



# Troubleshooting Manual JX2300

Before any action,

- Please check if the connections are made correctly according to the Wiring Manual
- measure mains voltage,
- check if the sector is present on each box,
- check the quality of the ground connections,
- Check that there is no crosstalk between power cables and clock cables (14 -> 4, 15 -> 5 and for REILS 16 -> 6)

Never forget that 2000V is produced

Don't hesitate to order our special pulse viewer that can help detect a missing signal

How do you describe the observed anomaly?

## **REILS**

The REILS flashes 4 times then stops

When the slave REILS (R2) lamp stops, the master REILS (R1) lamp continues to flash

Both REILS (R1 and R2) do not flash together

## **SFLS**

Nothing is happening

A slave doesn't flash, but the others are OK

REILS does not flash

The current loop control system displays errors while the lamps flash

## Failure in REILS

### **The RTIL flashes 4 times then stops**

This situation occurs when there is no clock exchange between both cabinets.

Ask the tower to switch on the RTIL.

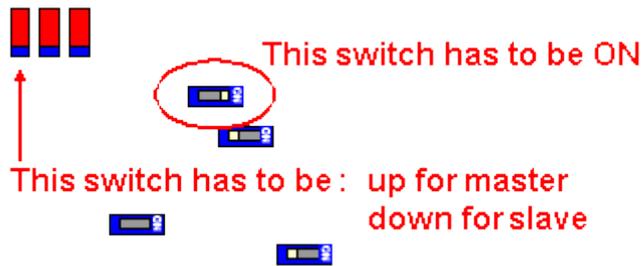
Notice which lamp flashes and which one doesn't

1. If both lamps flash 4 times before stopping, make a trial with test lamps.  
If success try to find which original lamp is faulty and change the trigger transformer inside the light head  
Use the red push button to test the lamp.
2. If the R2 only flashes 4 times, check the connection 16 (from R1) to 6 (from R2)
3. If the R1 only flashes 4 times, do as §1 on R2 light head.
4. If everything is OK, open the cabinets and verify whether they are configured as mentioned in [User manual](#) on page 9

Insure yourself that the micro switches are completely actionned and not in an intermediate position.

### **When the Slave RTIL lamp break down, the master continues flashing**

This situation occurs when the configuration switches are not correct  
please verify them as mentioned in [User manual](#) on page 9



Insure yourself that the micro switches are completely actionned and not in an intermediate position.

### **The master and slave RTIL do not flash together**

The two sets are configured in master so they flash under their own rythm. This situation occurs when the configuration switches are not correct please verify them as mentioned in [User manual](#) on page 9

Insure yourself that the micro switches are completely actionned and not in an intermediate position.

## Failure in SFLS

### **Nothing lights up**

When the tower turns on the system, there is no flash.

- Check if the main is properly connected. measure mains voltage on (240 V AC typ.) and off (OV)
- Check that the lamp safety switches are closed.
- Check that safety switches on enclosure connections are closed.
- Press the red test button. If the lamp does not flash, change the trigger transformer in the headlamp. If the lamp still does not light, change the lamp itself.
- Check that the first cabinet is configured as SFLS master (see User Manual page 7).
- Swap the master box with another one previously configured as a master.

If these tests are not conclusive, contact your dealer.

## **One slave does not flash but the others are OK**

When the tower swithes on, no flash occurs on one of the slaves.

- Verify whether mains is correctly connected. Measure the mains value on "switch on" (240 V AC typ.) and "switch off" states (OV)
- Verify whether the lamp safety switch of the light head is open or not. Close it.
- Verify whether the lamp safety switches on the output connectors is open or not. Close them.
- Push the red test button on the set. If the lamp does not flash, change the trigger transformer in the light head. If the this change does not solve, change the lamp by itself.
- Verify whether the set is configured as slave SFLS (see [User manual](#) on page 7). If not, correct it.
- Change the set by another one.

If these trials have not solved the problem, please call your reseller.

## **The runway threshold RTIL does not flash**

When the tower swithes on, the RTIL does not flash.

Do not forget that when a RTIL is turned on safety mode, it has to be reset by a "switch off / switch on" of the mains

- Verify whether mains is correctly connected. Measure the mains value on "switch on" (240 V AC typ.) and "switch off" states (OV)
- Verify whether the lamp safety switch of the light head is open or not. Close it.
- Verify whether the lamp safety switches on the output connectors is open or not. Close them.
- Push the red test button on the set. If the lamp does not flash, change the trigger transformer in the light head. If the this change does not solve, change the lamp by itself.
- Verify whether the set is configured as SFLS last REILS master and SFLS last REILS slave (see [User manual](#) on page 8). If not, correct it.
- Verify that the connections between the slave previous the master REILS and the master REILS are correct, especially 14 (previous slave) to 4 ( master REILS) (see [Connections manual](#) on page 4).
- Verify that the connections between master and slave are correct, especially 16 (master) to 6 (slave) (see [Connections manual](#) on page 5).
- Change the set by another one.

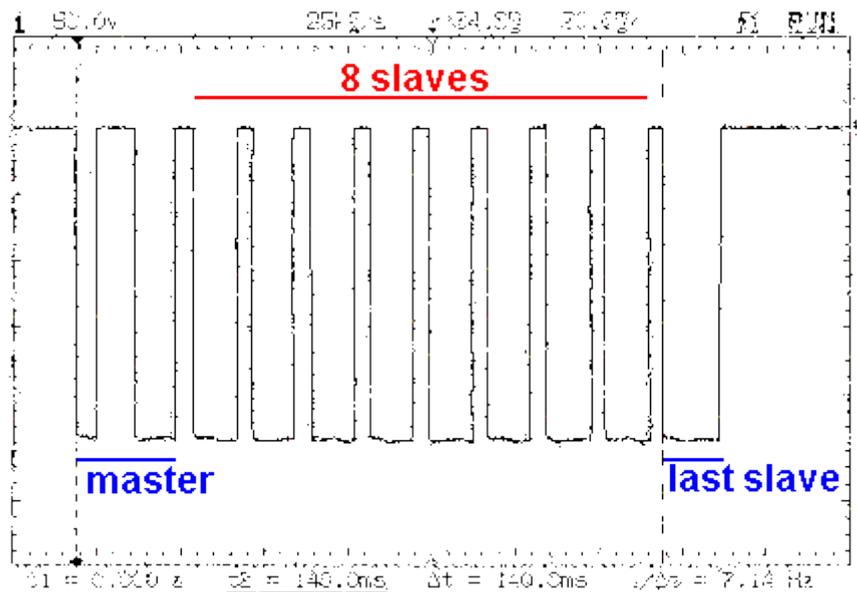
If these trials have not solved the problem, please call your reseller.

## **Errors are displaid on the current loop CMS, and the flashes are OK**

The current loop CMS lets flow a 13mA (approx) current through all the sets.

Each set open the current loop each time a flash occurs.

- Verify whether the current value is correctly adjusted (back panel potmeter on the CMS)
- Connect an oscilloscope on the CMS (back panel connectors on the CMS) and visualise such a curve :



This curve shows a normal current loop for a SFLS of 10 flashes.  
(This quantity has been chosen to simplify the picture)

First, the master set create a 5ms pulse to reset the flash counter of the CMS.

Then the master Flashes and create a 10ms pulse to inform of the flash success.

Then the eight slaves do the same pulse to inform each flash success.

Finally, the last slave (as configured according to [User manual](#) on page 8) create a 15ms pulse to inform each flash success.



When a flash problem occurs on the SFLS (ie. the set nbr 4 on the picture) the relevant pulse is not generated, allowing the CMS to display the fault

Unfortunately, a bad configuration of the switches can generate bad curves, even when the Flashes are not faulty by themselves.



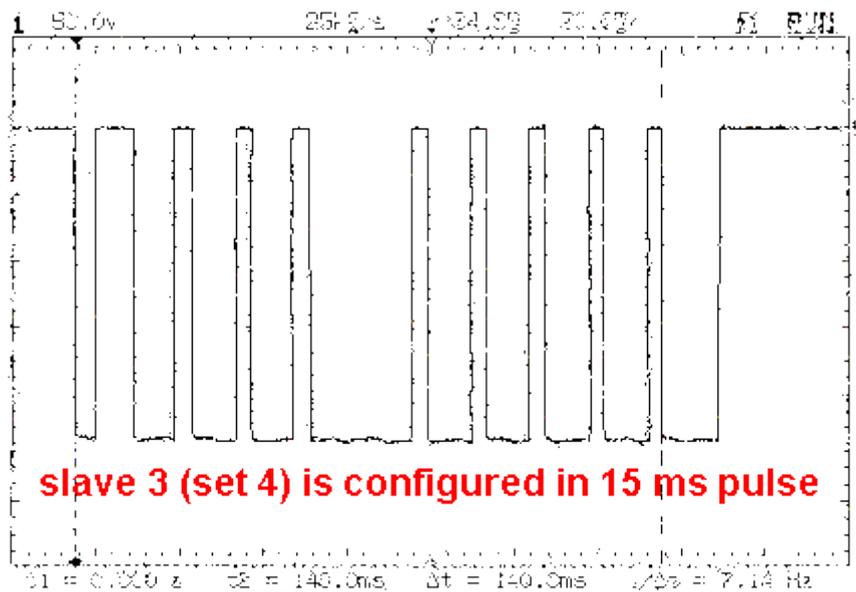
This curve shows only 9 pulses on a current loop for a SFLS of 10 flashes !  
 The problem is that one of the slaves has not a 14 ms delay but has 0 ms delay (see [User](#))

[manual](#) on pages 7 to 9)



Practically, two sets of the SFLS flashes simultaneously, and the CMS count a lack of one pulse, so it indicates the last one faulty.

Nevertheless, verify each slave configuration because each of them



In this case, the set nbr 4 is configured as a last slave instead of a "normal" slave. (see [User manual](#) on page 7)



This makes it generates a pulse of 15ms duration (normally indicating a last slave set) which mask the 4ms inter pulse delay (14 ms - 10 ms = 4 ms)

This can be seen only on a 14 ms delay SFLS.

if these trials have not solved the problem, please call your reseller.

