

National Standards Commission



Supplementary Certificate of Approval No S312

Issued under Regulation 9
of the
National Measurement (Patterns of Measuring Instruments) Regulations

This is to certify that an approval for use for trade has been granted in respect of the

Email Model TouchVision Driveway Flowmeter Control System

submitted by Email Electronics
 88-94 Canterbury Road
 Kilsyth VIC 3137.

NOTE: This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

CONDITIONS OF APPROVAL

This approval is subject to review on or after 1 December 1999.
This approval expires in respect of new instruments on 1 December 2000.

Instruments purporting to comply with this approval shall be marked NSC No S312 and only by persons authorised by the submitter.

Instruments incorporating a component purporting to comply with this approval shall be marked NSC No S312 in addition to the approval number of the instrument.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate No S1/0/A.

It is the submittor's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the Commission and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with the Commission's Document 106.

The Commission reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

DESCRIPTIVE ADVICE

Pattern: approved 11 November 1994

- An Email model TouchVision control system which may be used in a Commission-approved flowmetering system incorporating flowmeters fitted with Email MPP series driveway flowmeter indicators.

Variants: approved 11 November 1994

1. For use with certain Commission-approved flowmeters and indicators.
2. For use with a Keytronic model K700E control console.

Variants: approved 30 January 1995

3. Without a non-interruptable power supply.
4. Without a point of sale facility.

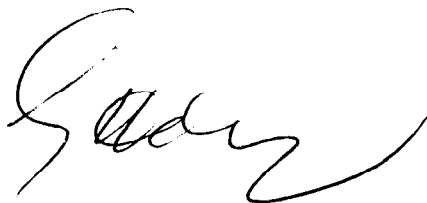
Technical Schedule No S312 describes the pattern and variants 1 to 4.

FILING ADVICE

The documentation for this approval comprises:

Supplementary Certificate of Approval No S312 dated 10 February 1995
Technical Schedule No S312 dated 10 February 1995 (incl. Table 1 and
Test Procedure)
Figures 1 and 2 dated 10 February 1995

Signed and sealed by a person authorised under Regulation 9 of the National Measurement (Patterns of Measuring Instruments) Regulations to exercise the powers and functions of the Commission under this Regulation.

A handwritten signature in black ink, appearing to be 'G. Ady', is written over a horizontal line.



National Standards Commission

TECHNICAL SCHEDULE No S312

Pattern: Email Model TouchVision Driveway Flowmeter Control System.

Submitter: Email Electronics
88-94 Canterbury Road
Kilsyth VIC 3137.

1. Description of Pattern

An Email model TouchVision control system which may be used in a Commission-approved flowmetering system incorporating driveway flowmeters fitted with Email MPP series driveway flowmeter indicators.

1.1 The System

The TouchVision system (Figure 1) may be used with up to 32 driveway flowmeters in postpay mode only, and comprises:

- An Email model TouchVision CPU controller (Figure 2);
- An Email model TouchVision operator's console (Figure 2);
- An Email model TouchVision purchaser's indicator;
- An Email model Universal Pump Controller driveway flowmeter control unit;
- A purchaser's receipt printer and
- A non-interruptable power supply unit.

The system facilities include:

- a point of sale facility including cash drawer;
- a facility for centrally setting the unit price of up to 10 grades of fuel;
- a postpay facility;
- a pump stop and all pumps emergency stop function; and
- a dual-memory facility.

1.2 Controller

The Email model TouchVision CPU controller (Figure 2) controls the various functions of the driveway flowmeters. The software controlling the metrological functions is identified as TouchVision Metrology version 1.1; other software may be used for management functions.

The controller may be as shown in Figure 2 or in alternative housings. It may be located remotely from the operator's console.

1.3 Console

The Email model TouchVision operator's console (Figure 2) communicates with the controller through a touch-panel visual display unit/keypad. The console also incorporates a card-reader facility.

1.3.1 Point of Sale Facility

The console incorporates point of sale (POS) terminal facilities and these shall not interact with the controller or the console in any way which would cause an incorrect indication of the measured volume or price.

1.3.2 Dual-memory Facility

This facility allows two purchasers to operate simultaneously, i.e. a second transaction may be carried out while a previous transaction which has not yet been completed is retained in memory.

The first purchaser carries out a delivery of fuel and the transaction data is indicated on both the purchaser's and vendor's indicators. Once the first purchaser has hung-up the nozzle, but before the first transaction has been completed, and after a period of about 5 seconds, a second purchaser can be authorised for the same flowmeter. The details of the first transaction are stored in memory and can be shown on both the vendor's and purchaser's indicators.

Only one transaction for each flowmeter may be stored in memory at any time.

1.4 Verification/Certification and Sealing Provision

Provision is made for a verification/certification mark to be applied on the controller. The controller is not required to be sealed.

The TouchVision system shall be re-verified/certified if the controller is replaced; however, other components of the system may be replaced without the system needing to be re-verified/certified.

Components which may be replaced are stand alone items and are connected to the controller by a single data plug or via an optional 'patch panel' (Figure 1). The components are:

Operator's console)	The replacement units for these components shall be of the same type and shall be supplied by the submitter.
Purchaser's display)	
Receipt printer	
Non-interruptable power supply unit	
Cash drawer	

1.5 Markings

The console and the controller are each marked with the following data, together in one location:

Manufacturer's name or mark	
Model number	
Serial number	
NSC approval number	S312
Operating (air) temperature range	5°C to 30°C

2. Description of Variants

2.1 Variant 1

For use with any combination of the following Commission-approved driveway flowmeters or driveway flowmeters fitted with any of the indicators listed below:

Email	Eclipse MVR 79 series indicators	NSC No S110A
	IDIS indicators	NSC No S305
	Epitronic driveway flowmeters	NSC No 5/6A/70A
	Vision driveway flowmeters	NSC No 5/6A/97
Gilbarco	Electroline driveway flowmeters	NSC No 5/6A/78A
	Highline driveway flowmeters	NSC No 5/6A/74
	Multi-product driveway flowmeters	NSC No 5/6A/84A

2.2 Variant 2

For use with a Commission-approved Keytronic model 700E control console (as described in the documentation of NSC approval No S145A) and with any combination of the following Commission-approved driveway flowmeters or driveway flowmeters fitted with any of the indicators listed below:

Email	Eclipse MVR 79 series indicators	NSC No S110A
	IDIS indicators	NSC No S305
	Epitronic driveway flowmeters	NSC No 5/6A/70B
	Multi-product driveway flowmeters	NSC No 5/6A/85A
	Vision driveway flowmeters	NSC No 5/6A/97
Gilbarco	Electroline driveway flowmeters	NSC No 5/6A/78A
	Multi-product driveway flowmeters	NSC No 5/6A/84A

2.3 Variant 3

Without a non-interruptable power supply unit in which case the dual-memory facility shall be disabled.

2.4 Variant 4

Without the point of sale facilities in which case the receipt printer and the cash drawer are not required.

TEST PROCEDURE

Instruments should be tested in accordance with any tests included in the approval documentation for the driveway flowmeter/s to which the pattern is connected, as appropriate, and in accordance with any relevant tests specified in the Inspector's Handbook.

The maximum permissible errors applicable are those applicable to the flowmetering system to which the pattern is connected, as stated in the approval documentation for the system.

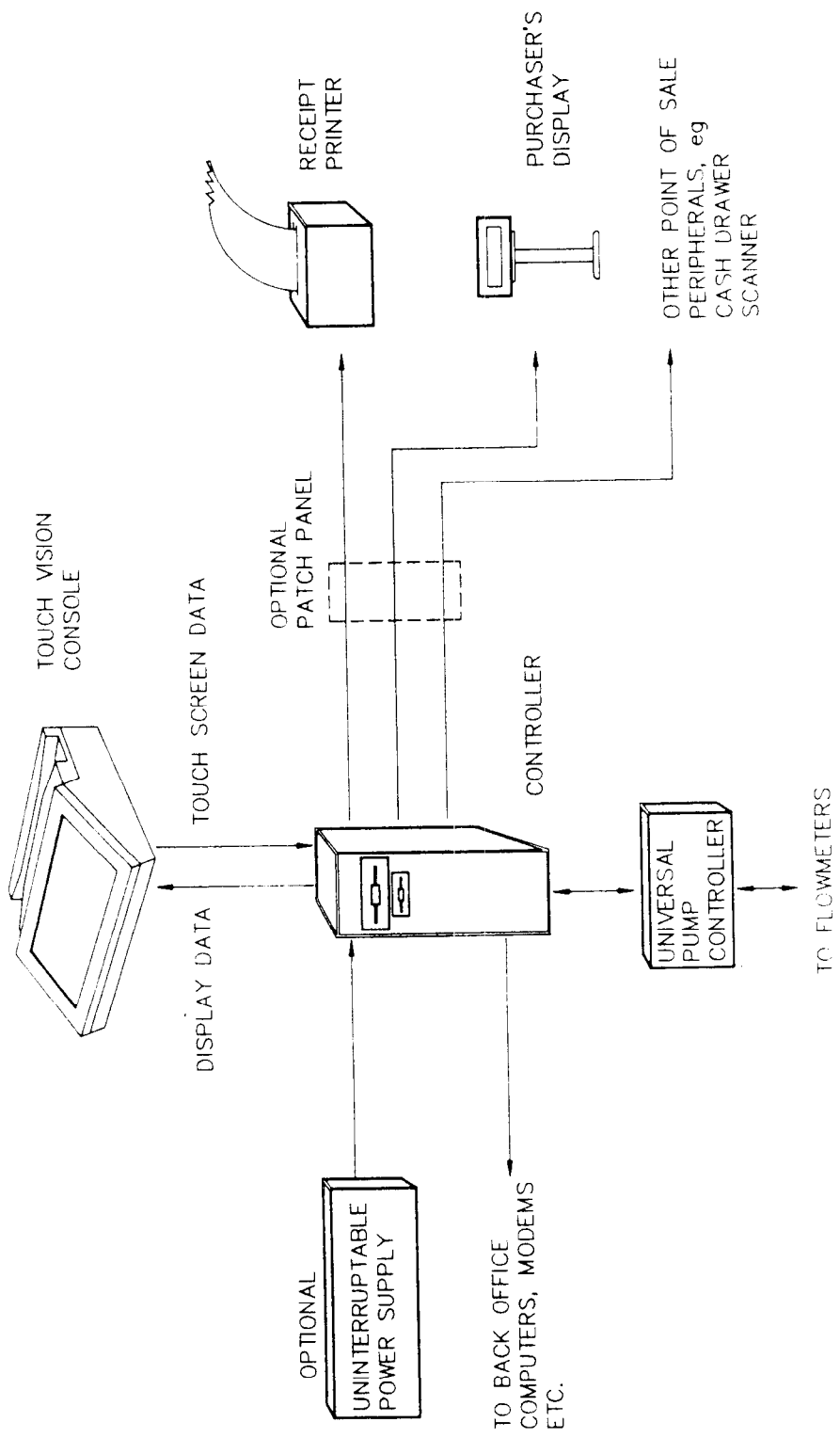
1. Postpay Mode (including dual-memory test)

- (i) At any driveway flowmeter, remove a nozzle from its hang-up position, authorise the flowmeter at the console and then deliver sufficient fuel to cause the price and quantity indicators to move significantly off zero. Stop the flowmeter by returning the nozzle to its hang-up; the details of the transaction are displayed on the console.
- (ii) Check that the price and volume displayed at the console are the same as the price and volume recorded from the driveway flowmeter.
- (iii) At the same flowmeter, perform another delivery as per (i) above; the details of the two transactions are now displayed on the console.
- (iv) Attempt to authorise a third delivery from the same flowmeter; this should not be possible.
- (v) Complete the transactions. Check that the details of both transactions have now been cleared.
- (vi) Repeat steps (i) to (v) for a number of driveway flowmeters.

2. Price Setting

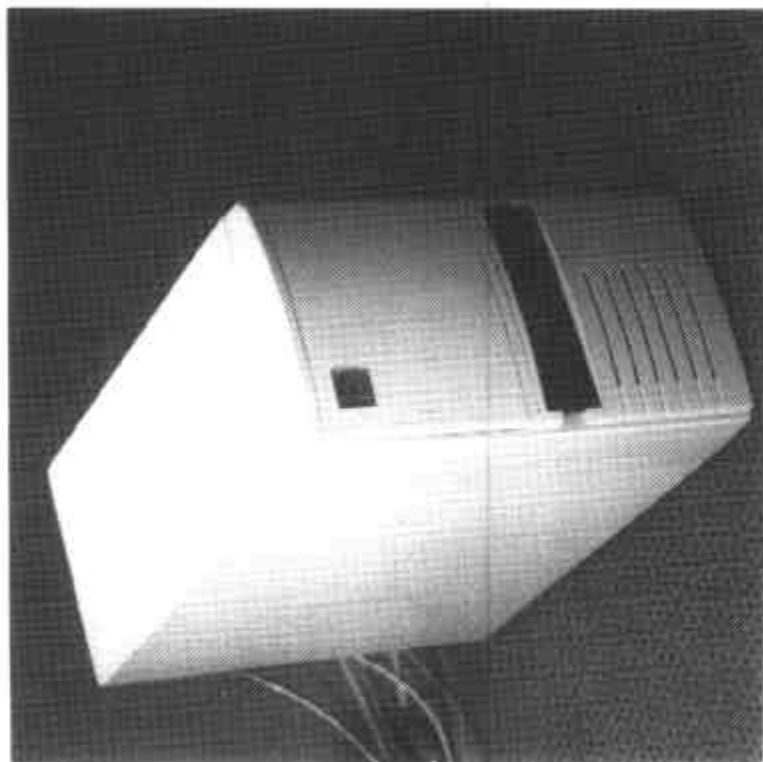
- (i) Conduct a price change for one or more grades of fuel. Observe that the displays on the corresponding driveway flowmeter blank for at least 1 minute after the price change and that the driveway flowmeter cannot be authorised during this period.
- (ii) Attempt to change the price of a grade of fuel whilst a delivery is in progress. This shall not be possible until the delivery has been completed.

FIGURE S312 - 1



Email Model TouchVision Driveway Flowmeter Control System

FIGURE S312 - 2



Email TouchVision CPU Controller and Operator's Console