial Stock Margin Requirement **Equity with Loan Value of Long Stock** Minimum (Current Market Value, Call Aggregate Exercise Price)
Maintenance Margin	10% * Strike Price
Cash	N/A

Reverse Conversion

Long call and short underlying with short put. Put and call must have same expiration date, underlying (multiplier), and exercise price.

Reg T Margin	
Initial/RegT End of Day Margin	In the Money Put Amount + Initial Stock Margin Requirement
Maintenance Margin	In the Money Put Amount + (10% * Strike Price)
Cash	N/A

Protective Put

Long Put and Long Underlying.

Reg T Margin	
Initial/RegT End of Day Margin	Initial Stock Margin Requirement
Maintenance Margin	Minimum (((10% * Put Strike Price) + Put Out of the Money Amount), Long Stock Maintenance Requirement)
Cash	N/A

Protective Call

Long Call and Short Underlying.

Reg T Margin

Initial/RegT End of Day Margin	Initial Standard Stock Margin Requirement
Maintenance Margin	Minimum (((10% * Call Strike Price) + Call Out of the Money Amount), Short Stock Maintenance Requirement)
Cash	N/A

Iron Condor

Sell a put, buy put, sell a call, buy a call.

Reg T Margin	
Initial/RegT End of Day Margin	Short Put Strike - Long Put Strike
Maintenance Margin	Same as Initial
Cash	If all options are European and cash-settled, same as margin account.

Disclosures

1. Minimum charge of USD 2.50 per share of underlying. This minimum does not apply for End of Day Reg T calculation purposes.
2. For Leverage Options, Minimum (20% * Leverage Factor, 100%).
3. For Leverage Options, Minimum (15% * Leverage Factor, 100%)
4. For Covered Basket Calls, (short basket call, long component stocks), the margin requirement is for all the component stocks.

- Specific options with commodity-like behavior, such as VIX Index Options, have special spread rules and, consequently, may be required to meet higher margin requirements than a straightforward US equity option. Clients are urged to use the paper trading account to simulate an options spread in order to check the current margin on such spread.
- If a combination of options is put on in such a way that a specific strategy is optimal at that point in time, the strategy may remain in place until the account is revalued even if it does not remain the optimal strategy. A revaluation will occur when there is a position change within that symbol. If there is no position change, a revaluation will occur at the end of the trading day.

Annex 1.

Expiration Related Liquidations

Background:

In addition to the policy of force liquidating client positions in the event of a real-time margin deficiency, CCG will also liquidate positions based upon certain expiration-related events which, after giving effect to, would create undue risk and/or operational concerns. Examples of such events are outlined below.

Option Exercise

CCG reserves the right to prohibit the exercise of stock options and/or close short options if the effect of the exercise/assignment would be to place the account in margin deficit. While the purchase of an option generally requires no margin since the position is paid in full, once exercised the account holder is obligated to either pay for the ensuing long stock position in full (in the case of a call exercised in a cash account or stock subject to 100% margin) or finance the long/short stock position (in the case of a call/put exercised in a margin account). Accounts which do not have sufficient equity on hand prior to exercise introduce undue risk should an adverse price change in the underlying occur upon delivery. This uncollateralized risk can be especially pronounced and may far exceed any in-the-money value the long option may have held, particularly at expiration when clearinghouses automatically exercise options at in-the-money levels as low as $0.01 per share.

Take, for example, an account whose equity on Day 1 consists solely of 20 long $50 strike call options in hypothetical stock XYZ which have closed at expiration at $1 per contract with the underlying at $51. Assume under Scenario 1 that the options are all auto-exercised and XYZ opens at $51 on Day 2. Assume under Scenario 2 that the options are all auto-exercised and XYZ opens at $48 on Day 2.

Account Balance	**Pre-Expiration**	**Scenario 1 - XYZ Opens @ $51**	**Scenario 2 - XYZ Opens @ $48**
Cash	$0.00	($100,000.00)	($100,000.00)
Long Stock	$0.00	$102,000.00	$96,000.00
Long Option*	$2,000.00	$0.00	$0.00
Net Liquidating Equity/(Deficit)	$2,000.00	$2,000.00	($4,000.00)
Margin Requirement	$0.00	$25,500.00	$25,500.00
Margin Excess/(Deficiency)	$0.00	($23,500.00)	($29,500.00)

*Long option has no loan value.

To protect against these scenarios as expiration nears, IB will simulate the effect of expiration assuming plausible underlying price scenarios and evaluating the exposure of each account assuming stock delivery. If the exposure

is deemed excessive, CCG reserves the right to either: 1) liquidate options prior to expiration; 2) allow the options to lapse; and/or 3) allow delivery and liquidate the underlying at any time. In addition, the account may be restricted from opening new positions to prevent an increase in exposure.

While CCG reserves the right to take these actions, account holders are solely responsible for managing the exercise/assignment risks associated with the positions in their accounts. CCG is under no obligation to manage such risks for you.

CCG also reserves the right to liquidate positions on the afternoon before settlement if CCG's systems project that the effect of settlement would result in a margin deficit. To protect against these scenarios as expiration nears, CCG will simulate the effect of expiration assuming plausible underlying price scenarios and evaluating the exposure of each account after settlement. For instance, if CCG projects that positions will be removed from the account as a result of settlement (e.g., if options will expire out of the money or cash-settled options will expire in the money), CCG's systems will evaluate the margin effect of those settlement events.

If CCG determines the exposure is excessive, we may liquidate positions in the account to resolve the projected margin deficiency. Account holders may monitor this expiration related margin exposure via the Account window located within the TWS. The projected margin excess will be displayed on the line titled "Post-Expiry Margin" (see below) which, if negative and highlighted in red indicates that your account may be subject to forced position liquidations. This exposure calculation is performed 3 days prior to the next expiration and is updated approximately every 15 minutes. Note that certain account types which employ a hierarchy structure (e.g., Separate Trading Limit account) will have this information presented only at the master account level where the computation is aggregated.

Note that CCG generally initiates expiration related liquidations 2 hours prior to the close, but reserves the right to begin this process sooner or later should conditions warrant. In addition, liquidations are prioritized based upon a number of account-specific criteria including the Net Liquidating Value, projected post-expiration deficit, and the relationship between the option strike price and underlying.

Physically Delivered Futures

With the exception of certain futures contracts having currencies as their underlying, CCG generally does not allow clients to make or receive delivery of the underlying for physically settled futures or futures option contracts. To avoid deliveries in an expiring contract, clients must either roll the contract forward or close the position prior to the Close-Out Deadline specific to that contract (a list of which is provided on the website).

Note that it is the client's responsibility to be aware of the Close-Out Deadline and physically delivered contracts which are not closed out within the specified time frame may be liquidated by CCG without prior notification.