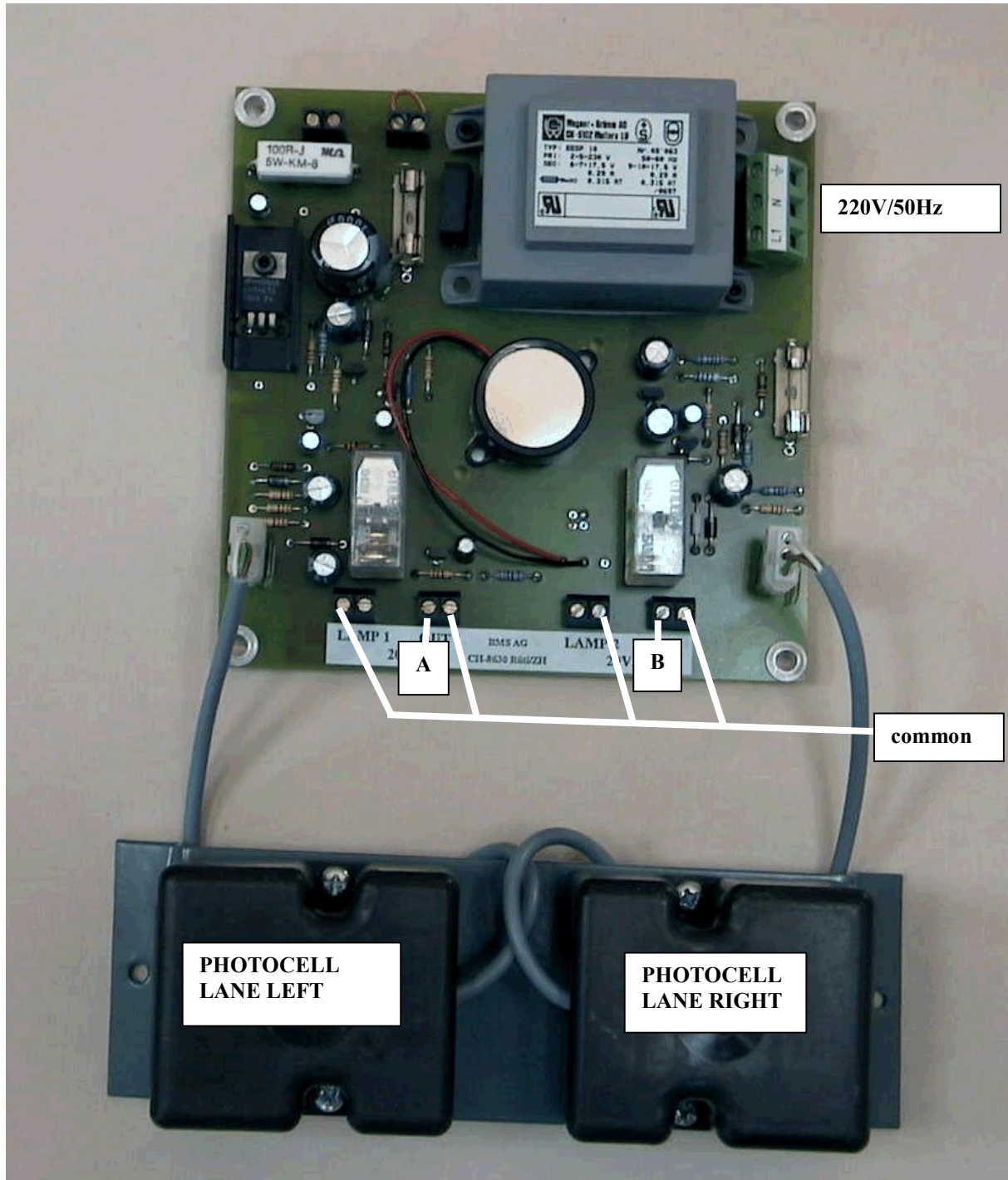


BMS FOUL DETECTOR SYSTEM

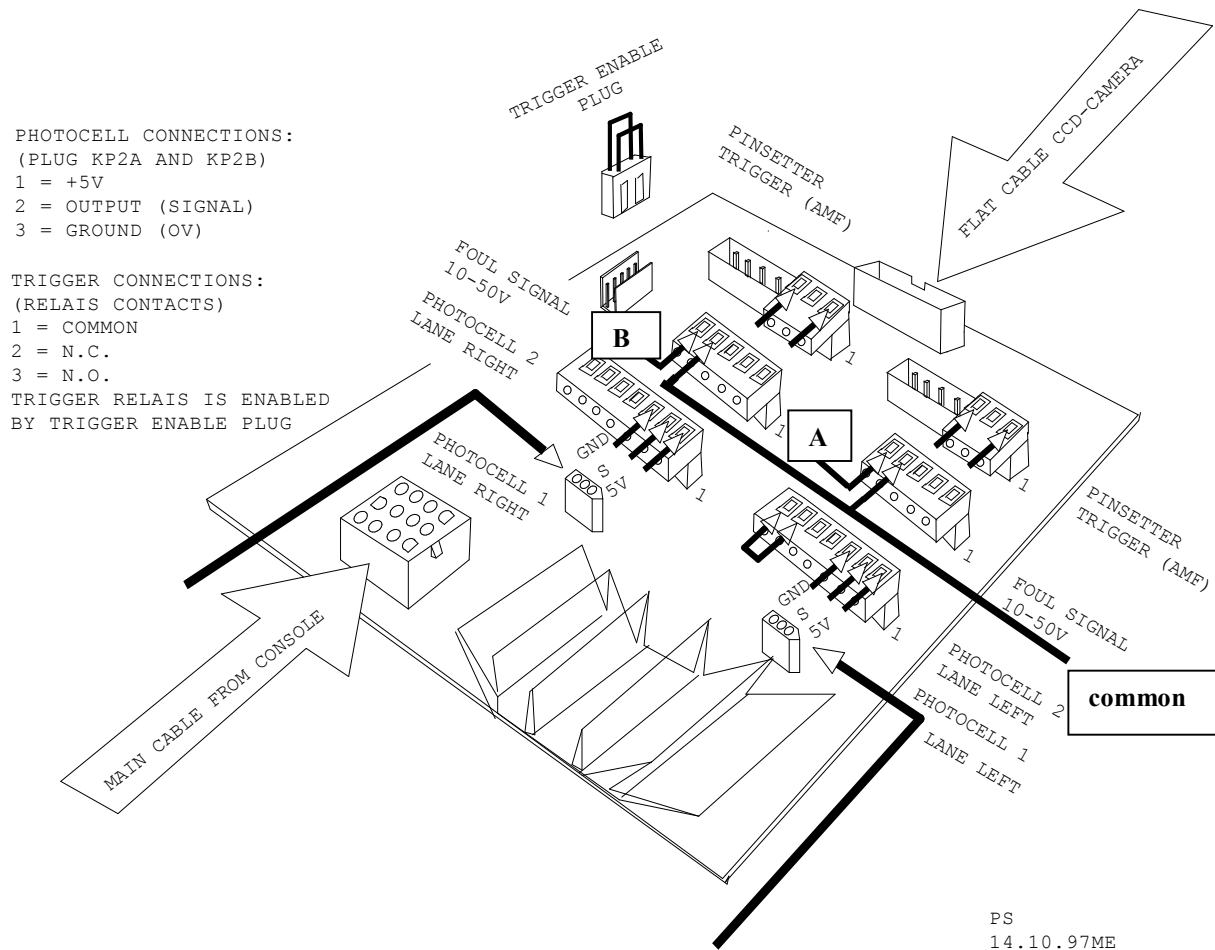
Instruction Manual



BMS Foul Detector Board with photocells (on a mounting bow)

- Install the board at the end of the double division capping and fix it with 4 screws
- Fix the photocells directly on the lane surface making sure that the FOUL LINE be in the middle of the two lenses.

- Connect the mains 220V/50Hz to the terminals
- Connect two signalling lamps 24V/5W to the lamp terminals (Option)
- Connect the outputs to the pinsetters. **Attention:** in case of AMF pinsetters check the COMMON wire. Connect common wire to common as indicated above otherwise a short circuit will result.
- Connect the outputs also to the Scoregraphic Power Supply or to the OPTIKA Interface. See figures below.

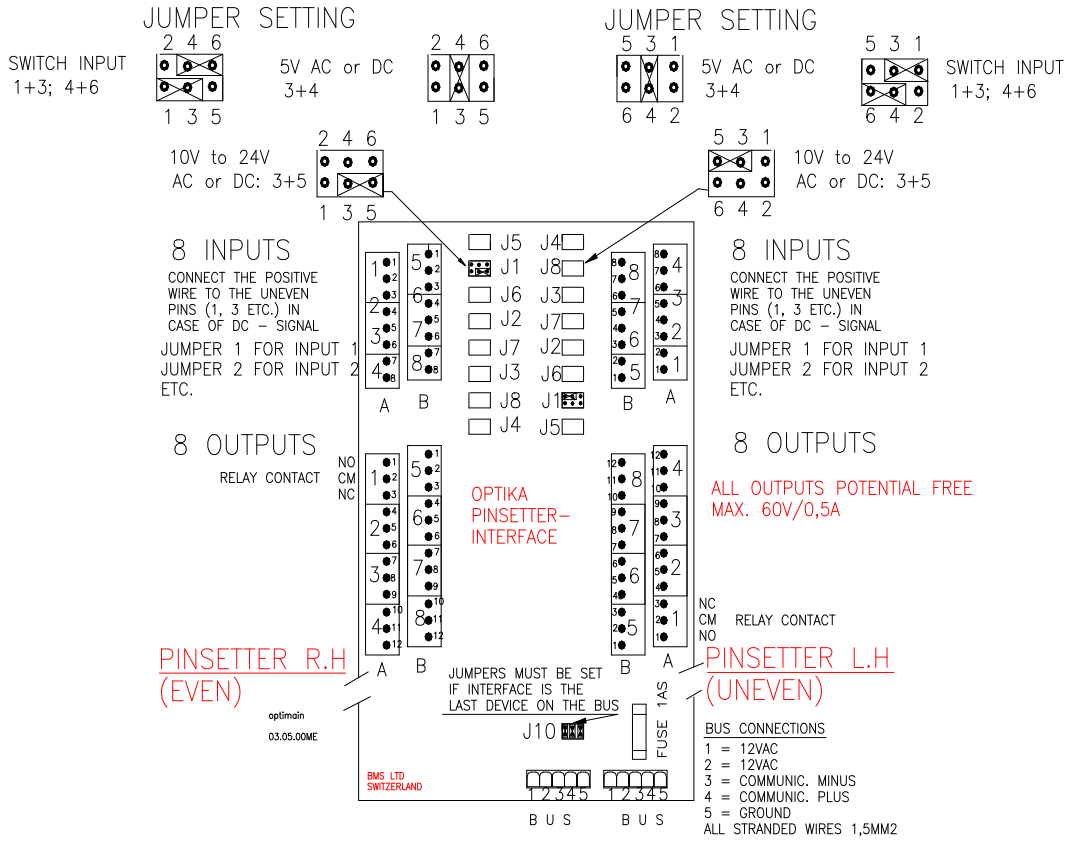


Power Supply Board (PS) of the Scoregraphic

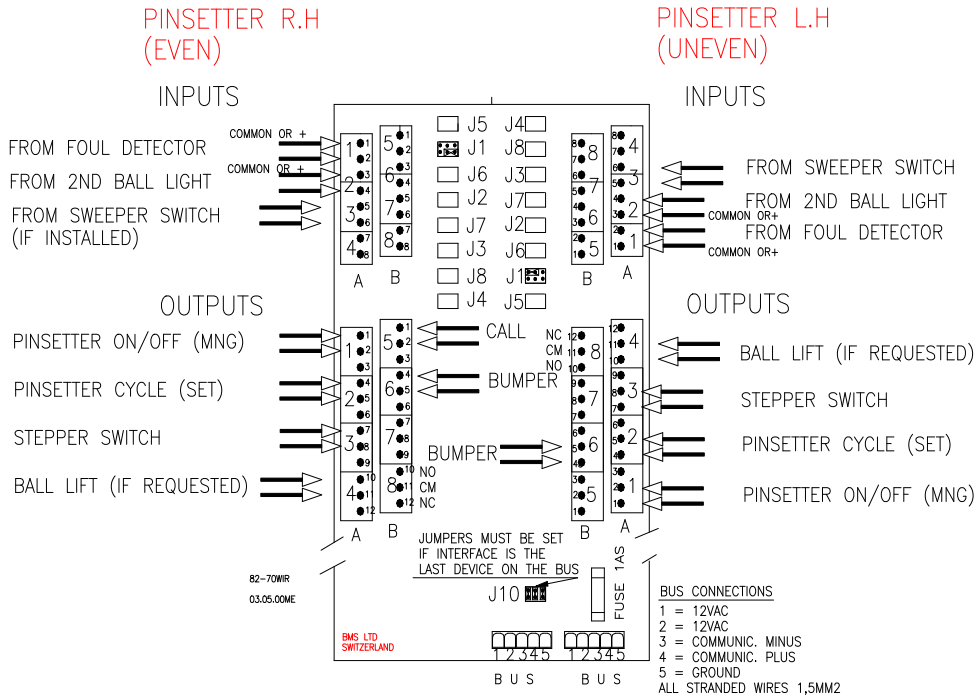
Note that the FOUL inputs of the Scoregraphic or of the Optika may be connected to the corresponding lamps on the masking units if such are available.

- Attach the reflectors to the single division cappings
- Install the double division cover over the Foul Detector
- Adjust the photocells

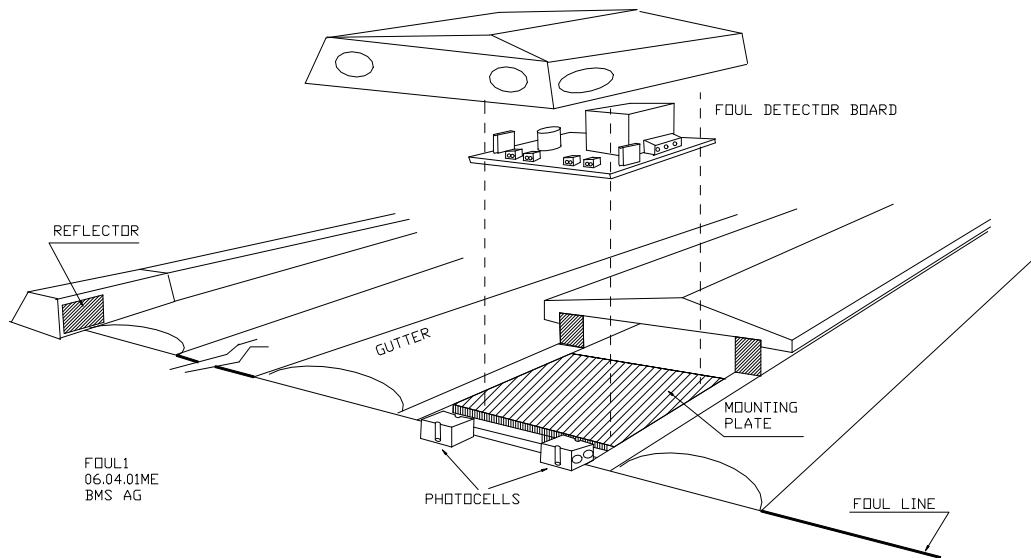
OPTIKA – UNIVERSAL PINSETTER INTERFACE



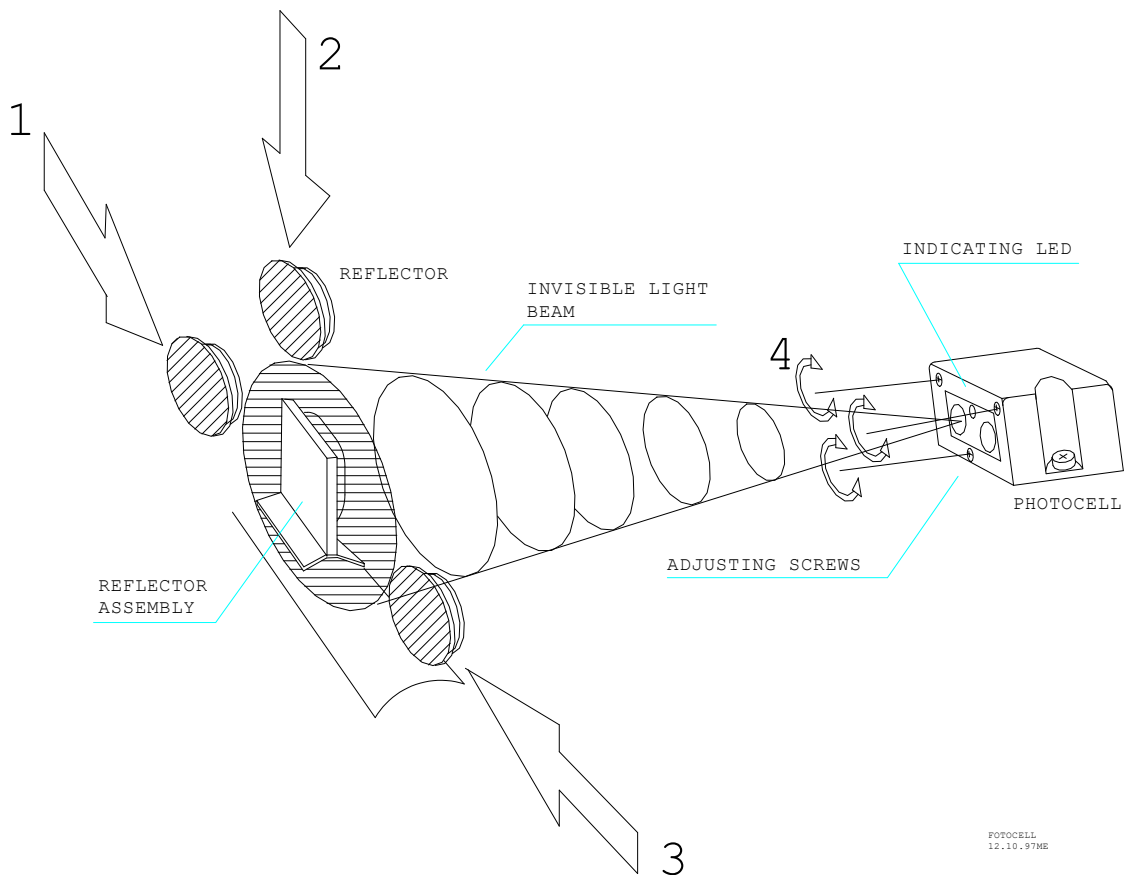
OPTIKA – UNIVERSAL PINSETTER INTERFACE



TYPICAL WIRING TO AMF 82-70 PINSETTER FOR SMART CONTROL



Adjusting the photocells



PHOTOCELL
12.10.97ME

The photocells are very important devices for the trouble free functioning of the system: it is therefore of paramount importance that their installation and adjustment be carried out very accurately.

Here a few hints:

- a) **Use a plumb line to achieve maximum allignement of the photocells and of their reflectors on more than one pair of lane.**
- b) **The top of the photocell and of the reflector should be at the same level: if not shift whatever more convenient.**
- c) **The invisible light beam emitted by the photocell is like a cone: the reflector should be in its middle.**
- d) **To check the adjustment proceed as follows (see figure above):**
 - **Cover the reflector assemby on the single division with a cloth**
 - **Take a reflector between the thumb and the forefinger and move it slowly toward the reflector assembly (1) until the indicating LED turns off. Notice the distance between the reflectors and repeat the operation from the top (2) and from the other side (3). Turn CW or CCW the adjusting screws (4) and repeat the above test until the adjustment is perfect. Note: do not turn all the screws in the same direction, but one e.g. CW and the other CCW! This assures a gap between the internal block and the external cover of the photocell.**

foul.doc
06.04.01ME