

### Introduction to Leveraged ETF Index Funds:

TQQQ seeks a 3x daily performance of the Nasdaq-100 index. The fund is managed by ProShares, a mainstay company in the ETF industry. The leveraged performance artificially provides the necessary volatility for the strategies in this spreadsheet.

### Overall Spreadsheet Objective:

Maximize profit during volatile TQQQ price movement by purchasing progressively lower-priced TQQQ "lots" on downward swings and selling the individual lots at first opportunity for a predetermined profit margin expressed as a percent gain per lot.

### Color Designations:

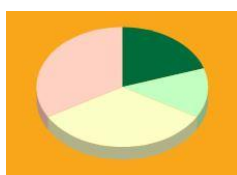
"Green Lots" represent the first third of the total TQQQ strategy-investable cash available. These funds represent your primary profit-generating cash during ordinary market movement. Frequent trading with these funds should be considered low-risk and essential to maximum profit potential.

"Yellow Lots" represent the second third of total strategy-investable cash available. These funds represent your purchases after green funds are exhausted during more significant downward market corrections. While using yellow funds represents a moderate risk, the spreadsheet adapts to protect these funds by increasing the margin between purchases in the yellow lots.

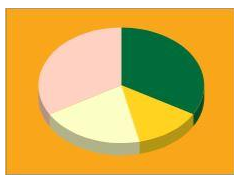
"Red Lots" represent the last third of total strategy-investable cash available. These funds represent your emergency cost-basis control measures during extreme and unexpected market dips. Because these funds represent the last cash you are willing to invest in this strategy, the spreadsheet will only use them when a significant cost basis lowering opportunity has been met. Consider selling red lots above the limit price than the spreadsheet dictates if you intend to combine their sale with higher priced yellow or green lots in an effort to liquidate your positions earlier. Selling red lots too early after a major market downturn recovery could delay opportunities to reach satisfactory exit conditions for yellow and especially higher-priced green lots.

### Risk-O-Meter:

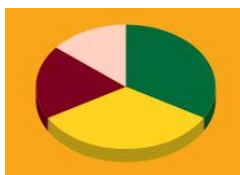
This meter shows identically on all three colored lot sheets. It is a visual depiction of the current risk-level based on purchased lots.



trading within green lots (low risk)



trading into yellow lots (mod risk)



trading into red lots (higher risk)

### Strategies Sheet:

The "Strategies" sheet allows you to edit parameters at the heart of the trade-generation engine that the spreadsheet pulls into arrays and lookup formulas in the "Data" sheet. It should not be necessary to edit anything on the actual "Data" sheet but you can modify your profit target and buy-in increments in the blue cells on the "Strategies Sheet." You will be invoking one these strategies by drop-down menu selection on the "Green Lots" sheet.

STRATEGY:	GREEN MAX	YELLOW MAX	RED MAX	PROFIT TARGET
BALANCED	7.50%	15.00%	45.00%	5.00%
BEAR	10.00%	25.00%	50.00%	3.00%
BULL	5.00%	12.50%	40.00%	7.50%
VOLATILE	5.00%	20.00%	45.00%	5.00%

**Green/Yellow/Red Max:** Percentage dip from most recent TQQQ closing high when the last lot on the "Buy-In Gameplan" for that color will be filled. A 5.00% "Green Max" setting means your last green lot on the "Buy-In Gameplan" will be 5% below the most recent closing high.

**Profit Target:** Percentage gain for each lot used to determine where the limit will be set on the "Exit Gameplan."

**Balanced:** Moderately aggressive buy-in and profit margins. Recommended strategy for ordinary market conditions.

**Bull:** Aggressive buy-in and profit margins. Use when infrequent market price corrections and longer bull streaks are predicted. Be cautious of prolonged use.

**Bear:** More gradual buy-in and conservative profit margins. Protects against early funds saturation during declining markets. Takes smaller profits earlier to avoid lost opportunities.

**Volatile:** Aggressive buy-in and moderate profit margins. Capitalizes on smaller swings that would otherwise result in lost opportunities waiting for larger swings or higher profit margins. Good for turbulent markets with directional uncertainty.

### Get Started Trading TQQQ:

After you are comfortable with the "Strategies" sheet, prepare the spreadsheet for your own implementation by entering a few specifics on the "Green Lots" sheet. All blue cells require input from the user. Red cells are computer-generated data and some blue cells turn green when a "Y" is selected from the drop-down menu.

TQQQ GAMULATOR v2.3			
Investment Strategy Mode:	VOLATILE	Spreadsheet Starting Date:	12/19/2017
Baseline TQQQ Investable Funds:	\$70,000.00	Realized Gains:	\$21,169.66
Purchase Frequency:	MODERATE (10)	Funds + Realized Gains:	\$91,169.66
# Months for Closing High Lookback:	12	Planned Buy-In \$ Per Lot:	\$3,038.99
Most Recent Closing High:	\$72.50	Closing High Date Utilized:	8/29/2018
(enter most recent high if manual):	\$69.99	Time Zone:	Central

**Choose Investment Strategy Mode:** Choose from the drop-down which mode to utilize from the "Strategies" sheet.

**Baseline TQQQ Investable Funds:** Enter the maximum cash investment you are willing to allocate to the spreadsheet. Realize that the spreadsheet will further apportion this amount into three equal thirds for the three colored lots sheets. As you have learned, the strategies seek to primarily invest with 25%-50% of these total TQQQ investable funds. The remaining funds are reserves for more drastic cost basis control measures, but their availability is essential to the risk management aspect of the spreadsheet. The spreadsheet automatically adds any realized gains back into investable funds and displays the total in the pink cell "Funds + Realized Gains".

**Purchase Frequency:** This option allows the user to select how many individual lots are purchased per third (ie. how many green lots there will be). This applies to all three colored lot sheets although the green sheet is the only one that allows selection. Choosing a higher frequency value reduces the likelihood of missed opportunities. While that may sound always beneficial, a higher value also means more effort will be required by the user to manage more orders which can be very time-consuming. It also results in more commission fees being paid as a result of more frequent trading. The spreadsheet will increase the limit price of each sale in order to recoup transaction fees and meet the profit target after fees are factored in.

**# Months for Closing High Lookback:** Set the number of months that the spreadsheet searches back to find the TQQQ closing high used to compute prices. Unless manual is selected, the spreadsheet will pull the TQQQ data from the internet to compute the closing high. The automatic price will display in the red cell labeled Most Recent Closing High. Six or twelve months is the recommended setting. If manual is chosen, such as when there is no internet connection, then the manual price must be entered in the blue cell below the automatic price in the red cell.

**Spreadsheet Starting Date:** The date you begin using the spreadsheet. This date is used to compute your performance for annualized returns.

**Time Zone:** Choose the US time zone your spreadsheet is using. This allows the spreadsheet to compare today's closing price with historical closing highs. If the closing price isn't updating within a few minutes after market close with a new closing high, restart the spreadsheet to force an update.

#### **The Buy-In Gameplan:**

This is the columns on the far left side of the screen. These are the automatically generated purchase lots that you need to place orders for. As a convenience, you can use the "Order Placed" drop-down option to record when a corresponding order has been placed with your brokerage. The "Filled Status" column will indicate when a lot has been filled based on your entries in the cells to the right under "Buy History."

#### **Buy History:**

Record your purchase transactions here once they have filled. In the event that you have a partial fill on a lot, you can still enter the transaction but select "N" under the "Lot Complete" dropdown. Once you complete the lot, only select "Y" for the transaction that completed it. You should never go back to previous transactions and change data unless you entered information erroneously. The spreadsheet automatically tracks the filled status based on buy and sell transaction data. This also means that you can mark a lot filled even if you decided not to purchase the exact number of shares dictated by the buy-in gameplan. Presently, the buy history only allows one hundred entries before you need to start over with a clean slate.

#### **The Exit Gameplan:**

These columns to the right of the "Buy History" columns auto-populate once you have purchase transactions with completed unsold lots. Like the "Buy-In Gameplan," they represent the orders to place in your brokerage in order to sell the lots you purchased. There is also an "Order Placed" drop-down option as before. Note that these track the number of shares purchased in each lot and require sales totaling the same number of shares per lot for the spreadsheet to work. A lot does not need to be sold in one transaction, but all shares must be sold before the lot will be reopened on the "Buy-In Gameplan." The limit prices are computed to recoup estimated sale commission fees based on the average of actual commissions paid for purchases.

#### **Sell History:**

Record the sell transactions on these right-most columns. When the spreadsheet detects that the same number of shares previously purchased as a lot are subsequently sold and assigned as the same lot, it automatically resets the "Filled Status" cue on the "Buy-In Gameplan." This notifies you to place a new buy order at the new price for the lot you just completely sold. The rows are also limited to one hundred entries.

#### **Recommendations:**

I recommend having your green orders placed at all times since they will fill with only minor price movements. Because of the laborious requirement of placing and updating so many orders, I recommend starting to place yellow orders after a few of the green ones have started to fill. This depends on your purchase frequency setting and how much time you are willing to devote. Your brokerage may allow a way for you to effectively place trailing stop orders which could remove the requirement to update the limit prices on orders as the TQQQ closing high increases. I would begin placing red orders in the same manner as yellow once I start filling the first yellow orders.