Universal Hopper

The original: still the best

— unbeatable reliability and payout speed

- **Field-proven reliability**
- **Low cost of ownership**
- **Fraud-resistant, high security**

UNIVERSAL
HOPPER Mk 4

⚡ WARNING ⚡

POWER OFF BEFORE
CONNECT - DISCONNECT

LEDS

CONNECTOR

1 MOTOR 0 VOLT
2 LOGIC 0 VOLT
3 SENSOR OUTPUT
4 IN1
5 SECURITY OUTPUT
6 HIGH LEVEL SENSE
7 LOW LEVEL SENSE
8 IN2
9 MOTOR SUPPLY
10 LOGIC SUPPLY
11 RAW SENSOR O/P
12 IN3

MOTOR SUPPLY	LOGIC SUPPLY
24V DC	12V NOMINAL DC

BUILD CONFIGURATION

Money Controls

Universal was the 'original' hopper, the foundation of the worldwide change-giving industry. And with its world-proven reliability, security and high capacity, it is still the best — the standard to which our competitors aspire.

An extremely tolerant, very-large-capacity, single-denomination coin payout unit, Universal has the flexibility required to pay out coins of different diameters and thickness.

Robustness, high reliability and low maintenance needs make Universal a long-life product, whatever the application. Servicing is simplified further when used in conjunction with the optional quick-fit & quick-release baseplate.

Universal Hopper Lite offers simplified functionality, whilst maintaining the reliability and robustness of the Universal Hopper design.

Reliability is maintained by continuous agitation of the coins to improve coin flow (usually due to bent or damaged coins). If a coin feed jam does occur, it is cleared automatically by momentarily reversing the payout belt.

Optical sensors at the front exit ensure that the correct number of coins is paid out.

The Universal Hopper provides a choice of communications protocol: either the industry-standard ccTalk serial interface or a standard parallel interface. The ccTalk interface provides increased security and enhanced diagnostics.

With over one and a quarter million units already supplied to a variety of markets, Universal's anti-jam, field-proven reliability is second to none, and has made it the industry standard.

Product Summary

- Resistant to fraud, high security
- Field-proven reliability, over 1.25 million supplied worldwide
- Optimum in-service time
- Truly global – one build-type handles 95% of world's coin sets
- Minimal number of empty/refill cycles
- Low cost of ownership
- ccTalk serial interface
- Large capacity – 1,120 × €1, 950 x £1, 1,600 x US 25¢
- Space-efficient design
- Secure payout — up to three coins per second
- Continuous agitation of coins to prevent jams
- Auto-reverse for jam clearance
- Low-level sensing, with option for high- or top-level sensing
- Robust, high reliability, low maintenance and dirt tolerant – long life
- ccTalk serial interface with encryption

Advanced design delivers high acceptance, high reliability and simplified servicing

Truly 'Universal'

The single-build Universal Hopper is suitable for 95% of the world's coin sets, including coins with holes, without needing adjustment. It caters for a wide range of coin sizes – from 16mm to 31mm in diameter and from 1.0mm to 3.5mm in thickness – through a choice of just four sizes of payout belt.

- **Reduces manufacturing costs**
- **Reduces stockholding costs**

Exceptional reliability

With over 25 years of development and field-proven operation behind it, Universal just keeps on working. Minimal maintenance, allied to Universal's unique anti-jam design, maximizes in-service availability and guarantees long life.

- **Maximizes revenue**
- **Minimizes operating costs**

High security, enhanced diagnostics

ccTalk makes Universal the most secure hopper in its class, with encrypted payout commands to prevent fraudulent activity. ccTalk also offers improved diagnostics, and more detailed error and status reporting — a major benefit for network-managed machines.

- **Increases revenue**
- **Maximizes profitability**

Options

- **Quick-fit & quick-release baseplate**
- **Choice of four payout belts for different coin sizes/coin configurations**
- **High- and/or top-level sensing**
- **Hopper-controlled or host-controlled payout modes**
- **Increased payout window security**
- **Standard parallel interface (in place of ccTalk serial interface)**

Universal has stood the test of time; but it hasn't stood still. The vast experience gained in a wide range of operating environments and technological advances have been used to improve and perfect Universal, ensuring that, not only is it the original, it is still the best.

Universal Hopper

Data Summary

Hopper Dimensions (Nominal) (Recommended Space Envelope: MK4 only)	Height	288mm (11.34")	
	Width	129mm (5.08")	
	Depth	242mm (9.53")	
	Weight (empty)	2.3kg (5lb)	
Coin Dimensions	Diameter	16–31mm (0.63"–1.22")	
	Thickness	1.00–3.50mm (0.039" –0.138")	
Coin Capacity (Typical)	1,120 x 1, 950 x £1, 1,600 x US 25¢		
Coin Payout Rate (Typical)	Three coins per second		
Environmental	Temperature Range: Operating	0°C to 60°C	
	Storage	-20°C to 70°C	
	Humidity Range:	Up to 75% RH non-condensing	

Electrical Interface		Parallel	Serial
Voltage:	Nominal	24.0Vdc	24.0Vdc
	Minimum	18.0Vdc	21.6Vdc
	Maximum	27.0Vdc	26.4Vdc
Current:	Typical (empty bowl)	0.30A	0.30A
	Typical (full bowl)	0.70A	0.70A
	Surge (auto-reverse)	2.50A	2.05A

Recognized internationally as experts in the field of secure money processing, Money Controls has the most comprehensive product range in the industry, covering coin, bill and system requirements. Our global presence ensures local – and regional – sales support and rapid-response spares and repairs service.

For further information and details of your nearest Money Controls office, please e-mail: sales@moneycontrols.com. Alternatively, you can visit our website, where you will find a wide range of information on our company and products:

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