

Troubleshooting for models:

PS-M

Multisport scoreboard



PS-K

Karate scoreboard



PS-BJJ

Brazilian Jiu Jitsu scoreboard



PS-J

Judo scoreboard
Old version, sold
until the end of 2009



PS-J

Judo scoreboard
New version, sold as of
the beginning of 2010



PS-T

Tennis scoreboard



PS-W

Wrestling scoreboard



PS-KB

KickBoxing scoreboard



Index of possible problems:

- 1.0 The scoreboard stays completely switched off.
- 2.0 The LCD display of the console stays completely, or partially switched off.
- 3.0 A single segment of a LED digit does not light up.
- 4.0 The information displayed on the LED frontal is not correct.



WARNING: All operations on electronic boards, should be carried out by a qualified electronic technician.

NOTE 1: Disconnecting or reconnecting a connector must be done after the power supply cord has been disconnected, for at least 10 seconds.

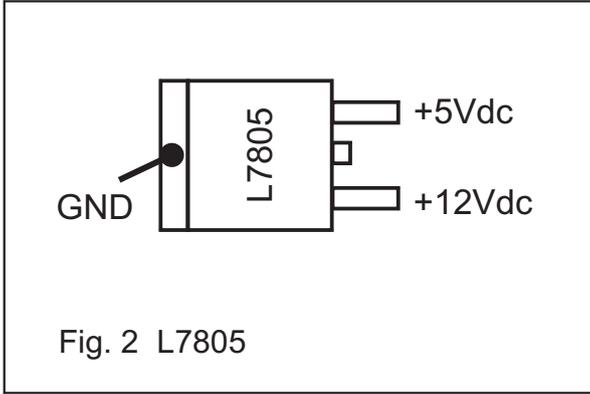
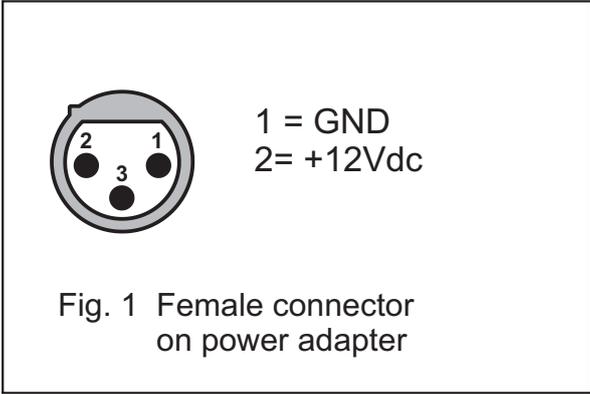


Fig.3

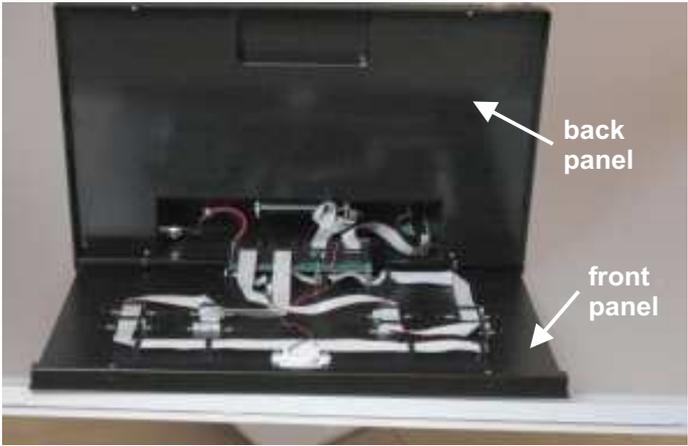


Fig.4

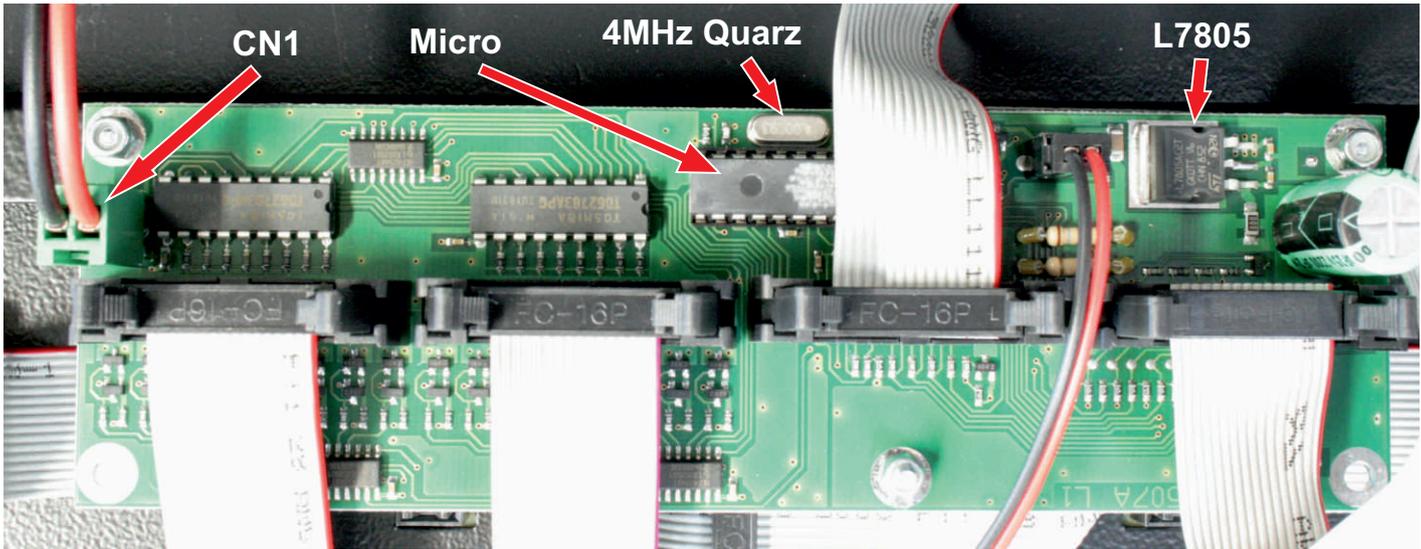


Fig.5 FAV.A507 - CPU Electronic board for PS-x

1.0 The scoreboard stays completely switched off

1.1 Press more times the ON/OFF key and observe both the console LCD display and the LED digits on the frontal. If the LED digits on the frontal work fine, and only the console LCD display does not turn on, then the fault depends on the LCD display; in this case, please see chapter 2.0. Otherwise, if also all LEDs of the frontal stay switched off, please see the following paragraph.

1.2 Make sure that the external power adapter, provides its output connector with a voltage of 12Vdc (see Fig.1 on pag.2). If the voltage is lower than +11 Vdc, the power adapter has to be replaced.

You should order the following article:

Art.168 - Power adapter 90-264V/12Vdc 1A, connector XLR

1.3 Open the scoreboard by unscrewing the 4 screws on the back (see Fig.3 and 4 on pag.2). Verify if there is a +12V power supply on the CN1 connector of the CPU (see Fig.5 on pag. 2). The red wire is positive. If there is not this voltage, in order to identify where occurs the power interruption, you should check the short path from the CN1 connector to the power supply input connector, fixed on the scoreboard case.

1.4 If on the CN1 connector there is a voltage of +12Vdc but nothing is displayed both on the LCD display and on the LED frontal, than the fault depends on the FAV.A507 (CPU) electronic board. For technicians who want to try to repair it, please see paragraph 1.5, otherwise to replace the electronic board order the article below:

Art.0430-1292 - FAV.A507 CPU electronic board for PS-x

You should specify the scoreboard of PS series that will use the electronic board, so that it could be provided with the specific software. If it concerns the article PS-J, clarify whether it is a new, or an old version (see pictures on pag.1).

Example: Art.0430-1292 - FAV.A507 CPU electronic board for PS-M

1.5. For technicians who want to try to repair the FAV.A507 electronic board, we suggest the following checks:

- A) On the L7805 component, verify the presence of +12Vdc and of +5Vdc (see Fig.5 and Fig.2 on pag.2). If there is not the +5Vdc voltage, try to replace the L7805 component.
- B) If there is the +5Vdc voltage, when there is no power supply, we suggest to:
 - 1) Extract and reinsert the MICRO (see Fig.5) from the socket, making sure that all pins are straights and not bents.
 - 2) Replace the 4MHz quartz.
- C) If the problem is still not solved, considering the low cost of the electronic board, we suggest to replace it (see paragraph 1.4).

2.0 The LCD display of the console stays completely, or partially switched off

2.1 If the scoreboard displays correctly the information on the LED frontal, but the LCD display of the console stays completely or partially off, this last one has to be replaced.

You should order the following article:

Art.0381-4100 - LCD Display for PS-x, 2x20 characters

The instructions for replacement are provided together with the LCD display.

3.0 A single segment of a LED digit does not light up

3.1 When a single segment of a LED digit does not light up, the cause is very likely because one of the 4 LEDs that makes up the segment, is failed. Since the LEDs are connected in a series, if one of them has a fault, this will interrupt the current in all the other LEDs.

For technicians who want to try to repair the LED electronic board, please see paragraph 3.2. To order a new LED electronic board, please see paragraph 7.2.

3.2 Often, the LED has no faults, but the problem is due only to a contact of one of the 4 LEDs of the segment, which has a defective soldering. If it is not possible to see the defective soldering, we suggest to review with a soldering iron all the 8 solderings (2 for each LED). The defective LED can be found out, also, by short circuiting its 2 contacts: in this case the other 3 LEDs of the series will turn on.

4.0 The information displayed on the LED frontal is not correct

4.1 If, on the LED frontal, there are several segments of LED which stay switched off or which are lighting up incorrectly, we suggest to make a test of all LEDs visualizations.

To test the LEDs, see chapter 8.

4.2 By the Rows Test, check if all LEDs of each letter (for example all LEDs identified by the letter "A") turn on correctly. If there are some wrong visualizations, that is, if LEDs with different letters light up at the same time, or if some LEDs of the selected letter stay switched off, you should verify if the solder jumpers have been carried out properly, on the LED boards with such troubles (see paragraph 7.3).

If the solder jumpers are in the correct position, please contact the supplier indicating:

1. The scoreboard model.
2. For each LED board which does not display the correct information, please indicate the number identifying the board, and the letters which do not light up properly, or which stay switched off even when they should turn on.

4.3 By the Columns Test, check if only one digit at a time turns on entirely. Also a light of 4 LEDs, identified by the letter H, can be turned on together with a digit. Different lights of 4 LEDs can be turned on too, but each light must have a different letter. If there are some wrong visualizations, that is if 2 digits light up at the same time, you should verify if the solder jumpers have been carried out properly, on these LED boards (see paragraph 7.3).

If the solder jumpers are in the correct position, please contact the supplier indicating:

1. The scoreboard model.
2. For each LED board that does not display the correct information, please indicate the number identifying the board and the letters which do not light properly or which stay switched off even when they should turn on.

4.4 By the Total lighting Test, check if all LEDs turn on. If some LEDs stay switched off, we suggest to open the scoreboard, by unscrewing the 4 screws on the back (see Fig.3 and Fig.4 on pag.2), and verifying that all the electronic board connectors are well inserted.

If the problem is not solved, for each group of 4 LEDs which does not turn on, see chapter 3.

7.0 Electronic LED boards models and their position

7.1 Article codes of the electronic LED boards

The different models of electronic LED boards on the PS scoreboards, are identified through the following articles:



Art.0430-1266
FAV.A504 electronic board, digit "1", RED LEDs



Art.0430-1262
FAV.A504 electronic board, digit "8", YELLOW LEDs



Art.0430-1260
FAV.A504 electronic board, digit "8", RED LEDs



Art.0430-1264
FAV.A504 electronic board, digit "8", GREEN LEDs



Art.0430-1300
FAV.A508 electronic board, 2-points, RED LEDs



Art.0430-1302
FAV.A508 electronic board, 2-points, YELLOW LEDs

7.2 Order of an electronic LED board

There are 2 ways to order an electronic LED board:

1. Specify only the article code, shown on paragraph 7.1.
In this case you need a soldering iron, in order to carry out the solder jumpers on the electronic board, as specified on paragraph 7.3.
2. Together with the article code shown on paragraph 7.1, specify also the model of scoreboard in which the electronic board will be installed and its position, defined by a number. In this way, the electronic board comes provided with the solder jumpers already carried out. To identify the number that defines the position of the electronic board:
 - Find the scoreboard model, among those shown in chapter 9.
 - Find the number indicated for the concerned electronic board.

For example concerning the PS-M model, to order the LED board which stays in the position of seconds units, you should specify:

art. 0430-1262/PS-M/20

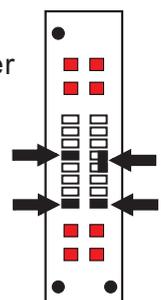
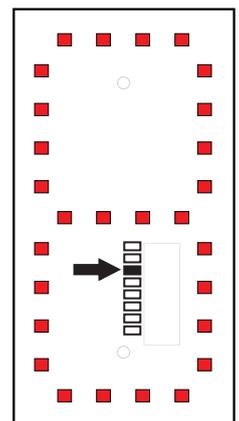
7.3 Electronic LED board position

The same model of electronic LED board can be used in different positions on the same scoreboard, but each position requires a different setting, realized through solder jumpers carried out with a soldering iron. For example the figure on the right shows the position of the solder jumpers on 2 models of electronic board.

The chapter 9 shows the electronic LED boards for all models of the PS series scoreboards.

Please look at the model you are interested in and note that the position of the solder jumpers has been indicated for each electronic board.

Moreover, each electronic board is identified by a number. If when ordering an electronic LED board both the scoreboard model and the identification number of the electronic board have been specified, the last one will be provided with the solder jumpers already carried out (see paragraph 7.2).



8.0 Test of LEDs visualizations

8.1 Preface to the Test of LEDs

Find the scoreboard model among those shown in Chapter 9. Please note that each group of 4 LEDs (segment of digit or light point) is identified by one of these letters: A, B, C, D, E, F, G, H.

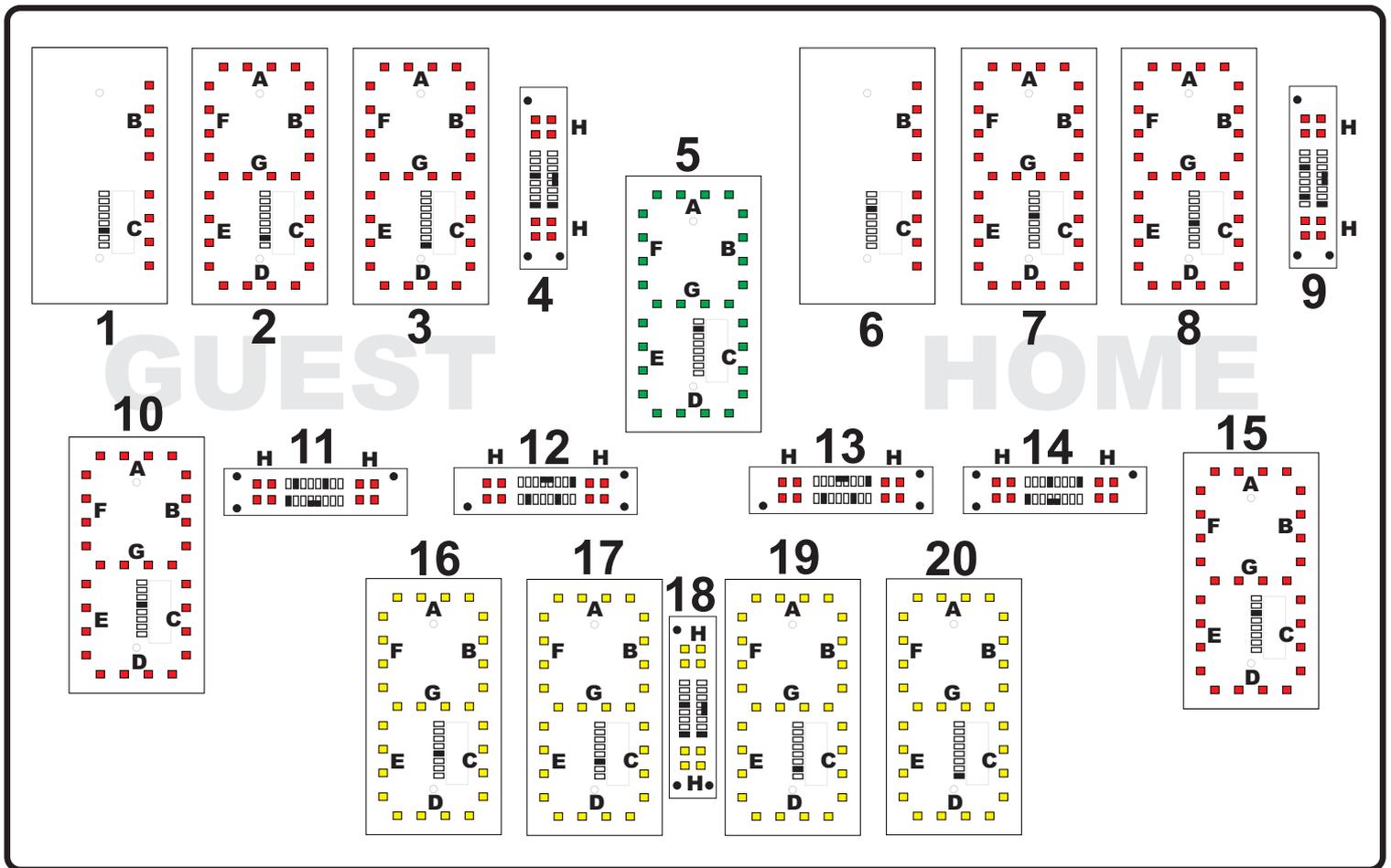
You can make 3 different types of tests:

1. Rows Test . Useful to turn on all the groups of LEDs identified by the same letter.
2. Columns Test. Useful to completely turn on a digit at a time.
3. Total lighting Test. Useful to verify the turning on of all LEDs.

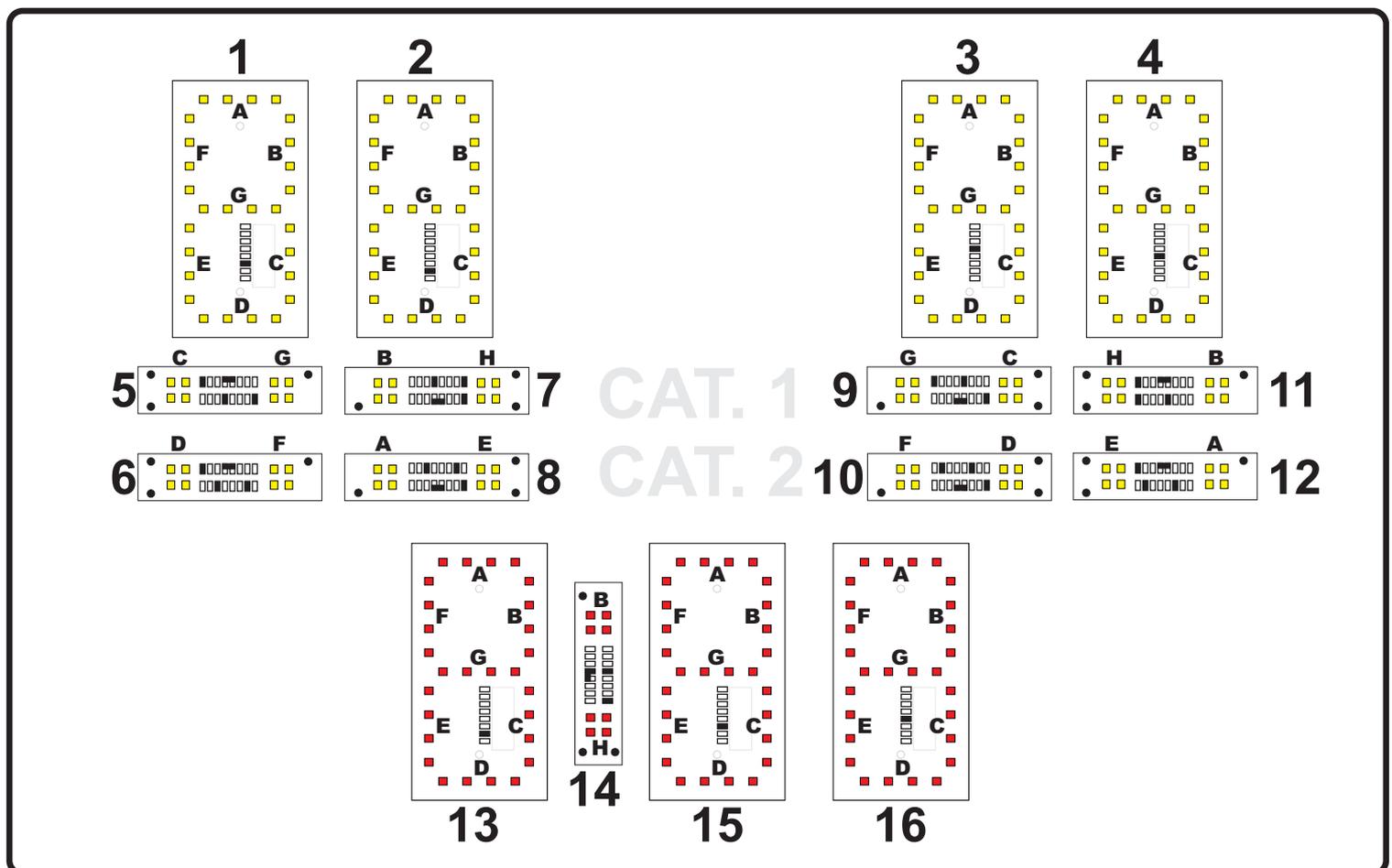
8.2 To access the function of LEDs test:

1. Turn on the scoreboard.
2. Press the [PROG IN-OUT] key continuously for 2 seconds. On the console display will appear the text: **Language, Lingua, Langue, etc.**
3. To enter the Rows Test press once the [NEXT] key. All groups of 4 LEDs identified by the letter "A" have to turn on. Then, by pressing the [+] key, the LEDs of letter "B" will turn on; by pressing continuously the [+] key, also the LEDs identified by letters C, D, E, F, G, H, will turn on. Use the [-] key, to return to the previous visualizations.
4. To enter the Columns Test press the [NEXT] key again. Use the [+] and [-] keys to turn on at a time the different digits. Together with a digit can be turned on also a light with the letter H.
5. To enter the total lighting test press the [NEXT] key again. ALL LEDs have to turn on. This test, useful for checking that there are no LEDs turned off, is not able to identify any troubles of wrong lightings.
6. Press the [NEXT] key again to end the test.

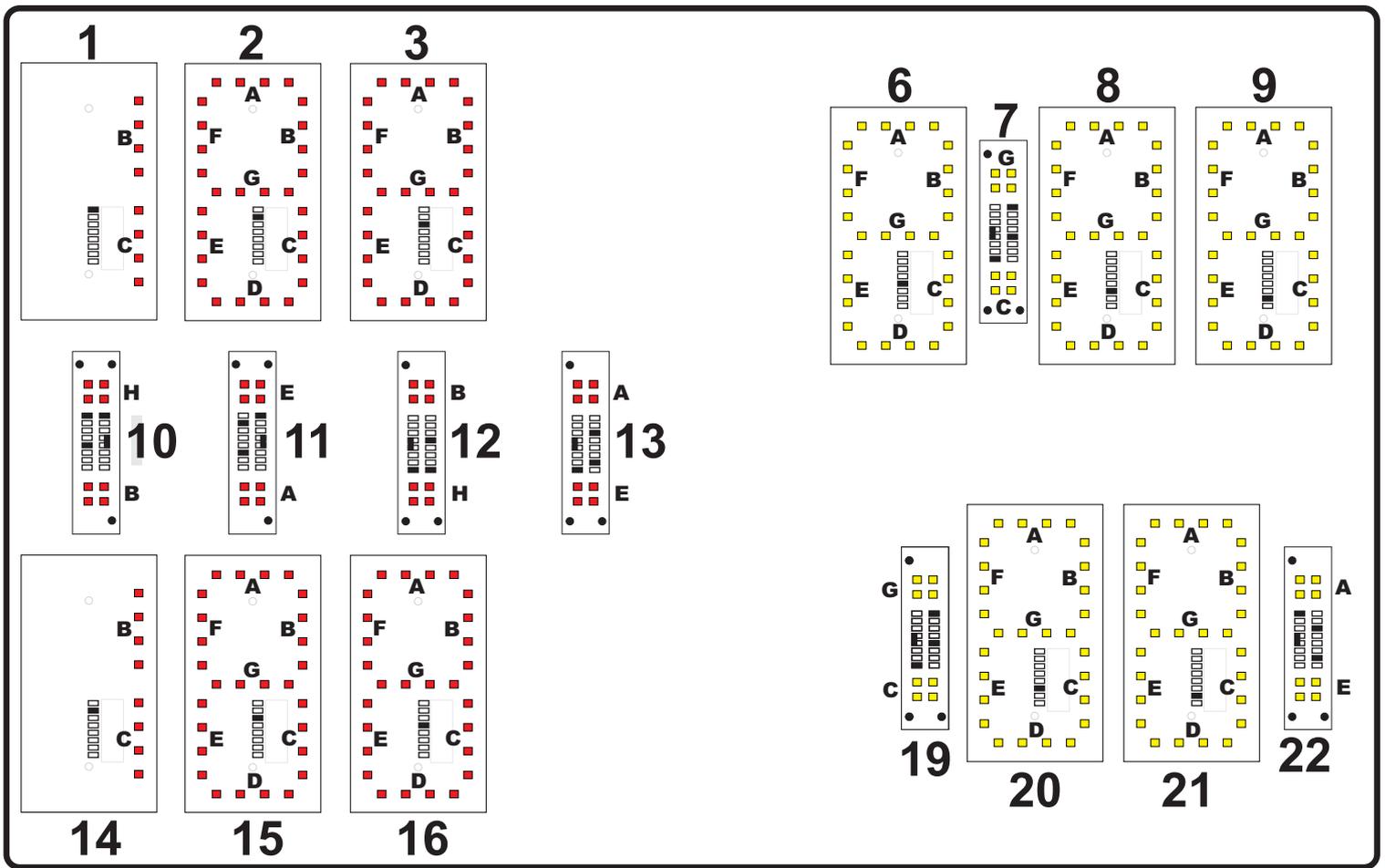
9.0 Position of electronic LED board for the different models of PS



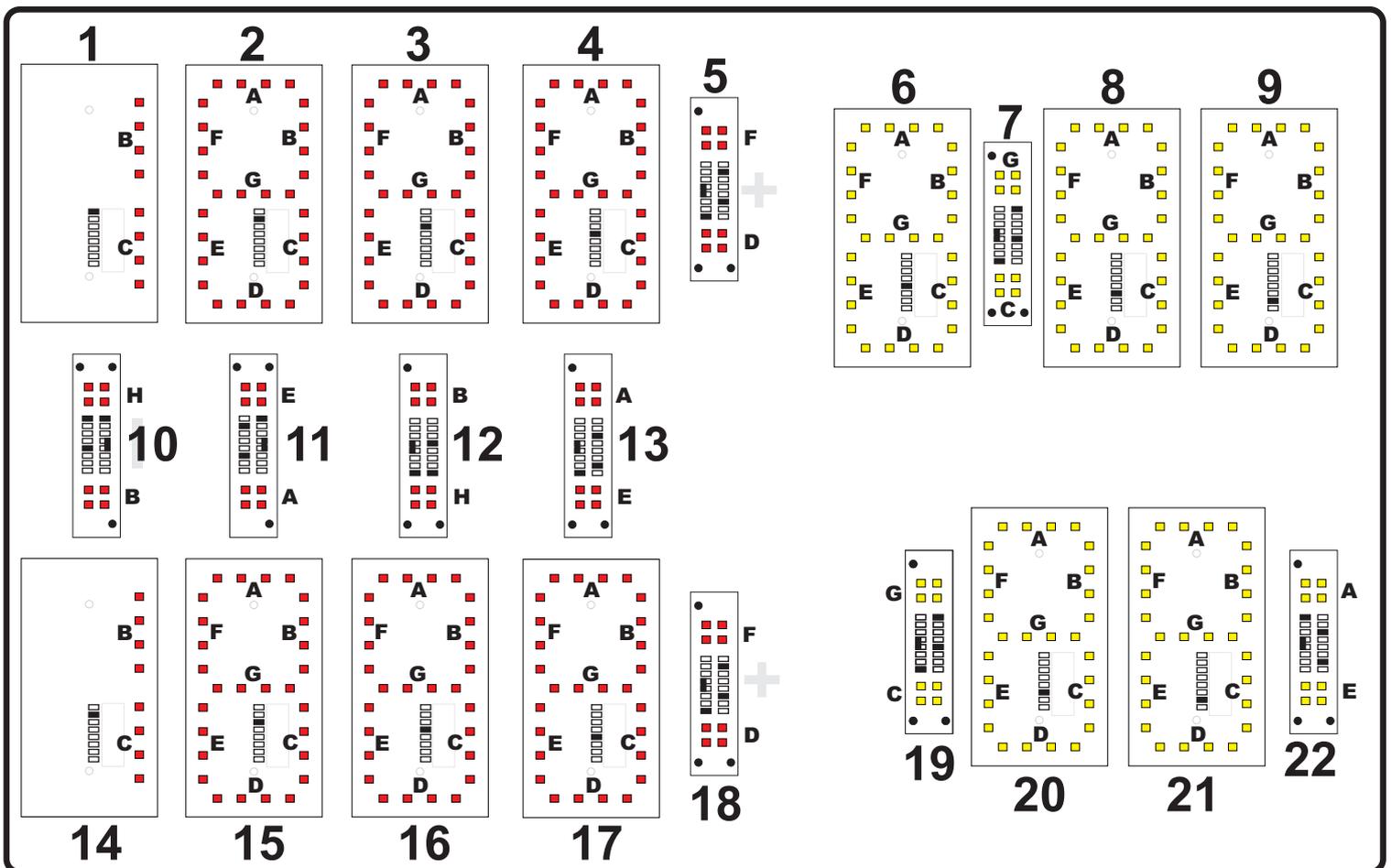
art.160 **PS-M** for **MultiSport**



art.162 **PS-K** for **Karate**



art.164 **PS-J** for **JUDO** -- New version, sold as of the beginning of 2010



art.164 **PS-J** for **JUDO** -- Old version, sold until the end of 2009

