



## **User Manual for GW-CB-S-002**

### **1. Introduction**

**Model : GW-CB-S-002      FCC ID : 2APN9GW-CB-S-002**

This system is the payout unit of tablet chemicals.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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#### **FCC CAUTION**

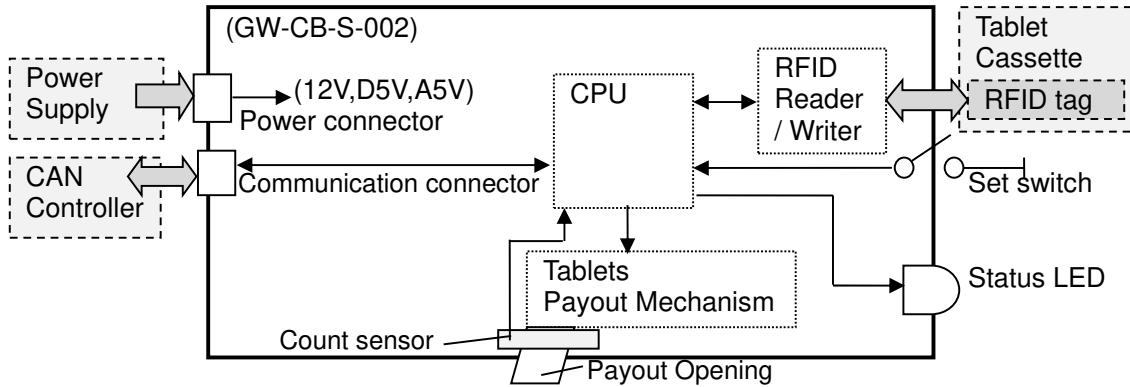
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person's body.

## 2. System Description



This system equipped with an RFID reader / writer and judges the type of tablet according to the contents of the set "RFID tag" (mounted on "Tablet Cassette").

The "Set switch" is turned on when "Tablet Cassette" is attached.

The type of "RFID tag" corresponds to ISO15693, and the conformity tags are TT-I03-S1 (by HITACHI) or SFE-SLX-3025 (by E-Garde).

The tablet put in the cassette is paid out from the "Payout Opening" in the required quantity, and counted by the "Count sensor".

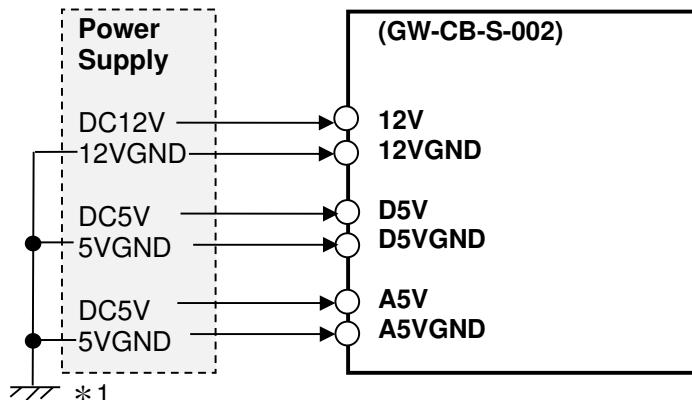
For the "Power supply", DC12 V and DC5 V (for D5V and A5V) are required.

It operates by sending a CAN command from the "CAN Controller" via CANH, CANL.

"Status LED" is displayed in three colors (Red, Green, Orange) and it indicate now status.

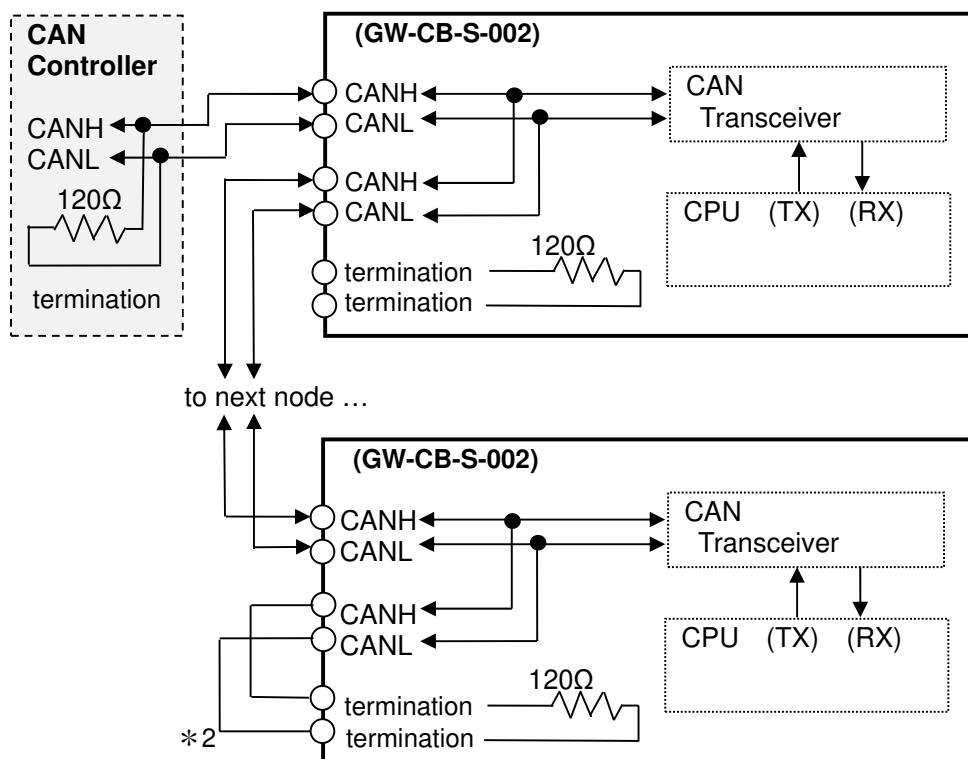
### 3. Connection

- "Power connector" . . . (HIROSE : DF-11-6DEP-2C)  
1pin:12V、2pin:12VGND、3pin:D5V、4pin:D5VGND、5pin:A5V、6pin:A5VGND



\*1 : Since each GND is not connected inside the unit, please connect on the "Power Supply" side.

- "Communication connector" . . . (HIROSE : DF-11-8DEP-2C)  
1pin:CANH、2pin:CANL、3pin:(General-purpose Input)、4pin:CANH  
5pin:CANL、6pin:(General-purpose Output)、7pin:termination、8pin:termination



\*2 : If it is the last node, please terminate CANH, L with built-in resistor (by wire).

## 4.Operating

- Supply to “Power connector” DC12V and DC5V (for D5V and A5V)
- Send the following CAN commands from “CAN controller”.

## 5.Command List

- Control Instruction

	CAN ID	parameter 1	parameter 2	parameter 3	parameter 4	parameter 5	parameter 6	parameter 7	parameter 8
Initial instructions	0x200	0x49							
Payment information request	0x200	0x50	Number of packages (thousands place)	Number of packets (hundreds place)	Number of packets (tens place)	Number of packets (one place)	Number of tablets (hundreds place)	Number of tablets (tens place)	Number of tablets (one place)
Payout instruction	0x200	0x44	Number of packages (thousands place)	Number of packets (hundreds place)	Number of packets (tens place)	Number of packets (one place)	'0': With pre-timer '1': No pre-timer	'0': low speed '1': Standard speed '2': high speed	
Stop instruction	0x200	0x53							
Error cancellation instruction	0x200	0x52							
LED control instruction	0x200	0x4C	LED color '0': Red '1': Green '2': Orange '3': LED 1	Lighting pattern '0': OFF '1': ON '2': Blinking (250 ms cycle) '3': Blinking (500 ms cycle)					
RFID information request	0x200	0x54	What to read '0': UID+BLOCK '1': UID '2': BLOCK	Bit specification of target block in ASCII representation '0' to 'F'  bit 0: Block 1 bit 1: Block 2 bit 2: Block 3 bit 3: Block 4	Bit specification of target block in ASCII representation '0' to 'F'  bit 0: Block 5 bit 1: Block 6 bit 2: Block 7 bit 3: Block 8				
Dimmer log request	0x200	0x72							

• State Response

	CAN ID	Parameter 1	Parameter 2	Parameter 3	Parameter 4	Parameter 5	Parameter 6	Parameter 7	Parameter 8
<b>State notification</b>	0x400	0x53	<p>bit 0 to 5: 1: before the initial 2: Initial 3: Waiting 4: Reserved 5: Operating</p> <p>bit 7: Error condition 0: No error 1: With error</p>	<p><b>Error detail 1</b> bit 7: Detecting of the lock bit 6: unnecessary tablet fall detection bit 5: Out of tablets bit 4: Sensor fault bit 3: Cassette removal during operation bit 2: Motor control bit 1: transmission error bit 0: Reception error</p> <p><b>Error detail 2</b> bit 7: bit 6: bit 5: bit 4: bit 3: bit 2: bit 1: RFID data error detection bit 0: RFID communication error</p>	Tablet Cassette insertion state	Number of remaining tablets (hundreds place)	Number of remaining tablets (tens place)	Number of remaining tablets (one place)	
<b>Error detail information</b>	0x400	0x47	<p><b>Lower 4bits:</b> Operating state at the time of error detection</p> <p>0x00: Initial state (initial setting) 0x01: Front wait 0x02: Paying out (waiting for ON) 0x03: Paying out (waiting for OFF) 0x04: M type tablets countermeasure no-monitoring period 0x05: Rear wait 0x0A: completion of payout 0x0F: After error determination</p> <p><b>Upper 4 bits:</b> motor operation state</p> <p>0x00: Motor stop 0x10: CW 0x20: CCW</p>	Determination time: upper 1st byte (binary)	Determination time: upper 2nd byte (binary)	Motor operating time: upper 1st byte (binary)	Motor operating time: upper 2nd byte (binary)	Motor operating time: upper 3rd byte (binary)	Motor operating time: upper 4th byte (binary)
<b>RFID information</b>	0x400	0x54	Upper 1st byte (binary)	Upper 2nd byte (binary)	Upper 3rd byte (binary)	Upper 4th byte (binary)	Upper 5th byte (binary)	Upper 6th byte (binary)	Upper 7th byte (binary)
<b>RFID information</b>	0x400	0x74	Block number '1' to '8'	Upper 1st byte (binary)	Upper 2nd byte (binary)	Upper 3rd byte (binary)	Upper 4th byte (binary)		
<b>RFID error details</b>	0x400	0x65	Error Status	Error count					
<b>Dimming log notification</b>	0x400	0x72	Dimming value	Sensor 1 upper byte (binary)	Sensor 1 lower byte (binary)	Sensor 2 upper byte (binary)	Sensor 2 lower byte (binary)	Sensor 3 upper byte (binary)	Sensor 3 lower byte (binary)