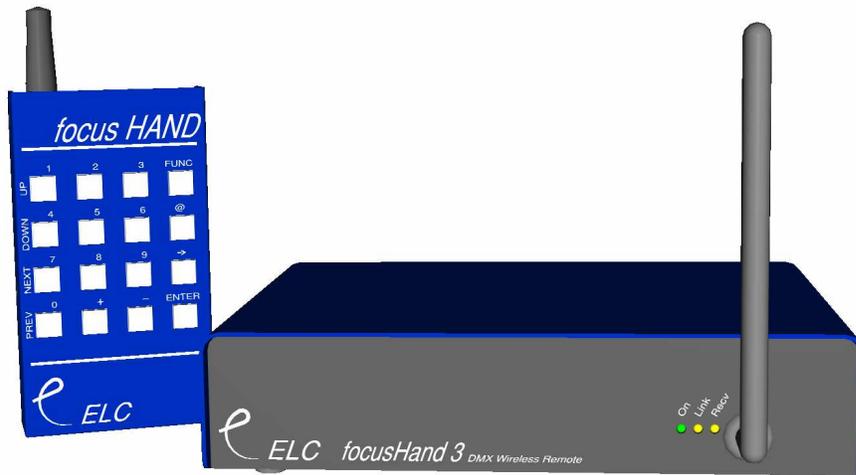


focus HAND 3

512 channel wireless DMX riggers remote

Users Manual

Software version: 1.0



ELC

FocusHAND 3

System description

focusHAND 3 is a wireless remote control unit with a DMX output, to be used for controlling lighting fixtures while focussing them.

This means that the 'normal' operation with one person behind the lighting desk, an intercom and one person at the rig is replaced by one person at the lamp position only.

The handheld unit uses a small number of easy to operate keys for 'dialing in' the number of the dimmer channel, the level etc. These commands are sent via an UHF radio link to the receiver unit, which translates them into the proper DMX values.

The receiver unit has to be connected between the lighting consoles DMX output and the dimmers DMX input, where it will take over the control of the DMX line. This can be activated with the remote unit, so the receiver can be permanently connected.

Not only one spot at a time can be controlled, but also groups and level can be adjusted from off to 100%. Even groups and memories can be stores and recalled.

This means focusHAND 3 is a versatile controller for the lighting operator to perform his job quick and easy, without being tied to wires.

This product may only be used for controlling dimmers and moving lights. Using the product out of these specifications will remove all responsibility from the supplier

Getting Started

The focus HAND system consists of 2 parts, the remote control transmitter and the main unit.

The remote unit:

The remote has 16 keys and 1 slide switch. The slide switch is for power on. However the power consumption is minimal, so battery life is not really shortened, because only depressing a key activates the unit. The switch is mainly used as a safety against unwanted key presses when the unit is in the pocket.

Battery replacement

Because of the often rough circumstances in which the unit can be used, the battery compartment is closed with normal M3 screws instead of clips. To replace the battery, remove the two screws at the bottom, replace it with a fresh one and close the lid with the same (M3x4mm) screws. Be sure not to throw the old battery in the normal dustbin, but remove it adequately. Using alkaline batteries is recommended.

Keypad layout

1 Up	2	3	Func
4 Down	5	6	@
7 Next	8	9	→ group
0 Prev	+ memory	- store	Enter

Key illumination

The keys on the transmitter are illuminated. While a key is pressed the unit is transmitting, indicated by bright illumination of the keys. When releasing the key the illumination stays on for a period of time. The time(out) can be programmed on the remote unit following these steps:

- 1) switch off the remote unit (slide switch on top)
- 2) press and hold FUNC, @, → or ENTER
- 3) switch on the remote unit (slide switch)
- 4) wait until keys are blinking (± 5 sec)
- 5) release the key

The time is now programmed to:

Key	Time
FUNC	5 seconds
@	12 seconds
→	25 seconds
ENTER	never turn off

focus HAND 3 main unit:

Connections:

The main unit has 2 DMX connections and a fixed mains lead. The mains input voltage can range from 90Vac to 240Vac. The DMX connections on the back are for DMX input and output on 5 pin XLR.

DMX connection :

<i>Pin</i>	<i>Description</i>
1	Ground/Screen
2	Data -
3	Data +
4	loop thru to other XLR5 pin 4
5	loop thru to other XLR5 pin 5

For best results the antenna has to be oriented as far away as possible from metal parts, including the housing.

LED indications:

The LED's on the front indicate Power On, Active and Receive

<i>LED</i>	<i>Meaning</i>
On	Power is on and the internal processor is working
Active	DMX control is taken over from the lighting desk
Receive	A valid signal is received from the remote

Operation:

Activation (with HTP merge):

Type in the code [+] [+] [ENTER]

This action activates the receiver unit, taking over the DMX control. The DMX output will be an Highest take Precedence merge of the DMX input and the channels generated by the remote.

Activation (without HTP merge):

Type in the code [+] [+] [0] [ENTER]

This action activates the receiver unit, taking over the DMX control. Merge function is disabled, the DMX output is only generated by the remote.

Deactivation:

Type in the code [-] [-] [ENTER]

This action deactivates the receiver unit switching back the DMX control to the lighting desk.

Single dimmer at full:

Type in [1..512] [ENTER]

ex:

[1] [ENTER]

Single dimmer at percentage:

Type in [1..512] [@] [0..9]

The level will be set in 10% steps

ex:

[2] [@] [5]

→ dimmer 2 at 50%

Adjusting the level:

Type in: [@] [4]

→ selected dimmers at 40%

Group of dimmers:

It's possible to select multiple dimmers at one time. This can be a range, using [THRU], or separate dimmers using [+] and [-].

ex:

[1] [THRU] [6] [ENTER]

→ dimmer 1 to 6 selected

[3] [+] [6] [+] [1] [0] [ENTER]

→ dimmer 3,6,10 selected

[1] [THRU] [6] [+] [1] [0] [ENTER]

→ dimmer 1 to 6 and 10 selected

[1] [THRU] [6] [-] [5] [ENTER]

→ dimmer 1 to 4 and 6 selected

Adding dimmers:

To add dimmers to a selection use the [+].

ex:

[+] [4] [ENTER]

→ adds dimmer 4 to previously selected dimmers

[+] [6] [THRU] [10]

→ adds dimmers 6 to 10

Removing dimmers:

Using [-] removes dimmers from the selection.

ex:

[-] [3] [ENTER]

→ removes dimmer 3 from selection

[-] [3] [THRU] [8]

→ removes dimmers 3 to 8

Clear Stage (remove all):

To clear the selection press:

[0] [ENTER]

Stepping thru dimmers:

Press [FUNC], then you can use [NEXT], [PREV], [UP] and [DOWN] for stepping thru the dimmer channels and adjusting the total level. When finished press [ENTER].

Toggle between presets:

Press [ENTER] for switching between the current and previous setting.

Using groups

The focus hand can store up to 50 selection groups.

Recording a group

First select any number of channels in the normal way.

Next press:

[Func] [- / Store] [→ / group] number of the group [Enter]

Recalling a Group

To recall a group press for example:

[→ / Group] [1] [Enter]

→ Group 1 at Full

[→ / Group] [2] [+] [1] [→] [6] [@] [5]

→ Group 2 and channels 1 thru 6 at 50%

Using memories

The focus HAND3 has 51 memories on board.

Recording a memory

Create the scene as normal.

Next press:

[Func] [- / Store] number of the memory [Enter]

Recalling a memory

Press:

[Func] [+ / memory] number of the memory [Enter]

Using Startup memory

If memory 0 is programmed then the unit will automatically activate in merge mode at power on. Memory 0 can be programmed with channels at certain levels or with all channels at 0%. To erase memory 0, store memory 0 with all 512 channels at FULL (best to disconnect the DMX output before setting all channels at FULL).

Using multiple remotes at the same location

To use multiple remotes in the same location, without interfering, you'll need to make change some settings in both remote and base unit. 3 possible settings are possible called: '0' (factory default) '+', and '-'.

Changing the base unit's encoding

(this may only be done by qualified personnel, because you'll need to open the cabinet)

- Unplug the main power supply
- Open the cabinet (6 screws)
- Find the location of the settings, it is a jumper array marked by 0 + - (at the front)
- Set the jumper to the correct setting
- Close the cabinet

Changing the remote's encoding

(this can be done at any time, even to use 1 remote for up to 3 locations)

- Switch off the remote (slide switch)
- Press and hold the '0' '+', or '-' key
- Switch on the remote (slide switch)
- Wait for a few seconds (keeping the key pressed) until the leds start flashing.

Troubleshooting

If for some reason you can't get any connection between the HF remote and the base unit. Please first check the batteries of the remote. If they are ok then the remote might have accidentally been set to a different encoding. Follow the procedure described above.

General Information

CE – Product

The Focus Hand System permits to the CE requirements set-up by the European Community. This can be recognized by this label on the outside of the product.



FCC NOTES (914,5MHz US version):

NOTE:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communication. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

NOTE:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

In order to maintain compliance with FCC regulation shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio & television reception.

CAUTION:

Changes or modifications not expressly approved by ELC lighting and Leprecon LLC may void the users authority to operate this equipment.

R&TTE regulations (433,92MHz EU version):

The HF modules used are designed and manufactured by Radiometrix (UK) and approved to ETS 300-220-1.

The transmitter is approved according R&TTE guideline 1999/5/EC and carries the declaration CE0889!

The unit is approved for use in the following countries in Europe:
A,B,DK,FIN,F, D,EL,IRL,I,L,NL,P,E,S,UK,IS,NO,CH

Technical Specifications:

Focus HAND Remote control transmitter:

Output: EU: UHF 433.92 MHz, 10mw maximum
US: UHF 914,5 MHz, 1mW maximum
Antenna: Helical, fixed
Working range: 75 meter indoor, 200 meter in free field
Power: 9 Volt 6F22 battery
Keys: 16 keys
Size / Weight: 115 x 65 x 20 mm (excl. antenna) 280 gram

Focus HAND2 Main unit:

Output: DMX 512 (1990) on 5 pin female XLR
Input: DMX 512 (1990) on 5 pin male XLR
Signalization: 3 Leds
Power: 90Vac to 240Vac 10VA max
Dimensions 200 x 44 x 150 mm
Weight 1,4 kg

