

# SkyWave DX150 (C) - PCB Component/Source List

| Quantity | Designator                       | Notes         | Description  | Manufacturer Number               | Source              | Source Part Number   | Web Site   |
|----------|----------------------------------|---------------|--|-----------------------------------|---------------------|----------------------|--|
| 24       | N/A                              | RF IN, RF OUT | Cable, Coaxial, RG174A/U Type, 52-Ohm                                  | RG174A/U (Belden)                 | RF Parts            | RG174A/U             | <a href="http://www.rfparts.com">www.rfparts.com</a> |
| 7        | C7, C11, C13, C15, C17, C18, C24 |               | Capacitor, 0.01uF, 100V, 20%, Z5U, Radial (LS=0.197")                  | D103M29Z5UH6UJ5R (Vishay)         | Mouser Electronics  | 594-D103M29Z5UH6UJ5R | <a href="http://www.mouser.com">www.mouser.com</a>   |
| 3        | C6, C10, C14                     |               | Capacitor, 0.1uF, 50V, 10%, X7R, Radial (LS=0.197")                    | K104K15X7RF5UH5 (Vishay)          | Mouser Electronics  | 594-K104K15X7RF5UH5  | <a href="http://www.mouser.com">www.mouser.com</a>   |
| 1        | C12                              |               | Capacitor, 1000pF, 500V, 10%, X7R, Radial (LS=0.197")                  | H102K25X7RL63J5R (Vishay)         | Mouser Electronics  | 594-H102K25X7RL63J5R | <a href="http://www.mouser.com">www.mouser.com</a>   |
| 1        | C9                               |               | Capacitor, 100uF, 25V, 20%, 1K Hours, 105C, 5x11mm, Radial (LS=0.079") | UVY1E101MDD (Nichicon)            | Mouser Electronics  | 647-UVY1E101MDD      | <a href="http://www.mouser.com">www.mouser.com</a>   |
| 3        | C1, C2, C5                       |               | Capacitor, 10uF, 25V, 20%, Radial (LS=0.079")                          | UVR1E100MDD1TD (Nichicon)         | Mouser Electronics  | 647-UVR1E100MDD1TD   | <a href="http://www.mouser.com">www.mouser.com</a>   |
| 1        | C8                               |               | Capacitor, 1uF, 50V, 20%, Radial (LS=0.079")                           | ESK105M050AC3AA (Kemet)           | Mouser Electronics  | 80-ESK105M050AC3AA   | <a href="http://www.mouser.com">www.mouser.com</a>   |
| 3        | C16, C23, C25                    |               | Capacitor, Dipped Mica, 330pF, 1000V, 5%, Radial (LS=0.232")           | CDV16FF331JO3F (Cornell-Dubilier) | Mouser Electronics  | 598-CDV16FF331JO3F   | <a href="http://www.mouser.com">www.mouser.com</a>   |
| 2        | C3, C22                          |               | Capacitor, Dipped Mica, 47pF, 500V, 5%, Radial (LS=0.232")             | CD15ED470JO3F (Cornell-Dubilier)  | Mouser Electronics  | 598-CD15ED470JO3F    | <a href="http://www.mouser.com">www.mouser.com</a>   |
| 1        | C21                              |               | Capacitor, Dipped Mica, 560pF, 500V, 5%, Radial (LS=0.344")            | CD19FD561JO3F (Cornell-Dubilier)  | Mouser Electronics  | 598-CD19FD561JO3F    | <a href="http://www.mouser.com">www.mouser.com</a>   |
| 2        | D1, D2                           |               | Diode, High Speed Signal, 1N914, DO35, Axial                           | 1N914 (Vishay)                    | Mouser Electronics  | 78-1N914             | <a href="http://www.mouser.com">www.mouser.com</a>   |
| 1        | F1                               |               | Fuse Holder, ATC Type, TH  | 3522-2 (Keystone Electronics)     | DigiKey Corporation | 3522-2K-ND           | <a href="http://www.digikey.com">www.digikey.com</a> |

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| 1        | F1                     |            | Fuse, ATC, 15A  | BK/ATC-15 (Cooper-Bussman)           | Mouser Electronics | 504-ATC-15         | <a href="http://www.mouser.com">www.mouser.com</a> |
| 2        | L2, L3                 |            | Inductor, RF Choke, 500-Ohms@30MHz, Wound Bead, Axial | 06H-751 (Fastron)                    | Mouser Electronics | 434-6H-751         | <a href="http://www.mouser.com">www.mouser.com</a> |
| 3        | INSUL1, INSUL2, INSUL3 | Q1, Q4, Q5 | Insulator, Phase Change, TO-220                       | CD-02-05-220 (Wakefield Engineering) | Mouser Electronics | 567-CD-02-05-220   | <a href="http://www.mouser.com">www.mouser.com</a> |
| 1        | N/A                    |            | PCB, SkyWave DX150 Revision-C                         | SkyWave DX150 Revision-C             | AllPCB             |                    | <a href="http://www.allpcb.com">www.allpcb.com</a> |
| 1        | VR1                    |            | Potentiometer, 1K, 0.1W, Vertical Adjust, TH          | PT6KV-102A2020 (Piher)               | Mouser Electronics | 531-PT6KV-1K       | <a href="http://www.mouser.com">www.mouser.com</a> |
| 1        | U1                     |            | Regulator, Voltage, 5V, 1A, TO-220                    | UA7805CKCT (Texas Instruments)       | Mouser Electronics | 595-UA7805CKCT     | <a href="http://www.mouser.com">www.mouser.com</a> |
| 1        | RLY1                   |            | Relay, DPDT, 5V, 8A, DIP                              | G2RL-2-DC5 (Omron)                   | Mouser Electronics | 653-G2RL-2-DC5     | <a href="http://www.mouser.com">www.mouser.com</a> |
| 1        | R2                     |            | Resistor, 1.2K, 0.25W, 5%, Axial                      | 291-1.2K-RC (Xicon)                  | Mouser Electronics | 291-1.2K-RC        | <a href="http://www.mouser.com">www.mouser.com</a> |
| 1        | R5                     |            | Resistor, 100, 0.25W, 5%, Axial                       | 291-100-RC (Xicon)                   | Mouser Electronics | 291-100-RC         | <a href="http://www.mouser.com">www.mouser.com</a> |
| 1        | R3                     |            | Resistor, 100K, 0.25W, 5%, Axial                      | 291-100K-RC (Xicon)                  | Mouser Electronics | 291-100K-RC        | <a href="http://www.mouser.com">www.mouser.com</a> |
| 2        | R4, R6                 |            | Resistor, 10K, 0.25W, 5%, Axial                       | 291-10K-RC (Xicon)                   | Mouser Electronics | 291-10K-RC         | <a href="http://www.mouser.com">www.mouser.com</a> |
| 1        | R11                    |            | Resistor, 3.3K, 0.25W, 5%, Axial                      | 291-3.3K-RC (Xicon)                  | Mouser Electronics | 291-3.3K-RC        | <a href="http://www.mouser.com">www.mouser.com</a> |
| 2        | R1, R13                |            | Resistor, 330, 0.25W, 5%, Axial                       | 291-330-RC (Xicon)                   | Mouser Electronics | 291-330-RC         | <a href="http://www.mouser.com">www.mouser.com</a> |

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| 1        | R10                                |                              | Resistor, 47K, 0.25W, 5%, Axial                                 | 291-47K-RC (Xicon)   | Mouser Electronics     | 291-47K-RC         | <a href="http://www.mouser.com">www.mouser.com</a>                                 |
| 4        | N/A                                | U1, Q1, Q4, Q5 to Heat Sink. | Screw, Machine, Philips Pan Head, #4-40, 1/4", Stainless Steel  | Screw, Machine, Philips Pan Head, 4-40, 1/4", Stainless Steel  | Albany County Fastners | 470036             | <a href="http://www.albanycountyfasteners.com">www.albanycountyfasteners.com</a>   |
| 4        | N/A                                | PCB to Heat Sink.            | Screw, Machine, Philips Pan Head, #4-40, 5/16", Stainless Steel | Screw, Machine, Philips Pan Head, 4-40, 5/16", Stainless Steel | Albany County Fastners | 470046             | <a href="http://www.albanycountyfasteners.com">www.albanycountyfasteners.com</a>   |
| 4        | SPACER1, SPACER2, SPACER3, SPACER4 |                              | Spacer, Round, 0.250"D, 0.125"ID, 0.100" Thick                  | 0.1" SPACER (Communication Concepts)                           | Communication Concepts | 0.1" SPACER        | <a href="http://www.communication-concepts.com">www.communication-concepts.com</a> |
| 1        | L1                                 |                              | Toroid, 0.825"OD, 0.520"ID, 0.250"W, #43 Material               | FT-82-43 (Amidon Associates)                                   | Amidon Associates      | FT-82-43           | <a href="http://www.amidoncorp.com/">www.amidoncorp.com/</a>                       |
| 1        | T1                                 |                              | Transformer, RF Input, #43 Material                             | RF400-0-43 (Communication Concepts)                            | Communication Concepts | RF400-0-43         | <a href="http://www.communication-concepts.com">www.communication-concepts.com</a> |
| 1        | T2                                 |                              | Transformer, RF Output, #43 Material                            | RF1000-0-43 (Communication Concepts)                           | Communication Concepts | RF1000-0-43        | <a href="http://www.communication-concepts.com">www.communication-concepts.com</a> |
| 1        | Q3                                 |                              | Transistor, FET, N-Channel, 2N7000, TO-92                       | 2N7000 (Fairchild Semiconductor)                               | Mouser Electronics     | 512-2N7000         | <a href="http://www.mouser.com">www.mouser.com</a>                                 |
| 2        | Q4, Q5                             |                              | Transistor, FET, N-Channel, Switching, 100V, 12.8A, 65W, TO-220 | FQP13N10 (Fairchild)   | Mouser Electronics     | 512-FQP13N10       | <a href="http://www.mouser.com">www.mouser.com</a>                                 |
| 1        | Q1                                 |                              | Transistor, FET, P-Channel, SUP45P03-09, TO-220                 | SUP45P03-09-GE3 (Vishay)                                       | Mouser Electronics     | 78-SUP45P03-09-GE3 | <a href="http://www.mouser.com">www.mouser.com</a>                                 |
| 1        | Q2                                 |                              | Transistor, FET, P-Channel, TP0606, TO-92                       | TP0606N3-G (Microchip Technology)                              | Mouser Electronics     | 689-TP0606N3-G     | <a href="http://www.mouser.com">www.mouser.com</a>                                 |

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| 4        | D4, D5, D6, D7            |   | TVS, Uni-Directional, Stand-Off=15V, Vbr=16.7V, Clamp=23.6V, 10%, 50pF, DO-15 | SAC15 (Littelfuse)                   | Mouser Electronics | 576-SAC15          | <a href="http://www.mouser.com">www.mouser.com</a>       |
| 3        | WASHER1, WASHER2, WASHER3 | Q1, Q4, Q5  | Washer, Shoulder, Black Plastic Insulating, TO-220                            | 3049 (Keystone Electronics)          | Mouser Electronics | 534-3049           | <a href="http://www.mouser.com">www.mouser.com</a>       |
| 14       | L1                        | L1  | Wire, #16, Teflon, Red, Stranded  | Wire, #16, Teflon, Red, Stranded     | PowerWerx          |                    | <a href="http://www.powerwerx.com">www.powerwerx.com</a> |
| 15       | L4                        | Inductor, Air, 12 Turns, #18 Magnet, 0.312" Diameter, Close Wound | Wire, #18, Copper Magnet, Red, Solid  | Wire, #18, Copper Magnet, Red, Solid | PowerWerx          |                    | <a href="http://www.powerwerx.com">www.powerwerx.com</a> |
| 18       | N/A                       | T1=6", T2=12"   | Wire, #20, Teflon, Orange, Stranded   | Wire, #20, Teflon, Orange, Stranded  | PowerWerx          |                    | <a href="http://www.powerwerx.com">www.powerwerx.com</a> |
| 24       | N/A                       | LED1, LED2  | Wire, #22, Teflon, Blue, Stranded   | Wire, #22, Teflon, Blue, Stranded    | PowerWerx          |                    | <a href="http://www.powerwerx.com">www.powerwerx.com</a> |
| 24       | N/A                       | SW1   | Wire, #22, Teflon, Green, Stranded  | Wire, #22, Teflon, Green, Stranded   | PowerWerx          |                    | <a href="http://www.powerwerx.com">www.powerwerx.com</a> |
| 24       | N/A                       | SW2   | Wire, #22, Teflon, Purple, Stranded   | Wire, #22, Teflon, Purple, Stranded  | PowerWerx          |                    | <a href="http://www.powerwerx.com">www.powerwerx.com</a> |
| 24       | N/A                       | LED1, LED2  | Wire, #22, Teflon, Yellow, Stranded   | Wire, #22, Teflon, Yellow, Stranded  | PowerWerx          |                    | <a href="http://www.powerwerx.com">www.powerwerx.com</a> |
| 24       | N/A                       | Power Lead.   | Wire, Zip Cord, #12, Red/Black  | Wire-RB-12-25 (Powerwerx)            | PowerWerx          | Wire-RB-12-25      | <a href="http://www.powerwerx.com">www.powerwerx.com</a> |