



Global-Hopper GH-3200



Installation and Operation Manual

Introduction

Himecs' Global-Hopper GH-3200 is the new generation of size free coin and token dispensers. The patent-pending rotary-drum system is designed to grasp every coin securely, which promises accurate and uninterrupted coin payouts to the last coin.

Operation

The GH-3200 can be controlled with a standard hopper interface or with the intelligent protocol cctalk. A integrated high performance 8-bit Flash-CPU controls the payout and protects the motor.

Installation

A 'Mounting Plate' with 4 fixing holes is provided.

Specifications

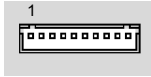
Dimension	210 (H) x 127 (W) x 225 (L) mm				
Coin Diameter	19.0mm - 32.0mm				
Coin Thickness	1.3mm - 3.2mm				
Dispensing Speed	Approx.310 coins/min				
Counting Method	Optical Sensor				
Interfaces	Standard , cctalk				
Operating Voltage	24VDC±10%				
Operating Current loaded	300mA				
Max Current	2A				
Weight	1900g				
MTBF	1x10 ⁶				
Hopper Capacity	<i>Coin</i>	<i>w/o Ext.</i>	<i>Std.Ext.1</i>	<i>Std.Ext.2</i>	<i>Wide Ext.</i>
(for dimensions see 'Outline Drawing')	5 Cent	1100	1700	2900	3100
	10 Cent	1100	1700	2900	3100
	20 Cent	780	1200	2000	2200
	50 Cent	590	950	1600	1700
	1 EUR	650	1050	1800	1900
	2 EUR	590	950	1600	1700



Electrical Interface

Pin assignment:

direct connector



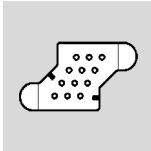
Standard

1	Logic Supply (+4 to 12V)
2	IN3
3	nc
4	nc
5	OUT Security
6	nc
7	IN2
8	0V Supply *
9	24V Supply *
10	Sensor OUT (Active LO)

cctalk (see Appendix B)

1	nc
2	nc
3	nc
4	nc (int.connected)
5	nc
6	cctalk Data
7	nc
8	0V Supply *
9	24V Supply *
10	nc

optional connector
(supplied with GH-Base-Plate)



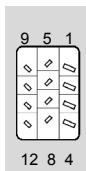
Standard

1	24V Supply *
2	0V Supply *
3	IN3
4	Logic Supply (+4 to 12V)
5	nc
6	IN2
7	Sensor OUT (Active LO)
8	Sensor OUT (Active HI)
9	OUT Security
10	LOW Level Sensor
11	HIGH Level Sensor
12	nc

cctalk (see Appendix B)

1	24V Supply *
2	0V Supply *
3	MDB TxD
4	MDB RxD
5	nc
6	nc
7	nc
8	nc
9	nc
10	LOW Level Sensor
11	HIGH Level Sensor
12	WAKE

opt.compatibility
connector
(available with mounting
adapter)



Standard

1	0V Supply *
2	LOW Level Sensor 1
3	Sensor OUT (Active LO)
4	nc
5	OUT Security
6	HIGH Level Sensor
7	LOW Level Sensor 2
8	IN2
9	24V Supply *
10	Logic Supply (+4 to 12V)
11	Sensor OUT (Active LO)
12	IN3

cctalk (see Appendix B)

1	0V Supply *
2	nc
3	nc
4	nc
5	cctalk Data
6	nc
7	nc
8	nc
9	24V Supply *
10	nc
11	nc
12	nc

*** CAUTION: Reversing the polarity of the supply inputs will damage the device !**

Modes of the 'Standard' –interface : (see Appendix A)

Mode 1:

Start / Stop motor to dispense coins. A pulse from the 'Sensor Out'-signals indicate the payout of one coin. Turn off the motor within 5ms to avoid miscounting.

IN2 = GND for Mode 1

IN3 = 0 Volt starts the motor (negative supply for the opto-coupler)

Mode 2:

A number of pulses on 'IN3' pays out the equivalent amount of coins. The motor starts and stops automatically.

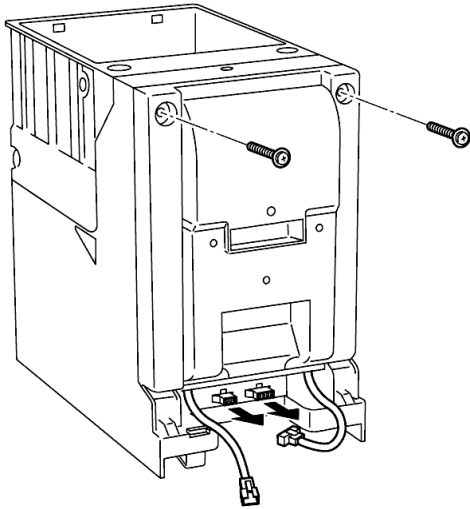
IN2 = OPEN for Mode 2

IN3 = LOW pulses pay out the coins

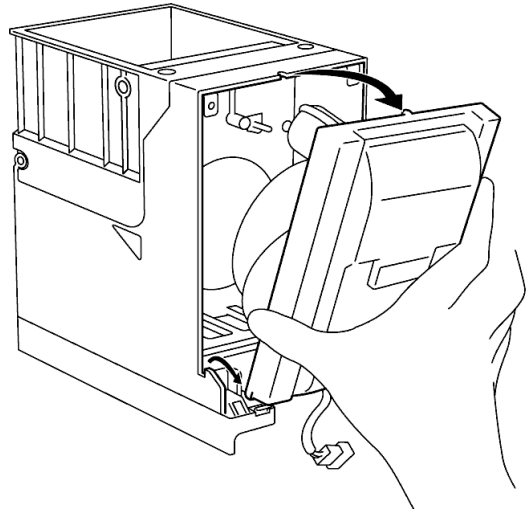


Disassembly

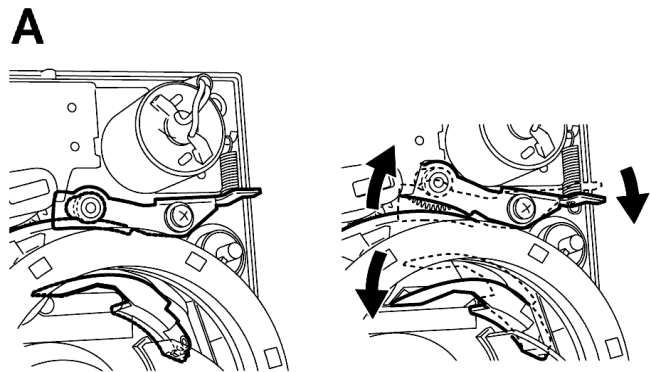
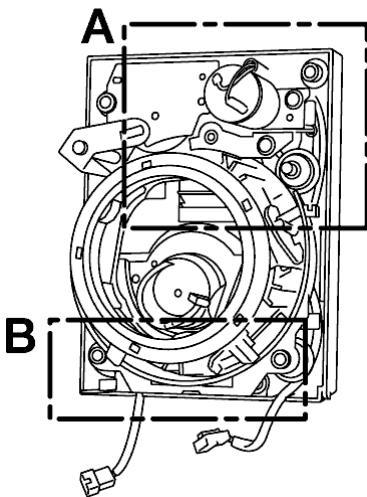
1. Unplug the 2 connectors, remove front screws



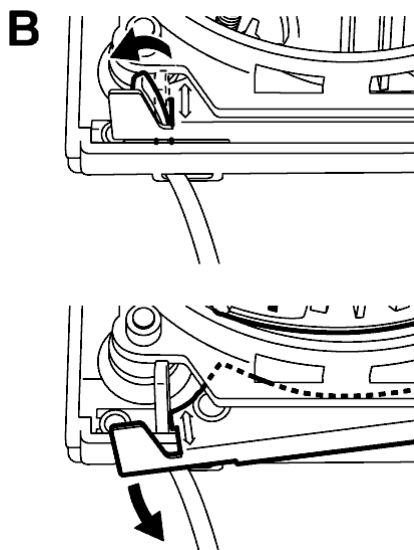
2. Remove Coin Payout Unit



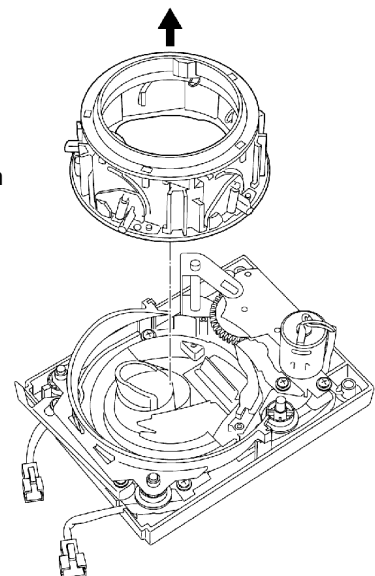
3. Push metal lever to release top of drum



4. Shift white plastic stopper left and metal lever down

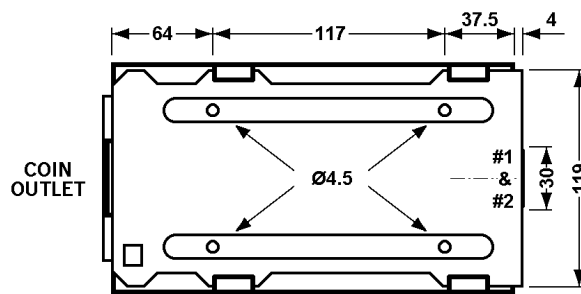
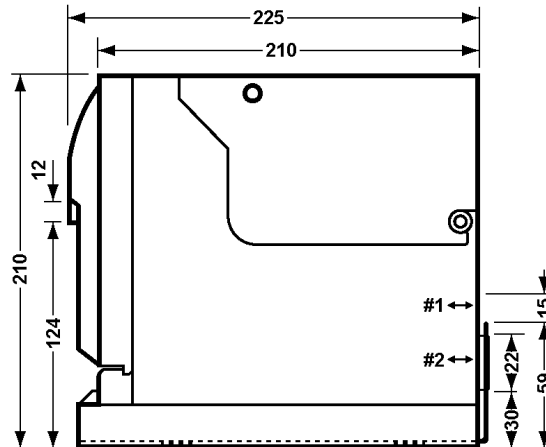
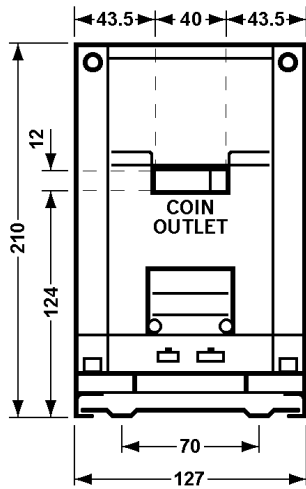


5. Remove released drum





Outline Drawing

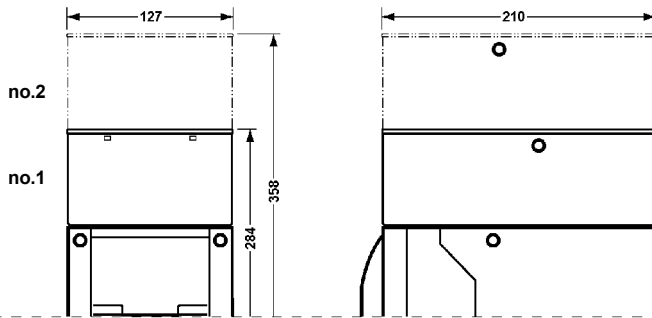


#1 - Standard Connection
#2 - Optional Connector

Option:

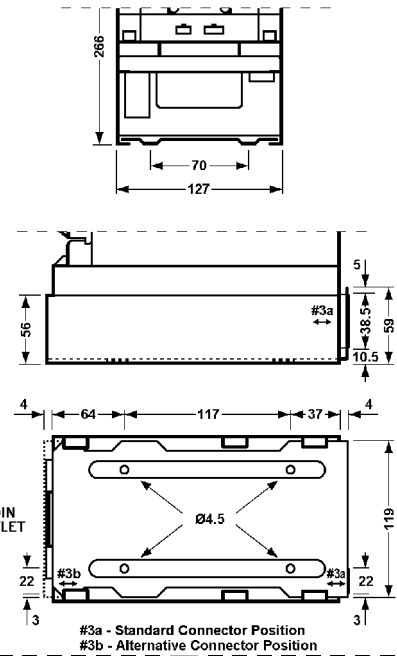
Same Size Extension Tanks
(S-Type Extension)

no. 1 + 2	
Total Capacity:	5 c = 1700 2900
	10 c = 1700 2900
	20 c = 1200 2000
	50 c = 950 1600
	1 € = 1050 1800
	2 € = 950 1600



Option:

Compatibility Hopper Adapter

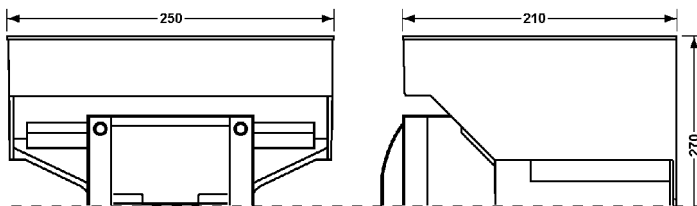


#3a - Standard Connector Position
#3b - Alternative Connector Position

Option:

Wide Extension Tank
(W-Type Extension)

Total Capacity:	
5 c =	3100
10 c =	3100
20 c =	2200
50 c =	1700
2 € =	1900
2 € =	1700



4U GmbH

Kaarster Strasse 75
40670 Meerbusch
Germany

Phone +49 2159 9297-800
Fax +49 2159 9297-808
Service +49 2159 9297-801

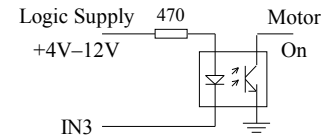
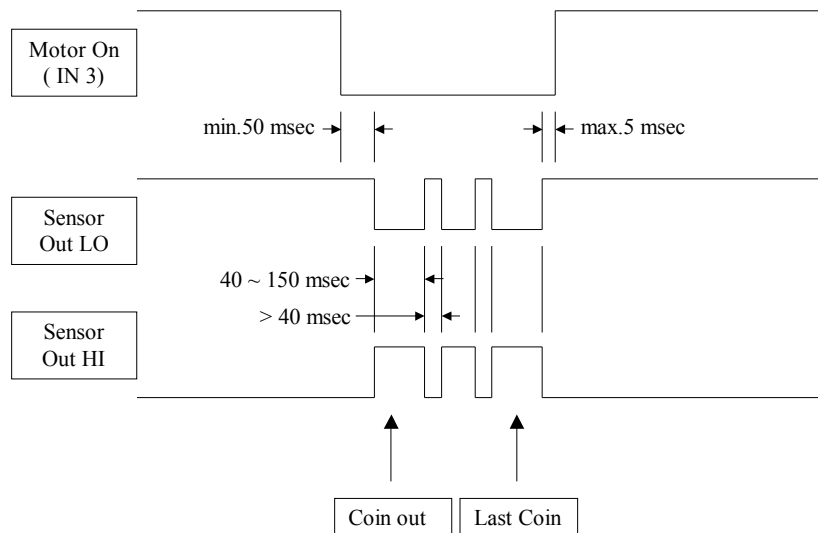
www.4ugmbh.de
info@4ugmbh.de
service@4ugmbh.de



Appendix A

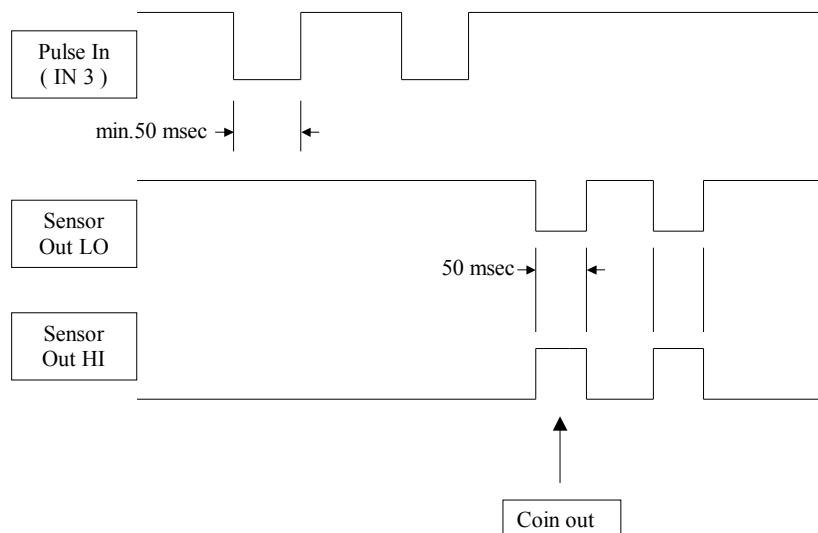
Standard Mode Timing

Mode1 (count mode) :
(IN2 = GND)



The level of the Sensor Out signals are internally pulled up to 5V. They are NOT open collector.

Mode2 (pulse mode) :
(IN2 = OPEN)



Max. number of pulses = 255.
Min. pulse length = 50 msec.



Appendix B

cctalk COMMANDS

- SIMPLE POLL	(\$FE = 254 D)
- REQUEST EQUIPMENT CATEGORIA ID	(\$F5 = 245 D)
- REQUEST PRODUCT CODE	(\$F4 = 244 D)
- REQUETS BUILD CODE	(\$C0 = 192 D)
- REQUEST MANUFACTURED ID	(\$F6 = 246 D)
- REQUEST SOFTWARE VERSION	(\$F1 = 241 D)
- READ OPTO STATES	(\$EC = 236 D)
- REQUEST COMM VERSION	(\$04 = 4 D)
- RESET DEVICE	(\$01 = 1 D)
- REQUEST SERIAL NUMBER	(\$F2 = 242 D)
- ENABLE HOPPER	(\$A4 = 164 D)
- DISPENSE HOPPER COIN	(\$A7 = 167 D)
- REQUEST HOPPER STATUS	(\$A6 = 166 D)
- TEST HOPPER	(\$A3 = 163 D)
- EMERGENCY STOP	(\$AC = 172 D)
- REQUEST HOPPER DISPENSE COUNT	(\$A8 = 168 D)
- ADDRESS POLL	(\$FD = 253 D)
- ADDRESS CLASS	(\$FC = 252 D)
- ADDRESS CHANGE	(\$FB = 251 D)
- ADDRESS RANDOM	(\$FA = 250 D)