KUDUX®
STAGE TECHNOLOGY

Moving Head

Hot Mix 15R



User manual

CE

! Please read the manual before installing and using this lighting
Keep it for future reference

Thank you for purchasing our device.
We make every effort to ensure the best quality of our products and to meet your expectations.

If you have any remarks or comments, please share them with us.

We will be grateful for any suggestions that will help us make products that are even better and devices that satisfy your needs.

R&D Team

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Statement

The product is good packing when ship out the factory. All users should strictly abide by the warnings and instructions stated in this manual, any damage and results due to misuse and the neglect of this operating manual will be excluded from the deal responsibility this manual will not informed in additionally if have technical changes.

Product description

Thank you for choosing this HOT MIX 15R products, this model is the moving head light which is the latest development of the smart, efficient products, beautiful shape, smooth R & D, combined with the advanced technology of today's stage lighting products with international advanced electronic control technology and excellent user-friendly industrial design, fully comply with CE standard, accepted international standard DMX512 signal mode.

This Moving head lights are widely used in television, disco, dance halls, nightclubs, performances and other professional venues

1. Safety information

Safety warning:
This product is only suitable for professional use, and does not apply to security for other purposes. After you got the lights, please check the package whether have any damage caused by transportation. If there is any damage, do not use this fixture, and please contact the dealer or manufacturer as soon as possible. This product is only suitable for indoor, IP20 protection class. Lamps should be kept dry to avoid Moisture, overheating or dusty environment. Prevent lamps come into contact with water or any other liquid. The use of this product should pay attention to: fire, heat, electric shock, ultraviolet radiation, the lamp to explode or shedding caused serious or fatal injury. Need to read the instructions before use energized or installing. Follow through the operation of security methods and pay attention to the warning signs on the specification and equipment. If you have any problem for how to safely operate the equipment. Please contact your dealer.

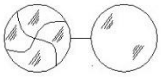
1.1. Anti-high temperature



ta =40°C

Please don’t use the equipment if the temperature above 40℃

1.2. Burst prevention



The lens should be changed if had damaged or any problems.
Don’t change the non-original manufacturer lens. Len size: ∅119mm×23mm

1.3. To prevent falling wounding

Please don’t move the package by one person only. 

When Hang the fixture, please must verify that the facilities to be able to withstand the weight of the lamps at least 10 times more.
Please make sure the Mounting hardware is strong enough no any damage, and insurance for the safety rope as auxiliary security fixed in other facilities will need to verify before installation. Installing or removing the equipment, to make the pulley below the work location

1.4. UV protection and the bulb explosion

Prohibit straight viewpoint with exposed bulbs to avoid UV damage to the eyes;
Do not use the equipment without the lens screen and the lid;
The lens and the light head covers should be timely replaced if any damage to rupture
The Fixture should be used with the protection screen together.

1.5. Prevention of electric shock



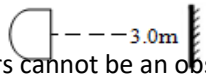
The electrical connection must only be carried out with corresponding qualifications;
Before installing, make sure you use the power voltage lamps must comply with the identified power, voltage and have an overload or leakage protection;
Each lamp must be properly grounded, installed in accordance with the relevant standards
Cut off the power when stall or replace the lamp and the fuse
Prohibit the use of a lightning storm or wet environment.

1.6. To prevent burning or fire





- The fixture can be mounted directly on the surface of ordinary combustible material.
- Do not short-circuit temperature protection switch or fuse, use the specified type of fuse.
- The equipment must be installed away from inflammable and explosive materials.
- The equipment should be projected range of 3 meters away objects and projectiles temperature less than 60 ° C;



- Fan or ventilation, at least in the range of 0.5 meters cannot be an obstacle.
- Do not place any object on the lens.
- Handling at least allow the device to cool for 20 minutes.
- Do not replace the non-original parts.



2. Package

2.1. Attachment

HOT MIX 15R packed with fly-case of one in one, two in one, or carton box.
Attach follow accessory.

CONTENT	QUANTITY
USER MANUL	1 piece

HANG FIXTURE	2 pcs
SIGNAL CABLE	1 piece

2.2. Transport protect lock

To protect the light, there is a protect lock; During the transport, the lock will have closed keeping the item in safety state.

2.3. About pack stage

1. Before packed, make sure power is off, and wait for at least 20mins for cooling down.
2. Before cleaning the fixture, make sure X, Y axis protect lock closed.
3. After packed by plastic bag, high-lift the fixture with two handles besides the product. put the product into the fly-case up-side-down. 
4. After packed the product, put the accessory into the accessory case, then closed and lock the fly-case.
5. Fly-case only up stacked two layers. Prohibited upside down
6. When packed with carton box, equipment should be put into the foam first, then set into a carton, pay attention to the vertical position.

2.4. Unpacking

Note: Before unpacking check the damage is whether due to the transportation or not, if you find any such damage, please do not use this item, and contact with the dealer or manufacturer as soon as possible.

- Open the fly-case, and discover the inside plastic bag.
- High-lift the product by two handles beside the bottom base and move it out.
- Before power on, make sure you have opened the X, Y axis lock!

3. Install standard

3.1. Install lock

HOT MIX 15R can be placed on the stage, or mounted in an arbitrary direction of the truss. Two fast locks system could fix the item easily.

3.2. Equipment fixed

- Before installation must verify the fast lock is keep in good state, and can withstand at least 10 times the weight of product. Verify that the building can withstand at least 10 times of the total weight of the product and accessory equipment's.
- Fix the hang fixture into the hole, which located on the base of the price.
- Seize handle of fasteners, clockwise rotate 1/4 turn and lock. Installed other one fastener
- in the same method.
- Using the safety cable which can withstand 10 times the weight of the equipment.
- Make sure the X, Y protect locks are opened, verify that within 3 meters there is no combustibles.

WARNING 

Fixture must use two fixing devices, and make sure the fixing device have locked! And only fully clockwise rotate 90 ° can lock the hang fixture! Do remember plus a safety rope, and do not connect the safety rope to plastic handle. It should be connected to the hole on the base!

3.3. Fixture connect

Attention! One product only can accept one input one output.

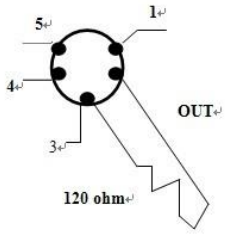
HOT MIX 15R DMX cable include 3 contact pins:
Pin 1, FOR GROUND; Pin 2 connected to the negative polarity signal; The pin 3 connected to the positive polarity signal.

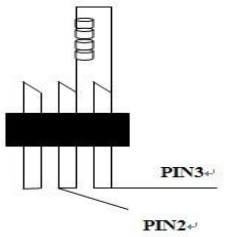
DMX512 cable must use the professional shielded twisted pair cable; standard loudspeaker cable is not reliable to control the long-range data. 24AWG cable is suitable for more than 300 meters long-distance signal transmission and must add\ DMX 512 signal amplifier.

Do not use two outputs to separate the connection, if separate a continuous connection to branch, DMX512 splitter is necessary.

If use the DMX512 splitter. At first connect DMX512 Splitter input terminal to controller, and then connected from the splitter output terminal to next device.

Do as above guide to connect other device, and finally coupled with terminal insertion as following:





4. Power supply

4.1. Voltage, power, fuse specification

Input Voltage	Total Power	Frequency
110~240V	550W	50/60Hz

4.2. Power protect

The equipment must be operated by professionals; Make sure that the voltage of power supply must be comply with the voltage identified on the lamp, and must have an overload or leakage electrical protection.

ATTENTION!

Factory has equipped the standard 3 pin plug socket. Connect the power supply as below table.

If lamp cable is damaged, replacement should be operate by factory or qualified staff. Any question, please contact professionals or talk to a qualified electrician.

Live wire(L)	Null(N)	Ground wire	
RED	BLUE	Yellow +Green	

5. Lamp

5.1. Lamp description

LAMP MODEL	POWER OF LAMP	LIFE/HOUR	COLOR TEMPERATURE
OSRAM SIRIUS HRI	440W	6000 HOURS	7800K



WARNING!
There is a safety hazard or damage if install similar bulb to reduce the risk of damage to light, do change the lamp before using time over 90% of lamp life.

5.2. Lamp replace



Attention! When replace the lamp is forbidden to touch lamp with bare hand, to avoid the greasy dirt stains filament. filament must be kept clean. Disconnect the power. Before replace lamp, fixture need 20 minutes for lamp cooling.

1. Fasten the head with Y axis protect lock in 60 ° position.
2. Use cross screwdriver to open the light body cover, remove the fan bracket, pull out the bulb cable as this picture show:
3. Please loose the connect wire as the following
4. Please loose the screws installed in the metal pieces as following.
5. Press the lamp reflector slightly use one finger, and press the lamp bottom slightly use another finger. So, the lamp will loose from the stand.

6. Repeat the above steps on the contrary action to install the lamp.

6. Display menu

CHANNEL	CHANNEL MODE	
	STANDARD	VECTOR
1	CYAN COLOUR WHEEL	CYAN COLOUR WHEEL
2	MAGENTA COLOUR WHEEL	MAGENTA COLOUR WHEEL
3	YELLOW COLOUR WHEEL	YELLOW COLOUR WHEEL
4	COLOUR 1	COLOUR 1
5	COLOUR 2	COLOUR 2
6	COLOUR 3	COLOUR 3
7	STOPPER / STROBE	STOPPER / STROBE
8	DIMMER	DIMMER
9	DIMMER FINE	DIMMER FINE
10	STATIC GOBO CHANGE	STATIC GOBO CHANGE

11	ANIMATION DISK INSERTION	ANIMATION DISK INSERTION
12	ANIMATION DISK ROTATION	ANIMATION DISK ROTATION
13	ROTATING GOBO SELECT	ROTATING GOBO SELECT
14	GOBO ROTATION	GOBO ROTATION
15	FINE GOBO ROTATION	FINE GOBO ROTATION
16	PRISMS INSERTION	PRISMS INSERTION
17	PRISMS ROTATION	PRISMS ROTATION
18	FROST	FROST
19	ZOOM	ZOOM
20	FOCUS	FOCUS
21	FOCUS FINE	FOCUS FINE
22	BEAM MODE	BEAM MODE
23	PAN	PAN
24	FINE PAN	FINE PAN
25	TILT	TILT
26	FINE TILT	FINE TILT
27	FUNCTION	FUNCTION
28	RESET	RESET
29	LAMP CONTROL	LAMP CONTROL
30	MACRO EFFECTS	MACRO EFFECTS
31	-	PAN-TILT TIME
32	-	COLOUR TIME
33	-	BEAM TIME
34	-	GOBO TIME

7. DMX Channels

Channel Mode		DMX	**Function**
Standard	**Vector**	Value	
1	1		**CYAN COLOUR WHEEL**
		0 - 255	Linear Cyan movement
2	2		**MAGENTA COLOUR WHEEL**
		0 - 255	Linear Magenta movement
3	3		**YELLOW COLOUR WHEEL**
		0 - 255	Linear Yellow movement
4	4		**COLOUR 1**
		0	Empty position
		28	Empty + Soft Filter
		50	Soft Filter
		80	Soft Filter + Lavender
		100	Lavender
		129	Lavender + CTO 3200K
		150	CTO 3200K
		181	CTO 3200K + CTO 2500K
		204	CTO 2500K
		235	CTO 2500K + Blue Wood (UV Filter)

		255	Blue Wood (UV Filter)
5	5		**COLOUR 2**
		0	Empty position
		28	Empty + Dark Green
		50	Dark Green
		75	Dark Green + CTB
		100	CTB
		129	CTB + Dark Blue
		150	Dark Blue
		178	Dark Blue + H.M.Green
		200	H.M.Green
		235	H.M.Green + Dark Red
		255	Dark Red
6	6		**COLOUR 3**
		0	Empty position
		28	Empty + Light Green
		50	Light Green
		77	Light Green + Pink
		100	Pink
		129	Pink + Aquamarine
		150	Aquamarine
		181	Aquamarine + Dark Orange
		200	Dark Orange
		231	Dark Orange + Light Orange
		255	Light Orange
7	7		**STOPPER / STROBE**
		0-3	Light OFF
		4 - 103	Strobe at linearly variable frequency from low (1 flash/sec) to high (12 flashes/sec)
		104 - 107	Light ON
		108 - 207	Pulsation at linearly variable speed from slow (0.5 flash/sec) to fast (12 flashes/sec)
		208 - 212	Light ON
		213 - 225	Random Strobe at low frequency
		226 - 238	Random Strobe at medium frequency
		239 - 251	Random Strobe at high frequency
		252 - 255	Light ON
8	8		**DIMMER**
		0 - 255	Light output linearly increase from no- light to maximum brightness. Dimmer blades move from totally closed to totally open in
9	9		**DIMMER FINE**
		0 - 255	Fine Dimmer positioning
10	10		**STATIC GOBO CHANGE**
		0	Empty position
		4	Gobo 1
		8	Gobo 2
		12	Gobo 3

		16	Gobo 4
		19	Gobo 5
		23	Gobo 6
		27	Gobo 7
		31	Gobo 8
		35	Gobo 9
		38	Gobo 10
		42	Gobo 11
		46	Gobo 12
		50	Gobo 13
		54	Gobo 14
		57	Gobo 15
		61	Gobo 16
		65	Gobo 17
		69	Gobo 18
		72 - 113	Continuous gobo wheel CCW rotation at linearly variable speed om
		114 - 117	Stop rotation
		118 - 159	Continuous gobo wheel CW rotation at linearly variable speed m
		160 - 165	Gobo 1 shakes at variable speed from slow (24 bpm) to fast (60
		166 - 170	Gobo 2 shakes at variable speed from slow (24 bpm) to fast (60
		171 - 175	Gobo 3 shakes at variable speed from slow (24 bpm) to fast (60
		176 - 181	Gobo 4 shakes …
		182 - 186	Gobo 5 shakes …
		187 - 191	Gobo 6 shakes …
		192 - 197	Gobo 7 shakes …
		198 - 202	Gobo 8 shakes …
		203 - 207	Gobo 9 shakes …
		208 - 214	Gobo 10 shakes …
		215 - 218	Gobo 11 shakes …
		219 - 223	Gobo 12 shakes …
		224 - 229	Gobo 13 shakes …
		230 - 234	Gobo 14 shakes …
		235 - 239	Gobo 15 shakes …
		240 - 245	Gobo 16 shakes …
		246 - 250	Gobo 17 shakes …
		251 - 255	Gobo 18 shakes …
11	11		**ANIMATION DISK INSERTION**
		0 - 255	Linear Animation Disk Insertion
12	12		**ANIMATION DISK ROTATION**
		0 - 124	Continuous animation disk CW rotation at linearly variable spee from
		125 - 130	Stop rotation
		131 - 255	Continuous animation disk CCW rotation at linearly variable spe d
13	13		**ROTATING GOBO SELECT**
		0 - 18	Empty position

		19 - 37	Gobo 1
		38 - 55	Gobo 2
		56 - 74	Gobo 3
		75 - 92	Gobo 4
		93 - 111	Gobo 5
		112 - 129	Gobo 6
		130 - 150	Gobo 1 shakes at variable speed from slow to fast
		151 - 171	Gobo 2 shakes at variable speed from slow to fast
		172 - 192	Gobo 3 shakes …
		193 - 213	Gobo 4 shakes …
		214 - 234	Gobo 5 shakes …
		235 - 255	Gobo 6 shakes …
		ROTATING GOBO effect disabled if BEAM MODE is working	
			GOBO ROTATION
		0 - 21	Gobo indexing CW: 0° to 90° range
		21 - 42	Gobo indexing CW: 90° to 180° range
		42 - 63	Gobo indexing CW: 180° to 270° range
		63 - 84	Gobo indexing CW: 270° to 360° range
		84 - 105	Gobo indexing CW: 360° to 450° range
		105 - 127	Gobo indexing CW: 450° to 540° range
		128 - 190	Continuous gobo rotation CCW at linearly variable speed from t
		191 - 192	Stop rotation
		193 - 255	Continuous gobo rotation CW at linearly variable speed from sl w
14	14	*ROTATING GOBO effect disabled if BEAM MODE is working*	
			FINE GOBO ROTATION
15	15	0 - 255	Fine Gobo Indexing CW
			PRISM INSERTION
16	16	0 - 10	Prism out

		11 - 132	Prism 1 into the light beam
		133 - 255	Prism 2 into the light beam
		PRISM effect disabled if BEAM MODE is working	
			PRISMS ROTATION
		0 - 21	Prism indexing CW: 0° to 90° range
		21 - 42	Prism indexing CW: 90° to 180° range
		42 - 63	Prism indexing CW: 180° to 270° range
		63 - 84	Prism indexing CW: 270° to 360° range
		84 - 105	Prism indexing CW: 360° to 450° range
		105 - 127	Prism indexing CW: 450° to 540° range
		128 - 190	Continuous prism rotation CCW at linearly variable speed from st
		191 - 192	Stop rotation
		193 - 255	Continuous prism rotation CW at linearly variable speed from sw
17	17	*PRISM effect disabled if BEAM MODE is working*	
			FROST
18	18	0 - 255	Frost moves linearly into the light beam Frost blades move from no-diffusion to maximum diffusion in 0.02 seconds at maximum speed.
			ZOOM
19	19	0 - 255	Zoom linearly moves from narrow to wide beam
			FOCUS
20	20	0 - 255	Focus moves linearly from far to near position. Focus lenses move from farest to nearest position in 1.11 seconds at
			FOCUS FINE
21	21	0 - 255	Fine Focus positioning
			BEAM MODE
		0 - 127	Zoom / Autofocus mode
		128 - 255	Beam Mode
22	22		*ROTATING and CHANGE GOBO / PRISM / ZOOM effects disabled* *BEAM MODE is working*

23	23		**PAN**
		0 - 255	Pan movement/positioning CCW from 0° to 540° - Fast Speed: 3.517 sec - Normal Speed: 4.038 sec
24	24		**FINE PAN**
		0 - 255	Fine Pan positioning CCW
25	25		**TILT**
		0 - 255	Tilt movement/positioning from 0° to 244° - Fast Speed: 2.180 sec - Normal Speed: 2.274 sec
26	26		**FINE TILT**
		0 - 255	Fine Tilt positioning
27	27		**FUNCTION**
		0 - 11	Unused range
		12 - 24	Fast Pan / Tilt speed (default)
		25 - 37	Normal Pan / Tilt speed
		63 - 75	CMY Full Range (default)
		76 - 87	CMY Limited range
		88 - 255	Free
			The functions are activated/selected passing through the un ed
28	28		**RESET**
		0 - 25	Unused range
		26 - 76	Zoom Reset Zoom Reset sequence is activated passing through the unus levels
		77 - 127	Pan / Tilt Reset Pan/Tilt Reset sequence passing through the unused levels r nge and
		128 - 255	Complete Reset All- effects Reset sequence passing through the unused levels ra
29	29		**LAMP CONTROL**
		0 - 25	Unused range
		26 - 100	Lamp OFF Lamp switch- off passing through the unused levels range and staying
		101 - 255	Lamp ON Lamp switch- on passing through the unused levels range and staying
30	30		**MACRO EFFECTS**
		0 – 7	Macro OFF
		8 – 11	Standby
		12 – 15	Standby black
		16 – 45	Zoom IN Faded
		46 – 75	Zoom OUT Faded
		76 – 105	Zoom IN OUT
		106 – 135	Standby Black 1
		136 – 165	Zoom IN Faded Random
		166 – 195	Zoom OUT Faded Random
		196 – 225	Zoom IN OUT Random
		226 - 255	Standby Black 2

31	31		**PAN-TILT TIME**
			Pan - Fine Pan - Tilt - Fine Tilt
32	32		**COLOUR TIME**
			Cyan - Magenta – Yellow
33	33		**BEAM TIME**
			Dimmer - Frost - Prism – Focus - Zoom
34	34		**GOBO TIME**
			Static Gobo – Rotating Gobo

A warm note:
When your performances over, please use your console to turn off the lamp first (DMX level = 0 bit.). let the fan keep working to cooling down around 5 minutes, then cut off the power.This action could be helpful to extend the lifetime of lamps.

VECTOR MODE TIME TABLE

BIT	Seconds
0	Full
1	0.2
2	0.4
3	0.6
4	0.8
5	1
6	1.2
7	1.4
8	1.6
9	1.8
10	2
11	2.2
12	2.4
13	2.6
14	2.8
15	3
16	3.2
17	3.4
18	3.6
19	3.8
20	4
21	4.2
22	4.4
23	4.6
24	4.8
25	5
26	5.2
27	5.4
28	5.6
29	5.8
30	6
31	6.2
32	6.4
33	6.6
34	6.8
35	7
36	7.2
37	7.4
38	7.6
39	7.8
40	8
41	8.2
42	8.4

BIT	Seconds
43	8.6
44	8.8
45	9
46	9.2
47	9.4
48	9.6
49	9.8
50	10
51	10.2
52	10.4
53	10.6
54	11
55	
56	12
57	
58	13
59	
60	14
61	
62	
63	15
64	
65	16
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67	
68	17
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70	18
71	
72	
73	19
74	
75	20
76	
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78	21
79	
80	
81	22
82	
83	23
84	
85	

BIT	Seconds
86	24
87	
88	25
89	
90	
91	26
92	
93	27
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95	
96	28
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98	29
99	
100	
101	30
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104	31
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106	32
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111	34
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114	35
115	
116	36
117	
118	
119	37
120	
121	38
122	
123	
124	39
125	
126	
127	40
128	

BIT	Seconds
129	41
130	
131	
132	42
133	
134	43
135	
136	
137	44
138	
139	45
140	
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142	46
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159	
160	53
161	
162	54
163	
164	
165	55
166	
167	56
168	
169	
170	57
171	

BIT	Seconds
172	58
173	
174	
175	59
176	
177	
178	60
179	
180	65
181	
182	
183	70
184	
185	75
186	
187	
188	80
189	
190	85
191	
192	
193	90
194	
195	95
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197	
198	100
199	
200	110
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202	
203	120
204	
205	
206	130
207	
208	140
209	
210	
211	150
212	
213	160
214	
215	

BIT	Seconds
216	170
217	
218	180
219	
220	
221	190
222	
223	200
224	
225	
226	210
227	
228	
229	220
230	
231	230
232	
233	
234	240
235	
236	250
237	
238	
239	260
240	
241	270
242	
243	
244	280
245	
246	290
247	
248	
249	300
250	
251	310
252	
253	
254	
255	Follow cue Data

8. Technical parameters:

- Lamp: Osram SIRIUS HRI 440W .
- Color temperature: 7800K
- Channel mode: 30/34 DMX 512 Channel
- Pan scan：540°(16bit) Electric correction
- Tilt scan：244° (16bit) Electric correction
- Color wheel:
- CMY color system based on 3 gradually fading color wheels
- 14 color filters on three wheels
- 2 CTO filters（3,200K and 2，500K）+ 1 CTB filter
- 2 Gobo wheels:
- wheel with 6 HQ dichroic, indexable and interchangeable rotating gobos
- Interchangeable and variable rotating wheel with 18+1 fixed metal gobos
- (including 6 beam reducers)
- Selectable Gobo-Shake function
- Prism: 2 indexable and interchangeable rotating prisms （8-facet and linear prism)
- Dimmer：High Precision 0-100% dimmer
- Zoom ranging from 4°to 31°for fixed gobos sharp focusing
- Zoom range from 6.7°to 50°for rotating gobos sharp focusing
- Electric focusing for a perfectly sharp light beam along its entire length
- Over heat protection
- Power: 100-240V, 50/60Hz
- IP level: IP20
- Net weight：30 KGS

9. Contact:

Please check who is our dealer in your country at our website

www.kudux.com

or write direct to us by email: office@kudux.com