Application Note

License Authentication via Serial Connection

for NXR-1000 series

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Contents

1. Overview

This document describes the License Authentication of the NXR-1000 Series via a Serial Connection. License Management Client (KPT-300LMC) is required for License Authentication, and please refer to "KPT-300LMC Basic Operations" for details.

1.1. Outline Features

License Authentication of NXR-1000 Series using the License Management Client (KPT-300LMC) is possible via LAN Connection and Serial Connection.

➢ LAN Connection
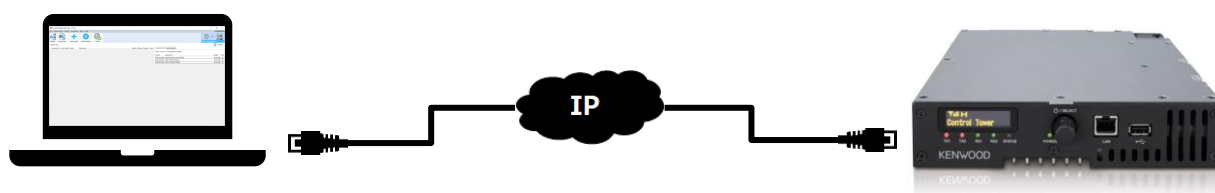
➢ Serial Connection

As shown in the following table, Authentication using a LAN connection is limited only to "Offline Authentication" using Field Activation.   Therefore, if Authentication is executed via the LAN Connection, the License can NOT be canceled even within 72 hours after its authentication.

On the other hand, Online Authentication is available in the Serial Connection.   The Online Authenticated License can be canceled within 72 hours.

	LAN Connection	Serial Connection
Offline Authentication (Field Activation)	y (*1)	y (*1)
Online Authentication	n/a	y
Cancellation within 72Hours	n/a	y (*1)

*1: Offline Authenticated (Filed Activation) Radio License can **NOT** be canceled even within 72 hours after its authentication regardless of the connection method.
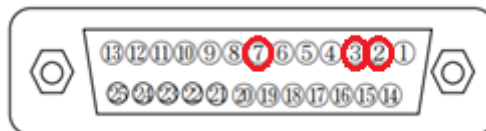
2. Serial Interface Connection of NXR-1000 series

2.1. CONTROL I/O (D-Sub 25-pin Connector)

The Serial Connection uses a D-Sub 25-pin Connector provided on the rear surface of the NXR-1000 series.
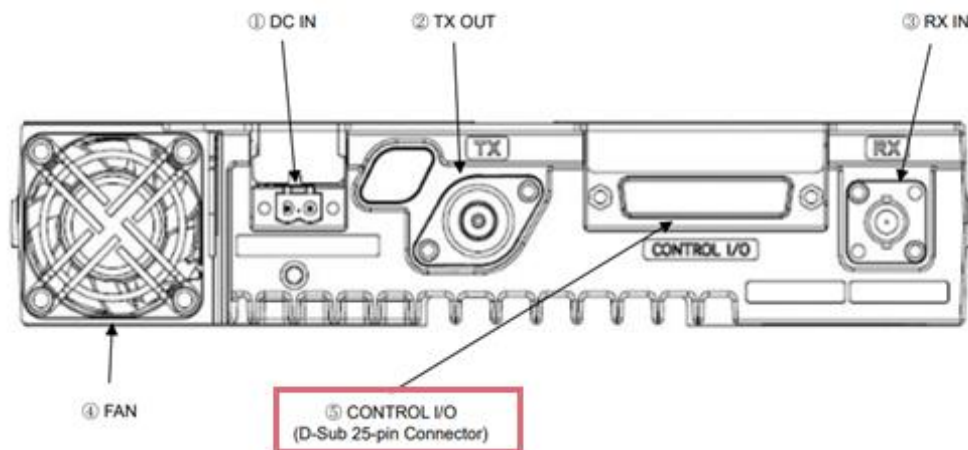

2.1.1. Control I/O

The Serial Communication (RS232C) uses Pin 2 (RXD), Pin 3(TXD), and Pin 7(GND) of the D-Sub 25-pin Connector on the rear surface.

| Pin No.	Terminal Name	Function
Pin 1	NC	Not Used
	RSSI	RSSI Voltage (Circuit change required) *
	RESET	Reset Input (Circuit change required) *
Pin 2	RXD2	UART
Pin 3	TXD2	UART
Pin 4	AUXI 1	Programmable Function Input 1
	CTS	UART (Circuit change required) *
Pin 5	AUXI 2	Programmable Function Input 2
	RTS	UART (Circuit change required) *
Pin 6	AUXI 3	Programmable Function Input 3
Pin 7	DG	Digital Ground
Pin 8	TD	TX Data input
Pin 9	TA	TX Audio input

2.1.2. Connection

Connect the License Management Client (KPT-300LMC) installed PC and NXR-1000 with a
<u>STRAIGHT</u> RS232C Serial Cable.
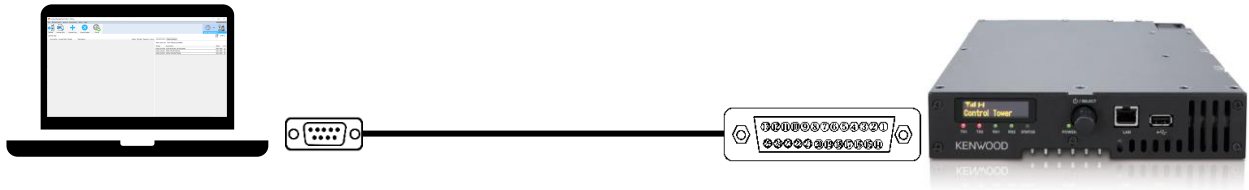
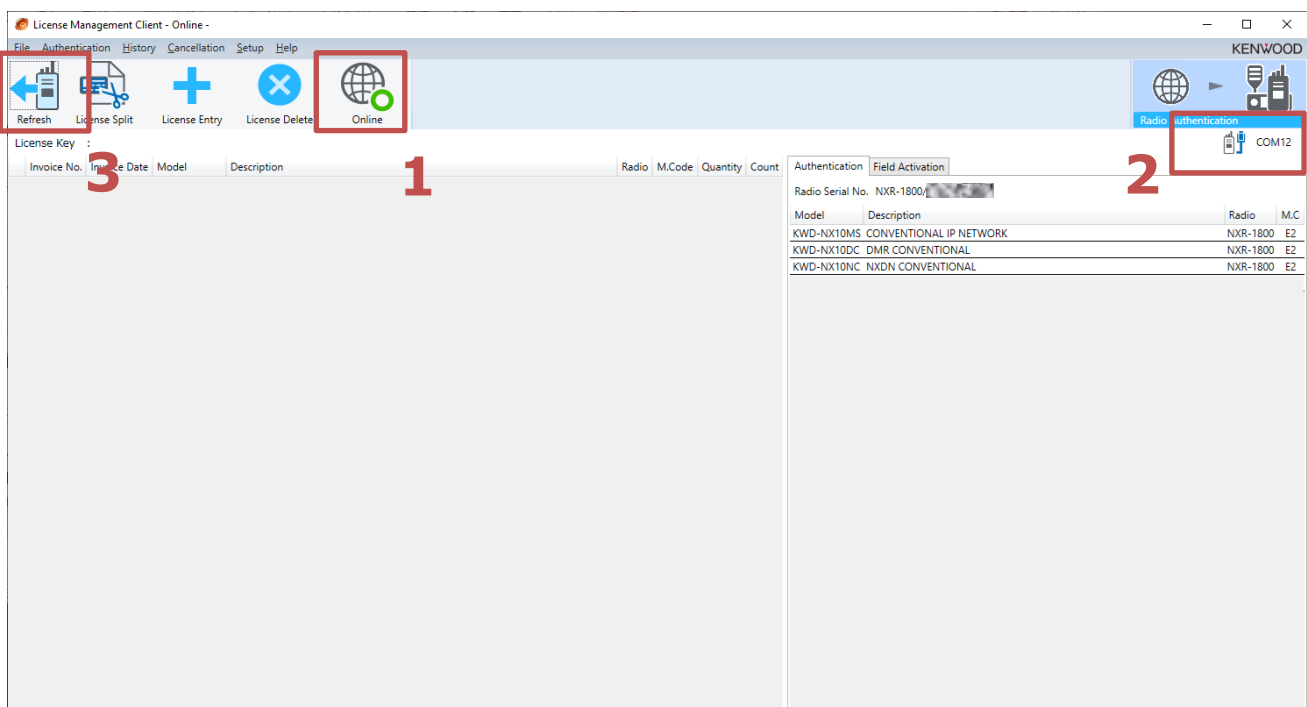**Note: There is no official JVCKENWOOD product for the serial cable.**

3. License Authentication by Serial Connection

By the Serial Connection, a Radio Feature License can be written to the NXR-1000 series in the Online Mode of the KPT-300LMC.
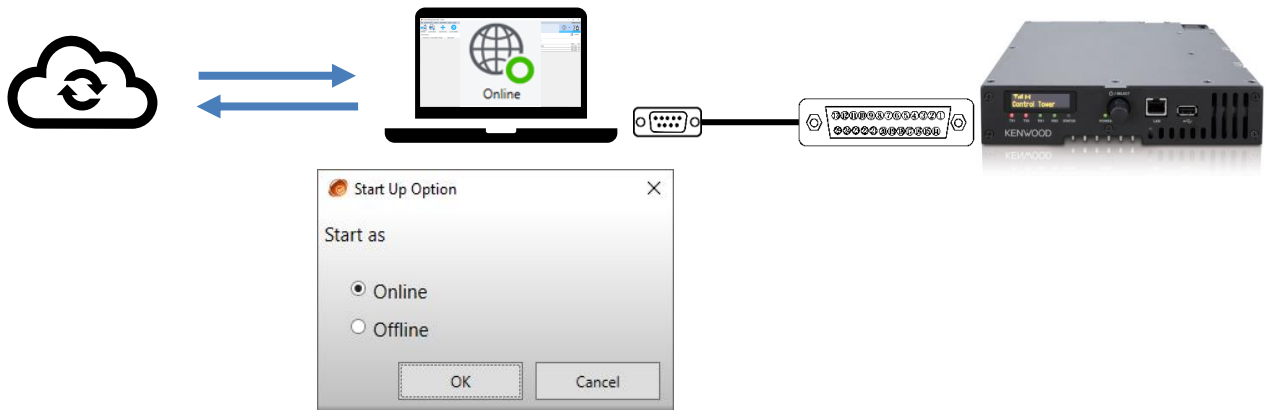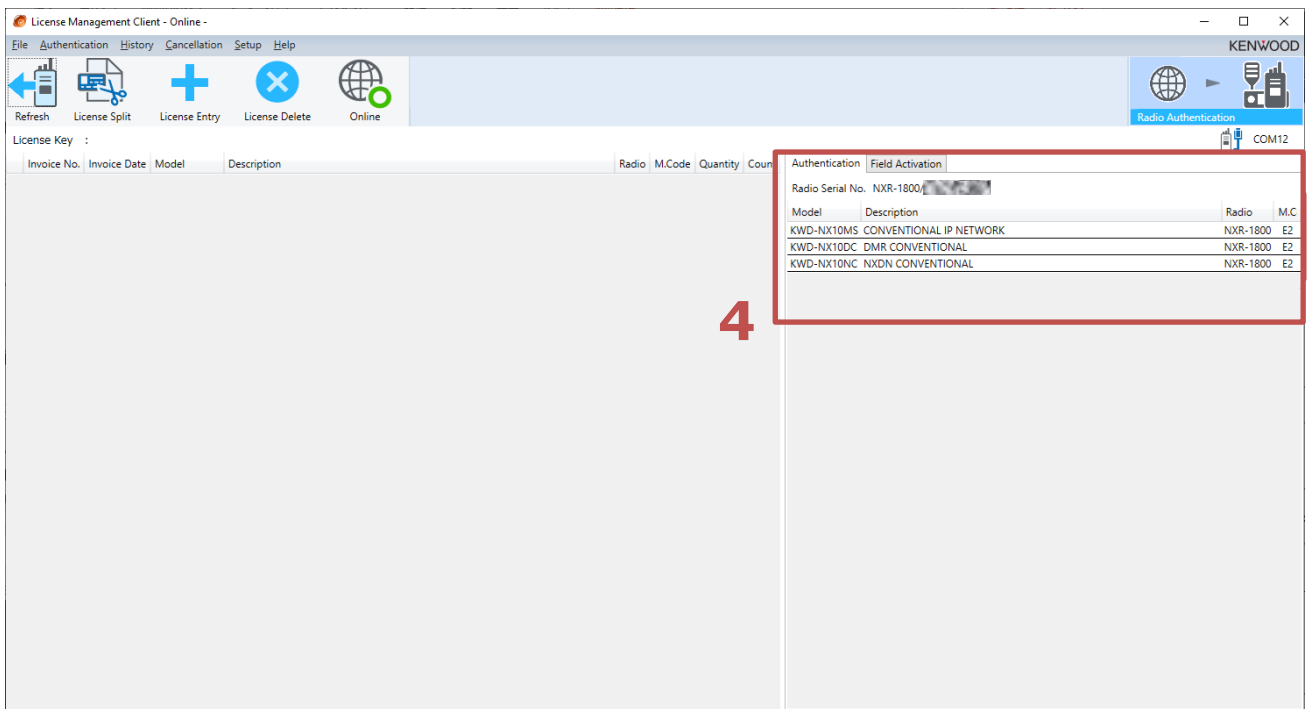

3.1. Online Authentication

1. Select "Online Mode".
2. Select a COM Port for communicating with NXR-1000.
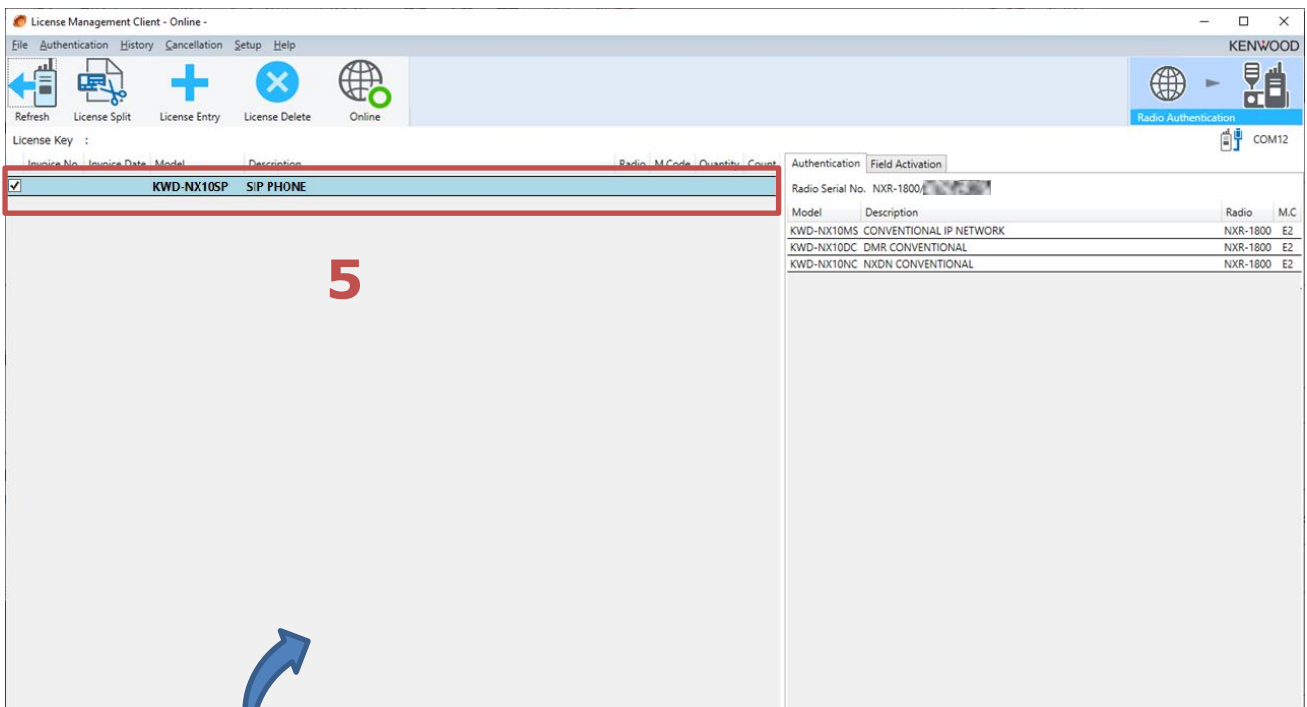3. Click "Refresh".

4. The License(s) installed on the NXR-100 will be listed on the right side.
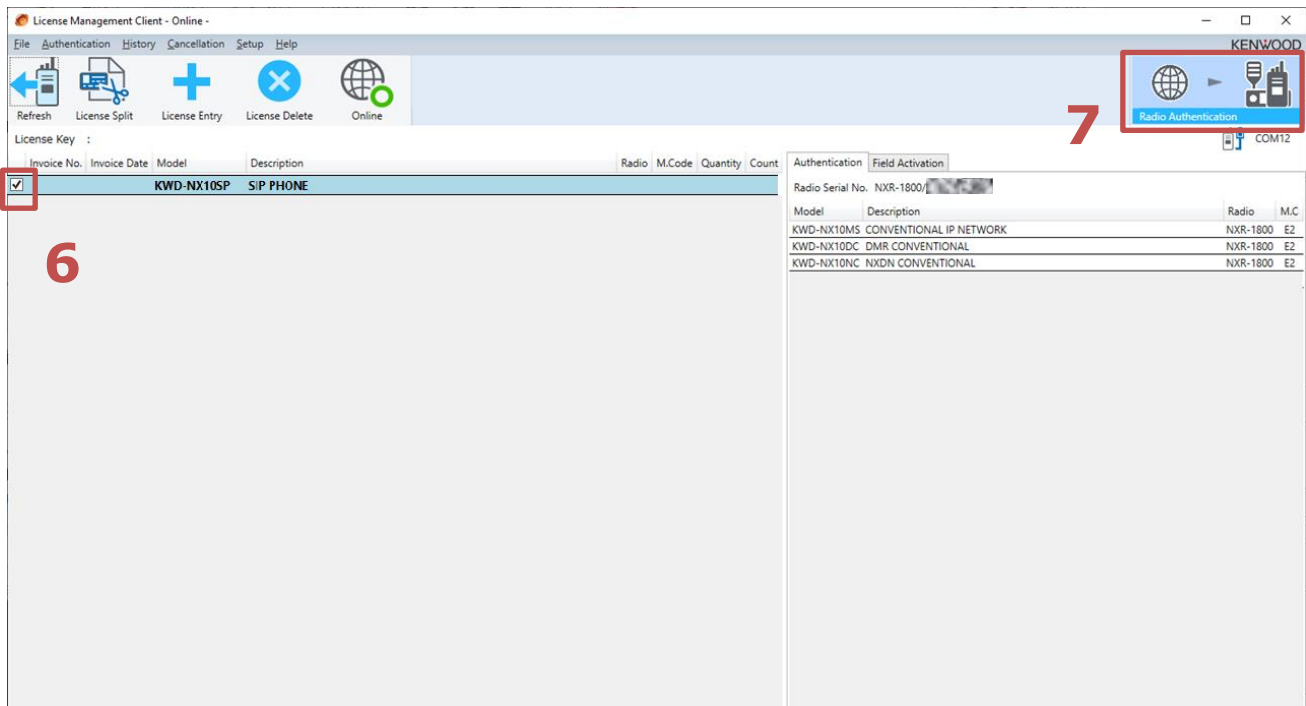

5. Drag and drop to load a Radio Feature License File (.jkefr) to be authenticated.

.jkefr

6. Double-click and tick a License you wish to write.
7. Click "Radio Authentication".
   Note: it is <u>NOT</u> necessary to use the Field Activation.

3.2. License Cancellation

The License written to the NXR-1000 series by Online Authentication can be canceled within 72 hours after its authentication.
The cancellation should be made using the Serial Connection in the same way described in the Online Authentication section of this document.   Please refer to the detailed steps for "KPT-300LMC Basic Operations".

Note: It is <u>NOT</u> possible to cancel Licenses written by the Offline Authentication (Filed Activation) even via the Serial Connection.

4. Revision History

Version	Date of issue	Note
1.00	Dec. 21. 2023	First edition