

## Titan Commando Emergency Kit Self Test

Product Codes: **TITAN/COMKIT20/ST**

### Safety Warning



- The installation should be carried out by a qualified electrician in compliance with the current edition of the IEE Wiring Regulations.
- Prior to installation, carry out the necessary risk assessment considering the people who could be at risk, the level of risk and the precautions required to control the risk
- Ensure that the circuit supply is isolated either by the circuit supply fuse being removed or the applicable circuit breaker being turned off before installation or any maintenance.
- Check the total load on the circuit ensuring the luminaire does not exceed the rating of the circuit cable, fuse or circuit breaker.
- Long-term use and voltage fluctuations can reduce the life span of the fitting.
- If the fitting incorporates control gear, ensure careful sizing to avoid instances of nuisance tripping of the protective device used in the installation.
- Follow the provided installation instructions, using the fixings supplied or recommended.
- Keep out of reach of children.

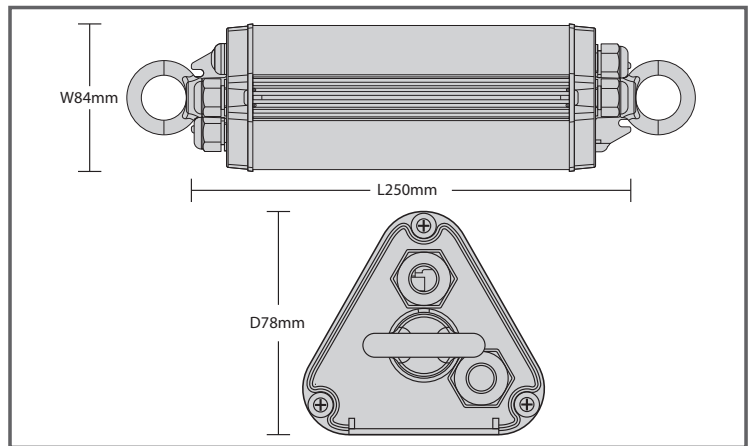


### Specification

#### Box Contents -

1 x Commando Emergency Kit with Self Test

<b>Dimensions:</b>	L: 250 x W: 84 x D: 78mm
<b>Material:</b>	Extruded & Die-Cast Aluminium
<b>Working Temperature:</b>	0°C - 50°C
<b>Included:</b>	Pre wired cables and Carabiner

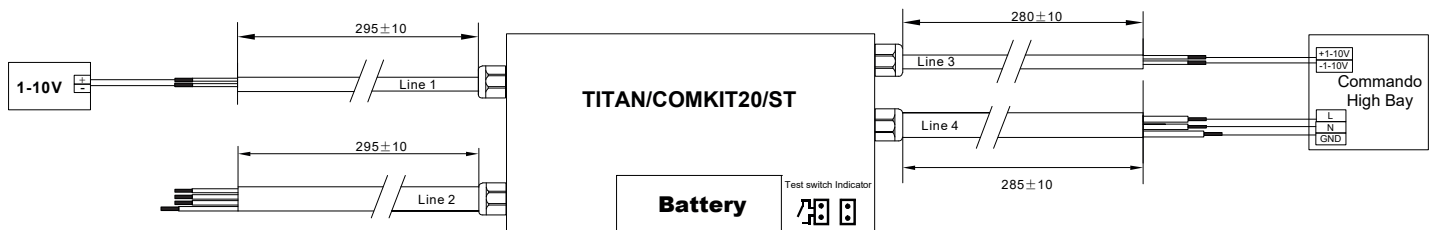


\*Battery 2 years guarantee

### Installation Instructions

Titan Commando Emergency Kit - for use with Commando High Bays.

- Ensure the mains supply is isolated before attempting installation.
- Please refer to the diagram below for details of mains supply and high bay luminaire connection



#### Line 1:

1-10V dimming input line  
+1-10V: RED  
-1-10V: BLACK

#### Line 2:

AC220V input line  
L in: BROWN  
SL in: BLACK(Switch Live)  
N in: BLUE  
EARTH/GND: YELLOW+GREEN

#### Line 3:

1-10V dimming output line  
Sout+: RED  
Sout-: BLACK

#### Line 4:

AC220V output line  
OUT+: BROWN  
OUT-: BLUE  
EARTH/GND: YELLOW+GREEN

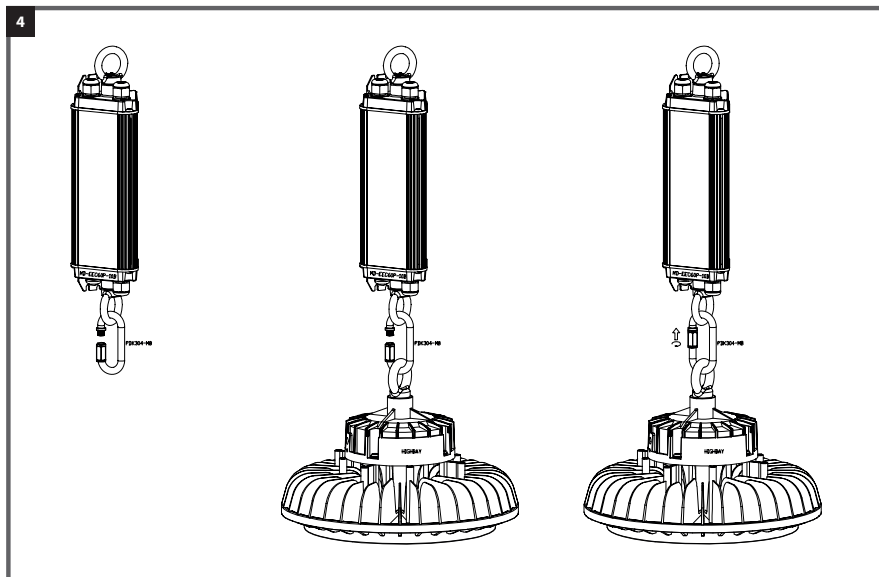
### IMPORTANT WIRING INFORMATION:

The 1-10V dimming output line (Line 3) **MUST ALWAYS BE CONNECTED** to the 1-10V input on the Commando High Bay, even when a plug in microwave detector is not installed to the high bay.

- + Positive - RED (on Titan Kit) to PURPLE (on COM/COMPRO High Bay)
- Negative - BLACK (on Titan Kit) to PINK (on COM/COMPRO High Bay)

Line 1 dimming input cables must be capped if a centralised 1-10V dimming system is not being connected

3. Wire as shown in the diagram, ensuring polarity is observed. Connect the cables to the mains/dimming supply and from the kit to the high bay using suitable IP rated connectors to suit the environment. See important note on page 1 about connection of 1-10V dimming cables
4. The kit has mounting rings fitted at both ends. These can be used to suspend the kit from a suitable hook then, using the carabiner supplied, connect the kit to the Commando high bay fitting. See diagram. Alternatively, the kit housing has a built in fixing plate to allow screw fixing (screws not supplied) to a suitable surface adjacent to the high bay.



5. Restore mains power and check for correct operation. The LED indicator will be illuminated permanent green. The kit should be left to charge for a minimum of 24 hours to fully charge the batteries, before carrying out a full duration commissioning test.

## Testing & Commissioning

This emergency kit features stand alone automatic self test operation. The test button is used to set up and reset the self test mode.

### Test Switch Functionality:

- A short press (>1 second) of the test switch starts a function test, lasting 10 seconds. The LED flashes green quickly during the test. (Note: battery capacity must be >5% = 30 minutes minimum charge)
- A long press (>10 seconds) initiates and resets the self test mode
- Once in self test mode, a 5 second press of the test switch alternates the kit between standard mode (LED flashes red very quickly) and self test mode (LED flashes green very quickly). This can only be done once the self test mode has first been initiated as detailed above

### Self Test Commissioning:

- After installing the kit and allowing the batteries to charge for 24 hours, self test mode can be initiated with a long press of the test switch (>10 seconds) as described above
- An initial full duration commissioning test will be carried out exactly 24 hours after the self test mode is initiated

### Test Schedules:

After self test mode initiation and the commissioning duration test, the kit will automatically carry out emergency testing to the following schedules, which meet and exceed legal requirements:

#### Functional Test

- A 5 second functional test will be carried out every 7 days,
- This checks the functionality of the emergency module, batteries and LED module
- NOTE: If a mains supply failure occurs while a functional test is in progress, the test shall be postponed and the system shall enter emergency operation. Following restoration of the mains supply, a postponed functional test shall re-commence automatically as soon as conditions permit

#### Duration Test

- An initial duration test will be carried out exactly 24 hours after self test mode has been initiated
- Further full duration tests will be carried out every 6 months (180-182 days)
- NOTE: A duration test will only commence when the battery is fully charged. If a mains supply failure occurs whilst a duration test is in progress, the test shall be postponed and the system shall enter emergency operation. Following restoration of the mains supply, a postponed duration test shall re-commence automatically when the battery is fully re-charged

### System Status Indication:

- The system status, including testing and any faults is provided by a bi-colour LED indicator on the kit. Status is provided as follows:

LED Indicator	Status	Details
Steady Green	Standby - System OK	Mains operation - Battery is charging
Fast Flashing Green	Functional test in progress	System is in 5 seconds test mode
Slow Flashing Green	Duration test in progress	System is in 3 hour test mode
Steady Red	Lamp failure	Open circuit, or short circuit, or LED failure
Fast Flashing Red	Battery capacity failure	Battery has failed duration test
Slow Flashing Red	Battery fault	Incorrect battery voltage, or short circuit or open circuit
LED Off	Battery operation	System in emergency mode. Mains disconnected from battery, or mains failure

**NOTES:**

- When a battery fault is detected, the indicator turns red and flashes slowly. Turn off the mains power and eliminate the fault. When the mains power is restored, the indicator returns to steady green.
- When a load fault is detected, the indicator turns steady red. Turn off the mains power and eliminate the fault, then press the test button twice to reset. When the mains power is restored, the indicator returns to steady green.
- When the battery fails a duration test, the indicator turns red and flashes quickly. Turn off the mains power and replace the battery. Restore the mains power and press the test button for >10 seconds to reset the system in self test mode. The indicator returns to steady green.

**Battery Discharge & Charge Specification**

Parameter	Min.	Type	Max.	Note
Battery discharge current	1400mA	-	1600mA	• Measured at 12.8V input from batteries
Output voltage	200Vdc	-	300Vdc	
Output constant current	47mA	-	85mA	

Batteries: 12.8V 6000mAH LiFePo4

Emergency Power (Batteries): 20W

Emergency Output Power (LED): 17W

Charge Current: 400mA ± 10%

Charge Time: 24hours

**Guarantee**

This product is guaranteed for a period of 5 years (battery 2 years) from the date of purchase. The guarantee is invalid in the case of improper use, tampering, removal of the Q.C. date label, installation in an improper working environment or installation not according to the current edition of the I.E.E. Wiring Regulations (BS7671). The guarantee is also invalidated if the luminaire has been insulation tested. Should this product fail during the guarantee period it will be replaced free of charge, subject to correct installation and return of the faulty unit. We do not accept responsibility for any installation costs associated with the replacement of this product. Your statutory rights are not affected. We reserve the right to alter specifications without prior notice.

**Maintenance**

- When this fitting comes to the end of it's life or you choose to replace it, please do not dispose of it with your normal waste. Please recycle where the facilities exist, check with your local authority for suitable options.

INS/EMERGENCY/0018/TITAN\_COMKIT/V2



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# INSTALLATION INSTRUCTIONS

## Emergency Testing Sheet

### Testing (Emergency Versions)

The emergency lighting must be tested and inspected regularly in accordance with local codes of practice.

NOTE: For safety reasons tests should be carried out preceding time of low risk, to allow for battery recharge.

The minimum recommended test schedule is as follows:

Commissioning - After installation, allow 24 hours to ensure full battery charge, and then interrupt the supply; check after 3 hours that the light is still illuminated.

1. Daily - Check that the charge indicator LED is working.
2. Monthly - Interrupt the power supply for a period sufficient to ensure each light is illuminated. At the end of the test, restore the supply and check the indicator is illuminated.
3. Annually - Interrupt the supply as in 2, but for the full rated duration. Ensure the light is illuminated at the end of the rated duration. Restore the supply and check the indicator is illuminated.
4. Record the date and result of each test, attending to any maintenance required in the event of a test failure.

**Luminaire Location** .....

**Date Installed** .....

**Date Commissioned** .....

Month	Test	Year 1			Year 2			Year 3		
		Signed	Result / Action	Date	Signed	Result / Action	Date	Signed	Result / Action	Date
1	Functional									
2	Functional									
3	Functional									
4	Functional									
5	Functional									
6	Functional									
7	Functional									
8	Functional									
9	Functional									
10	Functional									
11	Functional									
12	Full Duration									