^SN – Serialization Data

The **^SN** command allows the printer to index data fields by a selected increment or decrement value, making the data fields increase or decrease by a specified value each time a label is printed. This can be performed on 100 to 150 fields in a given format and can be performed on both alphanumeric and bar code fields. A maximum of 12 of the right- most integers are subject to indexing.

.13↓ In x.13 and earlier, the first integer found when scanning from right to left starts the indexing portion of the data field.

.14↑ In x.14 and later, the first integer found when scanning from end of the backing store towards the beginning starts the indexing portion of the data field.

.13↓ In x.13 and earlier, if the alphanumeric field to be indexed ends with an alpha character, the data is scanned, character by character, from right to left until a numeric character is encountered. Serialization takes place using the value of the first number found.

.14↑ In x.14 and later, if the backing store of the alphanumeric field to be indexed ends with an alpha character, the data is scanned, character by character, from the end of the backing store until a numeric character is encountered. Serialization takes place using the value of the first number found.

Format: **^SNv,n,z**

Parameters	Details
v = starting value	**Values:** 12-digits maximum for the portion to be indexed **Default: 1**
n = increment or decrement value	**Values:** 12-digit maximum **Default: 1** To indicate a decrement value, precede the value with a minus (–) sign.
z = add leading zeros (if needed)	**Values:** **N** = no **Y** = yes **Default: N**

Example: This example shows incrementing by a specified value:

ZPL II CODE	GENERATED LABELS
^XA ^FO260,110 ^CFG ^SN001,1,Y^FS ^PQ3 ^XZ ***Note: The ZPL II code above will generate three separate labels, seen to the right.***	001 002 003

Comments Incrementing and decrementing takes place for each serial-numbered field when all replicates for each serial number have been printed, as specified in parameter **r** of the **^PQ** (print quality) command.

If, during the course of printing serialized labels, the printer runs out of either paper or ribbon, the first label printed (after the media or ribbon has been replaced and calibration completed) has the same serial number as the *partial* label printed before the *out* condition occurred. This is done in case the last label before the *out* condition did not fully print. This is controlled by the **^JZ** command.

Using Leading Zeros

In the **^SN** command, the **z** parameter determines if leading zeros are printed or suppressed. Depending on which value is used (**Y** = print leading zeros; **N** = do not print leading zeros), the printer either prints or suppresses the leading zeros.

The default value for this parameter is **N** (do not print leading zeros).

Print Leading Zeros

.13↓ In x.13 and earlier, the starting value consists of the right-most consecutive sequence of digits.

.14↑ In x.14 and later, the starting value consists of the first number working backwards in the backing store consecutive sequence of digits.

The width (number of digits in the sequence) is determined by scanning from right to left until the first non-digit (space or alpha character) is encountered. To create a specific width, manually place leading zeros as necessary.

Suppressing Leading Zeros

In x.13 and earlier, the starting value consists of the right-most consecutive sequence of digits, including any leading spaces.

In x.14 or later, the starting value consists of the first number working backwards in the backing store consecutive sequence of digits, including any leading spaces.