

Operation Manual vers.1.0

Hints & Tips for CF35

Connect the all of CF35 one line. Hungaroflash recommend to use the complex cable for all connection – POWER connections and DMX signal connections – but you can use your POWER cable next to your DMX cable. Please do not make any "Y" connection from or to the SCREW-TERMINALS. CF35 has INPUT and OUTPUT screw-terminals on the mainboard.

Connect your DMX controller DMX OUT to the first unit INPUT screw-terminal. This input screw-terminal has only 2 pole for the DMX cable not 3 pole. The shield is missing here. So please connect signal + and signal – to its places.

The OUTPUTs has screw-terminal for the shield of cable. So please connect the 3 pole cable to the screw-terminal at the OUTPUT then on the next device INPUT just connect the SIGNAL + and SIGNAL – only and no shield connected at the INPUT.

Important!

All CF35 has AUTOMATIC DMX ADDRESS SYSTEM. After you connected all CF35 DMX connections and all POWER connections you are ready to a SWITCH ON. Important on this time the DMX controller MUST BE SWITCHED OFF!!! Then you can POWER ON the CF35s power connections only. DMX is not live yet.

- 1 - After power on all CF35 indicating with RED led the power is ON. If there is a CF35 RED led not lighting, this device is not connected to the POWER line.
- 2 – Then please switch ON the controller to let it issue the DMX SIGNAL. Your CF35s will addressing automatically. The first unit will got the CH1, the second will got CH2,..... and so on .
- 3 – then you see the RED leds turn off, indicating the addressing procedure were successful. After any LED is going to light again this will means the DMX signal is not connected on this device('s)
- 4 – if POWER line has break during the AUT.ADDRESSing, you must start again because its not going to be successful at al. Even if you would like to POWER them to 3 phase the CF35s, and one phase is missing at short time during aut.addressing, the all of address procedure need to start from the beginning.
- 5 – now you are ready to work with them. Please be informed CF35 has one channel, the frequency depend the refresh rate of the incoming DMX signal, and the value of channel preset the intensity of the next flash.

The CF35 has Stand By (no light no flashing) and seven levels of flash energy (BRIGHTNESS) what is determined by the value of the DMX and the time between two flash.

The Cart of DMX, flash energy versus the capacitor charging time (at 230VAC/50Hz mains, at 60Hz the charging time is shorter, multiply the value by 0.83):

ONE CHANEL OPERATION (HF PROTOCOL for old types)

| Levels | DMX value | Flash Energy | Seconds between two Flash | FLASH Frequency maximum | Minimum recommended Time between two FLASHes | Max.rec. Freq. |
|--------|-----------|--------------|---------------------------|-------------------------|----------------------------------------------|----------------|
| 7 | 201-255 | 35 Wsec | 3 | 0,33 Hz | 1,00 sec. (22W sec) | 1 Hz |
| 6 | 151-200 | 30 Wsec | 2,6 | 0,39 Hz | 0,86 sec. (19 Wsec) | 1,2 Hz |
| 5 | 126-150 | 25 Wsec | 2,1 | 0,47 Hz | 0,71 sec. (16 Wsec) | 1,4 Hz |
| 4 | 101-125 | 20 Wsec | 1,7 | 0,58 Hz | 0,57 sec. (13 Wsec) | 1,8 Hz |
| 3 | 76-100 | 15 Wsec | 1,3 | 0,78 Hz | 0,43 sec. (10 Wsec) | 2,3 Hz |
| 2 | 51-75 | 10 Wsec | 0,9 | 1,17 Hz | 0,29 sec. (6,4Wsec) | 3,5 Hz |
| 1 | 26-50 | 5 Wsec | 0,4 | 2,33 Hz | 0,14 sec. (3,2Wsec) | 7 Hz |
| 0 | 0-25 | Stand By | No Flash | | | |

This is looks like difficult; but good to know:

- if you increase the level of DMX, the flash energy not will increase, if the charging time is too short between two flash (at same fixture, of course)
- for impressive lightshow need lots of fixture, with rarely, but very quick running flash program
- for higher frequency flash need to use small DMX level
- if you set high DMX level with high repeat rate (=high freq.) the result is small misflash, and shortened the lifetime of flashtube

TWO CHANEL OPERATION IS TOTALLY SAME AS ABOVE. CH1 IS FREQUENCY FROM DMX THEN CH2 IS INTENSITY. BUT THIS INTENSITY IS CAN BE OVERDRIVED BY MICROCONTROLLER. ITS A KIND OF PROTECTION. BUT PHISICALLY THE FLASHING MECHANISM IS THE SAME BASE AS ABOVE.

Important!

Danger!

For replace the flashtube or open the plastic box after the mains off need to wait minimum 20! minutes for discharging the capacitor.

Elektricity perfectionist can to discharge the capacitors with 47R/5W resistor on the two side legs of flashtube (it will flash maybe).