

# **Technical Bulletin**

No. CQTB052

# Color/Studio Force II 72, Color/Studio Force II 48 Display

#### **PURPOSE**:

Due to circumstances beyond our control, the manufacturer has ended production of 3.2" LCD screen which is used in most of our products. In order to accommodate the new LCD screen, a few products have undergone a design change.

#### Table 1 UNITS AFFECTED

| Spectrum<br>Model | Chroma-Q Model | Product name                       |
|-------------------|----------------|------------------------------------|
| 641-2000          | CHCF248RGBA    | COLOR FORCE II 48 BLACK BODY       |
| 641-2100          | CHCF248RGBAW   | COLOR FORCE II 48 WHITE BODY       |
| 641-2500          | CHCF248RGBALR  | COLOR FORCE II 48 W/LUMENRADIO RF  |
| 641-3000          | CHCF272RGBA    | COLOR FORCE II 72 BLACK BODY       |
| 641-3100          | CHCF272RGBAW   | COLOR FORCE II 72 WHITE BODY       |
| 641-3500          | CHCF272RGBALR  | COLOR FORCE II 72 W/LUMENRADIO RF  |
| 641-4000          | CHSF2V48       | STUDIO FORCE II 48 BLACK BODY      |
| 641-4100          | CHSF2V48W      | STUDIO FORCE II 48 WHITE BODY      |
| 641-4500          | CHSF2V48LR     | STUDIO FORCE II 48 W/LUMENRADIO RF |
| 641-5000          | CHSF2V72       | STUDIO FORCE II 72 BLACK BODY      |
| 641-5100          | CHSF2V72W      | STUDIO FORCE II 72 WHITE BODY      |
| 641-5500          | CHSF2V72LR     | STUDIO FORCE II 72 W/LUMENRADIO RF |

For Color/Studio Force II 12, see page 7

# Serial Number Range:

- 641-2000 series serial numbers lower than 0306219653
- 641-3000 series serial numbers lower than 0306217775
- 641-4000 series serial numbers lower than 0306219523
- 641-5000 series serial numbers lower than 0306220652

#### Addressing board replacement kits

| S.No. | Part Number | Description                              |
|-------|-------------|--|
| 1     | 641-9948    | ADDRESSING BOARD REPLACEMENT KIT CFII 48 |
| 2     | 641-9951    | ADDRESSING BOARD REPLACEMENT KIT SFII 48 |
| 3     | 641-9972    | ADDRESSING BOARD REPLACEMENT KIT CFII 72 |
| 4     | 641-9976    | ADDRESSING BOARD REPLACEMENT KIT SFII 72 |
| 5     | 652-9912    | ADDRESSING BOARD REPLACEMENT KIT CFII 12 |
| 6     | 652-9916    | ADDRESSING BOARD REPLACEMENT KIT SFII 12 |

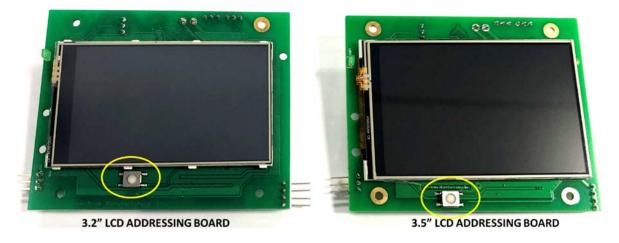
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# **Description of change:**

Serial number lower than listed above uses a 3.2" LCD, which has been discontinued by the manufacturer. The new addressing boards has 3.5" LCD and in order to fit that some parts are modified.



The position of the test switch can help to quickly identifying the old version from new.

#### Reference:

NA

#### Tools:

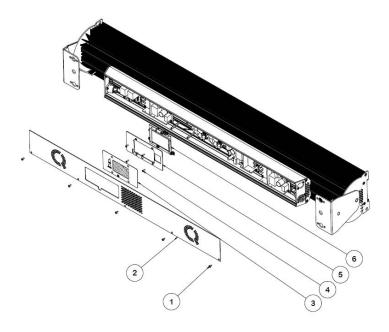
- Screwdriver #1 with PH#2 set at 15 in-lb torque.
- Screwdriver #2 with PH #1 set at 5 in-lb torque.

It will take approximately 10-12 minutes to change all the parts.

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# Bill of Materials for SFII/CFII 48 / 72:



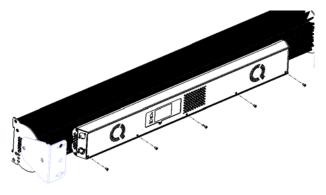
| ITEM | PART NUMBER    | OLD PART       | DESCRIPTION                                   | QTY. |
|------|----------------|----------------|---|------|
| NO.  |                | NUMBER         |   |      |
| 1    | 435-6295-0     | 435-6295-0     | SCREW SELF TAP PH PLPS BLK ST3.5x9.5 RoHS for | 5    |
|      |                |                | CFII/SFII 48                                  |      |
| 1    | 435-6295-0     | 435-6295-0     | SCREW SELF TAP PH PLPS BLK ST3.5x9.5 RoHS for | 6    |
|      |                |                | CFII/SFII 72                                  |      |
| 2    | 641-0115 REV H | 641-0115 REV F | CLOSING PLT w/ Q logo BLK CFII/SFII 48        | 1    |
| 2    | 641-0110 REV N | 641-0110 REV P | CLOSING PLT w/ Q logo BLK CFII/SFII 72        | 1    |
| 3    | 641-0603       | 900-1320       | OVERLAY CFII SFII 48 72                       | 1    |
| 4    | 430-1110-0     | 430-1110-0     | SCREW M3x10 FH PLPS BLK                       | 4    |
| 5    | 641-0120 REV C | 641-0120 REV E | OVERLAY PLT CFII SFII 48 72                   | 1    |
| 6    | 641-0212       | 641-0112       | PCB COM ADR 3.5" LCD CFII 48                  | 1    |
| 6    | 641-0282       | 641-0202       | PCB COM ADR 3.5" LCD SFII 48                  | 1    |
| 6    | 641-0292       | 641-0102       | PCB COM ADR 3.5" LCD CFII 72                  | 1    |
| 6    | 641-0283       | 641-0203       | PCB COM ADR 3.5" LCD SFII 72                  | 1    |

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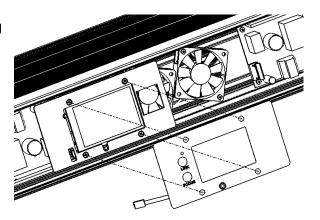


# ADDRESSING BOARD PCB INSTALLATION:

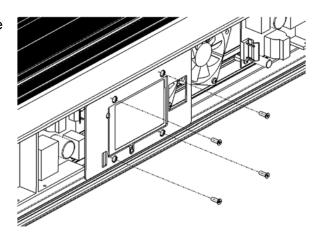
1. Remove the back plate of the light fixture by unscrewing five self-tap ST3.5 screws using screwdriver #1.



2. Remove the overlay from the addressing board.



3. Remove four M3 screws on the overlay plate using screwdriver #2.

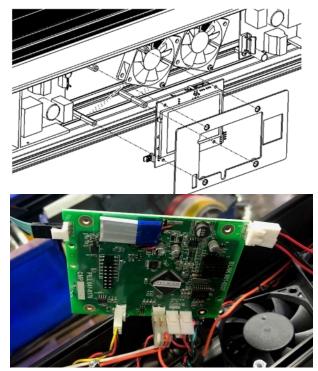


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Then remove the overlay plate and the addressing board from the standoffs.

Remove all the electrical connections on the addressing board carefully. Do not pull the addressing board.



# Assemble new addressing board with 3.5" LCD and back plate:

4. Connect the addressing board to the light fixture as shown in the picture. Include the overlay connection as shown on the left top corner.

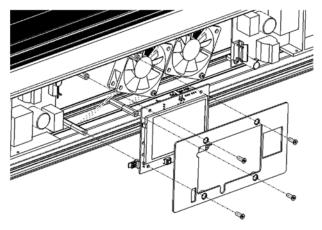


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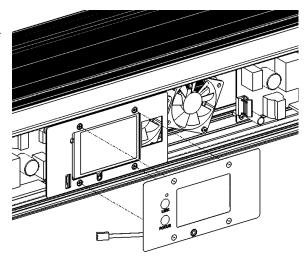
5. Place the 3.5" LCD addressing board and the revised overlay plate on top of the four standoffs as shown in the figure. Using four M3 screws provided in the kit, screw the two together with the main light fixture using screw driver #2.

Replace addressing board 641-0112 / 641-0102 / 641-0202 / 641-0203 with 641-0212 / 641-0292 / 641-0282 / 641-0283. Overlay plate 641-0120 rev C with 641-0120 Rev E.



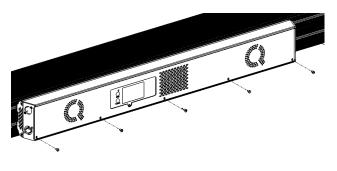
6. Remove the back cover of the adhesive backing on overlay and place the overlay on top of overlay plate. Align the four holes on the overlay with that on the overlay plate in order to center the LCD with the clear window on overlay.

Replace overlay 900-1320 with 641-0603.



7. Place the back plate on the extrusion such that the slot in the back cover is aligned with the home button on the addressing board. Screw five self-tap 3.5 screws (provided in the kit) through the holes on the back plate in to the extrusion using screw driver #1.

Replace back cover 641-0115 rev H / 641-0110 rev F with 641-0115 rev N /641-0110 rev P.



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# Color/Studio Force II 12

#### **Table 2 UNITS AFFECTED**

| Spectrum<br>Model | Chroma-Q Model | Product name                       |
|-------------------|----------------|------------------------------------|
| 652-1012          | CHCF212RGBA    | COLOR FORCE II 12 BLACK BODY       |
| 652-1100          | CHCF212RGBAW   | COLOR FORCE II 12 WHITE BODY       |
| 652-1512          | CHCF212RGBALR  | COLOR FORCE II 12 W/LUMENRADIO RF  |
|                   |                |                                    |
| 652-1150          | CHSF2V12       | STUDIO FORCE II 12 BLACK BODY      |
| 652-1250          | CHSF2V12W      | STUDIO FORCE II 12 WHITE BODY      |
| 652-1500          | CHSF2V12LR     | STUDIO FORCE II 12 W/LUMENRADIO RF |

# Serial Number Range:

- 652-1000 series serial numbers lower than 0306219423
- 652-1012 series serial numbers lower than 0306217088

#### Tools:

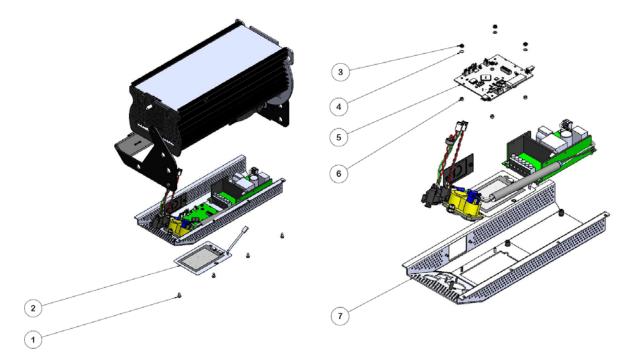
- Screwdriver #3 with PH#1.
- Screwdriver #4 with PH#2.
- Screwdriver #5 with M3 nut driver.
- Screwdriver #6 with M2.5 nut driver.
- Screwdriver #7 with M5 nut driver.

It will take approximately 20-22 minutes to change all the parts.

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# Bill of Materials for CFII/ SFII 12:

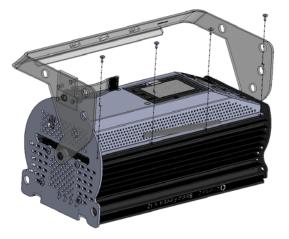


| ITEM | NEW PART       | OLD PART       | DESCRIPTION                                   | QTY. |
|------|----------------|----------------|---|------|
| NO.  | NUMBER         | NUMBER         |   |      |
| 1    | 435-6295-0     | 435-6295-0     | SCREW SELF TAP PH PLPS BLK ST3.5x9.5 RoHS for | 4    |
|      |                |                | CFII/SFII 12                                  |      |
| 2    | 652-0603       | 652-0200       | OVERLAY CFII/SFII 12                          | 1    |
| 3    | 430-3203-0     | 430-3203-0     | NUT HEX M3 COMBI BIK CFII/SFII 12             | 4    |
| 4    | 435-2108-3     | 435-2108-3     | WASHER FLAT M3.5 NYLON 6/6 CFII/SFII 12       | 4    |
| 5    | 652-0212       | 652- 0201      | PCB COM ADR 3.5" SF II 12                     | 1    |
| 5    | 652-0202       | 652-0102       | PCB COM ADR 3.5" CF II 12                     | 1    |
| 6    | 430-2003-7     | 430-2003-7     | SPACER ROUND M3 BRASS 3mm LG CFII SFII 12     | 4    |
| 7    | 652-0004 REV K | 652-0004 REV F | BOTTOM BRACKET CFII 12 BLK CFII/SFII 12       | 1    |



# ADDRESSING BOARD PCB INSTALLATION FOR CFII / SF II 12:

1. Remove four self tap ST3.5 screws using screwdriver #4 from the locations as shown in the picture.



2. Remove the bottom bracket assembly from the main unit.

Do not pull the assembly before disconnecting all the electrical connections.

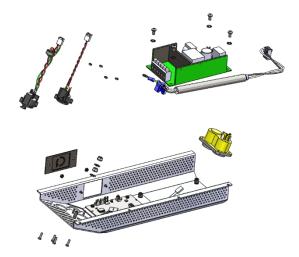


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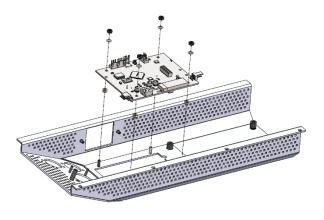
3. From the bottom bracket sub assembly remove all the electrical components.

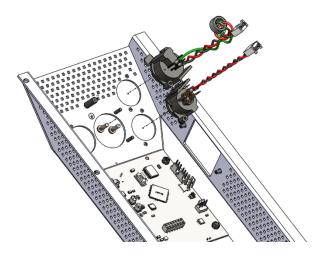
Keep all the parts safely to be assembled in new boat.



# Assemble new addressing board with 3.5" LCD and bottom bracket plate:

- 4. Use the new bottom bracket and new addressing board PCB (652-0202 or 652-0212) provided in the kit and assemble them as described below.
  - Place the four round spacers (430-2003-7) on the male studs in the bottom bracket as shown in the picture.
  - Place the addressing board PCB on top of the spacers.
  - Place the flat washers (435-2108-3) at the four locations on the male studs.
  - Tighten the four M3 nuts on the male studs using nut driver #5 to a torque of 5.5 lb-in.
- 5. Tighten four self tap screws ST2.9 to hold XLR5-F (652-0401) connector and XLR5-M (652-0402) connector to the bottom plate in the holes as shown in the picture using screwdriver #3 to a torque of 5.5 lb-in.



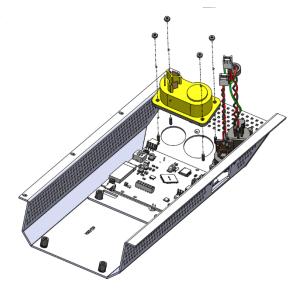


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6. Assemble the powerCON true1 in/out (900-2320) connector on the bent surface of the bottom bracket in the holes as shown in the picture.

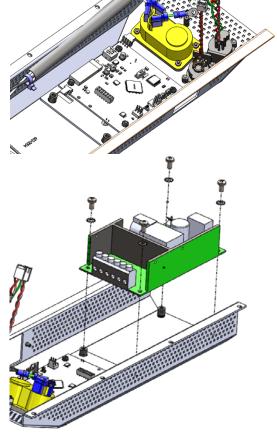
Using the nut driver #6 tighten the M2.5 nuts (425-3102-1) on the male stud to a torque 5.5 lb-in.



7. Connect the power harness (652-0400) to the powerCON in/out at three pins as shown in the picture.

Connect the ground terminal on power harness to the M5 stud on top of a lock washer and hex nut. And tighten a hex nut (450-3205) along with lock washer (450-2609-1) to the male stud using nut driver #7 to a torque of 9 lb-in.

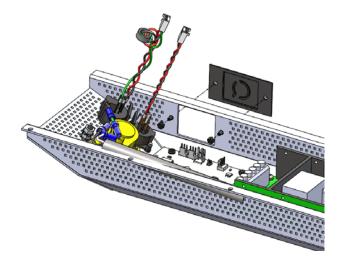
8. Assemble the power supply unit (900-2061) on the bottom bracket using four lock washers (440-2608-4) and M4 screws (440-1208-0) using screwdriver #3 to a torque of 7 lb-in.



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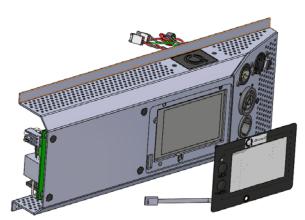


9. Place the RF module cover (652-0210) in the cut out and tighten it in place using two hex nuts (430-3203-0) using nut driver #5 with 5.5 lb-in torque.



10. Push the connector on the overlay to the other side of the bottom bracket towards the addressing board PCB.

Remove the back cover of the adhesive backing on overlay and place the overlay on top of overlay plate. Align the home button at the bottom centre on the overlay with that on the addressing board PCB in order to center the LCD with the clear window on overlay.



11. Make all the electrical connections as encircled in the picture.



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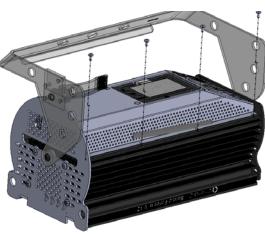


12. Place the bottom bracket assembly on the main assembly and push the edge with no holes in the slot in the main extrusion and then press it down from the front such that the holes on the bottom bracket matches with the holes on the fan plate.



13. Tighten four self tap screws ST3.5 at four locations with screwdriver #4 to a torque of 5.5 lb-in.

Unit is now ready to use.



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