



JPX-Nikkei 400 Leveraged and Inverse Index Guidebook

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JPX Market Innovation & Research, Inc.
Nikkei Inc.

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Record of Changes

DATE	Changes
2015/5/22	• Newly created
2023/2/13	• Added revisions with regard to the business transfer to JPXI (applied on April 1, 2022 retroactively)

Introduction

- JPX Market Innovation & Research, Inc. (JPXI) and Nikkei Inc. (Nikkei) (hereinafter JPXI and Nikkei are collectively referred to as “the Index Provider”) calculate indices that apply leverage effects to JPX-Nikkei Index 400 (hereafter "JPX-Nikkei 400 Leveraged Index") and indices that reflect the opposite trend of JPX-Nikkei Index 400 (hereafter “JPX-Nikkei 400 Inverse Index”) (hereinafter JPX-Nikkei 400 Leveraged Index and JPX-Nikkei 400 Inverse Index are collectively referred to as “JPX-Nikkei 400 Leveraged and Inverse Index”) in accordance with, as a rule, the methods described in this document. If an event not specified in this document occurs, or if the Index Provider determines that it is difficult to use the methods described in this document, the Index Provider may use an alternative method of index calculation as it deems appropriate.
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I . Outline of the Index

- The JPX-Nikkei 400 Leveraged Index applies a positive multiple to the daily rate of return of the base index, and is designed to act as an indicator for leveraged investment in the base index.
- The JPX-Nikkei 400 Inverse Index applies a negative multiple to the daily rate of return of the base index, and is designed to act as an indicator for investments that move inversely (or a multiple of inverse movement) to the base index.

II. Index Calculation

For the number of shares used for index calculation and base market value, the “JPX-Nikkei Index 400 Guidebook” is applied and the data for the JPX-Nikkei 400 on the same day is used. The same also applies to the prices for index calculation.

1. JPX-Nikkei 400 Leveraged Index

The JPX-Nikkei 400 Leveraged Index applies a positive multiple to the daily rate of return*** of the base index using the below formula. The index is denominated in points and is calculated to the second decimal place (values beyond the second decimal are rounded).

$$\text{Current Day Index Value} = \text{Previous Day Index Value} * (1 + N * \% \text{ Base Index return from previous day})$$

Base index, leverage rates, base date, and base value are as below:

	Base Index	Leverage Rate(N)	Base Date	Base Value
JPX-Nikkei 400 Leveraged (2x) Index	JPX-Nikkei 400 (price return)	2	August 30, 2013	10000 points

*** round off to two decimal places

2. JPX-Nikkei 400 Inverse Index

The JPX-Nikkei 400 Inverse Index applies a negative multiple to the daily rate of return*** of the base index using the below formula. The index is denominated in points and is calculated to the second decimal place (values beyond the second decimal are rounded).

$$\text{Current Day Index Value} = \text{Previous Day Index Value} * (1 - N * \% \text{ Base Index return from previous day})$$

Base index, leverage rates, base date, and base value are as below:

	Base Index	Leverage Rate (N)	Base Date	Base Value
JPX-Nikkei 400 Inverse (-1x) Index	JPX-Nikkei 400 (price return)	1	August 30, 2013	10,000 points
JPX-Nikkei 400 Double Inverse (-2x) Index	JPX-Nikkei 400 (price return)	2	August 30, 2013	10,000 points

*** round off to two decimal places

III. Other

1. Publication of Index Data

- Index values of JPX-Nikkei 400 Leveraged and Inverse Indexes are disseminated in real-time (every 15 seconds) through the Market Information System to securities companies, news media, and other institutions all over the country. The index values are calculated retroactively back to August 31, 2006 on an end-of-day basis.

2. Licensing

- JPX-Nikkei 400 Leveraged and Inverse Indexes are copyrighted material calculated in a methodology independently developed and created by the Index Provider and the Index Provider is the sole exclusive owner of the copyright and other intellectual property rights in JPX-Nikkei 400 Leveraged and Inverse Indexes and the methodology to calculate JPX-Nikkei 400 Leveraged and Inverse Indexes. Commercial use of JPX-Nikkei 400 Leveraged and Inverse Indexes must be licensed by the Index Provider. Such uses include, but are not limited to, the provision of derivative products such as futures and options, creation and marketing of linked funds or linked securities, or distribution of the indexes for data and analytic services.