



DEVELOPMENT STANDARD

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Revision A
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CLEANING CARTRIDGE RECOGNITION WITH LIGHT PRISM

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Cartridge
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UNIVERSAL MINI CLEANING CARTRIDGE
AND
UNIVERSAL DATA CLEANING CARTRIDGE

BACKGROUND

Cleaning cartridge spec QIC 147-C has been adapted for a dry ribbon cleaner. There is a recognition switch scheme built into the cleaning cartridge that triggers a tape drive firmware controlled cleaning routine. This firmware controlled cleaning routine is incompatible with existing wet cleaners. A second method recognizing a different type of cleaning cartridge is needed. The scope of this proposal is to detail the mechanical requirements for recognition of a second cleaning cartridge. We are also including recommended firmware support specifications.

1.0 Mini Cleaning Cartridge specifications:

- 1.1 Cartridge conforms to Minicartridge QIC 143
Including all optical sensing features of a standard recording Minicartridge.

2.0 Mechanical recognition specifications:

- 2.1 Mechanical cut out on front of the cartridge that will create the following conditions:

- No cartridge present
- Write enabled
- Constant tape sensor LED ON

3.0 Firmware response to Cleaning Cartridge recognition:

The tape drive will recognize that it has a TYPE 11 cleaning cartridge present. Upon recognition the tape drive will automatically initiate the cleaning cycle utilizing one of the recommended Drive Speeds and Time Out responses.

3.1	Drive Speed	Cleaning Cycle Time Out
	40 - 60 IPS	40 Seconds
	60 - 100 IPS	30 Seconds
	100 -200 IPS	20 Seconds

- 3.2 Head Steps
- 3.3 Two flashing LED pulses per second

4.0 Data Cleaning Cartridge specifications:

- 4.1 Cartridge conforms to Data Cartridge ANSI Spec X3.55-1982
Including all optical sensing features of a standard recording Data Cartridge.

5.0 Mechanical recognition specifications:

- 5.1 Mechanical cut out on front of the cartridge that will create the following conditions
 - No cartridge present
 - Write enabled
 - Constant tape sensor LED ON

6.0 Firmware response to Cleaning Cartridge recognition:

The tape drive will recognize that it has a TYPE II cleaning cartridge present. Upon recognition the tape drive will automatically **initiate** the cleaning cycle utilizing one of the recommend Drive Speed and Time Out responses.

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|-----|------------------------------------|-------------------------|
| 6.1 | Drive Speed | Cleaning Cycle Time Out |
| | 40 - 60 IPS | 40 Seconds |
| | 60 - 100 IPS | 30 Seconds |
| | 100 - 120 IPS | 20 Seconds |
| 6.2 | Head Steps | |
| 6.3 | Two flashing LED pulses per second | |

7-0 Technical cartridge drawing attached

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QIC MINICARTRIDGE
TECHNICAL DRAWING

