






PRODUCT INFORMATION - INF024-02

ACCESS CONTROL USING FTA / SFM KESTRELS

This document introduces the Access Control feature of the FTA and SFM KESTREL terminals, detailing its set-up and operation.

1. Introduction

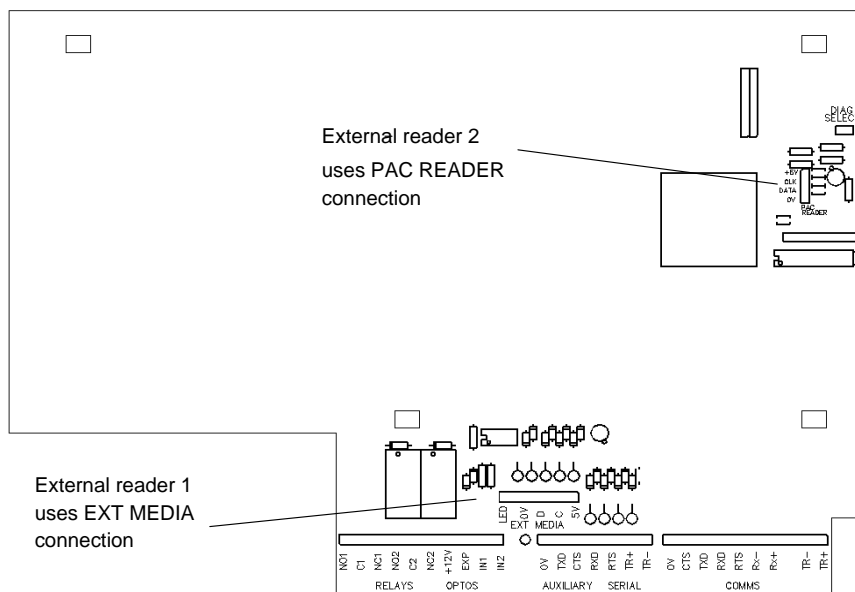
The purpose of this facility is to allow a FAMS FTA or SFM Kestrel, fitted with one or two external readers, to use the external readers for independant access control. This operation differs from standard, where the external readers are treated in the same manner as the internal slot. This new facility, which is provided by the firmware set KL-SFM-A10, allows the internal slot to be used for normal shop floor data collection; while, at the same time, allowing the external readers to be used for access control.

2. Operation

All operation and programming of the terminal is identical to that of the standard unit - Except that the external readers cannot be used as an alternative to the internal slot. Any data entered via the readers is validated using a standard validation table. Any valid data causes a user specified relay and LED to be activated. All valid data is saved in the terminals buffer for later collection by the host.

3. Connecting the External Readers

Two external readers can be used with the KESTREL terminal, the connections of these readers are shown below;



NOTE: The connector for external reader 1 has a single LED output (LED 2)The connector for external reader 2 has no LED output

The connector for external reader 2 is a **4 Pin 0.1" single in-line plug**. FEEDBACK can supply, as a factory fitted option, a satellite PCB (part number PCB006AS1) which provides screw connections for external reader 2, and includes a single LED output (LED 1).

4. Configuration

Diagnostic test 50 can be used to specify which relays and/or LEDs should be fired on seeing a valid entry from an external reader. The two external readers have the following descriptions:

Media input 2 - External reader 1
Media input 3 - External reader 2

Diagnostic Mode Test 50 - External Slot Actions

DIAGNOSTIC TEST 50
SELECT 1) EXTERNAL ONE 2) EXTERNAL TWO

Select "1" to configure external reader 1 or "2" to configure external reader 2.
Press "1" to display reader 1 options:

DIAGNOSTIC TEST 50
1 - RLY 1 (1/8Sec) NOW = 8 NEW =

Key in the required Relay 1 activation time in 125mS increments
(0 = No Relay, maximum = 255)
Press Enter;

DIAGNOSTIC TEST 50
1 - RLY 2 (1/8Sec) NOW = 0 NEW =

Key in the required Relay 2 activation time in 125mS increments
(0 = No Relay, maximum = 255)
Press Enter;

DIAGNOSTIC TEST 50
1 - LED 1 (1/8Sec) NOW = 0 NEW =

Key in the required LED 1 activation time in 125mS increments, the LED can be made to flash by adding 128 to the required value
(0 = No Relay, maximum = 127 + 128)
Press Enter;

DIAGNOSTIC TEST 50
1 - LED 2 (1/8Sec) NOW = 24 NEW =

Key in the required LED 2 activation time in 125mS increments, the LED can be made to flash by adding 128 to the required value
(0 = No Relay, maximum = 127 + 128)

Repeat this sequence for External reader 2

The information entered using Diagnostic 50 can also be supplied using the FAMS configuration command '(' ;

Format:

254 Set Terminal to receive
 LN Number of bytes in transmission
 TN Terminal Number
 '(' Command Type
 [Element] Configuration element
 Chk1, Chk2, Chk3 BCD Checksum
 254 End of transmission character

The configuration command element takes the form;

External Slot 1 - :1<Rly1><Rly2><LED1><LED2>
 External Slot 2 - :2<Rly1><Rly2><LED1><LED2>

All four values, which are entered as a two character ASCII-Hex string, must be supplied.

Example:

BYTE	DECIMAL	CHECKSUM	HEX	ASCII	DESCRIPTION
1	254	FE			Set terminal to receive
2	29	29	1C		Number of bytes in transmission
3	1	1	1		Terminal number
4	40	40	28	(Command type "("
5	58	58	3A	:	
6	49	49	31	1	Sub command ":1", External reader 1
7	48	48	30	0	
8	56	56	38	8	Relay 1 Duration 08H X 125mS =2sec
9	48	48	30	0	
10	48	48	30	0	Relay 2 Duration 00 = Not used
11	48	48	30	0	
12	48	48	30	0	LED 1 Duration 00 = Not used
13	57	57	39	9	
14	56	56	38	8	LED 2 Duration 98H = 152Dec (152 - 128) X 125mS = 3 Sec Flashing Element seperator
15	13	13	0D		
16	58	58	3A	:	
17	50	50	32	2	Sub command ":2", External reader 2
18	48	48	30	0	
19	48	48	30	0	Relay 1 Duration 00 = Not used
20	48	48	30	0	
21	56	56	38	8	Relay 2 Duration 08H X 125mS=2Sec
22	48	48	30	0	
23	48	48	30	0	LED 1 Duration 00 = Not used
24	48	48	30	0	
25	48	48	30	0	LED 2 Duration 00 = Not used
26	0	00			Chk1, first checksum character
27	16	10			Chk2, second checksum character
28	152	98			Chk3, third checksum character
29	254	FE			End of transmission character

Total: 1098

Pad out checksum to three bytes BCD

Hence: Chk1 = 00 (BCD)
 Chk2 = 10 (BCD)
 Chk3 = 98 (BCD)

NOTE:

The terminal does not respond to this command.

5. Validation

All data entered at the external readers is validated by the terminal, using a VAL table downloaded by the host. The search assumes that:

- 1) A direct match (i.e. no wild cards) must be found.
- 2) The entry is valid if found in the table.
- 3) The groups used in the search are:

Group 6 for External reader 1
Group 5 for External reader 2

When valid data is seen a transaction is created with a transaction type identifier of:

"97" for External reader 1
"98" for External reader 2

If the data is invalid then no action is taken.