

CHAPTER 23

INDEX

A

Adjustable Table, 46
Alarm, 164, 165, 320, 321
Amplifier, 15, 118, 227, 269
Amputee, 60, 234
Ankle, 60
Antenna, 121, 159, 169, 297
Armrests, 76, 94, 95, 199, 250
Arthritis, 96, 106, 110, 206
Audio, 56, 118, 163, 218, 320, 321
Autistic, 216, 218

B

Battery, 35, 50, 57, 80, 91, 107, 109, 113, 117, 143, 145, 157, 159, 168, 169, 171, 182, 187, 195, 196, 202, 210, 217, 218, 220, 239, 241, 254, 255, 263, 264, 316, 317, 326, 330
Bed, 164, 224, 311, 320
Belts, 47, 57, 260
Bicycle, 62, 66, 80, 83, 94, 162, 163, 215, 217, 220, 228, 244
Blind, 1, 9, 56, 57, 88, 156, 160, 332, 333
Board, 1, 2, 4, 10, 11, 17, 19, 22, 37, 43, 57, 60, 88, 89, 92, 93, 118, 119, 143, 151, 153, 157, 160, 165, 168, 169, 170, 171, 182, 187, 228, 297, 298, 299, 310, 330, 333
Brace, 206, 207
Brain Injury, 226
Button, 49, 84, 118, 119, 121, 130, 139, 153, 163, 169, 171, 184, 188, 199, 218, 224, 225, 250, 263, 269, 274, 285, 325

C

CAD, 10, 11, 45, 153, 231, 232, 234, 253, 335, 339
Camera, 56, 70, 81, 334
Car, 65, 66, 226, 240, 254, 280, 282, 294, 312, 313
Cart, 43, 109, 137, 294, 295, 302, 303, 305, 306, 307, 308, 333
Cause and Effect, 216
Cause-Effect, 3
Center of Mass, 75
Central Nervous System, 226
Cerebral Palsy, 31, 76, 92, 98, 174, 180, 224, 228, 230, 242, 244, 246, 248, 262, 264, 268
Chair, 44, 64, 81, 82, 94, 95, 96, 97, 108, 109, 126, 127, 128, 148, 199, 202, 214, 240, 241, 242, 244, 246, 250, 253, 260, 276, 278

Chassis, 5, 67, 103, 238, 239, 295, 330
Child, 31, 82, 83, 186, 210, 214, 232, 234, 250, 254, 262, 263, 264, 303
Children, xi, 1, 68, 82, 118, 176, 210, 216, 224, 230, 244, 246, 250, 254, 277, 303, 338
Communication, 7, 11, 12, 14, 16, 19, 20, 25, 32, 35, 36, 39, 93, 110, 112, 130, 160, 168, 170, 171, 244, 250, 254, 270, 297, 323, 327, 333, 338, 341
Computer, viii, ix, 4, 5, 12, 20, 33, 35, 36, 41, 48, 56, 107, 115, 116, 118, 120, 130, 142, 156, 160, 164, 168, 170, 182, 226, 228, 232, 234, 269, 270, 285, 297, 319, 320, 322, 326, 328, 331, 332, 334, 336, 340
Control, 14, 19, 36
Controller, 57, 65, 84, 137, 152, 169, 186, 195, 204, 239, 241, 254, 255, 262, 263, 310, 311, 325, 328, 329, 330
Converters, 118, 323

D

Database, 3, 12, 160, 337, 341
Deaf, 36, 164, 165, 168
Decoder, 117
Desk, 95, 298, 299
Diode, 158, 164, 329
Door Opener, 36, 184, 269
Drive Train, 329
Driving, 67, 109, 148, 176, 200, 202, 204, 205, 208, 239, 253, 307, 317, 324

E

Encoder, 116, 274
Environmental Controller, 35
Exercise Bicycle, 162

F

Feed, 254
Feedback, 3, 7, 10, 13, 14, 25, 26, 27, 47, 56, 62, 70, 72, 90, 91, 134, 136, 138, 156, 158, 162, 163, 168, 184, 233, 255, 268
Fiberglass, 269
Fire Alarm, 164
Foot, 50, 52, 53, 60, 61, 66, 67, 69, 70, 71, 86, 87, 93, 137, 160, 178, 180, 196, 208, 230, 239, 241, 242, 270, 294, 321
Force Sensing Resistor, 151

G

Gait Training, 132
 Garage Door Opener, 269
 Garden, 224, 231, 295
 Gardening, 86, 224
 Gear, 66, 67, 84, 103, 137, 143, 179, 180, 183, 189, 196, 202, 204, 239, 255, 257, 258, 284, 295
 Glove, 103, 142, 143, 144, 145, 190

H

Handrail, 215
 Head Rest, 241, 243
 Hearing Impaired, 320
 Horseback Riding, 98, 99, 216, 296
 Hydraulic, 124, 198, 239, 252, 260, 303

I

Incentive, 21
 Infrared, 1, 48, 120, 121, 182, 231

K

Kayak, 294, 295
 Keyboard, 17, 76, 130, 180
 Knee, 54, 69, 70, 146, 170, 171, 206, 207
 Knee Brace, 206, 207

L

LCD, 176, 274, 321, 322, 323, 326, 327
 LED, 19, 76, 90, 112, 113, 114, 116, 117, 118, 119, 121, 163, 164, 169, 231, 232, 263, 268, 311, 320, 330
 Leg, 31, 53, 58, 61, 66, 68, 74, 75, 83, 88, 104, 133, 136, 137, 146, 170, 171, 194, 196, 199, 206, 207, 246, 262, 264

M

Microcontroller, 43, 49, 91, 112, 113, 114, 116, 139, 142, 143, 156, 157, 163, 175, 176, 180, 182, 187, 195, 239, 297, 311, 322, 323, 326, 327, 328, 329
 Microphone, 81, 90, 91, 118, 119, 143, 144
 Microprocessor, 4, 11, 90, 120, 121, 274
 Mirror, 133, 339
 Modulation, 119, 157, 254, 263, 264
 Motor, 14, 43, 57, 65, 84, 88, 90, 91, 94, 102, 103, 110, 113, 136, 137, 139, 144, 145, 148, 156, 157, 158, 174, 175, 178, 180, 182, 183, 187, 189, 190, 194, 195, 196, 199, 204, 215, 216, 218, 220, 224, 228, 230, 238, 239, 241, 242, 248, 250, 252, 254, 255, 257, 258, 263, 264, 268, 280, 281, 284, 290, 316, 317, 324, 326
 Mouse, 226
 Multiple Sclerosis, 106, 130, 210, 256, 258, 260, 282, 286

N

Navigation, 156, 157, 158, 159, 160, 296, 321
 Nintendo, 48

O

Orthosis, 17

P

Painting, 314, 315
 Paraplegic, 31, 198, 284
 PC Board, 17
 Photography, 9
 Physical Therapy, 49, 88, 96, 132, 136, 162, 170, 190, 230, 262, 281
 Piezoelectric, 227
 Plexiglas, 119, 180, 227
 Plywood, 84, 92, 95, 99, 215, 216, 231, 250
 Polyethylene, 58, 70, 80, 179, 180, 270
 Polyurethane, 61, 65, 92, 246, 248, 253, 299
 Posture, 62, 98, 126, 134, 243, 312
 Power Supply, 11, 114, 118, 119, 142, 145, 158, 254, 264, 285
 Prosthesis, 58, 60, 61, 69, 70, 72, 220, 234
 Pulley, 65, 81, 103, 145, 179, 187
 PVC, 43, 50, 65, 81, 96, 97, 227, 231, 291, 315

Q

Quadriplegic, 92, 334

R

Radio, 112, 121, 156, 160, 184, 189, 218, 254, 296, 297
 Radio Shack, 218
 RAM, 124
 Reading, viii, 33, 298, 299
 Receiver, 1, 15, 112, 116, 117, 189, 231, 254, 263, 264, 326
 Recreation, 35, 37, 39, 338
 Regulator, 121, 157, 165, 297, 326
 Rehabilitation, 2, 9, 10, 33, 34, 39, 66, 101, 102, 104, 108, 110, 112, 136, 144, 148, 150, 152, 194, 206, 226, 268, 269, 270, 272, 274, 278, 281, 284, 286, 310, 334, 336, 337
 Relay, 84, 144, 145, 225, 263, 326
 Remote, 19, 48, 49, 120, 121, 152, 153, 168, 180, 182, 188, 204, 218, 231, 254, 263, 264, 265, 269, 281, 285
 Remote Control, 120, 121, 188, 204, 231, 254, 263, 264, 265
 RF, 112, 113, 165, 189
 ROM, 7, 10, 19, 72, 137, 184, 233, 262, 294

S

Saddle, 74, 98, 99, 216
 Safety Factor, 55, 198, 217
 Scanner, 11

Scanning, 92, 234
 Sensor, 49, 57, 112, 114, 116, 117, 170, 171, 182, 227, 228, 239, 269, 270, 281, 285, 322, 323, 326, 332, 335
 Sensory Stimulation, 176
 Servo, 150, 156, 158, 176, 187, 254, 255, 264
 Shower, 224, 272, 278
 Ski, 35, 52, 53, 54, 55, 132, 218, 252, 253
 Ski Boot, 53
 Sled, 135, 253
 Social Interaction, 238
 Speech, 1, 7, 11, 12, 90, 91, 121, 224, 264
 Springs, 110, 111, 134, 146, 189, 240, 271, 278, 313
 Standing, 60, 62, 64, 70, 184, 188, 210, 240, 242, 262, 294, 316
 Steering, 67, 146, 147, 239, 254, 255, 263, 264, 295, 302, 303, 308
 Support, xi, 1, 8, 9, 11, 12, 13, 14, 20, 27, 34, 36, 45, 46, 47, 61, 63, 65, 74, 75, 76, 77, 78, 82, 90, 94, 95, 96, 98, 99, 105, 109, 111, 127, 130, 131, 133, 134, 138, 139, 147, 158, 163, 167, 186, 187, 190, 196, 205, 206, 210, 215, 216, 217, 231, 240, 242, 244, 250, 260, 262, 264, 269, 276, 282, 295, 306, 310, 311, 316, 325, 333, 338, 340
 Swing, 62, 93, 215, 303
 Switch, 35, 49, 52, 80, 81, 84, 91, 109, 112, 117, 118, 119, 121, 143, 144, 158, 163, 167, 199, 202, 210, 218, 224, 230, 239, 253, 254, 263, 265, 281, 306, 310, 311, 316, 317, 330

T

Table, 43, 44, 46, 47, 76, 94, 179, 198, 199, 226, 250, 298, 299, 317, 323, 341
 Telephone, 1, 11
 Timer, 84, 177, 224, 326
 Toilet, 116
 Toy, 35
 Toys, 92

Train, 68, 196, 204, 230, 294, 326, 329
 Trainer, 90, 217, 284, 286
 Transducer, 227
 Transmission, 110, 112, 117, 121, 196, 200, 204, 254, 284, 297
 Transmitter, 112, 116, 189, 254, 263, 264, 297
 Transportation, 68, 108, 126, 238, 246, 254, 294
 Tray, 110, 111, 250, 314, 315
 Tricycle, 194, 195, 208
 Truck, 65, 165
 Tub, 256, 257, 258, 272, 278, 339

U

Ultrasonic, 56, 326, 327, 328
 Ultrasound, 239

V

Velcro, 61, 81, 82, 83, 89, 98, 142, 144, 150, 186, 190, 248, 265
 Visual Impairment, 93, 160, 188, 296, 298
 Voltage Regulator, 119, 157, 297, 311

W

Walker, 63, 132, 133, 134, 148, 210, 220, 248, 249
 Wheel, 45, 64, 67, 78, 82, 83, 96, 97, 109, 127, 128, 129, 134, 135, 148, 200, 204, 207, 217, 240, 260, 274, 295, 302, 306, 308, 316, 317, 326, 327, 328
 Wheelchair, 17, 31, 35, 36, 42, 43, 44, 50, 62, 64, 76, 80, 81, 82, 94, 96, 97, 99, 104, 105, 108, 109, 124, 126, 127, 128, 129, 130, 153, 180, 182, 188, 198, 200, 202, 204, 214, 215, 224, 228, 230, 233, 238, 242, 246, 256, 258, 260, 262, 294, 296, 302, 312, 313, 314, 315, 326, 327, 328, 329, 330
 Wheelchair Access, 302