

Japannext **JNX**

JNX Data File Formats

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1. Introduction

This document explains the data format of various files provided by Japannext over SFTP service. For further information and inquiries please contact Japannext PTS Technical Support via email to: ito@japannext.co.jp.

2. Overview

Files are provided in a CSV format, delimited by semicolon (;) or comma (,).

3. Stock Master Data File

Japannext Stock Master Data File will be available for each trading session. The filename is JNX_ST_MASTER_YYYYMMDD.csv, where YYYYMMDD is the day when this file was generated. Please note that semicolon (;) is used as a field delimiter for each line.

The file is composed of a single header line, followed by 0 or more data lines, and ends with a single trailer line. The fields in each line are described in the following sections.

3.1 Header

Name	Type	Length	Comments
Data Type Flag	String	1	Value is H = Header.
File Creation Date	String	8	YYYYMMDD format.
File Creation Time	String	6	In HHMMSS format.

3.2 Data line

Name	Type	Length	Comments
Data Type Flag	String	1	Value is D = Data.
Stock Code	String	4	Quick code.
ISIN Code	String	12	An International Securities Identification Number (ISIN) is a 12-digit Alphanumeric code that uniquely identifies a specific security.
Stock Short Name	String	24	Stock Short Name.
Stock Short Name	String	24	Stock Short Name.
Primary Exchange	String	1	0 = Tokyo Stock Exchange 2 = Nagoya Stock Exchange 6 = Fukuoka Stock Exchange 8 = Sapporo Securities Exchange
Negotiable Margin Issue Flag	String	1	Negotiable Margin Issue.
Trade Suspension Flag	String	1	Indicate if a stock is suspended for a day by Japannext.
Standardized Margin Issue Flag	String	1	Standardized Margin Issue.

Name	Type	Length	Comments
Margin Restriction Flag	String	1	Values: 1 = Japannext Increased Collateral Issue 2 = Japannext Daily Publicized Stock 3 = (Not In Use) 4 = (Not In Use) 5 = TSE Restricted Issue 6 = Japannext Restricted Issue
Loan Stock Flag	String	1	Values: 1 = Japannext Loan Transaction Issue 2 = Japannext Money Loan transaction Issue (buy side of margin transaction)
Loan Restriction Flag	String	1	Values: 1 = Japannext Restricted Stock Loan Application issue 2 = Japannext Precaution Notice Stock Loan issue
Delisting Flag	String	8	Specifies delisting date of Primary Exchange. In YYYYMMDD format.
Lot Size	String	8	Trading Lot Size.

3.3 Trailer line

Name	Type	Length	Comments
Data Type Flag	String	1	Value is T = Trailer.
Data Count	String	9	Row count excluding header and trailer.

4. Base Price Data File

Japannext Base Price Data File will be available for each trading session. Filename is JNX_B_PRICE_YYYYMMDD.csv, where YYYYMMDD is the day when this file was generated. Please note that semicolon (;) is used as a field delimiter.

The file is composed of a single header line, followed by 0 or more data lines, and ends with a single trailer line. The fields in each line are described in the following sections.

4.1 Header

Name	Type	Length	Comments
Data Type Flag	String	1	Value is H = Header.
File Creation Date	String	8	In YYYYMMDD format.
File Creation Time	String	6	In HHMMSS format.

4.2 Data line

Name	Type	Length	Comments
Data Type Flag	String	1	Value is D = Data.
Stock Code	String	4	Quick code.

Name	Type	Length	Comments
Stock Short Name	String	24	Stock Short Name.
Stock Short Name	String	24	Stock Short Name.
Base Price	String	12	Base Price at Japannext.
Primary Exchange Reference Price	String	12	Base Price at Primary Exchange.

4.3 Trailer line

Name	Type	Length	Comments
Data Type Flag	String	1	Value is T = Trailer.
Data Count	String	9	Row count excluding header and trailer.

5. EOD Data File

Japannext EOD Data File (Reconciliation File) will be available after each trading session. Filename is JNX_EOD_YYYYMMDD.csv, where YYYYMMDD is the day when this file was generated. Please note that semicolon (;) is used as a field delimiter.

The file is composed of a single header line, followed by 0 or more data lines, and ends with a single trailer line. The fields in each line are described in the following sections.

5.1 Header

Name	Type	Length	Comments
Data Type Flag	String	1	Value is H = Header.
File Creation Date	String	8	YYYYMMDD format.
File Creation Time	String	6	In HHMMSS format.

5.2 Data line

Name	Type	Length	Comments
Data Type Flag	String	1	Value is D = Data.
Trade Date	String	8	In YYYYMMDD format.
Board Name	String	4	Values: DAY = J-market DAYX = X-market DAYU = U-market NGHT = Nighttime market
Institution Code	String	8	Institution Code provided by JASDEC. Value = 000 + Institution Code
Session ID	String	20	Trading session ID given by Japannext.
Sub ID	String	10	SenderSubID

Name	Type	Length	Comments
Trade No	String	8	Trade Number.
Match Number	String	30	Match Number (YYYYMMDD-XXXXXXXXXX format)
Order No	String	8	Order Number.
Order No Suffix	String	6	Order Number Suffix.
Stock Code	String	4	Quick code.
Side Flag	String	1	Values: 1 = Buy 2 = Sell 5 = Short sell 6 = Short sell exempt
Price	String	10	Executed Price
Quantity	String	9	Executed Quantity
Account Type ID	String	1	Values: A = Agency P = Principal
Client Order ID	String	40	Unique identifier for the order as assigned by the institution
Execution Time	String	18	In YYYY-MM-DD HH:MM:SS format.
Liquidity Flag	String	1	Values: M = Maker T = Taker

5.3 Trailer line

Name	Type	Length	Comments
Data Type Flag	String	1	Value is T = Trailer.
Data Count	String	9	Row count excluding header and trailer.

6. Instrument Ranking Data Files

Japannext Instrument Data Ranking Data Files will be available after each trading session. Monthly Instrument Ranking Data File is available at the beginning of each month. Filenames are JNX-PTS-InstrumentRank-YYYYMMDD.csv and JNX-PTS-InstrumentRank-byMonth-YYYYMMDD.csv, where YYYYMMDD is the day when the file was generated. Each line uses comma (,) as the delimiter.

The file starts with a header row which lists the field names for each column.

6.1 Data Line

Note that the last two fields BBO Execution Ratio (inside) and Improvement Ratio (improve) are not available in monthly instrument ranking file.

Name	Type	Comments
local_code	String	Quick code.

Name	Type	Comments
name_en	String	Stock Short Name.
open_prc	String	Open price.
high_prc	String	High price.
low_prc	String	Lowest price.
close_prc	String	Close price.
cnt_ord_buy	String	Total number of buy orders.
cnt_ord_sell	String	Total number of sell orders.
cnt_ord	String	Total number of orders.
cnt_exec	String	Total number of trades.
acvol	String	Accumulated volume.
turnover	String	Turnover.
acvol_exch	String	Primary Exchange Volume.
turnover_exch	String	Primary Exchange Turnover.
ratio_acvol	String	Japannext Volume / Primary Exchange Volume * 100.
ratio_turnover	String	Japannext Turnover / Primary Exchange Turnover * 100.
inside	String	Ratio of executions within Primary Exchange Best Bid and Best Ask spread.
improve	String	Ratio of executions in basis points.

7. U-market Stock & Price Data File

Japannext U-market Stock & Price Data File will be available before each trading session. Filename is DAYU_ST_MASTER_YYYYMMDD, where YYYYMMDD is the day when the file was generated.

Each line uses comma (,) as the delimiter.

The file starts with a header row which lists the field names for each column.

7.1 Data Line

Name	Type	Length	Comments
SYMBOL	String	4	Quick code.
EXCHANGE_CODE	String	1	Primary exchange code T = Tokyo Stock Exchange.
ISIN	String	12	An International Securities Identification Number (ISIN) is a 12-digit Alphanumeric code that uniquely identifies a specific security.
FULLNAME_EN	String	72	Stock Full Name.
NAME	String	26	Stock Short Name.
NO_OF_SHARES	String	18	Number of shares.
TRADING_UNIT	String	8	Trading unit.
BASE_PRICE	String	21	Base price.

Name	Type	Length	Comments
LOWER_LIMIT	String	21	Lower price limit.
UPPER_LIMIT	String	21	Upper price limit.

8. Master File

Master File will be available before each trading session. It is in JSON format, with a filename JNX_MASTER_YYYYMMDD.json, where YYYYMMDD is the day when the file was generated. It consists of three types of messages: TradeDate, TickSize and Orderbook.

TradeDate will always be a single message, specifying the trade date for all data in the file. Ticksize messages define price tick size tables the same way JNX ITCH feed does. Orderbook messages provide information about tradable instruments.

8.1 Trade Date

Name	Type	Comments
MessageType	String	Value is TradeDate = Trade date message.
TradeDate	String	YYYYMMDD format.

8.2 Price Tick Size

Name	Type	Comments
MessageType	String	Value is TickSize = Price Tick Size Message.
PriceTickSizeTableId	Integer	Price tick size table identifier.
PriceTickSize	Integer	Price tick size.
PriceStart	Integer	Start of price range for this price tick size. Please note PriceDecimals' value is 1.

8.3 Orderbook Directory

Name	Type	Comments
MessageType	String	Value is Orderbook = Orderbook Directory Message.
OrderbookId	String	Quick code.
OrderbookCode	String	An International Securities Identification Number (ISIN) is a 12-digit Alphanumeric code that uniquely identifies a specific security.
Group	String	Orderbook group identifier. Values: DAY = Daytime market NGHT = Nighttime market DAYX = X-Market DAYU = U-Market
RoundLotSize	Integer	Number of shares that represent a round lot.

Name	Type	Comments
PriceTickSizeTableId	Integer	Price tick size table identifier.
PriceDecimals	Integer	Number of decimal places in price fields. Value is 1.
StockShortName	String	Stock Short Name.
PrimaryExchange	String	T = Tokyo Stock Exchange.
NegotiableMarginIssueFlag	String	Negotiable Margin Issue.
TradeSuspensionFlag	String	Indicate if a stock is suspended for a day by Japannext.
StandardizedMarginIssueFlag	String	Standardized Margin Issue.
MarginRestrictionFlag	String	Values: 1 = Japannext Increased Collateral Issue 2 = Japannext Daily Publicized Stock 3 = (Not In Use) 4 = (Not In Use) 5 = TSE Restricted Issue 6 = Japannext Restricted Issue
LoanStockFlag	String	Values: 1 = Japannext Loan Transaction Issue 2 = Japannext Money Loan transaction Issue (buy side of margin transaction)
LoanRestrictionFlag	String	Values: 1 = Japannext Restricted Stock Loan Application issue 2 = Japannext Precaution Notice Stock Loan issue
DelistingFlag	String	Specifies delisting date of Primary Exchange. In YYYYMMDD format.
OutstandingShares	String	The number of a company's shares that are available for trading.
BasePrice	Integer	Base Price at Japannext. Please note PriceDecimals' value is 1
MaxPriceLimit	Integer	Upper price limit.
MinPriceLimit	Integer	Lower price limit.

NOTE: IPOs might have a different BasePrice when there is a discrepancy since the file is created before it could be manually corrected.

9. Tick Data File

The Tick Data file provides 5 best limits and trades for all tradable instruments at Japannext. Every Tick Data file CSV is compressed, with a filename YYYYMMDD_BOARD_TICKDATA.csv.bz2, where YYYYMMDD is the day when the file was generated and the BOARD represents orderbook group identifier (DAY, DAYX, NGHT, etc.).

Name	Description
EntryTime	Message time stamp (YYYY-MM-DD HH:MM:SS.MMM)

Name	Description
SecurityCode	Quick symbol code
MessageType	0 for a trade and 1..5 for the best limit 1..5
BidPrice	0 when MessageType is equal to 0
BidQuantity	0 when MessageType is equal to 0
OfferPrice	0 when MessageType is equal to 0
OfferQuantity	0 when MessageType is equal to 0
TradePrice	0 when OfferQuantity is equal to 0 and MessageType higher than 0
TradeQuantity	0 when OfferQuantity is equal to 0 and MessageType higher than 0

NOTE: If the bid or offer quantity/price is 0, it means that there is no bid/offer at this limit; ultimately, if this happens for the limit 1, it means that the order book is empty.

10. ITCH Binary Data

The ITCH Binary Data file contains raw ITCH data, structured as a repeated sequence of 2-byte Message Length values followed by their corresponding ITCH messages. For detailed information on decoding the ITCH messages, please refer to the ITCH protocol specifications.

Name	Type	Length	Comments
Message Length	Integer	2	Length of the ITCH Message
ITCH Message		variable	ITCH Message

Revision History

Date	Version	Comments
2021-10-27	1.0	Initial version
2022-05-20	1.1	Updated `U-market Stock & Price Data File` name Removed the details of the decommissioned `Stock Group Data File` Minor grammar corrections
2023-04-03	1.2	Added Master JSON File.
2023-07-19	1.3	Trade Date message added to Master File MessageType for Price Tick Size message changed from Ticksiz to TickSize. Unified Alpha and Char types into String type for all files. NegotiableMarginIssueFlag type changed from integer to String in Orderbook Directory message of Master File. Fixed value for PrimaryExchange in Master File. Removed length column in Instrument Ranking Data Files. Added missing comments for Data Lines columns in CSV files. Fixed comment in Base Price file for Primary Exchange Reference Price column.
2023-09-26	1.4	Added note that BasePrice might be different for IPOs Added Tickdata File
2023-12-26	1.5	Added Sapporo, Nagoya, and Fukuoka Exchanges to the Primary Exchange Data line in Stock Master Data File
2024-10-18	1.6	Added ITCH binary Data File.