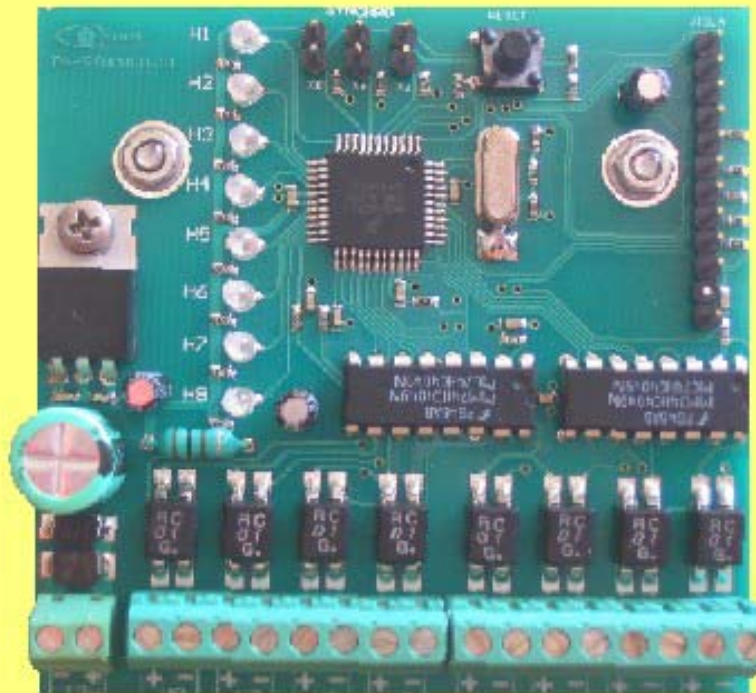
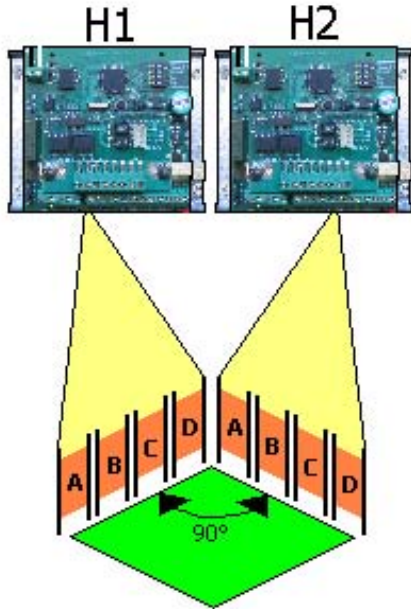


## Synchronizer for HUBs TC

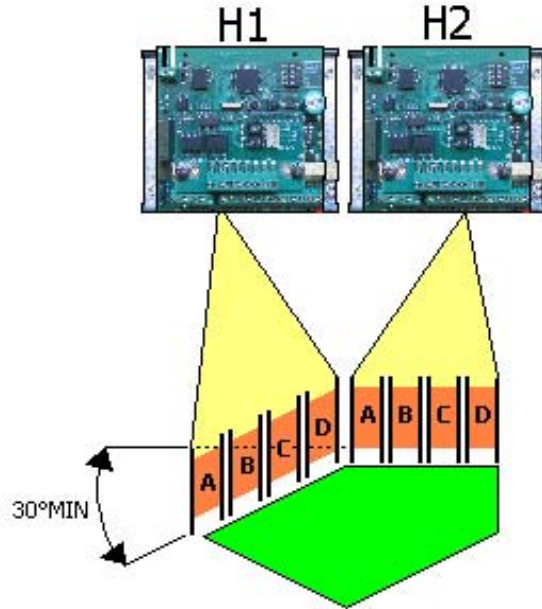


# WHEN TWO OR MORE HUBS CAN WORK WITHOUT ANY INTERFERENCE PROBLEMS?

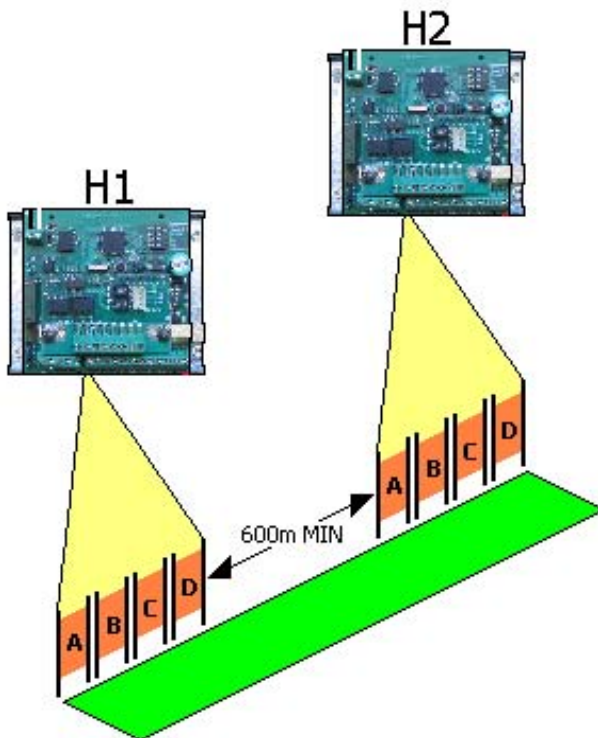
WHEN NONE OF THE BEAMS OF ANY COLUMN CONNECTED TO ONE HUB IS COUPLED DIRECTLY WITH ANY BAR OF A DIFFERENT HUB.



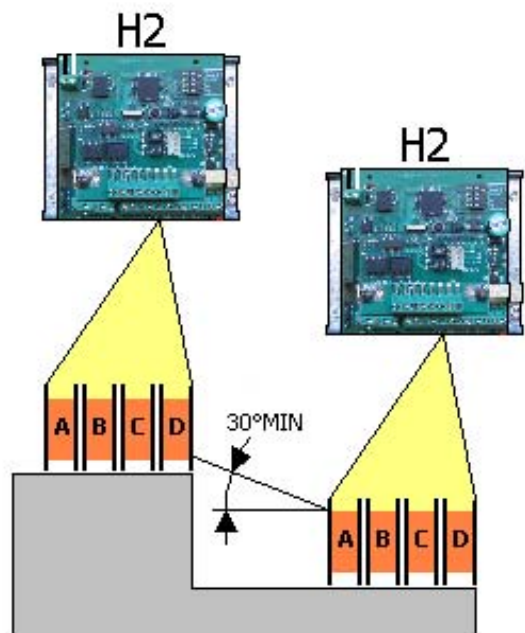
WITH RIGHT ANGLE



OR WITH ANGLE OF AT LEAST 30°



ON THE SAME LANE AT DISTANCE HIGHER THAN 600m

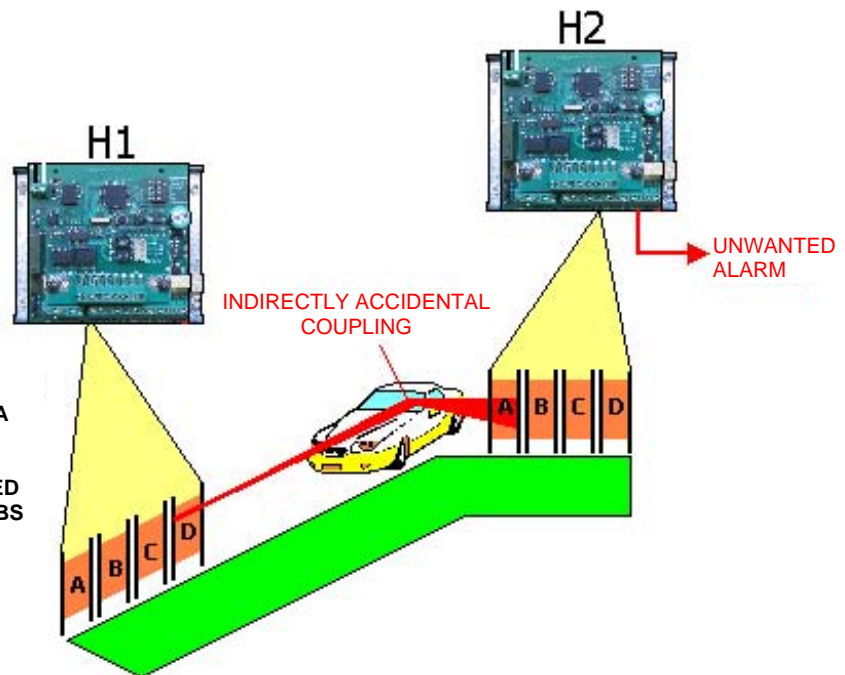


OR WITH VERTICAL ANGLE OF AT LEAST 30°

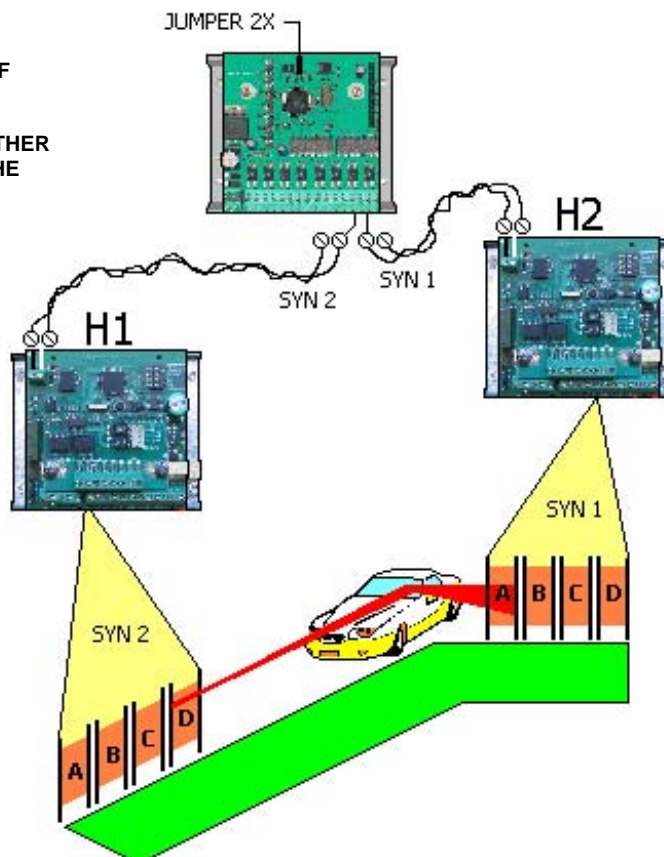
# WHEN IT IS NECESSARY TO SYNCHRONIZE TWO OR MORE HUBS?

WHEN AT LEAST ONE BEAM OF A COLUMN CONNECTED TO A HUB CAN BE COUPLED (EVEN INDIRECTLY) WITH A BAR OF A DIFFERENT HUB.

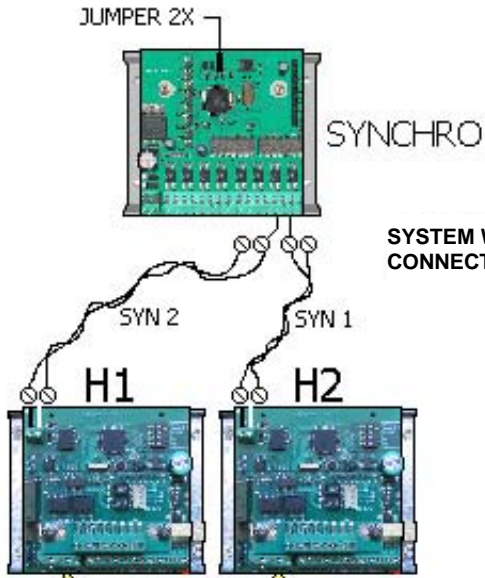
EXAMPLE WHERE THE SYNCHRO WOULD NOT BE NECESSARY, BUT A PROBABLE EXTERNAL EVENT (REFLECTION OF PARKED CAR WINDOW) COULD CAUSE UNWANTED ALARMS TO ONE OR BOTH THE HUBS



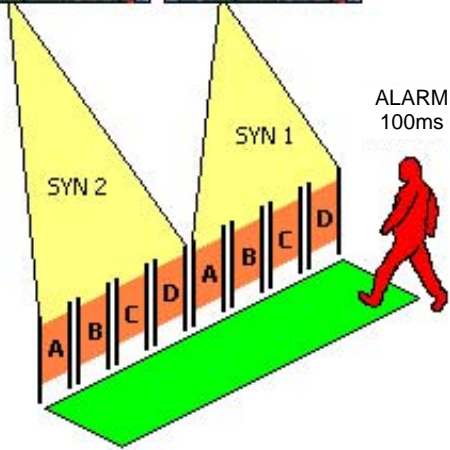
IT IS THEN NECESSARY THE USE OF THE SYNCHRO, THAT MAKES THE SYSTEM IMMUNE FROM INTERFERENCES CAUSED BY ANOTHER BARRIERS SYSTEM WORKING IN THE NEIGHBOURING AREA



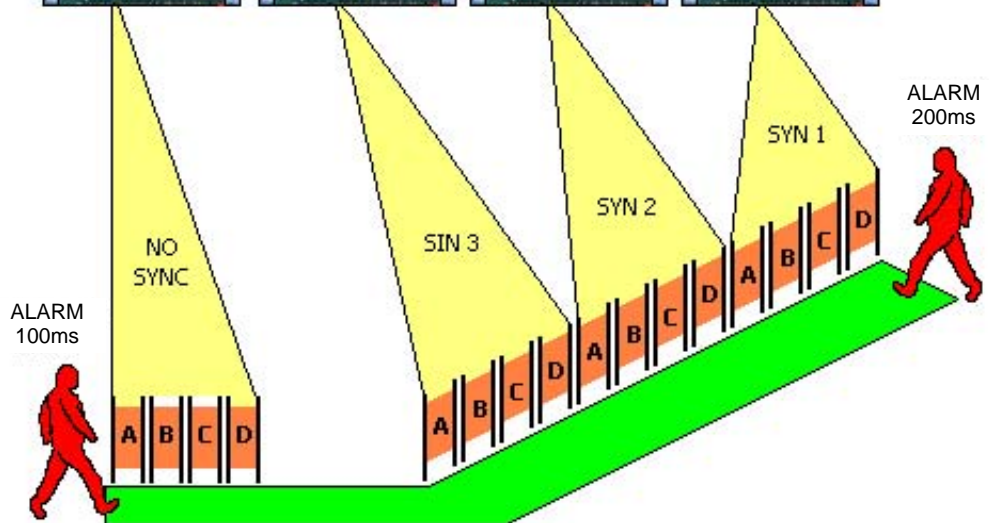
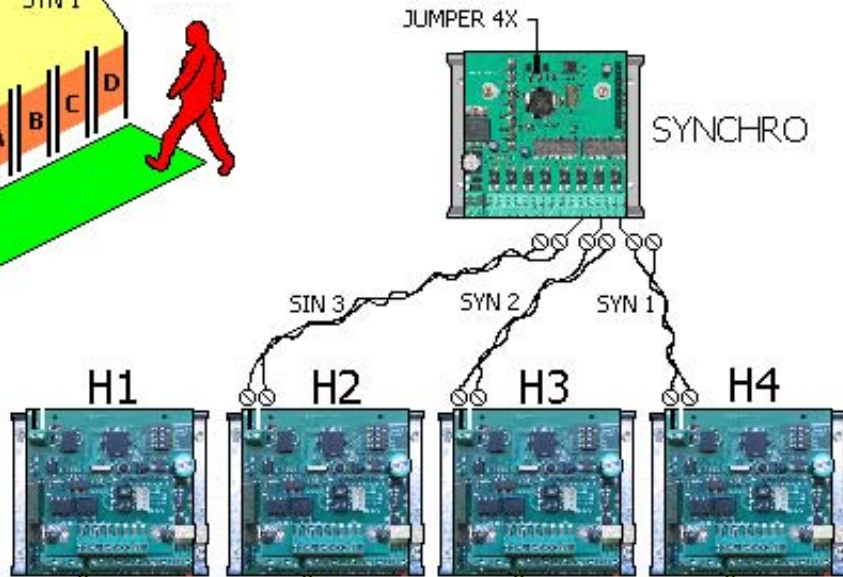
# INSTALLATION EXAMPLES



SYSTEM WITH 8 SETS ON SINGLE LINE  
CONNECTED TO TWO SYNCHRONIZED HUBS (2X)

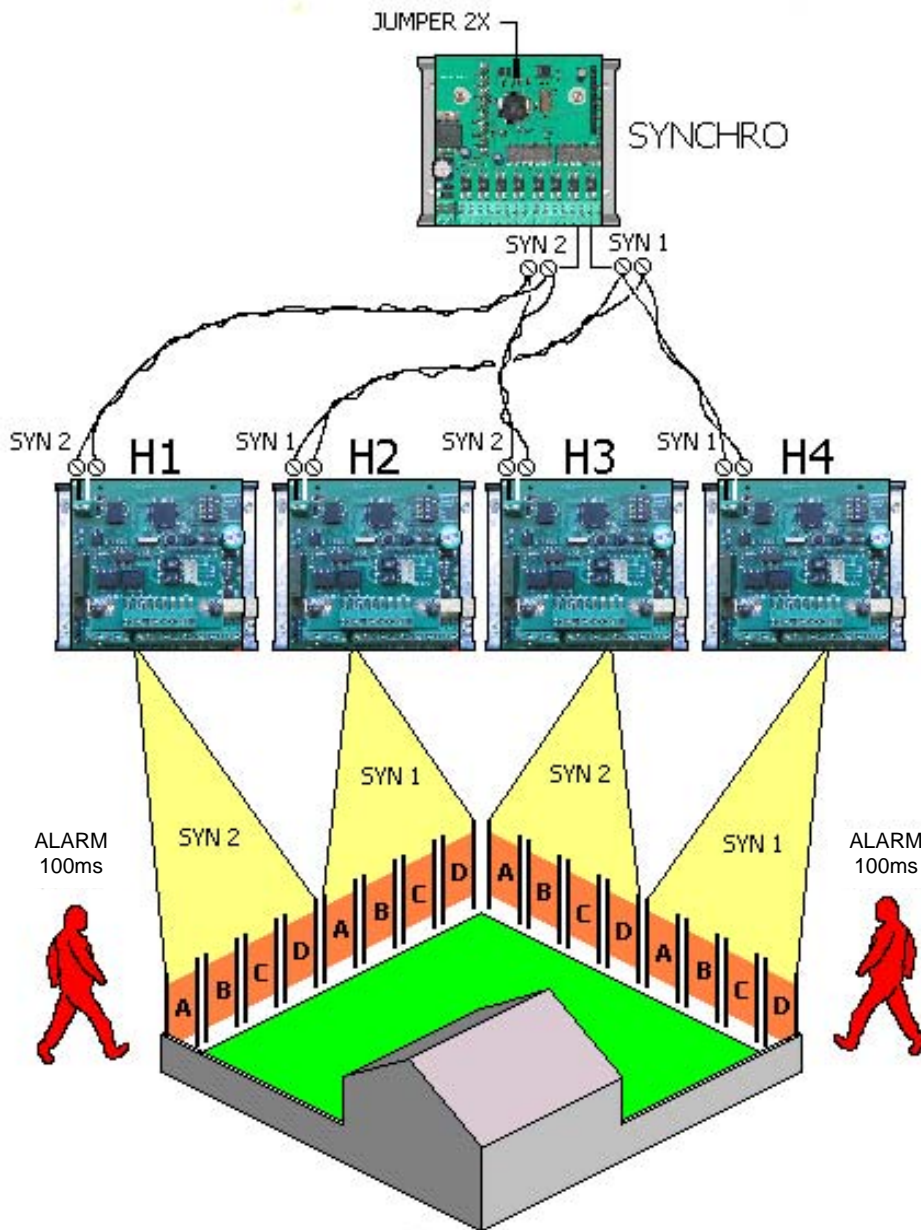


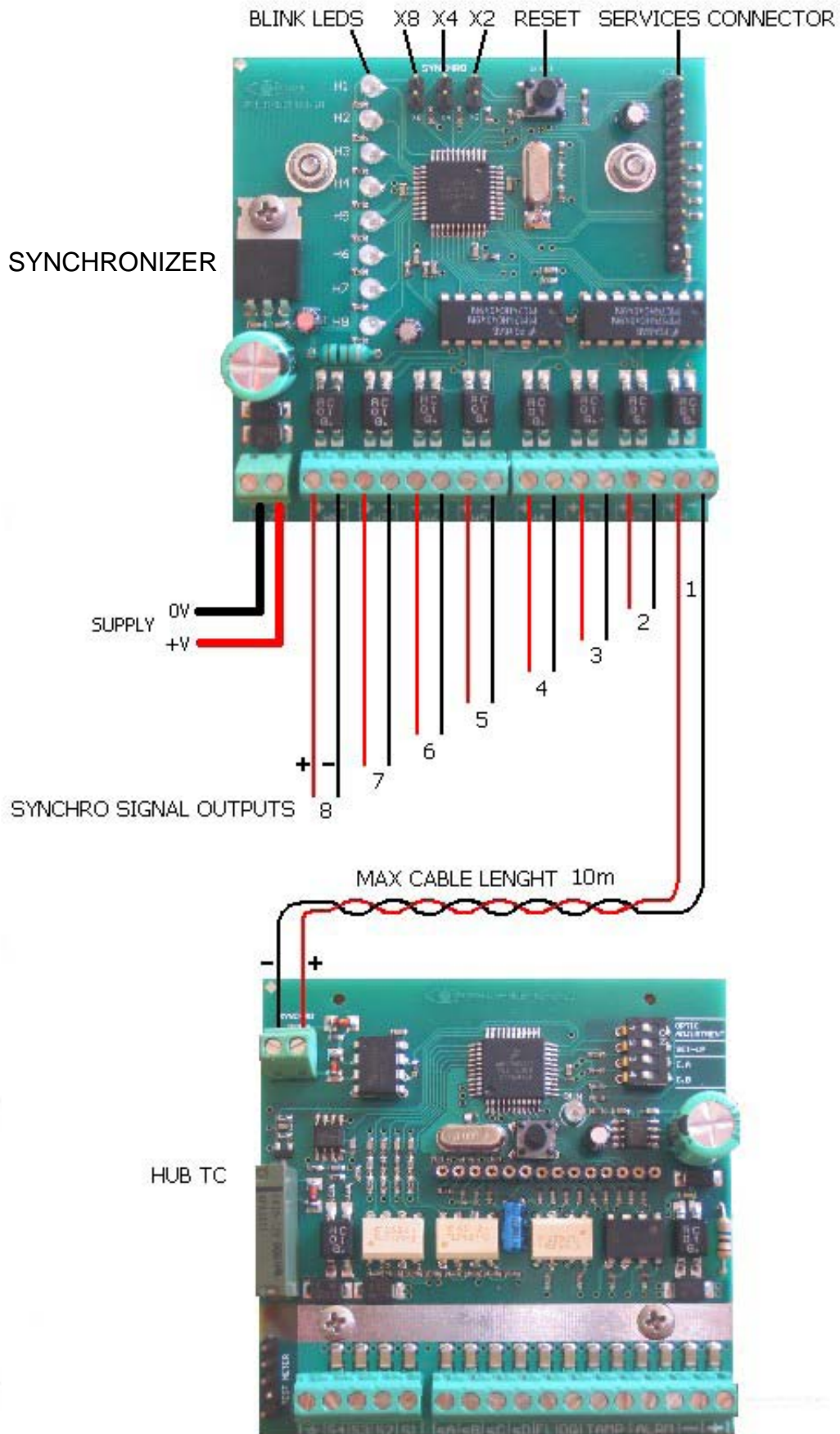
EXAMPLE OF A SYSTEM WITH 16 SETS:  
12 SETS ARE IN LINE AND SYNCHRONIZED (4X);  
4 SETS MOUNTED NOT IN LINE WITHOUT SYNCHRONIZER.



TYPICAL EXAMPLE OF INSTALLATION WITH 2 SIDES COMPOSED BY 8 SETS EACH. THE SIDES ARE PERPENDICULAR, SO THE SETS OF ONE SIDE DO NOT INTERFERE WITH THE OTHER SIDE AND IT IS SUFFICIENT TO SYNCHRONIZE ONLY THE SETS IN LINE WITH A SYNCHRO 2X.

AS YOU CAN SEE, THE OUTPUTS SYN1 AND SYN2 ARE CONNECTED TO TWO HUBS IN PARALLEL. THE SYNCHRONIZER IS DESIGNED TO DRIVE UP TO 5 HUBS FOR EVERY SYN OUTPUT (FOR A TOTAL OF 40 HUBS).





## SYNCHRONIZER FOR HUBTC

- POWER SUPPLY: 9-16Vdc 200mA MAX (40 HUB TC connected)
- OUTPUTS: N° 8 BRIDGED 0-5V / FAN OUT = 5
- JUMPER X2: ENABLES OUTPUTS SYNC1-2 LED BLINK 1-2 HUBS IN FULL SPEED – ALARM 100ms
- JUMPER X4: ENABLES OUTPUTS SYNC1-2-3-4 LED BLINK 1-2-3-4 HUBS IN HALF SPEED – ALARM 200ms
- JUMPER X8: ENABLES ALL OUTPUTS AND ALL LED BLINK HUBS IN LOW SPEED – ALARM 400ms
- RESET: BLOCKS ALL THE SYNC OUTPUTS AND THE CONNECTED HUBS
- SERVICE CONN.: PROGRAMMING CONNECTOR
- SIGNALLING: N° 8 BLINK LED
- CONNECTIONS: SYNC CABLE LENGTH MAX = 10m

**DIMENSIONS [mm]**  
HOLES DISTANCE

