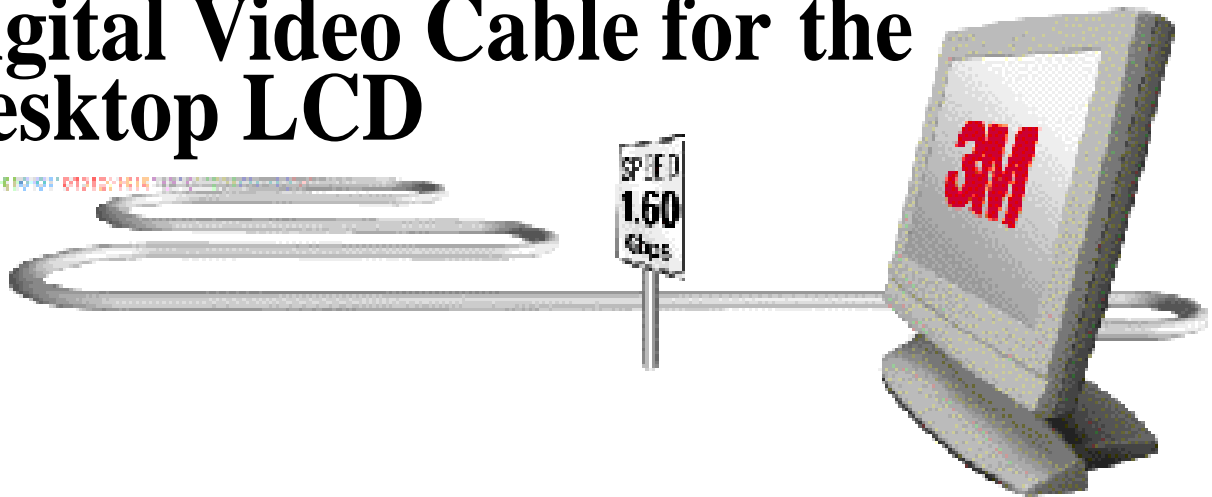




# Digital Video Cable for the Desktop LCD



## Interconnect System Features

- Shielded Twin-Ax Cable Assemblies
- DFP Host Connector
- High Reliability, High Density MDR Components
- >1Gbps/Pair Transmission Rate (experimental results)

The 3M™ MDR Digital Video Transmission System is *THE INTERCONNECT SOLUTION* to meet the demanding requirements of today's high performance digital data transmission applications. The electrical performance of the total interconnect system is becoming increasingly important. As data rates continue to increase (up to 1.6 Gbps) edge transitions must decrease from a typical 1 ns to 100 ps. At these higher rates, the connectors and cable must be considered part of the transmission line and their effect on electrical performance can no longer be ignored.

Signal skew (within pair skew and channel skew) is one of the largest factors inhibiting speed within a system, and can occur at all points along the transmission path: driver and receiver circuits, circuit board traces, cables, and connectors. Skew can prohibit optimum performance in high speed transmission systems and generate EMI due to imbalance of the electrical fields. To minimize skew, control impedance and decrease transmission lengths, PCB layouts must be optimized and cable and connectors should be carefully selected. Any potential reduction in skew should be pursued.

## VESA™ Digital Flat Panel (DFP) Standard

The purpose of the VESA™ (Video Electronics Standards Association) DFP standard is to identify an interface that allows a host computer to connect directly to an external digital flat panel monitor over several meters of cable without the need for analog-to-digital conversion. The physical part of this standard is based on the MDR 20 pos. connector at the host/PC interface.

## Digital Interface Standards for the Monitor (DISM)

The DISM/JEIDA committee in Japan is an open standards organization which has identified design guidelines for PC/display and other flat panel applications. The DISM workgroup has focused on establishing easy to implement, long term digital-only interface solutions. The MDR 20 and 26 pos. connectors are included in this standard (26 pos. includes the USB function).

## Digital Display Workgroup (DDWG)

In September, 1998, Intel Corporation announced the formation of DDWG which will address the industry's requirements for a digital connectivity specification for digital displays and high-performance PCs. The working group will define a robust, comprehensive and extensible interface specification addressing protocol, electrical, and mechanical definitions. The goal of DDWG is to release the specification by mid-year 1999.

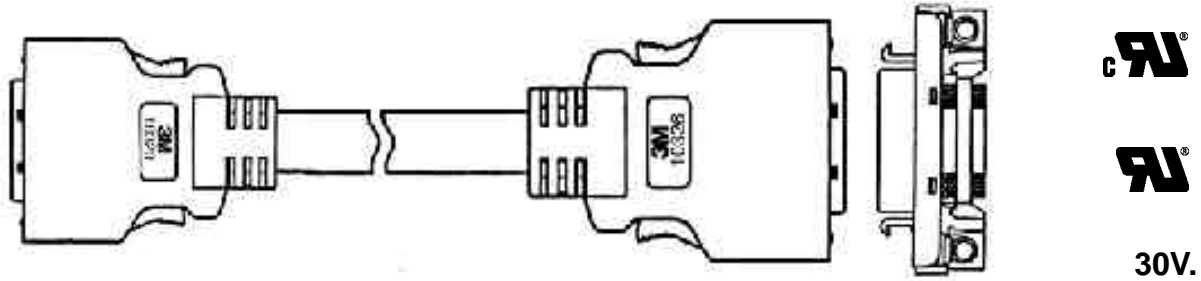
MDR 20 pos. DFP Digital Video to LCD Monitor

15 pos. Analog VGA to CRT Monitor



## Ordering Information:

### Mini D Ribbon High Performance Twin-Ax Harness and Connectors



Each twin-ax pair of the cable harness is electrically isolated with a foil shield and a drain wire. The entire cable bundle is shielded with foil and braid.

#### 20 pos. and 26 pos. R/A Receptacle, PTH

(spec. drawing TS-0621)

20 pos.	Part No.	10220-55X3(XX)	(beige)
20 pos.	Part No.	D10220-55G3(XX)	(black)
26 pos.	Part No.	10226-55G3(XX)	(beige)

#### 20 pos. and 26 pos. R/A Receptacle, SMT

(spec. drawing TS-0755 and TS-0874)

20 pos.	Part No.	10220-12I0VE
26 pos.	Part No.	10226-1AI0VE

### High Performance Shielded Digital Video Cable

#### 20 pos. DFP HOST to 26 pos. MONITOR

(spec. drawing TS-0883)

1 meter	Part No.	14520-EZDB-100-0EC
2 meter	Part No.	14520-EZDB-200-0EC
3 meter	Part No.	14520-EZDB-300-0EC
5 meter	Part No.	14520-EZDB-500-0EC
10 meter	Part No.	14520-EZDB-A00-0EC

#### 20 pos. DFP HOST to 20 pos. MONITOR

(spec. drawing TS-0858)

1 meter	Part No.	14520-EZAB-100-0EC
2 meter	Part No.	14520-EZAB-200-0EC
3 meter	Part No.	14520-EZAB-300-0EC
5 meter	Part No.	14520-EZAB-500-0EC
10 meter	Part No.	14520-EZAB-A00-0EC

**Note:** Assembly with USB "break out" at HOST to be available Quarter 1, 1999.

**Note:** Cable assembly does not include USB.

To request technical documents, call 3M Electronic Products Division at:

**Phone: 1-800-225-5373**

**Fax: 1-800-325-5329**

For information on 3M's MDR Interconnect System Assemblies and Components visit our website at: [www.3M.com/interconnects/](http://www.3M.com/interconnects/)

VESA is a registered trademark of the Video Electronics Standards Association.

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