

**STATE OF NEW JERSEY
DEPARTMENT OF TRANSPORTATION
TRENTON, NEW JERSEY 08625**

**METRIC SPECIFICATIONS FOR TOC LARGE DIRECT VIEW MONITOR
(TRAFFIC OPERATIONS CENTER LARGE SCREEN DISPLAY)**

N.J. Specification No. EBM-TOCLSD-1

Effective Date: July 1, 2001

New Jersey Department of Transportation Specifications for a Traffic Operations Center large scale display monitor.

The purpose of these specifications is to describe minimum acceptable design and operating requirements for this equipment.

GENERAL - I

- 1-1 The large screen color monitor shall be of premium quality incorporating the latest technology that is available from the manufacturer's standard product line.
- 1-2 The monitor shall be supplied complete with a stand with rollers. A positive parking system shall be supplied with the stand which will prevent the monitor from moving unintentionally.

LARGE SCREEN DISPLAY - II

2-1 Configuration

The monitor shall have a 940 millimeter diagonal measure (or greater) large screen. The monitor shall be direct view and capable of full color generation. The monitor shall meet the following requirements:

- A. Monitor shall support resolutions of 1 280 by 1 024 (or greater) non-interlaced.
- B. Monitor shall have horizontal frequency range of at least 24 kilohertz to 64 kilohertz, and a vertical frequency range of at least 40 hertz and 120 hertz.
- C. Monitor must support analog RGB (XVGA) and NTSC (National Television Standards Committee) video inputs.
- D. All required support cabling, of appropriate lengths, and all connectors shall be provided to connect the monitor to a composite video source and an XVGA computer.
- E. The monitor shall be supplied complete with a cable ready tuner.

- 2-2 The monitor shall be supplied with at least two (2) remote control units which are capable of fully controlling the unit from at least 9 meters away.

TESTING - III

All equipment defined in this specification shall be subject to factory testing as subsequently described. The factory test shall demonstrate or provide confirmation that all of the equipment meets the overall specifications. The test shall demonstrate the large scale monitor with both the X VGA computer input and the NTSC video input.

The supplier shall be responsible for submitting a test plan which has been designed to exercise and monitor the equipment for the purpose of determining compliance with the specifications.

TRAINING - IV

Training shall be provided for the Department's engineering, consultants, maintenance and operations staff, at a facility provided by the Department. The training shall include hand out material for each participant. The training shall review the complete operation of the Large Screen Monitor including all onboard controls, remote controls, and cable connections. The class shall be at least 4 hours in duration and may be attended by up to 20 personnel.

INSTRUCTIONS AND GUARANTEES - V

- 5-1 One set of complete schematics and operations/maintenance manuals of each component shall be supplied with every monitor. Standard manufacturer's maintenance and operations manuals shall be provided with each unit delivered.
- 5-2 No changes or substitutions in these requirements will be acceptable unless authorized in writing. Inquiries regarding this specification shall be addressed to the Manager, Office of ITS Engineering, New Jersey Department of Transportation, P.O. Box 613, 1035 Parkway Avenue, Trenton, New Jersey 08625.
- 5-3 All components shall carry a two-year guarantee from the date of acceptance against any imperfections in workmanship or materials.
- 5-4 The Supplier shall furnish any and all equipment which they deem necessary for safe and reliable operation of the assembly.
- 5-5 All components furnished under this specification shall be current production equipment and of recent manufacturer, identical models of which are in field operation in not less than 100 sites. Untried or prototype units shall not be considered for acceptance.
- 5-6 All major components shall be identified with a metal plate containing the serial number with a bar code identification.
- 5-7 Any repairs made by a manufacturer or representative shall be documented and returned with units when warranty repaired. This documentation shall include an explanation of the exact repairs made and identification of parts replaced by part number and circuit number. All warranty repairs shall be completed within thirty days of delivery of the equipment to the designated repair depot.