Soontech Annals

EB01: Minewave Fixed Bulk Slice

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Tags: external-bulk, fixed-bulk, multi-slice

Features

- 1.1 million item capacity
- Multi-slicing compatible
- Input overflow protection
- Fully hopperlocked

Applications

• External bulk storage

General Description

The EB01 Minewave Fixed Bulk Slice is a device that can be stacked to create a fixed external bulk storage system. The device interfaces with an decoder (not included) and a controller (not included) to automatically store and retrieve items with redstone control. Multislicing, the ability to set multiple slices to the same code, is supported. These multi-sliced slices need not be adjacent.

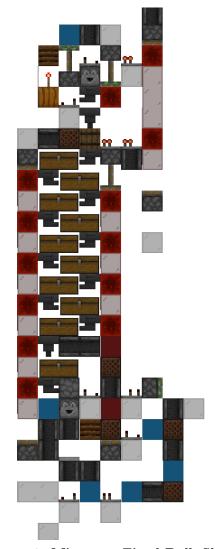


Figure 1: Minewave Fixed Bulk Slice

Connecting the output triggers

The output triggers are connected to the controller from the back of the bulk to preserve the correct update order for the dropperline. The output trigger lines must be connected with the following timings: 0gt - output trigger 1, 4gt - output trigger 2, 10gt - output trigger 3.

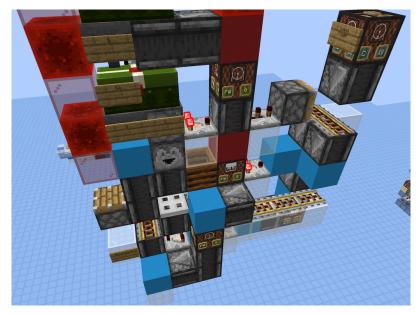


Figure 2: Output Trigger Wiring

Rail extensions

Rail extensions, necessary in order to expand the bulk storage beyond nine slices, must be aligned in the following manner.

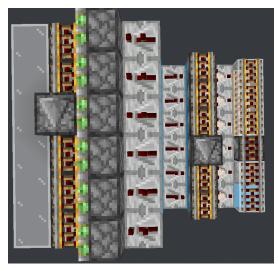


Figure 3: Rail Extension Alignment

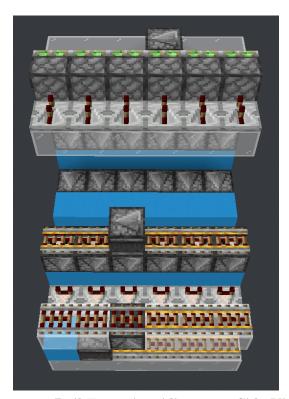


Figure 4: Rail Extension Alignment, Side View

Device Specifications

Table 1: Inputs

Name	Range	Description
Box input	Box	Dropperline input for transporting boxes to the slices.
Slice activation	Pulse	Activates the slice to store or retrieve boxes. Connect to a decoder. Piston input.
Output trigger 1	Pulse	Selects the slice for output.
Output trigger 2	Pulse	Triggers the output of the slice. Should be pulsed 4gt after output trigger 1.
Output trigger 3	Pulse	Triggers the output dropperline. Should be pulsed 10gt after output trigger 1.
Reset lines 1 & 2	Pulse	Disables the slice.

Table 2: Outputs

Name	Range	Description
Box output	Box	Dropperline output for transporting boxes from the slices.

Table 3: Device Specifications

Parameter	Min.	Typ.	Max.	Unit	Conditions
Throughput	8	-	-	gt	Input/output throughput
Latency	18	-	-	gt	From output trigger to dropper activation.
MC Version	1.16	1.21.4	-	MCV	Latest version at time of writing: 1.21.4
Dimensions		1 x 26 x 29		Blocks	

Testing Data

Table 4: Executed Tests

Test	Result	
Output test	Device was able to output boxes correctly using the output triggers.	

Download Information

Table 5: Download Information

Identifier	MC	File	Description
EB01	1.21.4	EB01_Minewave_Fixed_Bulk_Slice.litematic	Schematic of device.