Soontech Annals

EC03: 16gt Item Encoder

By: Andrews54757
Tags: encoders, half-speed

Features

- Uses 9 carts for half-hopperspeed (16gt) throughput

- Requires only 1 item per type per chest.

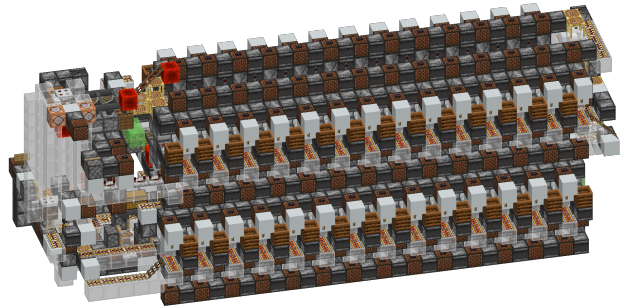- MTE compatible.

- Self resettable toggle states.

Applications

- Encoding items

General Description

The EC03 16gt encoder has a 16gt throughput encoder core which only requires one item per type in a chest. It uses 9 carts but can be easily modified with cart yeeting in 1.19+ (carts in storage are all empty). It is dustupdateless, honeyless, and MTE compatible.

Figure 1: 16gt Item Encoder

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	Code	Outputs redstone signals corresponding to mapped code.

Table 3: Device Specifications

Parameter	Min.	Typ.	Max.	Unit	Conditions
Throughput	16	-	-	gt	Normal Usage
Active Lag	+1	+1.4	+2	ms	At half-hopperspeed. Ryzen 5 3600, 2GB RAM. MC 1.18.1 with Lithium.
MC Version	1.13	1.18.2	-	MCV	Latest version at time of writing: 1.19.3
Dimensions		38 x 15 x 11		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 16gt throughput with randomized input.

Download Information

Table 5: Download Information

Identifier	MC	File	Description
EC03	1.18.2	EC03_16gt_encoder_core_p1.litematic	Schematic of encoder.