
Radium
Die Lichtmarke
GAME
CHANGER
Keep current.
Change fluorescent tubes, keep luminaires.
Cost-efficient, dimmable, resource-saving.
LED Neo Tubes and LED Driver
www.radium.de/led-neo

Give your luminaires an upgrade.
With Radium LED Neo tubes.

For warehouses, production halls or even office spaces, the classic T8 fluorescent tubes have been standard for a long time. With Radium LED Neo tubes, a completely new product concept is now coming onto the market. This gives your existing luminaires the chance to get a simple upgrade. Which is smart, efficient and environmentally friendly.

Disposing of existing, functional luminaires completely would be costly and ecologically insane. The new Radium LED T8 Neo, **is just as efficient as many new LED-luminaires – and with less waste.**

Low effort – great effect

Converting to Radium LED Neo is as easy as replacing a defective ballast in a classic luminaire. Just install the new driver, screw in the LED Neo tube – done!
Big advantage: With many modern LED alternatives, luminaire and light source are one. This means that every defect means a complete replacement of the luminaire and thus new assembly effort and new electrical waste. The widespread T8 / T5 standard certainly also allows you to choose your light source freely in the long term. In contrast to replacing it with new LED lights, the LED Neo tubes offer the option of replacing only the standardized lamp.

Radium LED Neo tubes are compatible

Radium LED Neo tubes fit into all standard G13/G5 lamp holders and match the classic dimensions of a T8/T5 fluorescent tube. That‘s all there is in common. To convert to LED Neo, just replace the lamp and replace the ECG or CCG 1:1 with the LED driver. The LED tube and the LED driver are optimally tuned with each other, so that no compatibility tests are necessary after the conversion.

The secret of many functions: the external LED driver.

By operating an external LED driver instead of an integrated driver in the tube, the LED Neo convinces with its special features that you will not find in any other LED tube. The Radium LED drivers replace existing ECGs/CCGs 1:1. Ideal for quickly connecting your own lighting system to the future. Up to four Radium LED Neo tubes can be connected per LED driver. Even emergency lighting systems can be operated with our LED tubes.

Your advantages

- Increase in efficiency: up to 192 lm/W
- Super bright: up to 6,200 lm per lamp
- Extremely long service life: up to 100,000h L70B10
- 5 years guarantee
- Future-proof by DALI control
- Flicker-free
- Dimmable
- Suitable for Emergency power
- Cost efficient
- TÜV certified

Dare the Jump into the Future with Existing Luminaires.

With an Convincing Concept.

LED Neo tubes transform your existing luminaires into modern lighting systems that are super bright, flicker-free, dimmable, suitable for emergency power supply and DALI-capable. A conclusive product concept, that is second to none. The highlight: an external LED driver that equips every Radium LED Neo tube with functions that characterize modern lighting management today.
This makes Radium LED Neo tubes a lot superior to all previous retrofit solutions.

Robust, external Radium Driver instead of integrated Mini-Driver.

Radium LED Neo tube

+ Very high efficiency up to 180 lm/W
+ High luminous flux up to 5,180 lm
+ Flicker-free lighting

Radium LED Driver

+ One Radium DALI driver can drive up to 4 Radium LED Neo tubes.
+ External driver creates space for high quality technical components that are not feasible in mini driver format.
+ High reliability
+ No compatibility check

The DALI capability enables further optimization via a lighting management system or central building control.

By using our DALI 2 drivers, you have all the possibilities that DALI offers, including integration into an IoT network. Whether the lamps should shine brighter or darker in the future can, however, also be set directly via dip switches on the respective driver – during installation or even later.

Brighter, darker, dimmable – enjoy the new possibilities.

The LED Neo luminous flux can be adjusted via control current. Specifically: With the appropriate ballast, the Radium LED Neo tube can be set to a desired value via the operating current (constant current). In this way, it emits the right brightness for every „visual task“.

Suitable for emergency power

Unlike ordinary LED tubes, Radium LED Neo tubes are even suitable for installation in emergency power systems. This is because Radium drivers are also DC-capable. This means that your new Radium LED Neo tube will continue to shine with the same brightness even if the power supply is switched to DC in the event of a fault.

Are you planning a big project?

If you think about a big lighting installation, we would like to support you.

Just contact us by phone: +49 (0) 2267 81-493 or by E-Mail to **customerservice@radium.de**

One lamp for everything: adjustable luminous flux, modular functionality.

For versatile use.

Cost consciousness, efficiency and resource conservation are practically woven into the DNA of the new Radium LED Neo tube. Witness the many advantages for variable operation and **flexible use of your system.**

Optimized storage: one Luminaire, multiple Luminous fluxes

Thanks to the modular system of driver and lamp, as well as the possibility of adjusting the luminous flux as needed, the Radium LED Neo is also highly efficient in storage. So you don‘t have to buy several types of luminaires, you only need one light source that you can use flexibly.

Short delivery times

While ordering new LED luminaires often involves long waiting times, you can quickly convert your existing luminaires to Radium LED Neo.

Convincing even in comparison with classic retrofit solutions.

- Storage and portfolio complexity is significantly reduced (function is in modular design)
- Greater flexibility due to variable luminous fluxes
- Long service life: 70.000 h L80B10
  100.000 h L70B10
- High reliability due to separation of power electronics
- Compatibility guaranteed (no compatibility or dimmer lists)
- Higher functionality (dimmable, emergency power) and modularity
- Environmental friendly materials

Sustainability by design

By choosing Radium LED Neo, you score twice in terms of sustainability:

- **Save around 2,200 kg of waste per 1,000 fixtures**, as the luminaires are simply re-used and even technically future-proofed.
- With other luminaire suppliers, the lamp and luminaire have to be replaced in the event of a defect because the two are inseparably connected or replacing the module is too time-consuming. With Radium LED Neo, on the other hand, it is sufficient to replace only the component that is not working: LED tube, driver or luminaire. As a result, even at the end of the service life, the amount of waste is low. Compared to replacing a luminaire insert, you again save about **700 kg** of waste for 1,000 fixtures.

High operational safety due to glass and shatter protection

Radium LED Neo tube is made of a long-proven material: glass. While typical plastic LED tubes sag quickly or bend when exposed to heat, a glass bulb remains rigid for a clear appearance. For high protection during transport and operation, a shatter guard secures all glass tubes. Thus, even if the bulb is broken, no splinters escape that could cause injury or contaminate production. This makes the lamps even suitable for use in the food industry (IFS). LED T5 Neo tubes do not have shatter protection.

By retrofitting, you reduce acquisition costs and save in the long term.

With efficiency plus comfort.

With the conversion to the new Radium LED Neo you invest little and save a lot. Because all your functional T8/T5 luminaires can continue to be used. Just out of curiosity, you might want to calculate how much it would cost to replace all the luminaires, including installation and lamps. The costs for the environment are also significantly lower when converting to Radium LED Neo.

You can save this much

Simply scan the QR code and compare costs with the LED's Save calculator on www.radium.de/leds-save

Low Investment. Quick Amortisation.

Compared to an LED continuous row system, the investment costs with LED T8 Neo are more than 60 % lower. Replacing fluorescent lamps with LED Neo tubes pays for itself after only 8.8 months.

Example LED T8 Neo	LED T8 NEO	LED-Luminaire
Number of Luminaires (pcs)	40	40
Number of Lamps per Luminaire (pcs)	2	1
Changeover time per Luminaire (Min.)	12	20
Personnel costs/hour	70,00€	70,00€
Investition per Luminaire DALI (UVP)	110,70€	304,90€
Total investment costs	**4.988,00€**	**13.129,33€**

— 5 —
YEARS
GUARANTEE

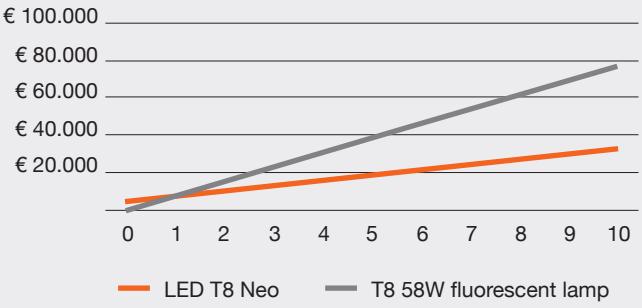
Reduce maintenance intervals: Radium LED Neo tubes last longer.

With 100,000 hours of light, the LED Neo tubes can illuminate rooms non-stop for almost 8 years. The drivers have the same service life. Radium gives a 5-year guarantee on drivers and LED tubes.

20-year after-sales guarantee

Radium LED Neo tubes offer you long-term security, as you can safely purchase our products in the long-term. This way, you invest in the future of your lighting infrastructure with foresight.

Example LED T8 Neo



Use the LED advantage against high electricity costs

With the same luminous flux, Radium LED Neo consumes about 50% less energy, in some luminaires it even saves up to 80% compared to conventional fluorescent tubes. In addition, power consumption can be further reduced through efficient lighting management – via DALI, Push&DIM or setting the luminous flux directly on the driver.

With Radium LED Neo tubes you trust in high quality.

For long-term use.

The Neo system uses a reliable external Radium LED driver instead of an integrated mini-driver. This creates more installation space for high-quality and durable components. This enables versatile and dimmable solutions that are used in many application areas – in office buildings, logistics halls and industrial buildings.

Project process

1

Contact our advisory team by email at:
customerservice@radium.de

2

Transmission of the key data
- Size of the plant
- Number of lighting points
- Current lighting system
- Lamps currently installed
- Dimmable: yes or no?
- How bright is the current installation?
- How bright should the new installation be?

3

Recommendation planning and **receive offer** from Radium

4

Place an order

5

Receive **delivery**

Safety with letter and seal

Whether fire protection or building insurance – there are many players who look critically at innovations. We have tested the combination of LED driver and LED tube in detail and the responsible master electrician certifies the safe and standard-compliant operation of the converted luminaire with LED Neo by specialist contractor declaration.

Safe is safe: TÜV and ENEC certified

Since 1904 Radium stands for safety and high quality made in Germany. That is why the new Radium LED Neo have also been ENEC certified by TÜV Süd. In addition, the safety extra-low voltage (SELV) ensures high operational safety.

SELV

Continue to use instead of throwing away

Converting your lighting system to LED Neo tubes is smart, because in addition to low purchase and operating costs, you also benefit from high efficiency and future-proof light management.

Thanks to their long service life of 100,000 hours and their full compatibility for for the replacement of T8/T5 fluorescent tubes, the LED T8 Neo is a great replacement product for any application. In addition, the CO_2 footprint is very low.

With LED T8 Neo you combine sustainability and cost efficiency with flexibility!

Keep current now and make an appointment for a personal consultation.

Use our contact form:
https://www.radium.de/en/bera-tung-led-neo

We will be happy to advise you on the possibilities that LED Neo tubes open up for you.

Please get in touch:
E-Mail: customerservice@radium.de
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Die Lichtmarke

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V2308

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LED T5 Neo

NEO Glass 5 YEARS GUARANTEE G5

			d mm	l mm	
1	43720825	**RL-T5 14/24 NEO 830/G5 DC**	17	549	D
1	43720826	**RL-T5 14/24 NEO 840/G5 DC**	17	549	C
1	43720827	**RL-T5 14/24 NEO 865/G5 DC**	17	549	C
1	43720828	**RL-T5 21/39 NEO 830/G5 DC**	17	849	D
1	43720829	**RL-T5 21/39 NEO 840/G5 DC**	17	849	C
1	43720830	**RL-T5 21/39 NEO 865/G5 DC**	17	849	C
1	43720831	**RL-T5 28/54 NEO 830/G5 DC**	17	1149	D
1	43720832	**RL-T5 28/54 NEO 840/G5 DC**	17	1149	C
1	43720833	**RL-T5 28/54 NEO 865/G5 DC**	17	1149	C
1	43720834	**RL-T5 35/49 NEO 830/G5 DC**	17	1449	D
1	43720835	**RL-T5 35/49 NEO 840/G5 DC**	17	1449	C
1	43720836	**RL-T5 35/49 NEO 865/G5 DC**	17	1449	C
1	43720837	**RL-T5 49/80 NEO 830/G5 DC**	17	1449	D
1	43720838	**RL-T5 49/80 NEO 840/G5 DC**	17	1449	C
1	43720839	**RL-T5 49/80 NEO 865/G5 DC**	17	1449	C

		DRIVER DALI				DRIVER ON/OFF			
		1 lamp	2 lamps	3 lamps	4 lamps	1 lamps	2 lamps	3 lamps	4 lamps
T5 14/24 NEO	350 mA	10.0 W	20.0 W	30.0 W	40.0 W	10.0 W	20.0 W	30.0 W	40.0 W
	300 mA	8.6 W	17.2 W	25.8 W	34.4 W	8.6 W	17.2 W	25.8 W	34.4 W
	250 mA	7.1 W	14.2 W	21.3 W	28.4 W	7.1 W	14.2 W	21.3 W	28.4 W
	200 mA	5.7 W	11.4 W	17.1 W	22.8 W	5.7 W	11.4 W	17.1 W	22.8 W
T5 21/39 NEO	350 mA	17.9 W	35.8 W	53.7 W	71.6 W	17.9 W	35.8 W	53.7 W	71.6 W
	300 mA	15.3 W	30.6 W	45.9 W	61.2 W	15.3 W	30.6 W	45.9 W	61.2 W
	250 mA	12.7 W	25.4 W	38.1 W	50.8 W	12.7 W	25.4 W	38.1 W	50.8 W
	200 mA	10.1 W	20.2 W	30.3 W	40.4 W	10.1 W	20.2 W	30.3 W	40.4 W
T5 28/54 NEO	350 mA	24.5 W	49.0 W	73.5 W		24.5 W	49.0 W	73.5 W	
	300 mA	20.9 W	41.8 W	62.7 W		20.9 W	41.8 W	62.7 W	
	250 mA	17.3 W	34.6 W	51.9 W		17.3 W	34.6 W	51.9 W	
	200 mA	13.8 W	27.6 W	41.4 W		13.8 W	27.6 W	41.4 W	
T5 35/49 NEO	350 mA	23.4 W	46.8 W	70.2 W		23.4 W	46.8 W	70.2 W	
	300 mA	20.0 W	39.9 W	59.9 W		20.0 W	39.9 W	59.9 W	
	250 mA	16.6 W	33.1 W	49.7 W		16.6 W	33.1 W	49.7 W	
	200 mA	13.2 W	26.4 W	39.6 W		13.2 W	26.4 W	39.6 W	
T5 49/80 NEO	350 mA	33.9 W	67.8 W			33.9 W	67.8 W		
	300 mA	29.0 W	57.9 W			29.0 W	57.9 W		
	250 mA	24.1 W	48.1 W			24.1 W	48.1 W		
	200 mA	19.2 W	38.4 W			19.2 W	38.4 W		

For luminous fluxes and power data refer to operating current charts. Driver affiliation see color assignment.

2 

3 

LED Driver

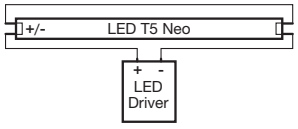
			W max.	V	mA	l mm	w mm	h mm
ON/OFF								
2	OTNA4435	**DRIVER 20W/200-350mA IP20**	20.0	25 – 57	200 – 350	156	30	21
2	OTNA4436	**DRIVER 40W/200-350mA IP20**	40.0	58 – 114	200 – 350	195	30	21
2	OTNA4437	**DRIVER 60W/200-350mA IP20**	60.0	115 – 172	200 – 350	195	30	21
2	OTNA4438	**DRIVER 80W/200-350mA IP20**	80.0	170 – 230	200 – 350	195	30	21
DALI								
3	OTDA4030	**DRIVER DALI 15W/100-350mA IP20**	14.7	16 – 42	100 – 350	195	30	21
3	OTDA4439	**DRIVER DALI 37W/200-350mA IP20**	37.0	54 – 240	200 – 350	195	30	21
3	OTDA4441	**DRIVER DALI 75W/200-350mA IP20**	75.0	54 – 240	200 – 350	245	30	21

Operating Current Charts.

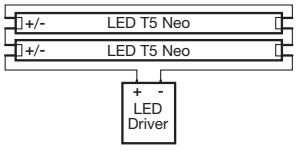
LED T5 Neo.

mA	V	W	lm	lm/W	lm	lm/W	lm	lm/W
LED T5 Neo 14/24			3000K		4000K		6500K	
350	28,5	10,0	1620	162	1800	180	1800	180
300	28,5	8,6	1400	163	1550	180	1550	180
250	28,5	7,1	1180	166	1300	183	1300	183
200	28,5	5,7	960	168	1060	186	1060	186
LED T5 Neo 21/39			3000K		4000K		6500K	
350	51,1	17,9	2840	159	3150	176	3150	176
300	50,9	15,3	2460	161	2730	178	2730	178
250	50,7	12,7	2070	163	2300	181	2300	181
200	50,5	10,1	1670	165	1850	183	1850	183
LED T5 Neo 28/54			3000K		4000K		6500K	
350	70,0	24,5	4000	163	4400	180	4400	180
300	69,7	20,9	3440	165	3800	182	3800	182
250	69,3	17,3	2900	168	3200	185	3200	185
200	69,0	13,8	2350	170	2600	188	2600	188
LED T5 Neo 35/49			3000K		4000K		6500K	
350	66,9	23,4	3870	165	4300	184	4300	184
300	66,6	20,0	3340	167	3700	185	3700	185
250	66,3	16,6	2800	169	3110	188	3110	188
200	66,0	13,2	2270	172	2520	191	2520	191
LED T5 Neo 49/80			3000K		4000K		6500K	
350	96,9	33,9	5600	165	6200	183	6200	183
300	96,6	29,0	4830	167	5360	185	5360	185
250	96,3	24,1	4080	169	4520	188	4520	188
200	96,0	19,2	3320	173	3680	192	3680	192

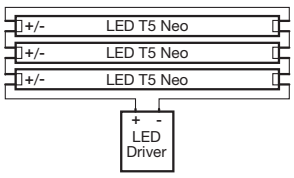
Circuit examples:



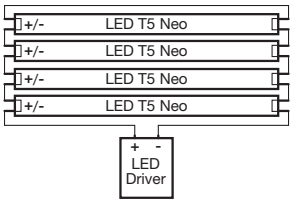
1x LED T5 Neo



2x LED T5 Neo



3x LED T5 Neo



4x LED T5 Neo

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- Variable luminous flux up to 5,180 lm
- Increasing efficiency: up to 180 lm/W
- Extremely long lasting: up to 70.000 h L80B10
- TÜV certificated
- Suitable for emergency power

LED T8 Neo

			d mm	l mm		Art.No.	Qty T8 Neo	Art.No.	Qty. T8 Neo	Art.No.	Qty T8 Neo	Art.No.	Qty T8 Neo
								DRIVER DALI		DRIVER ON/OFF			
1	43719848	**LED T8 NEO 18 840/G13**	28.5	603	C	OTDA4030	1-2	OTDA4031	4	OTNA4033	2	OTNA4034	4
1	43719849	**LED T8 NEO 18 865/G13**	28.5	603	D	OTDA4030	1-2	OTDA4031	4	OTNA4033	2	OTNA4034	4
1	43719850	**LED T8 NEO 36 840/G13**	28.5	1213	C	OTDA4031	1-2	OTDA4032	4	OTNA4034	2	OTNA4035	4
1	43719851	**LED T8 NEO 36 865/G13**	28.5	1213	C	OTDA4031	1-2	OTDA4032	4	OTNA4034	2	OTNA4035	4
1	43719852	**LED T8 NEO 58 840/G13**	28.5	1513	C	OTDA4032	1-2			OTNA4035	2		
1	43719853	**LED T8 NEO 58 865/G13**	28.5	1513	D	OTDA4032	1-2			OTNA4035	2		

NEO · Glass · 5 YEARS GUARANTEE · G13

For luminous fluxes and power data refer to operating current charts.

2

3

- Control of up to four Radium LED T8 Neo
- High reliability
- DALI2
- TÜV Süd ENEC certified
- Compatibility check no longer necessary

LED Driver

			W max.	V	mA	l mm	w mm	h mm
ON/OFF								
2	OTNA4033	**DRIVER 15W/350mA IP20**	14.7	33 – 42	350	156	30	20
2	OTNA4034	**DRIVER 30W/700mA IP20**	29.4	33 – 42	700	195	30	20
2	OTNA4035	**DRIVER 50W/1200mA IP20**	50.4	33 – 42	1200	245	30	21
DALI								
3	OTDA4030	**DRIVER DALI 15W/100-350mA IP20**	14.7	16 – 42	100-350	195	30	21
3	OTDA4031	**DRIVER DALI 30W/550-750mA IP20**	31.5	18 – 44	550-750	245	30	21
3	OTDA4032	**DRIVER DALI 60W/1100-1500mA IP20**	63.0	19 – 44	1100-1500	285	30	21

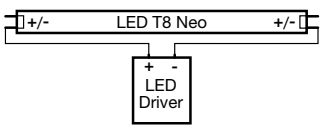
Operating Current Charts.

LED T8 Neo.

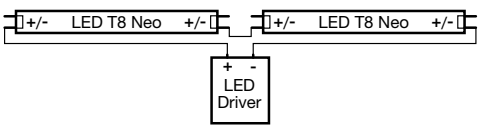
mA	V	W	lm	lm/W
LED T8 Neo 58W 840				
1,500	20.5	30.8	5,180	168
1,450	20.5	29.7	5,017	169
1,400	20.4	28.6	4,853	170
1,350	20.4	27.5	4,690	170
1,300	20.3	26.5	4,527	171
1,250	20.3	25.4	4,363	172
1,200	**20.3**	**24.3**	**4,200**	**173**
1,150	20.2	23.2	4,038	174
1,100	20.1	22.1	3,875	175
1,050	20.0	21.0	3,713	176
1,000	20.0	20.0	3,550	178
LED T8 Neo 36W 840				
1.000	20.2	20.2	3,418	169
950	20.1	19.1	3,258	170
900	20.1	18.1	3,099	171
850	20.0	17.0	2,939	173
800	20.0	16.0	2,779	174
750	19.9	14.9	2,620	175
700	**19.9**	**13.9**	**2,460**	**177**
650	19.8	12.9	2,288	178
600	19.7	11.8	2,116	179
550	19.7	10.8	1,944	180
500	19.6	9.8	1,772	181
LED T8 Neo 18W 840				
550	20.0	11.0	1,875	170
500	19.9	10.0	1,710	172
450	19.9	8.9	1,545	173
400	19.8	7.9	1,380	174
350	**19.7**	**6.9**	**1,215**	**176**
300	19.5	5.9	1,049	179
250	19.4	4.8	882	182
200	19.2	3.8	716	186

mA	V	W	lm	lm/W
LED T8 Neo 58W 865				
1,500	20.5	30.8	4,925	160
1,450	20.5	29.7	4,771	161
1,400	20.4	28.6	4,617	161
1,350	20.4	27.5	4,463	162
1,300	20.3	26.5	4,308	163
1,250	20.3	25.4	4,154	164
1,200	**20.3**	**24.3**	**4,000**	**165**
1,150	20.2	23.2	3,848	166
1,100	20.1	22.1	3,695	167
1,050	20.0	21.0	3,543	168
1,000	20.0	20.0	3,390	170
LED T8 Neo 36W 865				
1,000	20.2	20.2	3,368	167
950	20.1	19.1	3,210	168
900	20.1	18.1	3,053	169
850	20.0	17.0	2,895	170
800	20.0	16.0	2,737	171
750	19.9	14.9	2,580	173
700	**19.9**	**13.9**	**2,422**	**174**
650	19.8	12.9	2,253	175
600	19.7	11.8	2,083	176
550	19.7	10.8	1,914	177
500	19.6	9.8	1,744	178
LED T8 Neo 18W 865				
550	20.0	11.0	1,800	164
500	19.9	10.0	1,643	165
450	19.9	8.9	1,485	166
400	19.8	7.9	1,328	168
350	**19.7**	**6.9**	**1,170**	**170**
300	19.5	5.9	1,010	172
250	19.4	4.8	850	176
200	19.2	3.8	690	180

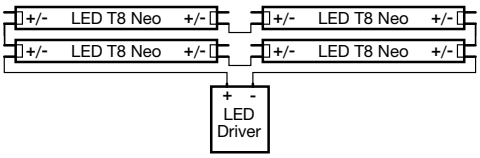
Circuit examples:



1x LED T8 Neo



2x LED T8 Neo



4x LED T8 Neo

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