FC88 Kit Instructions

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INTRODUCTION

General
1. This kit contains the parts necessary to connect the FC88 Control Display to the GF90/GF92, AF88/AF89, ST95/ST96, ST98, ST50/ST51/ST75/ST75V, and ST51A/ST75A/ST75AV instruments.
2. Connection instructions are given that show how to connect the FC88 to FCI’s instruments.

Ordering of Parts
Ordering of parts are to be directed as follows:
Fluid Components International LLC
1755 La Costa Meadows Drive
San Marcos, California 92078
Attention: Customer Sales
Phone: (800) 854-1993 or (760) 744-6950 or Fax: (760) 736-6250
www.fluidcomponents.com

Publication Requests
Requests for copies of publications should be directed to the address shown in the above paragraph.

AF88/AF89 OPERATION
Plug the cable into the FC88 as shown in Figure 1. Plug the other end of the cable into P1 of the main circuit board of the AF88 or AF89 as shown in Figure 1. If the FC88 will not be used in conjunction with the FlexMASSter the adapter circuit board may be discarded. The FC88 is ready for use.

Using FC88 With Multiple Instrument Models
If an FC88 Control Display Unit has been used on a FlexMASSter instrument and it needs to be used on an AF88 or AF89 instrument the FC88 will need to be reprogrammed. The following instructions reprogram the FC88:
1. With the FC88 cable disconnected from the AF88/89, simultaneously press the CTRL, SHIFT, and F1 keys.
2. While holding down all three keys pressed in Step 1, plug the FC88 cable into the energized AF88/89.
3. A message should immediately come up on the screen of the FC88 as shown below.

LOAD DEFAULT DATA!
ARE YOU SURE?
YES    NO
4. Press the “A” (YES) key on the FC88. Wait for the FC88 to beep.
5. Press the following keys in sequence (not simultaneously): SHIFT, CTRL, SPACE.
6. Press the “A” key until “9600 BAUD” appears on the screen. Press the “E” key to save.
7. Press the “A” key until “PARITY=SPACE” appears on the screen. Press the “E” key to save.
8. The screen should now read “32 CHARACTER DISPLAY”. Press “E” to save.
9. The set-up is complete. If the FC88 is plugged into a working AF88/89 the FC88 should now be operating in its normal mode with the instrument.

![Diagram of FC88 Kit Instructions](image-url)

Figure 1
GF90/GF92 OPERATION

Plug the cable into the FC88 as shown in Figure 2. Plug the other end of the cable into JP3 of the top control board of the GF90 or GF92 as shown in Figure 2. If the FC88 will not be used in conjunction with the FlexMASSter the adapter circuit board may be discarded. The FC88 is ready for use.

Figure 2
FLEXMASSTER OPERATION

Plug the cable into the FC88 as shown in Figure 3. Plug the other end of the cable into the P1 of the adapter circuit board Part Number 016932. Plug P2 of the adapter circuit board into the serial communication connector of the processor board of the FlexMASSter instrument as shown in Figure 3. The FC88 is ready for use.

![Diagram showing FC88 and adapter board assembly](image-url)

**Figure 3**
ST98 OPERATION

Plug the cable into the FC88. Plug the other end of the cable into P1 of the Customer Connection Board inside of the ST98 instrument (pictured in Figure 4). The FC88 is ready for use.

Figure 4
ST50, ST51, ST75 (GEN1) OPERATION

Plug the cable into the FC88. Plug the other end of the cable into P3 of Customer Connection Board inside of the ST50, ST51 or ST75 instrument (pictured in Figure 5). The FC88 is ready for use.

Figure 5
ST51A, ST75A, ST75AV (GEN3) OPERATION

An RS-232 serial port is provided via a .100" 2 x 3 header connector (J9) on the interface board (remove blind lid for access). Plug the serial cable adapter assembly 025859-01 onto the J9 header as shown in Figure 6 below (make sure the connector latch is oriented as shown). Then plug the other end of the cable (the longer of the two modular connector cable ends) into the FC88 handheld calibrator. Note that the 025859-01 cable has a dual purpose—the other (unused) short cable end with the modular plug is for connecting a Gen1 (ST50, ST51, ST75, ST75V) instrument to the FC88.

Figure 6