Soontech Annals
EC02: Small Decimal Encoder

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Features

- Small and simple stacked design with demibolts.

- Encodes up to 1000 item types.

- Uses up to four carts for 1 code/56 gt throughput

Applications

- Encoding items

Figure 1: Small Decimal Item Encoder

General Description

The EC02 small item to decimal encoder uses demibolts and a simple layered design. It can handle up to 1000 item types.

Device Specifications

Table 1: Inputs

Name	Range	Description
Item input	Item	Item for encoding.

Table 2: Outputs

Name	Range	Description
Item output	Item	Outputs the inputted item.
Item Code 1	6-15	First digit of code.
Item Code 2	6-15	Second digit of code.
Item Code 3	6-15	Third digit of code.

Table 3: Device Specifications

Parameter	Min.	Typ.	Max.	Unit	Conditions
Throughput	56	-	-	gt	Normal Usage
Active Lag	+0.5	+1	+2	ms	At fullspeed. Ryzen 5 3600, 2GB RAM. MC 1.18.1 with Lithium.
MC Version	1.16	1.17.1	-	MCV	Latest version at time of writing: 1.19.3
Dimensions	28 x 13 x 17			Blocks	

Testing Data

Table 4: Executed Tests

Test	Result
Item encoding test	Device was able to encode with item input
Throughput test	Device was able to encode at 8gt throughput with randomized input.

Download Information

Table 5: Download Information

Identifier	MC	File	Description
EC01	1.17.1	EC02_small_decimal_encoder.litematic	Schematic of encoder.