VendTag User Handbook V1.3

This booklet contains techinical information including wiring diagrams and application examples
1. General operation
2. Control of user keys
3. Application example: Simple vending machine (VMC) interface through coin validator connector
4. Application example: Relay output in pulsed mode
5. Application example: Relay output in latched mode
6. Application example: Access control for security doors, turnstiles, car park barriers, etc.

1. General Operation

Red User Tags

The VendTag system allows users to receive a limited or unlimited number of vends per day. Each tag may be individually set to give 1 to 9 vends per day or unlimited vends.

In normal use the VendTag display shows either a flashing dot to show it is operational or a dash to show it is inhibited by a signal into he Inhibit/Reset input.

When the user touches a tag on the sensor, the display shows number of vends remaining on the key. If the key is for unlimited vends then the display shows "F" for "free".

If the tag is held on the sensor for two seconds a vend is taken from the tag. The VendTag output can be a pulse on any of the six coin validator lines or the built in relay can pulse or latch. In Latching mode the relay is unlatched by a signal into the VendTags inhibit/reset input.

Yellow User Tags

If a sytem is to use some keys with limited vends and others for free vends then yellow tags can be used to distinguish them from the red limited vend tags.

2. Control of Tags

Where it is required, a blue Master Tag may be supplied. The Master Tag allows the following funtions
a. Add more user keys to the system.
b. Set the daily limit for each Tag.
c. Erase all user Tags.

Use of Master Tag

1. The VendTag must be operating, i.e. not inhibited and the display (if fitted) flashing a dot.
On repeatedly touching the blue key to the sensor the display shows
1, 2, 3, 4, 5, 6, 7, 8, 9, F, E then back to the flashing dot (i.e. normal operation).
1 to 9 means the next key touched will be programmed to give that many vends per day.
F means the next key touched will become a free vend key.
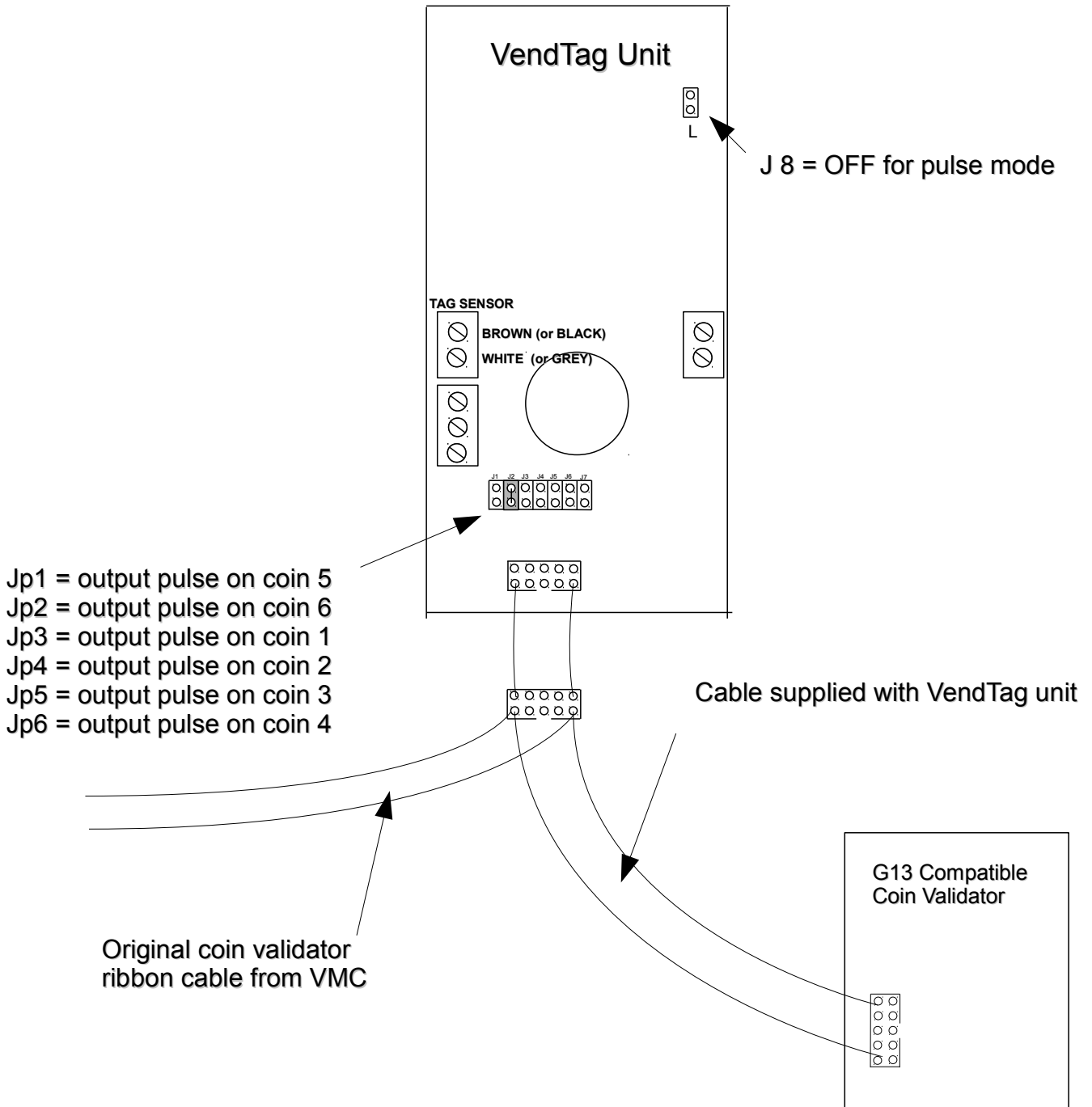E means erase all user tags. To continue with the erase option, hold the blue tag on the sensor until the display shows '-'. After a few moments the tags will be erased and normal operation resumes.

Clock Synchronisation

Limited vend tags are re-credited every 24 hours. To ensure that the re-credit occurs at a reasonable time of day or night, a push button switch near the bottom of the PCB allows the 24 hour clock to be reset to 12 hours less than the current time. The 12 hour difference provides the convenience of being able to set the re-credit time for example, in the middle of the night, without having to be there at that time. So for instance, pressing the button at 11.00 am will reset the clock so the keys will be re-credited at 11.00 pm.

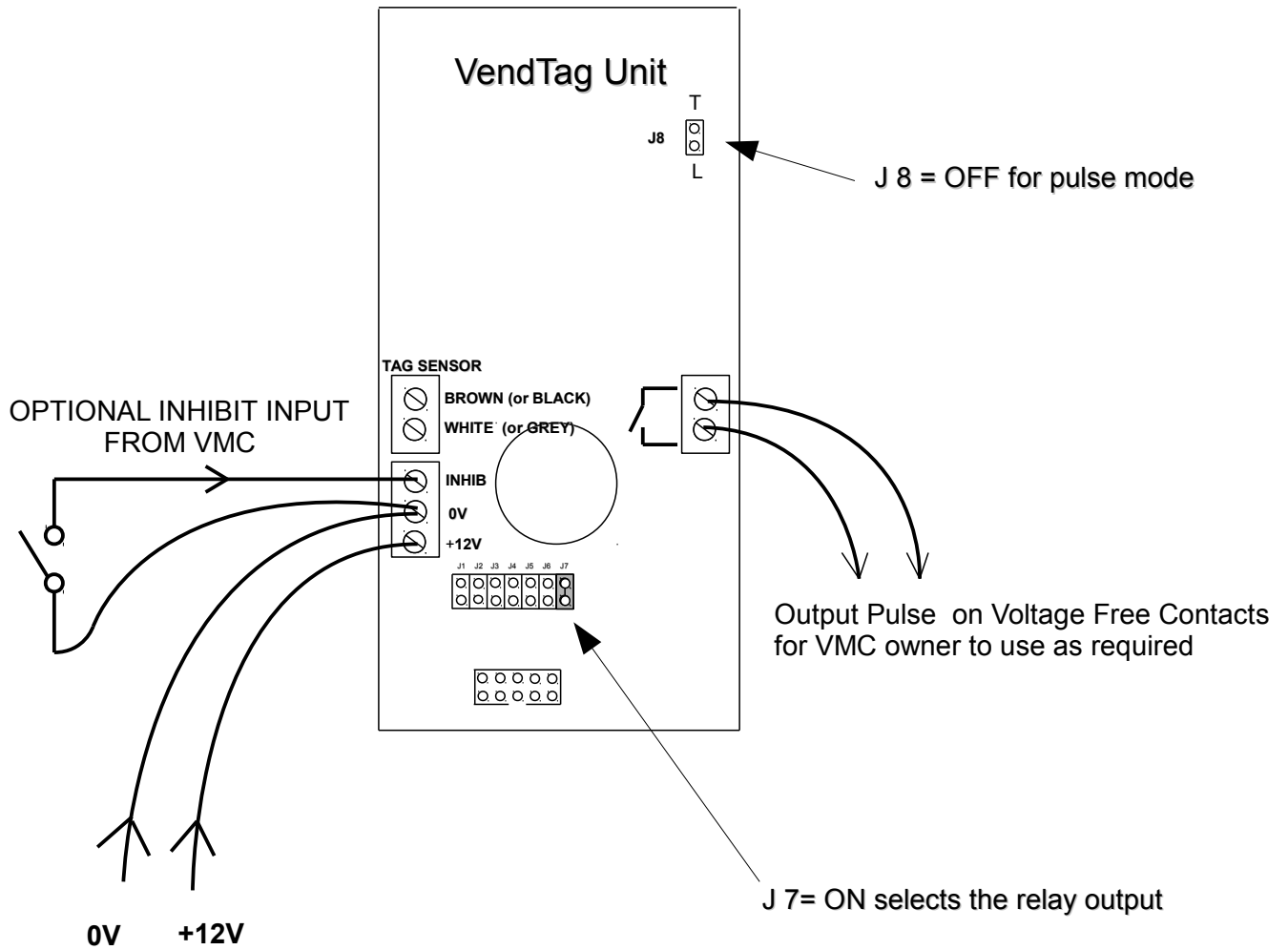# VendTag simple connection using Coin Validator connections only

The VendTag is powered from the coin validator cable and monitors the coin inhibit line to prevent vends being taken from a key when the coin validator is inhibited. The output pulse may be on any of the coin lines.

VendTag Unit

L

J 8 = OFF for pulse mode

TAG SENSOR

BROWN (or BLACK)

WHITE (or GREY)

J1 J2 J3 J4 J5 J6 J7

Jp1 = output pulse on coin 5
Jp2 = output pulse on coin 6
Jp3 = output pulse on coin 1
Jp4 = output pulse on coin 2
Jp5 = output pulse on coin 3
Jp6 = output pulse on coin 4

Cable supplied with VendTag unit

G13 Compatible
Coin Validator

Original coin validator
ribbon cable from VMC

Note. This arrangement also would work in latched outpt mode (J8 fitted) if the coin validator is inhibited by the VMC during the vend. The relay will unlatch at the end of the vend when the validator is enabled again. This could be useful if the VendTag relay ouput was wired across free vend switch on the VMC which needed to stay switched on until the end of the vend.

VendTag connection using the internal relay output in Pulse Mode

The VMC owner needs to provide a 12 Volt supply to the VendTag. The output pulse is from voltage free relay contacts. The optional inhibit input when taken to 0V prevents vend being taken from a tag, for instance when the machine is busy or sold out.

VendTag Unit

T
J8
L

J 8 = OFF for pulse mode

TAG SENSOR

BROWN (or BLACK)
WHITE (or GREY)

OPTIONAL INHIBIT INPUT FROM VMC

INHIB
0V
+12V

J1 J2 J3 J4 J5 J6 J7

Output Pulse on Voltage Free Contacts for VMC owner to use as required

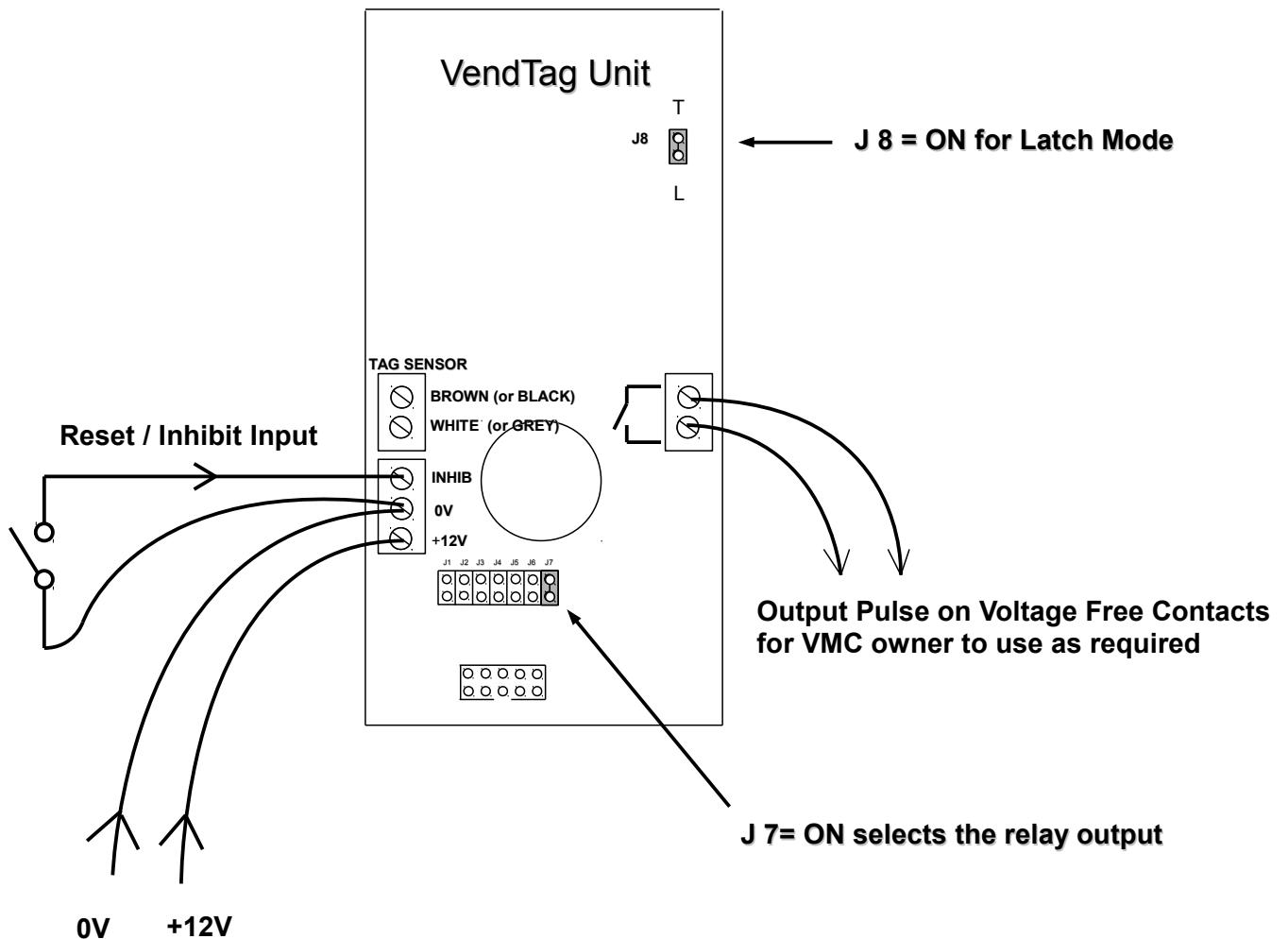J 7= ON selects the relay output

0V   +12V

12V Power Supply to Vend Tag Unit

VendTag connection using the internal relay output in Latch Mode

The VMC owner needs to provide a 12 Volt supply to the VendTag. The output pulse is from voltage free relay contacts.

The output relay latches until the Reset input is taken to 0V. This input may also be used to inhibit the VendTag by holding the input low for instance when the machine is busy or sold out.

VendTag Unit

J8   T

L

J 8 = ON for Latch Mode

TAG SENSOR

BROWN (or BLACK)

WHITE (or GREY)

Reset / Inhibit Input

INHIB

0V

+12V

J1 J2 J3 J4 J5 J6 J7

Output Pulse on Voltage Free Contacts for VMC owner to use as required

J 7= ON selects the relay output

0V   +12V

12V Power Supply to VendTag Unit

Access control for Security Doors, Turnstiles, Car Park Barriers, etc.

0V
POWER SUPPLY

VendTag Unit

J8
T
L

J 8 = ON for Latch Mode

SWITCH
Closed when the door is closed

TAG SENSOR
BROWN (or BLACK)
WHITE (or GREY)
INHIB
0V
+12V

J1 J2 J3 J4 J5 J6 J7

12V DOOR STRIKE SOLENOID

J 7= ON for relay output

+12V
POWER SUPPLY