## Soontech Annals

# IM01: 100 Item RAM

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Tags: item-memory, random-access

### **Features**

- Has 100 different codes/item types. a dropper of storage per code.
- Random access. Can insert and retrieve items in constant time in any order.
- Half hopperspeed order throughput. Can execute insertions and retrievals every 16 game ticks (exclusive, can't do both at same time).
- Hopperlocked. Can be fully hopperlocked.
- Togglestateless. No piston toggle states.

Figure 1: 100 Item RAM

## **Applications**

- Temp storage for merging.
- Dynamic bulk mapping storage.

## **General Description**

The IM01 is able to store and retrieve items with a specific decimal code. This may be useful as a temp storage in an encoded dynamic sorting system.

# **Device Specifications**

Table 1: Inputs

Name	Range	Description		
Code Digit 1	1-10	First digit indicating row.		
Code Digit 2	1-10	Second digit indicating column.		
Do Retrieval	0-1	Indicates order is to retrieve items.		
Execute Order	Pulse	Executes the order with the given settings.		
Item Input	Item	Item to be inserted/retrieved.		

### Table 2: Outputs

Name	Range	Description
Item Output	Item	Output for retrieval orders.

## Table 3: Device Specifications

Parameter	Min.	Typ.	Max.	Unit	Conditions
Order Execution Interval	16	-	-	gt	Normal Usage
Hopper Count		110		Hoppers	
MC Version	1.13	1.17.1	-	MCV	Latest version at time of writing: 1.19.3
Dimensions		27 x 9 x 23		Blocks	

# **Testing Data**

Table 4: Executed Tests

Test	Result	
Insertion	Items were successfully inserted in all positions.	
Retrieval	Items were successfully retrieved from all positions.	

# **Download Information**

Table 5: Download Information

Identifier	MC	File	Description
IM01	1.17.1	$IM01\_100\_item\_memory\_1.17.1.litematic$	Litematic of item RAM device.