



# **Charger Product Guide** Specialized charging solutions for almost any application







G delta-q

QúiQ

fullriverbattery.com

# QuiQ 1000

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|                | QuiQ 1000                            |        |      |        |            |      |      |  |  |
|----------------|--------------------------------------|--------|------|--------|------------|------|------|--|--|
| Output         |                                      | 100/24 |      | 100/12 | 100/120VAC |      |      |  |  |
| Specifications | 24V                                  | 36V    | 48V  | 72V    |            | 48V  | 72V  |  |  |
| Max Watts      | 695                                  | 875    | 1000 |        |            | 1200 |      |  |  |
| Max Current    | 25A                                  | 21A    | 18A  | 12A    |            | 25A  | 17A  |  |  |
| Max Voltage    | 34V                                  | 51V    | 68V  | 100V   |            | 68V  | 100V |  |  |
| Min Voltage    | 6V                                   | 9V     | 12V  | 18V    |            | 12V  | 18V  |  |  |
| Battery Type   | Lead Acid (Wet / AGM / GEL), Lithium |        |      |        |            |      |      |  |  |
| AC Input       | 85-265VAC Single Phase 45-65 Hz      |        |      |        |            |      |      |  |  |
|                |                                      |        |      |        |            |      |      |  |  |

|                              |  | QuiQ 1500 |       |                |      |  |  |  |
|------------------------------|--|-----------|-------|----------------|------|--|--|--|
|                              |  | 100/12    | 20VAC | 208/230/240VAC |      |  |  |  |
| 72V                          |  | 48V 72V   |       | 48V            | 72V  |  |  |  |
| 0                            |  | 12        | 00    | 1500           |      |  |  |  |
| 12A                          |  | 25A       | 17A   | 30A            | 20A  |  |  |  |
| 100V                         |  | 68V       | 100V  | 68V            | 100V |  |  |  |
| 18V                          |  | 12V       | 18V   | 12V            | 18V  |  |  |  |
| d (Wet / AGM / GEL), Lithium |  |           |       |                |      |  |  |  |
| iVAC Single Phase 45-65 Hz   |  |           |       |                |      |  |  |  |
|                              |  |           |       |                |      |  |  |  |

|                | IC650 B                              | ASE      |          | 10    | IC650 COMM |            |       |  |
|----------------|--------------------------------------|----------|----------|-------|------------|------------|-------|--|
| Output         | 1                                    | 00-240VA | C        |       | 1          | 100-240VAC |       |  |
| Specifications | 24V                                  | 36V      | 48V      | 1     | 24V        | 36V        | 48V   |  |
| Max Watts      |                                      | 650W     |          |       | 650W       |            |       |  |
| Max Current    | 27.1A                                | 18.1A    | 13.5A    |       | 27.1A      | 18.1A      | 13.5A |  |
| Max Voltage    | 36V                                  | 54V      | 72V      |       | 36V        | 54V        | 72V   |  |
| Min Voltage    | 1.2V                                 | 1.8V     | 2.4V     |       | 1.2V       | 1.8V       | 2.4V  |  |
| Battery Type   | Lead Acid (Wet / AGM / GEL), Lithium |          |          |       |            |            |       |  |
| AC Input       |                                      | 85-27    | OVAC Sin | gle I | Phase 50   | /60hz      |       |  |

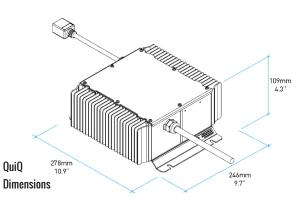
|                | IC900 B                              | ASE   |          |       | 10       | C900 COM | ΛM   |  |
|----------------|--------------------------------------|-------|----------|-------|----------|----------|------|--|
| Output         | 100-240VAC                           |       |          |       | 1        | 00-240VA | C    |  |
| Specifications | 24V                                  | 36V   | 48V      |       | 24V      | 36V      | 48V  |  |
| Max Watts      | 900W                                 |       | 960W     |       | 900W     |          | 960W |  |
| Max Current    | 37.5A                                | 25A   | 20A      |       | 37.5A    | 25A      | 20A  |  |
| Max Voltage    | 36V                                  | 54V   | 72V      |       | 36V      | 54V      | 72V  |  |
| Min Voltage    | 1.2V                                 | 1.8V  | 2.4V     |       | 1.2V     | 1.8V     | 2.4V |  |
| Battery Type   | Lead Acid (Wet / AGM / GEL), Lithium |       |          |       |          |          |      |  |
| AC Input       |                                      | 85-27 | OVAC Sin | gle I | Phase 50 | /60hz    |      |  |

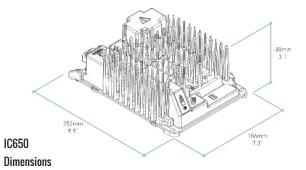
|   |                | IC12 |
|---|----------------|------|
|   | Output         |      |
| 0 | Specifications | 2    |
| 0 | Max Watts      |      |
| N | Max Current    | 5    |
| 5 | Max Voltage    | 3    |
|   | Min Voltage    | 1.   |
|   | Battery Type   |      |

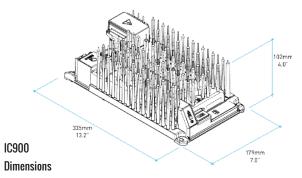
AC In

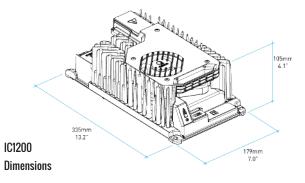
|        | IC1200 B                             | BASE     |          |       | IC1200 COMM |       |      |  |  |
|--------|--------------------------------------|----------|----------|-------|-------------|-------|------|--|--|
| ut     | 10                                   | 00/240VA | NC       |       | 1           | NC    |      |  |  |
| ations | 24V                                  | 36V      | 48V      |       | 24V         | 36V   | 48V  |  |  |
| /atts  |                                      | 1200W    |          |       | 1200W       |       |      |  |  |
| irrent | 50A                                  | 33.3A    | 25A      |       | 50A         | 33.3A | 25A  |  |  |
| ltage  | 36V                                  | 54V      | 72V      |       | 36V         | 54V   | 72V  |  |  |
| ltage  | 1.2V                                 | 1.8V     | 2.4V     |       | 1.2V        | 1.8V  | 2.4V |  |  |
| Туре   | Lead Acid (Wet / AGM / GEL), Lithium |          |          |       |             |       |      |  |  |
| put    |                                      | 85-27    | OVAC Sin | gle F | hase 50     | /60hz |      |  |  |

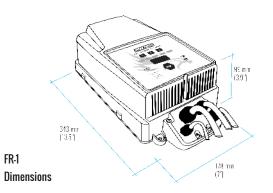
| FR-1 Multi-Voltage Charger |                                      |       |           |           |           |       |       |  |  |
|----------------------------|--------------------------------------|-------|-----------|-----------|-----------|-------|-------|--|--|
| Output                     | 110/240VAC                           |       |           |           |           |       |       |  |  |
| Specifications             | 12V                                  | 16V   | 24V       | 28V       | 36V       | 42V   | 48V   |  |  |
| Max Watts                  |                                      | 696   | 1000      | 1000      | 1200      | 1200  | 1200  |  |  |
| Max Current                | 30A                                  | 30A   | 30A       | 25A       | 25A       | 20A   | 20A   |  |  |
| Max Voltage                | 17.4A                                | 23.2A | 34.8A     | 40.6A     | 52.2V     | 60.9V | 69.6V |  |  |
| Min Voltage                | 6A                                   | 10A   | 18A       | 22A       | 30V       | 38V   | 42V   |  |  |
| Battery Type               | Lead Acid (Wet / AGM / GEL), Lithium |       |           |           |           |       |       |  |  |
| AC Input                   |                                      | 85    | 265VAC \$ | Single Ph | ase 50/60 | Dhz   |       |  |  |







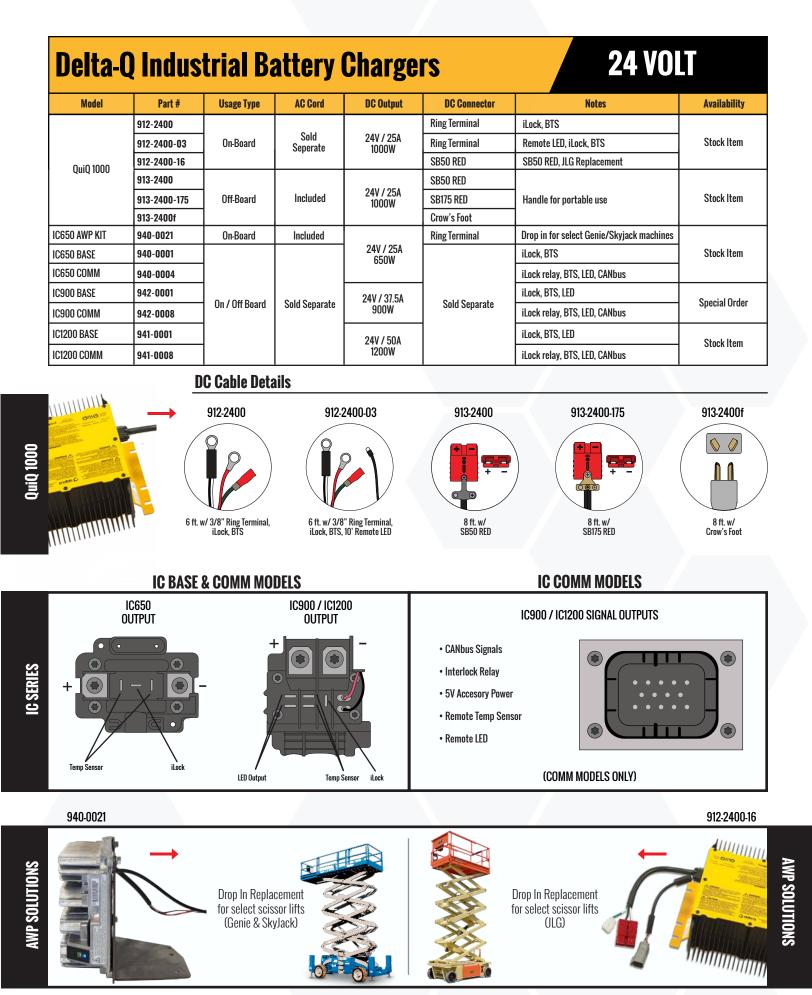




**IC650** 

10900

FRI



| Delta-Q     | <b>Indus</b> | t <mark>rial B</mark> a | S             | 36 VOLT            |                       |  |               |
|-------------|--------------|-------------------------|---------------|--------------------|-----------------------|--|---------------|
| Model       | Part #       | Usage Type              | AC Cord       | DC Output          | DC Connector          | Notes                                      | Availability  |
|             | 912-3600     |                         |               |                    | <b>Ring Terminal</b>  | iLock,BTS                                  |               |
| QuiQ 1000   | 912-3600-D1  | On-Board                | Sold Separate | 36V / 21A          |                       | Remote LED, iLock, BTS                     | Stock Item    |
|             | 912-3654     |                         |               | 1000W              | SBS50 Grey*           | iLock Relay, BTS, LED (8 Pin Deutsch Plug) |               |
|             | 913-3600     |                         |               |                    | SB50 Grey             |  |               |
|             | 913-3600-175 | 3600-175                |               | SB175 Grey         |                       |  |               |
| QuiQ 1000   | 913-3600a    | Off-Board               | Included      | 24V / 25A<br>1000W | EZGO "D" Plug         | Handle for portable use                    | Stock Item    |
|             | 913-3600f    |                         |               | 10001              | Crow's Foot           |  |               |
|             | 913-3600g    |                         |               |                    | Yamaha 2-Pin (Nabson) |  |               |
| IC650 BASE  | 940-0002     |                         |               | 36V / 18A          |                       | iLock, BTS                                 | Stock Item    |
| IC650 COMM  | 940-0005     |                         |               | 650W               |                       | iLock relay, BTS, LED, CANbus              | SLUCK ILEIII  |
| IC900 BASE  | 942-0002     | On / Off-Board          | Sold Separate | 36V / 25A          | Sold Separate         | iLock, BTS, LED                            | 0             |
| IC900 COMM  | 942-0009     |                         |               | 900W<br>36V / 33A  |                       | iLock relay, BTS, LED, CANbus              | Special Order |
| IC1200 BASE | 941-0002     |                         |               |                    |                       | iLock, BTS, LED                            | Stock Item    |
| IC1200 COMM | 941-0009     |                         |               | 1200W              |                       | iLock relay, BTS, LED, CANbus              | Special Order |

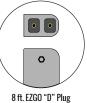


**DC Cable Details** 



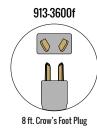
6 ft. w/ 3/8" Ring Terminal, iLock, BTS







912-3600-D1





913-3600g

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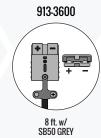
8 ft. Yamaha 2-Pin (Nabson)

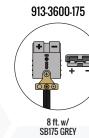
CANbus Signals

 Interlock Relay 5V Accesory Power

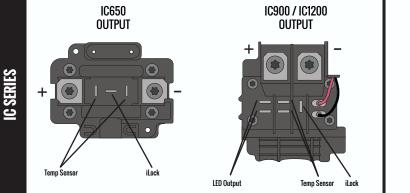
• Remote LED

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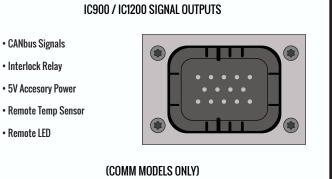




**IC BASE & COMM MODELS** 



#### **IC COMM MODELS**



## **Delta-Q Industrial Battery Chargers**

## **48 VOLT**

| Model         | Part #      | Usage Type      | AC Cord                          | DC Output          | DC Connector                  | Notes  | Availability     |  |
|---------------|-------------|-----------------|----------------------------------|--------------------|-------------------------------|--|------------------|--|
|               | 912-4800    |                 |                                  |                    | Ring Terminal                 | iLock,BTS  | Stock Item       |  |
| QuiQ 1000     | 912-4800-D1 |                 |                                  | 48V/18A/           |                               | Remote LED, iLock, BTS                                   |                  |  |
|               | 912-4854    | On-Board        | Sold Separate                    | 1000W              | SBS50 Blue*                   | iLock Relay, BTS, LED (8 Pin Deutsch Plug)               |                  |  |
| QuiQ 1000 DCI | 922-4854    |                 |                                  |                    | 30300 Diuc                    | 12V Converter iLock Relay, BTS, LED (8 Pin Deutsch Plug) | Special Order    |  |
| QuiQ 1500     | 914-4800    |                 |                                  | 48V/30A*           | <b>Ring Terminal</b>          | iLock, BTS   | Stock Item       |  |
| QUIQ 1500     | 914-4854    |                 |                                  | 1000W*             | SBS50 Blue*                   | iLock Relay, BTS, LED (8 Pin Deutsch Plug)               | SLUCK ILEIII     |  |
|               | 913-4800    |                 |                                  |                    | SB50 Blue                     |  |                  |  |
|               | 913-4800b   |                 |                                  | 48V / 18A<br>1000W | EZGO Rectangle w/notch        | Handle for portable use                                  | Stock Item       |  |
|               | 913-4800c   |                 |                                  |                    | EZGO RXV (Triangle)           |  |                  |  |
|               | 913-4800d   | Off-Board       | Included                         |                    | Yamaha 3-Pin                  |  |                  |  |
| QuiQ 1000     | 913-4800e   | UII-BOard       | Included                         |                    | Club Car 3-Pin                | WILL NOT WORK WITH FACTORY OBC (pre 2014)                |                  |  |
|               | 913-4800f   | 1               |                                  |                    | Crow's Foot                   |  |                  |  |
|               | 913-4800g   |                 |                                  |                    | Yamaha 2-Pin (Nabson)         | Handle for portable use                                  |                  |  |
|               | 913-4800h   |                 |                                  |                    | Star Car 3-Pin                |  |                  |  |
| IC650 BASE    | 940-0003    |                 |                                  | 48V / 13A          |                               | iLock, BTS   | Stock Item       |  |
| IC650 COMM    | 940-0006    |                 |                                  | 650W               |                               | iLock relay, BTS, LED, CANbus                            | SLUCK ILEIII     |  |
| IC900 BASE    | 942-0003    | On / Off-Board  | Cold Conorato                    | 48V / 20A          | Sold Separate                 | iLock, BTS, LED  | Current al Ouder |  |
| IC900 COMM    | 942-0010    | UII / UII-DUalu | ard Sold Separate 900W 48V / 25A | Sun Separate       | iLock relay, BTS, LED, CANbus | Special Order  |                  |  |
| IC1200 BASE   | 941-0003    |                 |                                  | ]                  | iLock, BTS, LED               | Stock Item   |                  |  |
| IC1200 COMM   | 941-0010    |                 |                                  | 1200W              |                               | iLock relay, BTS, LED, CANbus                            | Stock Item       |  |

**DC Cable Details** 



912-4800/914-4800



6 ft. w/ 3/8" Ring Terminal, iLock, BTS





8 ft. EZGO 48V w/ notch

913-4800g

0 8 ft. Yamaha 2-Pin (Nabson)

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912-4800-D1

913-4800c

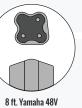


913-4800h



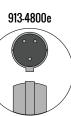
1 ft. w/ SBS50 BLUE, 1 ft. w/ 8-Pin Deutsch Plug

913-4800d

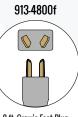








922-4854



8 ft. Crow's Foot Plug

Continued on the next page

8 ft. Club Car 48V

8 ft. Star Car 48V

912-4854 / 914-4854

1 ft. w/ SBS50 BLUE, 8-Pin Deutsch Plug,PP75 4-Pin

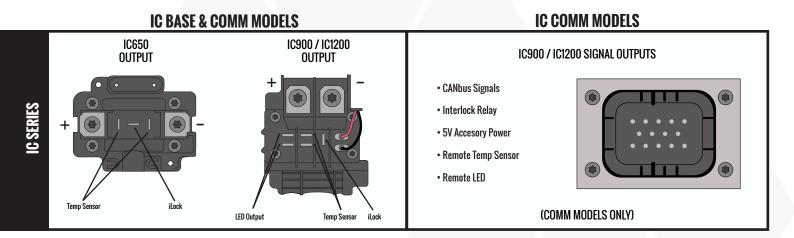
8 ft. w/ SB50 BLUE

913-4800



## **48 Volt Chargers Continued**

# **48 VOLT**



| Delta         | -Q Ind      | ustria     | 72 VOL1       |                 |                      |   |              |
|---------------|-------------|------------|---------------|-----------------|----------------------|---|--------------|
| Model         | Part #      | Usage Type | AC Cord       | DC Output       | DC Connector         | Notes   | Availability |
|               | 912-7200    |            |               |                 | <b>Ring Terminal</b> | iLock,BTS   | Stock Item   |
| QuiQ 1000     | 912-7200-D1 |            |               | 72V/12A/1000W   |                      | Remote LED, iLock, BTS                                    | SLUCK ILEIII |
|               | 912-7254    | On-Board   | Sold Separate |                 | SBS50 Green - other  | iLock Relay, BTS, LED (8 Pin Deutsch Plug)                | Discontinued |
| QuiQ 1000 DCI | 922-7254    | ]          |               | 72V/20A*/1500W* | accessories may be   | 12V Converter, iLock Relay, BTS, LED (8 Pin Deutsch Plug) | Stock Item   |
| QuiQ 1500 DCI | 914-7254    | 1          |               | 12V/20A*/1300W* | required.            | iLock Relay, BTS, LED (8 Pin Deutsch Plug)                |              |



#### **DC Cable Details**



6 ft. w/ 3/8" Ring Terminal, iLock, BTS

#### 912-7200-D1



6 ft. w/ 3/8" Ring Terminal, iLock, BTS, 10' Remote LED 912-7254 / 914-7254



1 ft. w/ SBS50 GREEN, 1 ft. w/ 8-Pin Deutsch Plug 922-7254



1 ft. w/ SBS50 GREEN 8-Pin Deutsch Plug, PP75 4-Pin

| Fullri    | ver Mu       | lti Volt       | age C                          | hargers                        |                        |  |               |  |
|-----------|--------------|----------------|--------------------------------|--------------------------------|------------------------|--|---------------|--|
| Model     | Part #       | Usage Type     | AC Cord                        | DC Output                      | DC Connector           | Notes                                    | Availability  |  |
|           | FR1-RT       |                |                                |                                | Ring Terminal          |  |               |  |
|           | FR1-SB50     | On / Off Board |                                |                                | SB50 Grey or Blue      |  |               |  |
|           | FR1-SB175    |                |                                |                                | SB175 Red or Grey      | Programming Module sold separately       |               |  |
|           | FR1-AGC      |                | 12V / 30A MAX                  | Alligator Clips                | (Part #: WIFI-DONGLE)  |  |               |  |
| FR1-GCC-A |              |                | 12V / 30A MAX<br>24V / 30A MAX | EZGO "D" Plug                  |                        |  |               |  |
|           | FR1-GCC-B    |                | Included                       | 36V / 25A MAX<br>48V / 20A MAX | EZGO Rectangle w/notch |  | Stock Item    |  |
|           | FR1-GCC-C    |                |                                |                                | EZGO RXV (Triangle)    |  |               |  |
| FR1       | FR1-GCC-D    | Off-Board      |                                |                                | Yamaha 3-Pin           |  |               |  |
|           | FR1-GCC-E    |                |                                |                                | Club Car 3-Pin         | WILL NOT WORK WITH FACTORY OBC (Pre2014) |               |  |
|           | FR1-GCC-F    |                |                                |                                | Crow's Foot            | Programming Module sold separately       |               |  |
|           | FR1-GCC-G    |                |                                |                                | Yamaha 2-Pin (Nabson)  | (Part #: WIFI-DONGLE)                    |               |  |
|           | FR1-GCC-H    |                |                                |                                | Star Car 3-Pin         |  |               |  |
|           | WIFI-DONGLE  | Programming    | -                              | -                              | -                      | USED FOR PROGRAMMING THE FR1             | Stock Item    |  |
| FRC       | FRC-RT-12V   | On / Off-Board | 12V / 8A or 13A / 200W         |                                | <b>Ring Terminal</b>   | Programming via dip switches             | Ou secial Oud |  |
| 11(0      | FRC-SB50-24V | on / on-Duaru  |                                | 24V / 8A or 13A / 400W         | SB50 Red               | Trogramming via urp switches             | Special Order |  |

**DC Cable Details** 



FR-C

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| DO VANIE DELAIIS                                   |                        |                               |                      |  |
|--|------------------------|-------------------------------|----------------------|--|
| FR1-RT   | FR1-SB50 GREY          | FR1-SB50 BLUE                 | FR1-SB175 RED        | FR1-SB175 GREY                         |
|  |                        |                               |                      |  |
| 8 ft. w/<br>SB50 GREY                              | 8 ft. w/<br>SB50 GREY  | 8 ft. w/<br>SB50 BLUE         | 8 ft. w/<br>SB50 RED | 8 ft. w/<br>SB175 GREY                 |
| FR1-AGC  | FR1-GCC-a              | FR1-GCC-b                     | FR1-GCC-c            | FR1-GCC-d                              |
|  |                        |                               |                      |  |
| 8 ft. w/ Alligator Clips                           | 8 ft. EZGO "D" Plug    | 8 ft. EZGO Recatngle w/ notch | 8 ft. EZGO 48V RXV   | 8 ft. Yamaha 48V                       |
| FR1-GCC-e  | FR1-GCC-f              | FR1-GCC-g                     | FR1-GCC-h            | WIFI DONGLE                            |
|  |                        |                               |                      | FR-1                                   |
| 8 ft. Club Car48V                                  | 8 ft. Crow's Foot Plug | 8 ft. Yamaha 2-Pin (Nabson)   | 8t ft. Star Car 48V  | Dongle For Programming<br>FR1 Chargers |
| DC Cable Details                                   |                        |                               |                      |  |
| FRC-RT-12V   | FRC-SB50-24V           |                               |                      |  |
| $\left( \begin{array}{c} \phi \end{array} \right)$ |                        |                               |                      |  |

8 ft. w/ Ring Terminals **12V**  8 ft. w/ SB50 RED 24V

## **Delta-Q Charger Accessory List**

### ACCESSORIES

#### **AC Cords**

|            | Model     | ltem Type  | ltem Type | Length | Part Description                                 | Notes                                    | Availability |
|------------|-----------|------------|-----------|--------|--|--|--------------|
| #1         | QuiQ      | AC-Cord    |           | 10 ft  | NEMA 5-15P to IEC320 C13, 14AWG                  | Standard North American AC-cord (110VAC) | Stock Item   |
| <b>#</b> 2 | QuiQ      | AC-Cord-15 |           | 15 ft  | NEMA 5-15P to IEC320 C13, 14AWG                  | Standard North American AC-cord (110VAC) | Stock Item   |
| #3         | IC Series | 475-0406   | AC- Cord  | 10 ft  | NEMA 5-15P to IEC320 C13, 14AWG, LOCK & SEAL     | Standard North American AC-cord (110VAC) | Stock Item   |
| #4         | IC Series | 475-0349   |           | 6.5 ft | NEMA 5-15P to IEC320 C13, 14AWG, LOCK & SEAL     | Standard North American AC-cord (110VAC) | Stock Item   |
| <b>#</b> 5 | IC Series | 475-0410   |           | 10 ft  | SHUCKO CEE 7/7 to IEC320 C13, 16AWG, LOCK & SEAL | Standard European AC-cord (220VAC)       | Stock Item   |

#### DC Cables (for IC Series chargers)

| [          | Model     | ltem Type | ltem Type   | Length | Part Description                              | Notes       | Availability |
|------------|-----------|-----------|-------------|--------|---|-------------|--------------|
| #6         | IC Series | 475-0466  |             | 5.6 ft | DC Harness w/ 3/8" Ring Terminals             | Max Amps 38 | Stock Item   |
| <b>#</b> 7 | IC Series | 475-0351  |             | 6 ft   | DC Harness w/ 3/8" Ring Terminals, iLock, BTS | Max Amps 34 | Stock Item   |
| #8         | IC Series | 475-0353  | DC Harness  | 8 ft   | DC Harness w GREY SB50                        | Max Amps 34 | Stock Item   |
| <b>#</b> 9 | IC Series | 475-0409  | DO Hailiess | 8 ft   | DC Harness w/ RED SB50                        | Max Amps 34 | Stock Item   |
| #10        | IC Series | 475-0354  |             | 8 ft   | DC Harness w/ GREY SB175                      | Max Amps 34 | Stock Item   |
| #11        | IC Series | 475-0379  |             | 2 ft   | DC Harness w/ BLACK SB175                     | Max Amps 50 | Stock Item   |

#### **DC Cable Adapters**

|     | Model      | ltem Type | ltem Type | Length | Part Description                 | Notes   | Availability |  |  |
|-----|------------|-----------|-----------|--------|----------------------------------|---|--------------|--|--|
| #12 | QuiQ / FR1 | 293-045   |           | 1 ft   | SB50 Grey to SB175 Grey Adapter  | SB175 housing color can be changed by request   | Stock Item   |  |  |
| #13 | QuiQ / FR1 | GCC-A     |           | 2 ft   | 36V EZGO TXT from SB50 Adapter   | "D-Plug" - Fits EZGO 1996 and later   | Stock Item   |  |  |
| #14 | QuiQ / FR1 | GCC-B     |           | 2 ft   | 48V EZGO TXT from SB50 Adapter   | "Square w/ Notch" - Fits EZGO & Western vehicles 1996 and later                           | Stock Item   |  |  |
| #15 | QuiQ / FR1 | GCC-C     |           | 2 ft   | 48V EZGO RXV from SB50 Adapter   | "3-Pin Triangle" - Fits EZGO 2008 & later   | Stock Item   |  |  |
| #16 | QuiQ / FR1 | GCC-D     |           | 2 ft   | 48V YAMAHA from SB50 Adapter     | "3-Pin" Fits Yamaha 2006 and later  | Stock Item   |  |  |
| #17 | QuiQ / FR1 | GCC-E     | Adapter   | 2 ft   | 48V CLUB CAR from SB50 Adapter   | "3-Pin Round" - Fits Club Car 1995 and later (Not for use with OBC)                       | Stock Item   |  |  |
| #18 | QuiQ / FR1 | GCC-F     |           | 2 ft   | 48V CROWS FOOT from SB50 Adapter | Fits older EZGO, Cushman, Yamaha, Club Car, Karrior,<br>Legend, Noland, Norskog, Columbia | Stock Item   |  |  |
| #19 | QuiQ / FR1 | GCC-G     |           | 2 ft   | 36V YAMAHA from SB50 Adapter     | (2-Pin) Nabson Plug - Fits Yamaha MAC 1996 and Later                                      | Stock Item   |  |  |
| #20 | QuiQ / FR1 | GCC-H     |           | 2 ft   | 48V STAR CAR from SB50 Adapter   | "3-Pin Round" - Fits Star Car Vehicles<br>(other voltage configs available)               | Stock Item   |  |  |

#### Accessories

|             | Model            | ltem Type | ltem Type  | Length | Part Description                                 | Notes   | Availability |
|-------------|------------------|-----------|------------|--------|--|---|--------------|
| #21         | QuiQ / IC Series | 900-0061  |            | -      | Remote LED label (pack of 10)                    | For use on remote LED enabled chargers only                       | Stock Item   |
| #22         | QuiQ             | 900-0071  |            | -      | SBS50 Blue w/ pins and Strain relief             | For use with 48V QuiQ chargers ending with ***-**54               | Stock Item   |
| #23         | QuiQ             | 900-0072  | Accessory  | -      | SBS50 Green w/ pins and Strain relief            | For use with 72V QuiQ chargers ending with ***_**54               | Stock Item   |
| #24         | QuiQ             | 900-0075  |            | -      | Deutsch 8-Pin Accessory Kit                      | For use with QuiQ chargers ending with ***-**54                   | Stock Item   |
| #25         | QuiQ             | 900-0103  |            | -      | Deutsch 8-Pin Signal Harness                     | For use with QuiQ chargers ending with ***-**54                   | Stock Item   |
| #26         | QuiQ Dci         | 900-0076  |            | -      | PP75 2x2 Stacked Accessory Kit                   | For use with 48V QuiQ chargers begin/ending with 922-**54         | Stock Item   |
| <b>#2</b> 7 | IC900 / IC1200   | 900-0138  |            | 10 ft  | Remote LED w/ Faston Tabs                        | For use with any IC900/IC1200 charger                             | Stock Item   |
| #28         | QuiQ / IC Series | 475-0348  | Accessory  | 10 ft  | Remote Temp Sensor (BTS) w/ Faston Tabs          | Quick Connect to any IC Series charger   wiring required for QuiQ | Stock Item   |
| #29         | IC Series (COMM) | 475-0357  | A0003301 y | 6 ft   | Signal Harness w/ iLock Relay & LED              |   | Stock Item   |
| #30         | IC Series (COMM) | 475-0359  |            | 6 ft   | Signal Harness w/iLock Relay, LED, 10CCT Pigtail | 10 CCT pigtail for CANbus use                                     | Stock Item   |
| #31         | IC650            | 900-0111  |            |        | Handle & Feet kit for IC650 chargers             | Converts any IC650 for off-board portable use                     | Stock Item   |

# **Delta-Q Charger Accessory List**

### ACCESSORIES

#### **Programmer & Service Items**

|             | Trugramme        |             |              |   |   |                               |                          |                                 |                                 |                               |                            |            |
|-------------|------------------|-------------|--------------|---|---|-------------------------------|--------------------------|---------------------------------|---------------------------------|-------------------------------|----------------------------|------------|
|             | Model            | ltem Type   | ltem Type    | Length  | Part Descrip                            | tion                          |                          | Notes                           |                                 | Availability                  |                            |            |
| ¥32         | QuiQ             | 900-0089-02 | Programmer   | -   | Add/Delete/Change algorithm             | s on QuiQ chargers            | PC                       | computer required               |                                 | Stock Item                    |                            |            |
| ¥33         | QuiQ / IC Series | 900-0002    | Service Item | Service Item  | -                                       | Temp Sensor Repair Kit        |                          |                                 |                                 |                               | Stock Item                 |            |
| ₿34         | QuiQ             | 900-0057    |              |   |   | -                             | Handle for QuiQ chargers |                                 | Re                              | placement handle or add porta | bility to any QuiQ charger | Stock Item |
| ¥35         | QuiQ / IC Series | 900-0058    |              |   | 10 ft                                   | Remote LED w/ shielded bare v | wires                    | Fo                              | r use on BTS enabled chargers o | only                          | Special Order              |            |
| ¥36         | QuiQ / IC Series | 900-0060    |              |   | 4 ft                                    | Replacement temp sensor w/    | bare wires               |                                 |                                 |                               | Special Order              |            |
| <b>#</b> 37 | IC650            | 426-0062    |              | -   | Clamp Breakaway for DC Cord             | (IC650 only)                  | Fo                       | r use when DC cable runs from b | oack to front of charger        | Stock Item                    |                            |            |
| ¥38         | IC1200           | 900-0123    |              | -   | Replacement Fan for IC1200              |                               |                          |                                 |                                 | Stock Item                    |                            |            |
| ¥39         | IC650 AWP Kit    | 480-0392    |              |   | Replacement Interlock box for           | IC Series AWP Kit             | Fo                       | For use with part 940-0001-S005 |                                 | Stock Item                    |                            |            |
|             | AC-Cord          | AC-Corr     |              | 475-0406  | 475-0349                                | 475-0410                      | 475-04                   | 475-0351                        | 475-0353                        | 475.0409                      |                            |            |
|             | 475-0354         | 475-03      | 879          | 293-045   | GCC-A                                   | GCC-B                         | GCC                      | C GCC-D                         | GCC-E                           | GCC-F                         |                            |            |
|             | #10              |             |              | + - +<br>+ - + - |   | 0<br>#14                      | #15                      |                                 | HTT                             | ₩18                           |                            |            |
|             | GCC-G            | GCC-        |              | 900-0061  | 900-0071                                | 900-0072                      | 900-00                   |                                 | 900-0076                        | 900-0138                      |                            |            |
|             | 475-0348         | 475-03      |              | 475-0359  | 900-0111<br>900-0111<br>11 11 11<br>#31 | 900-0089-02                   | 900-00                   |                                 | 900-0058                        | 900-0060                      |                            |            |
|             | 426-0062         | 900-01      | 23           | 480-0392  |   |                               |                          |                                 |                                 |                               |                            |            |





# **QUIQ SERIES TECHNICAL GUIDE**

#### AMMETER

#### Solid

Displays Scale of output during bulk phase.

#### Flashing

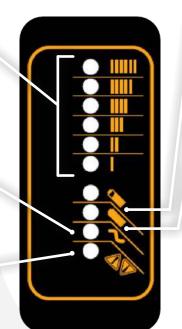
Output has been reduced due to high internal charger temperature. Displays Charge profiles 1-6 for 11 seconds if no battery is connected.

#### **AC INDICATOR**

Solid AC power is present Flashing Low AC voltage. Check electrical source and cord length.

#### FAULT INDICATOR

Red Light Charger error. Refer to troubleshooting instructions below.



#### **BULK CHARGE INDICATOR**

#### Solid

Bulk charge phase complete (80% charged); in absorption phase.

#### Flashing

Displays charge profile number if no battery is connected.

#### **CHARGE COMPLETION**

Solid Charging complete and maintenance mode is active. Flashing Absorption phase complete, in finishing phase.

# **Selecting a Charge Profile**

Delta-Q's QuiQ Charger can store up to 10 charging profiles, also called charge algorithms. Pre-2006 QuiQ chargers with serial number prefix DQCP allow preloaded profiles to be selected, but cannot be reprogrammed with new profiles. QuiQ chargers can be programmed using one of two methods.



#### MANUAL SELECTION METHOD

Requires no external hardware.

#### **QUIQ PROGRAMMER WITH PC METHOD**

Requires a QuiQ Programmer (900-0089-02) and a PC.

For more information, visit the Delta-Q support page: www.delta-q.com/support/

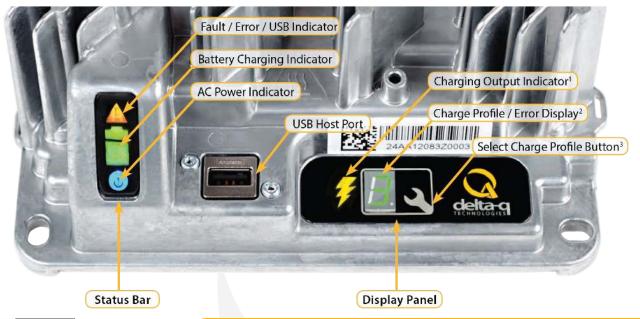
# **Troubleshooting Instructions**

If a fault occurs, count the number of red flashes between pauses and refer to the table below.

| Flash Sequence           | Cause  | Solution   |
|--------------------------|--|--|
| <b>0*0</b>               | Battery high voltage.  | Check battery size condition. This fault will clear automatically once the condition has been corrected.   |
| <b>0 * * 0</b>           | Battery low voltage.   | Check battery size and condition. This fault will clear automatically one the condition has been corrected.  |
| <b>0***0</b>             | Charge timeout caused by battery pack<br>not reaching required voltage; or charger<br>output reduced due to high temperatures. | Check connections. Ensure battery type matches selected charge profile and operate the charger at a lower ambient temperature. Reset the charger by interrupting AC power for 15+ seconds. |
| <b>0***</b>              | Battery could not be trickle charged up to minimum voltage.  | Check for shorted or damaged cells. Reset the charger by interrupting AC power for 15+ seconds.  |
| <b>0****</b>             | Charger shutdown due to high internal temperature.   | Ensure sufficent cooling airflow. Reset the charger by interrupting AC power for 15+ seconds.  |
| <b>0****</b> ** <b>0</b> | Internal charger fault.  | Reset the charger by interrupting AC power for 15 seconds. Return to service depot if fault persists.  |

#### Fullriver Battery - Delta-Q QuiQ Series Technical Guide















Solid Red - Charger Fault. See display panel for details.



Flashing Green - USB port active. Solid Green - Safe to remove USB flash drive. Flashing Green - Low state of charge. Solid Green - High state of charge.

Solid Blue - AC power available.

Flashing Green - High state of charge. Solid Green - Charge complete.

# **Selecting a Charge Profile**



Disconnect AC input from the charger, or from the wall outlet. Wait 30 seconds for the input relay to open. *(See Figure 1)* 



While reconnecting AC input, press and hold the Select Charge Profile Button. Hold the button until Error Indicator is on and Battery Charging Indicator starts flashing.



Press and release the Select Charge Profile Button to advance through charging profiles loaded on the charger. The selected charging profile will be displayed up to three times (e.g. "P-O-1-1" for Profile 11). *(See Figure 2)* 



Once desired charging profile is displayed, press and hold button for 10 seconds to confirm selection and exit Profile Selection Mode. *(See Figure 3)* 

5

Press the Select Charge Profile Button to check that the desired profile is selected.

For more information, visit the Delta-Q support page: www.delta-q.com/support/

#### Fullriver Battery - Delta-Q IC Series Technical Guide



# **DELTA-Q ALGORITHM LIST**

| Algorithm | Preloaded On |           | Battery | AH      | Osmaatikilitu                 | Decise of For            | Nataa                         |
|-----------|--------------|-----------|---------|---------|-------------------------------|--------------------------|-------------------------------|
| #         | QuiQ         | IC Series | Туре    | Range   | Compatibility                 | Designed For             | Notes                         |
| 5*        | •            | •         | Flooded | 85-150  | Group 27, 31                  | Trojan 30XHS / 31XHS     |                               |
| 1*        |              | •         | Flooded | 150-260 | Group GC2, GC8, GC12, J185    | Trojan T-105             |                               |
| 38*       |              | •         | Flooded | 120-170 | Group GC12 / Industrial Cells | Trojan T1275             | 113% Finish Cap               |
| 7         |              |           | Flooded | 330-425 | Group J305, L16               | Trojan L16               |                               |
| 37        |              |           | Flooded | 200-250 | 42v                           | Trojan-105               | 48v to 42v Conversion         |
| 71        | •            | •         | Flooded | 140-200 | Group GC8, 27, 31             | US Battery 8V-GC         |                               |
| 11        | • •          | • •       | Flooded | 200-255 | Group GC2, GC2H               | US Battery US125         |                               |
| 72        | •            | •         | Flooded | 250-320 | Group J305                    | US Battery US-305HC      |                               |
| 73        | •            | •         | Flooded | 300-425 | Group L16                     | US Battery US-L16HC      |                               |
| 21*       | •            | •         | Flooded | 210     | Industrial Cells              | Exide                    |                               |
| 42*       |              | •         | AGM     | 80-150  | General AGM                   | Discover EV31A           |                               |
| 43*       |              | •         | AGM     | 200-400 | General AGM                   | Discover                 |                               |
| 126*      | •            | •         | AGM     | 85-140  | Group 24, 27, 31              | Fullriver                | Fullriver Compatible Only     |
| 125*      | •            | •         | AGM     | 150-200 | Group GC8, GC12, 6v27         | Fullriver DC180-8        | Fullriver Compatible Only     |
| 151*      | •            | •         | AGM     | 220-290 | Group GC2, J185, 4D, 8D       | Fullriver DC224-6        | Fullriver Compatible Only     |
| 141*      | •            | •         | AGM     | 335-415 | Group J305, L16               | Fullriver DC400-6        | Fullriver Compatible Only     |
| 225       |              |           | AGM     | 55-415  | All Models                    | Fullriver All Models     | Fullriver Only - Float Charge |
| 8*        |              |           | AGM     | 80-150  | Group 24, 27, 31              | Concord / Lifeline 104Ah |                               |
| 35*       |              |           | AGM     | 200-255 | Group GC2, GC2H, 6v27         | Concord / Lifeline 233Ah |                               |
| 5*        |              |           | AGM     | 85-150  | Group 27, 31, GC12            | Trojan                   | Float Finish                  |
| 6*        | •            | •         | GEL     | 98-120  | Group 27, 31                  | East Penn Deka 8G31      |                               |
| 26*       |              | •         | GEL     | 150-230 | Group GC8, GC2                | East Penn Deka 8GGC2     |                               |
| 52*       |              |           | GEL     | 80-130  | Group 27, 31                  | Exide Sonnenschein 105Ah |                               |
| 51*       |              |           | GEL     | 150-200 | Group GC8, GC2                | Exide Sonnenschein 180Ah |                               |
| 12*       |              |           | GEL     | 200-300 | Group 4D, 8D, J305            | Exide 240Ah              |                               |

\* Temperature compensated algorithm

•• Default setting for QuiQ and IC650 chargers

**CAUTION:** Using algorithms to charge batteries they were not designed for is done at your own risk. Delta-Q is continuously testing and updating charge algorithms with various batteries. Though many algorithms may work with a range of batteries, certain properties including variations in manufacturing, chemical composition, and health may cause unacceptable charging performance. Closely monitor a suggested battery/algorithm combination for at least three charge cycles to ensure batteries are being properly charged.