Soontech Annals

EC01: Hopperspeed Encoder V2

By: Andrews54757
Tags: encoders, hopperspeed

Features

- Hopperspeed (9000 items/hr) encoding.

- Adjustable and expandable to work with any base.

- Requires 4 items per item type per chest.

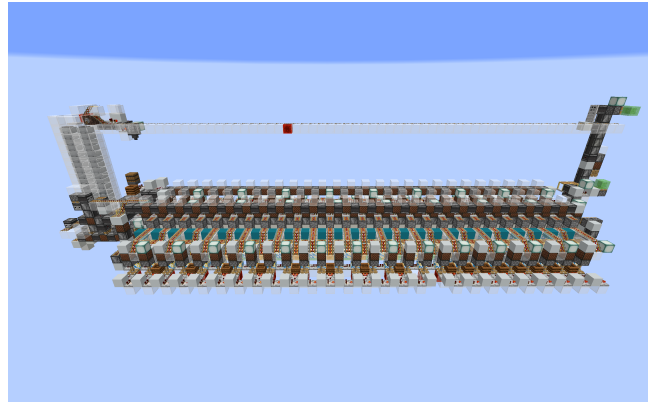- Uses 30 carts and floating rail.

Applications

- Encoding items

Figure 1: Hopperspeed Item Encoder

General Description

The EC01 encoder uses multiple hoppercarts to allow for hopperspeed item to code encoding. The design shown is a 54 double-chest design which allows for up to 1000 item types with a decimal encoding scheme.

Device Specifications

Table 1: Inputs

Name	Range	Description
Box input	Box Item	Single-type box with items for encoding.

Table 2: Outputs

Name	Range	Description
Box output	Box Item	Outputs the inputted box timed with the code.
Code signal	Code	Outputs a redstone signal corresponding to the mapped item code.

Table 3: Device Specifications

Parameter	Min.	Typ.	Max.	Unit	Conditions
Throughput	8	-	-	gt	Normal Usage
Active Lag	+2	+2.5	+3	ms	At Hopperspeed. Ryzen 5 3600, 2GB RAM. MC 1.18.1 with Lithium.
MC Version	1.16	1.16.5	-	MCV	Latest version at time of writing: 1.19.3
Dimensions		70 x 19 x 19		Blocks	

Testing Data

Table 4: Executed Tests

Test	Result
Box encoding test	Device was able to encode with box 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	1.16.5	EC01_Hopperspeed_Encoder_V2-r1.zip	World download of encoder