

# Applications Index

## A

Access control . . . . . 114, 131-133  
 Addressable Fire Alarm Systems . . . . . 125-128  
 Alliance Ham/CB and TV rotors compatibility . . . . . 139  
 Amplifiers . . . . . 152, 169  
 Analog video. . . . . 102, 115, 167  
 Analog/digital video . . . . . 99, 102, 115  
 Analog/digital video broadcast-grade monitors . . . . . 93  
 Annunciator systems . . . . . 141-143  
 Audio . . . . . 25, 39, 134-137, 159  
 Audio components. . . . . 166-168  
 Audio interconnects . . . . . 40-41  
 Audio systems . . . . . 15-17, 25, 27-28, 45-46, 148, 156, 172, 175  
 Audio/image/video products . . . . . 183  
 Automatic valve control systems . . . . . 22

## B

Background music . . . . . 16-17, 27-28, 134-137  
 Bases . . . . . 169  
 Bell systems . . . . . 141-143  
 Bi-amp speakers . . . . . 152-153  
 Broadcast. . . . . 94, 100, 107-108, 112  
 Broadcast and sound systems . . . . . 23, 25, 29-30  
 Broadcast and studio. . . . . 35, 38, 40-41  
 Broadcast and studio requirements. . . . . 21  
 Broadcast and studio use . . . . . 172, 175  
 Broadcast digital video . . . . . 96-98  
 Broadcast grade. . . . . 105-106  
 Broadcast-grade headend . . . . . 92  
 Broadcast/HDTV . . . . . 88-93, 96-99, 107-108  
 Broadcast/Serial Digital Interface (SDI) . . . . . 92, 106-107  
 Broadcast-grade Serial Digital Interface (SDI). . . . . 99  
 Burglar alarms . . . . . 22, 32, 65-66, 116-121, 123, 129, 141-143  
 Business machines . . . . . 22, 32, 65-66

## C

Cable tray installations . . . . . 22, 32  
 CAD/CAM systems . . . . . 78  
 Card readers . . . . . 114  
 Cash registers . . . . . 22, 32, 65  
 Cat 5e Sctp . . . . . 163  
 Cat 5e UTP . . . . . 163  
 CATV . . . . . 86-92, 96-99, 101-106, 110-115, 150  
 CATV/headend . . . . . 92  
 CCTV . . . . . 86-88, 90-92, 96-99, 101-102, 104-105, 110, 114-115, 162, 177  
 Commercial broadcast facilities . . . . . 158  
 Communication and audio system . . . . . 148, 172, 175  
 Communication and control . . . . . 161

Communication circuits . . . . . 46  
 Communications . . . . . 66, 114, 116-129, 159-160  
 Computer and computer interconnections . . . . . 23-24, 26, 29, 31, 60, 68-69, 78  
 Computer interconnections . . . . . 24, 31, 60, 68-69, 78  
 Computer/networks . . . . . 109  
 Computers . . . . . 29, 39, 43-44, 49-51, 53-54, 57-59, 62-64, 70-77, 79-84, 95, 112, 183-184  
 Console board equipment . . . . . 166-168  
 Control circuits . . . . . 9, 11-21, 24, 26-28, 31, 39-41, 43-45, 48-64, 68-84, 134-138, 152-153, 172, 175, 185  
 Cue line systems . . . . . 177

## D

Data and signal transmission . . . . . 24  
 Data transmission . . . . . 31, 43-44, 53-54, 60, 68-71, 73-77, 79, 95, 100, 112, 163  
 DBS . . . . . 86, 90-92, 115  
 Digital audio . . . . . 147-148, 151, 157, 166  
 Digital audio interfaces . . . . . 153  
 Digital data transport . . . . . 183  
 Digital video cameras/displays/recorders . . . . . 183  
 Digital/audio . . . . . 147-148, 151-157, 166  
 Direct broadcast satellite . . . . . 90  
 Direct burial . . . . . 26, 89, 97-98, 104, 139-140, 164-165  
 Disc arrays . . . . . 183-184  
 Door bells . . . . . 141-143  
 Door control . . . . . 132-133  
 Drop cable . . . . . 88, 91-92, 96-99, 103

## E

EIA RS-232 circuits . . . . . 48, 52, 55-58  
 EIA RS-232 systems . . . . . 11-14, 18-20, 30-31, 43-44, 54-56, 68-73, 75, 77-79  
 EIA RS-422 circuits . . . . . 55-56, 77, 79, 83  
 EIA RS-423 systems . . . . . 72, 78  
 Effects pedals . . . . . 169  
 Electronic instrumentation control systems . . . . . 47  
 EMI isolated circuits for instrumentation . . . . . 159-160  
 Energy management systems . . . . . 21  
 Excellent shielding for noise reduction . . . . . 34-38  
 External wiring of machinery . . . . . 5-6

## F

Fire alarm control . . . . . 21  
 Fire alarm systems . . . . . 122, 124-129  
 Fire protective circuits . . . . . 117-121, 123  
 FM broadcast . . . . . 88, 91

## G

General-purpose audio applications . . . . . 170  
 Good flexibility . . . . . 23, 29-31, 34, 36-37, 53-54, 70-72, 75-79  
 Guitars . . . . . 169



# Applications Index

## H

HDTV ..... 86-93, 96-99, 107-108, 115  
 Heating and air conditioning installations ..... 141-143  
 Helical binding or overall jacketing ..... 163  
 Hi-fi and stereo speaker wire ..... 156-157  
 High speed computer interconnects ..... 78  
 High speed computers ..... 72, 83-84  
 High speed solid state circuits for  
     low-voltage applications ..... 182  
 High-end microphones ..... 148  
 High-impedance microphones ..... 172, 175  
 Home entertainment ..... 147-148, 151-156, 170  
 Home theater ..... 114, 116, 147-148, 151-153, 156

## I

Industrial control systems ..... 32  
 Industrial equipment ..... 43-44, 53-54, 58-59, 70-84  
 Industrial equipment control ..... 23, 29-31, 60, 68-69  
 IEEE 802.3 and ISO/IEC 8802.3  
     10 Base 5 LAN computer cables ..... 95  
 IEEE 802.3 and ISO/IEC 8802.3  
     10 Base 2 computer cables ..... 95  
 Instrumentation ..... 150, 159-161  
 Instrumentation and control use ..... 46  
 Instrumentation systems ..... 25, 47  
 Intercom systems ..... 16-17, 22, 27-28, 32, 47,  
     65-66, 138, 141-143  
 Intercoms ..... 9, 11-14, 18-20, 116  
 Interconnection components ..... 166-168  
 Internal telephones ..... 11-14, 18-20  
 Internal wiring, electrical/electronic equipment,  
     panels/meters ..... 2-5  
 In-wall speakers ..... 147, 151-155  
 Irrigation systems ..... 22

## J

Jukeboxes ..... 156-157

## K

Keyboards and other instruments to amplifiers,  
     mixers, and effects pedals ..... 169

## L

LAN and data transmission ..... 100  
 LAN and data transmission computer cables ..... 95  
 LAN cable ..... 90  
 Line level microphone ..... 167-168  
 Line level signals ..... 167-168  
 Local area network ..... 101-104  
 Low capacitance applications ..... 35, 38, 72, 74, 83-84, 166-169  
 Low capacitance requirements ..... 56, 76-77, 79  
 Low cost alternative to laminated bus bars ..... 182  
 Low inductance DC applications ..... 182

Low signal distortion data requirements ..... 78  
 Low-voltage installations ..... 141-143  
 Low-voltage power distribution, electronic  
     and data processing equipment ..... 182  
 Low-impedance microphones ..... 172, 174-175  
 Low-voltage golf course satellite sprinkler control ..... 140

## M

MATV ..... 86, 88-89, 96-99, 101-106, 110, 115  
 Mixers ..... 169  
 Monitor applications ..... 93, 107-108  
 Monitor systems ..... 177  
 Monitor/VDT display ..... 101-104  
 Motor and transformer lead ..... 5-6  
 Multiple cable pulls ..... 163  
 Musical instruments ..... 170

## N

Noise reduction shielding ..... 34-38  
 Non QPL ..... 4, 37  
 Not for in-wall use ..... 156-158

## O

Optical fiber cables ..... 163  
 Oscillators ..... 7  
 Outdoor installations ..... 139  
 Outdoor rated ..... 138-140, 176  
 Outdoor signal processing gear ..... 169  
 Outdoor use ..... 164-165

## P

Parallel or serial transmission ..... 184  
 Personal computers ..... 183-184  
 Petrochemical control systems ..... 66  
 Petrochemical refineries ..... 32  
 Plenum versions ..... 163  
 Point-of-sale systems ..... 61  
 Point-to-point wiring ..... 2-5  
 Power-limited circuits ..... 22, 32, 65-66  
 Power-limited control circuits ..... 16-17, 27-28, 48,  
     52, 55, 61, 134-137  
 Precision video – analog/digital ..... 105-106  
 Primary power distribution, electronic  
     and data processing equipment ..... 182  
 Process control and instrumentation ..... 15, 26, 39, 45,  
     48-52, 55-57, 61-64  
 Programmable Logic Controllers (PLC) ..... 112  
 Public address systems ..... 9-14, 18-20  
 Pull boxes ..... 122, 124-128

## R

Radio station components, interconnection and audio ... 166-168  
 Radio transmitters ..... 33-34, 36, 171, 173  
 Radios ..... 33-34, 36, 171, 173

# Applications Index

Recording studios . . . . .	33-34, 36, 158, 166-168, 171, 173
Recording studios and sound stages . . . . .	23, 29-30
Recording studio components, interconnection and audio . . . . .	166-168
Remote control circuits . . . . .	9, 11-15, 18-20, 26, 39, 45, 48-52, 55-57, 61-64, 138, 152-153
Remote control for studio equipment . . . . .	37
Remote control systems . . . . .	177
Remote control units . . . . .	141-143
Residential sprinkler solenoid control . . . . .	140
REX . . . . .	132-133
RF shielding . . . . .	24, 33-38, 164, 171, 173
RF signal transmission . . . . .	88, 91, 94, 96-111
RG6 video/data quad shield coax . . . . .	163
RGB video . . . . .	115, 162
Riser versions . . . . .	163
Rotor antenna controls . . . . .	139
RS-232 circuits . . . . .	48, 52, 55-56
RS-232 systems . . . . .	11-14, 18-20, 30-31, 43-44, 53-54, 68-73, 75, 77-79
RS-422 circuits . . . . .	55-56
RS-423 systems . . . . .	72, 78
<b>S</b>	
Satellite actuator control . . . . .	101
Satellite receivers . . . . .	115
Secondary power distribution, electronic and data processing equipment . . . . .	182
Security systems . . . . .	132-133, 152-153
Serial Digital Interface (SDI) . . . . .	87, 92, 99, 107
Shielded cable . . . . .	24, 164
Shielded power supplies . . . . .	148, 172, 175
Shielding, Fire Wire . . . . .	183-184
Shielding, noise reduction . . . . .	34-38
Shielding, SCSI . . . . .	184
Shielding, USB . . . . .	184
Signal isolation, total . . . . .	61-64, 80-84
Signal systems . . . . .	141-143
Smoke detectors . . . . .	115, 117, 121-128
Sound system installations . . . . .	166-168
Sound systems . . . . .	23, 25, 29-30, 33-38, 47, 116, 171, 173
Speaker extension service . . . . .	138
Special audio . . . . .	159-161
Stereo systems . . . . .	148, 151-155
Studio use . . . . .	148, 172, 175
Suggested voltage rating: 1000 volts . . . . .	174
Suggested voltage rating: 1000 volts (MIL-W 76B) . . . . .	4
Suggested voltage rating: 150 volts . . . . .	16-17, 27-28, 52, 138
Suggested voltage rating: 200 volts . . . . .	139
Suggested voltage rating: 30 volts . . . . .	72, 74, 76-79, 82
Suggested voltage rating: 300 or 600 volts . . . . .	18-20, 23, 29-31, 53-54, 59
Suggested voltage rating: 300 volts . . . . .	2, 9-15, 22, 24-26, 32-36, 38-41, 43-51, 55-58, 60-66, 68-71, 73, 75, 80-81, 83-84, 117-129, 134-138, 148, 154, 159, 161, 171-173, 175, 185
Suggested voltage rating: 350 volts . . . . .	21, 164-165
Suggested voltage rating: 600 volts . . . . .	3, 37
Suitable for EIA RS-232 and RS-423 CAD/CAM applications . . . . .	72
Suitable for EIA RS-232 applications . . . . .	11-14, 18-20, 30-31, 43-44, 53-54, 68-73, 75, 77-79
Suitable for EIA RS-422 applications . . . . .	77, 79
Suitable for EIA RS-422 CAD/CAM applications . . . . .	83
Suitable for EIA RS-485 applications . . . . .	76
<b>T</b>	
Television station components, interconnection and audio . . . . .	166-168
Test equipment . . . . .	7
Thermostat control . . . . .	141-143
Thicknet/trunk cable . . . . .	95
Touch-plate systems . . . . .	141-143
Tray cable installations . . . . .	65-66
TV broadcast . . . . .	177
TV cameras . . . . .	177
<b>V</b>	
Video . . . . .	88-93, 96-98
Video and audio interconnecting cables . . . . .	172, 175
Video interconnect . . . . .	38, 38
Video – analog/digital . . . . .	99, 102, 105-108
Voice communications . . . . .	117-129