



JVC Professional Products Company
Division of JVC AMERICAS CORP.
1700 Valley Road
Wayne, New Jersey 07470
(800) 582-5825
www.jvc.com/pro

This product specification is based on recognized industry standards for project documentation found within the Construction Specification Institute (CSI) Project Resource Manual – CSI Manual of Practice [5th Edition], MasterFormat™ [2004 Edition], SectionFormat™ [1997 Edition] and PageFormat™ [1999 Edition].

This specification is based on JVC model TM-A210G and may be used as a manufacturer based proprietary specification or edited to a performance based specification. Optional text is presented in brackets []; delete optional text as required in final project documentation. Specifier Notes are intended to provide information and guidance relative to the specific product or system ensuring proper configuration, performance and operation; delete these notes in final project documentation.

Section 28 23 16

Video Surveillance Monitoring and Supervisory Interfaces

PART 1 GENERAL

1.01 SUMMARY

- A. Section includes: High resolution industrial grade twenty one inch color CRT monitor with automatic video format selection and selectable aspect ratios

1.02 RELATED SECTIONS

- A. 01.61.13 Software Licensing Requirements
- B. 01.86.33 Electronic Safety and Security Performance Requirements

Specifier Note: Projects may vary in scope and complexity; as such it is important to identify those sections which may have an impact on system operation or infrastructure integrity. It is important these sections be reviewed and addressed if the project warrants it and/or is the practice of the Specifier. Edit or revise those sections which do not apply to a specific project. Contact a JVC Representative for further assistance.

- C. 28.01.20 Operation and Maintenance of Electronic Surveillance
- D. 28.05.00 Common Work Results for Electronic Safety and Security
- E. 28.06.20 Schedules for Electronics Surveillance
- F. 28.08.00 Commissioning of Electronic Safety and Security Systems

- G. 28.13.33.33 Access Control Interfaces to Video Surveillance
- H. 28.16.33.33 Intrusion Detection Interfaces to Video Surveillance
- I. 28.23.16 Video Surveillance Monitoring and Supervisory Interfaces
- J. 28.23.23 Video Surveillance Infrastructure
- K. 28.23.26 Video Surveillance Remote Positioning Equipment
- L. 28.23.29 Video surveillance Remote Devices and Sensors
- M. 28.31.33.33 Fire Detection and Alarm Interfaces to Video Surveillance

Specifier Note: The convergence of IT Infrastructures and Network Video technology may often require the integration of equipment enclosures and related hardware typically found in data center environments. Edit or revise those sections as required for a specific project or specification practices

- N. 27.11.16 Communication Cabinets, Racks, Frames and Enclosures
- O. 27.21.00 Data Communication Network Equipment
- P. 27.22.00 Data Communication Hardware

Specifier Note: Within large scope projects communication and cabling may often be related to requirements found in the overall building electrical requirements. Edit or revise those sections as required for a specific project or specification practices.

- Q. 26.05.19 Low-Voltage Electrical Power Conductors and Cables
- R. 26.41.23 Lighting Protection, Surge Arrestors and Suppressors
- S. 26.55.53 Security Lighting
- T. 26.56.00 Exterior Lighting

1.03 REFERENCES

- A. UL/CE
- B. FCC Part 15 Radio Frequency Radiators
- C. CE EN61000-6-3 / EN61000-6-1: Emission Immunity
- D. RoHS
- E. IEC 60297-1 Ed. 3.0 b:1986: Mechanical Structures for Electronic Equipment

1.04 SUBMITTALS

- A. General: In compliance with Conditions of the Contract and Division 1 Submittal requirements.
 - 1. Product Data: Submit original equipment manufacturers product, installation, operation and maintenance data.

Specifier Note: When comparing/choosing digital video security equipment, many products may be derivatives of consumer electronics. The following language ensures the Owner of the proper equipment is being used for the intended purpose

1.05 QUALITY ASSURANCE

- A. The system shall be manufactured for the intended purpose in a commercial /industrial, 24 hour day, 7 days per week, and 365 days per year operating environment
- B. Manufacturer Qualifications: Obtain [products] [systems] from a manufacturer experienced in the engineering, production and support of networked digital video systems, and, with sufficient production capability to meet the required project schedule
 - 1. Specified Manufacturer to provide field engineering support services

Specifier Note: Certification or licensing requirements for contractors, installers or integrators of safety and security systems vary from state to state in the continental United States. Verify requirements with the Authority Having Jurisdiction for the specific project. Edit or revise those sections as required for a specific project or specification practices.

- C. Installer Qualifications:
 - 1. Engage Installer with [license] [certification] [type] as required by the [State of] [City of] with demonstrated successful experience designing, installing, commissioning, training and servicing network based video systems
 - 2. Installer shall have completed factory training and be certified by the manufacturer as qualified to install, operate and maintain product(s) specified

1.06 WARRANTY

- A. Provide original equipment manufacturers warranty documentation for acceptance by the Owner

Specifier Note: Coordinate paragraph below with manufacturers warranty requirements

- 1. Warranty Period: [specify term] years commencing with the Date of Substantial Competition

1.07 DELIVERY, STORAGE AND HANDLING

- A. General: Comply with Division 1 Product Requirement Section and the manufacturers recommended procedures for receiving and protection of the equipment.
- B. Storage and Protection: Store materials protected from exposure to extreme or harmful environmental conditions and at temperature and humidity levels recommended by the manufacturer.

1. Prevent physical damage, soiling or wetting
2. Provide secure storage prior to and during installation
3. Provide individual components in the manufacturers original packaging and labeling

1.08 PROJECT/SITE CONDITIONS

A. Environmental Requirements:

1. Site should be substantially enclosed and secure prior to installation of hardware
2. Environmental systems should be in place and operational
3. Deliver materials onsite at least 24 hours prior to installation to allow materials to reach temperature and humidity equilibrium

PART 2 PRODUCTS

2.01 COLOR CLOSED CIRCUIT TELEVISION MONITOR

A. General

1. Provide high resolution industrial grade twenty one inch color CRT monitor with automatic video format selection and selectable aspect ratios. Provide optional expansion slots for optional component/SDI cards
 - a. Horizontal resolution at center: 450 lines (Y/C Input)
 - b. Provide on screen programming
 - c. Monitor shall be rack mount compatible with industry standard 19" rack rails or enclosures

B. Electrical

1. Input voltage: AC 120/220/240 volts, 50/60 hertz
2. Power consumption: 1.2 amps 120V; 0.8 amps 220-240V
3. Color System: Auto select
 - a. NTSC
 - b. PAL
4. Scanning frequencies:
 - a. NTSC: 15.734 kHz horizontal x 60 Hz vertical
 - b. PAL: 15.625 kHz horizontal x 50 Hz vertical
5. Color temperature: 6,500 and 9,300 degrees Kelvin, switchable
6. Video input/output:
 - a. 1.0V peak to peak, 75 Ohms resistance
 - b. Negative sync
 - c. Auto terminating
7. Video input: Composite video, 1V peak to peak, 75 Ohms resistance
8. Y/C input:
 - a. Y: 0.714V peak to peak, 75 Ohms resistance
 - b. C: 0.286V peak to peak, 75 Ohms resistance
9. Aspect Ratio: 16:9 or 4:3, switchable

C. Audio

1. Provide monitor with dual audio inputs with bridging outputs
 - a. 0.5V (rms)

2. Provide built in monaural speaker
 - a. 3.5 inches (8cm)
 - b. 1 watt output

D. Mechanical

1. Dimensions: 16 1/2 inches (418mm) long by 14 1/4 inches (360mm) wide by 12 1/4 inches (310mm) high
 - a. 7U rack units high
2. Weight: 35.2 pounds 16 kg)
3. Screen: 20" diagonal
 - a. Dot pitch: 0.63mm
4. Front panel controls and indicators
 - a. Built in speaker
 - b. Push Button x 8
 1. Chroma/Phase adjust
 2. Contrast/Brightness
 3. Volume/Menu Select (-)
 4. Volume/Menu Select (+)
 5. A Video Input Select
 6. B Video Input Select
 7. Menu On/Off
 8. Power On/Off
 - c. Indicator LED x 3
 1. Power On
 2. Video Input A
 3. Video Input B
5. Rear panel controls, connectors and indicators
 - a. BNC x 4
 1. Video Input A
 2. Video Input B
 3. Bridging Video Output A
 4. Bridging Video Output B
 - b. Mini DIN 4 Pin x 2:
 1. Video B input Y/C luminance and chrominance
 2. Bridging Video B output Y/C luminance and chrominance
 - c. RCA pin x 4: Audio
 1. Audio Input A
 2. Audio Input B
 3. Bridging Audio Output A
 4. Bridging Audio Output B
 - d. RCA pin x 2: Wired remote terminal connection
 - e. AC power cord socket x 1

E. Environmental

1. Temperature Range
 - a. Storage: -13 to 122 degrees Fahrenheit (-25 to 50 degrees Celsius)
 - b. Operating: 32 to 104 degrees Fahrenheit (0 to 40 degrees Celsius)
 2. Relative Humidity Range
 - a. Storage: 10% to 90%, non-condensing
 - b. Operating: 10% to 80%, non-condensing
 3. The unit is suitable for indoor operation. Provide proper air ventilation and filtering to maintain operating temperature and air quality when mounted in equipment cabinets or other confined areas
- F. Regulatory
1. Emission/Immunity:
 - a. FCC Part 15, Subpart B, Class B Device
 - b. EN61000-6-3 / EN61000-6-1
 2. Safety:
 - a. UL 60950
 - b. CSA 22.2 No. 950 (c-UL)
 - c. EN60950-1
 3. Environmental Sustainability:
 - a. RoHS Directive
 4. Mechanical: IEC 60297-1 Ed. 3.0 b:1986

2.02 MANUFACTURED UNITS

- A. JVC Model Number: TM-A210G: 21" Color CRT monitor
- B. Included Accessories
 1. AC Power Cord
- C. Optional Accessories
 1. Rack mount kit

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install the system in accordance with the equipment manufacturers recommended procedures
- B. Install system using generally acceptable industry practices for Closed Circuit Television systems and in compliance with building and electrical codes according to authority having jurisdiction

Specifier Note: The following may be deleted for projects of smaller scope in which full Division 1 project documentation is not provided or required. It is recommended that performance requirements be specified within the project documentation to ensure proper configuration and operation of the system. Contact your JVC Representative for assistance in developing performance specification specific to a particular project.

- C. Ensure system and all related components are configured to support performance requirements outlined in Division 1, 01.86.33 Electronic Safety and Security Performance Requirements

3.02 FIELD QUALITY ASSURANCE

- A. Provide Manufacturer Field Engineering Support for engineering, installation, testing and commissioning assistance as required in Division 1

3.03 COMMISSIONING

Specifier Note: The following may be deleted for projects of smaller scope in which full Division 1 project documentation is not provided or required. It is recommended that performance requirements be specified within the project documentation to ensure proper configuration and operation of the system. Contact your JVC Representative for assistance in developing performance specification specific to a particular project.

- A. Testing: Ensure system operates to manufacturers specifications
- B. Ensure system and all related components are configured to and comply with performance requirements in:
 - 1. Division 1, Section 01.86.33: Electronic Safety and Security Performance Requirements
 - 2. Division 28, section 28.01.20: Operation and Maintenance of Electronic Surveillance
- C. User/Owner Training:
 - 1. Provide original manufacturers [approved] [certified] training for system administrators and operators designated by the Owner
- D. Documentation: Provide [x] set(s) of manufacturers hardware installation and software user guides for each level of authorized users

3.04 INSPECTION/MAINTANENCE

- A. Follow manufacturers recommended practices for preventative maintenance
- B. Comply with Division 28, section 28.01.20 Operation and Maintenance of Electronic Surveillance
- C. Ensure continuous, unrestricted airflow in environment where equipment is installed

MasterFormat, PageFormat and SectionFormat are trademarks of the Construction Specification Institute