



# FEC HELIPOINTS & HELIPOINT EQUIPMENT

Designed, Manufactured and Installed...we do it all.

## FEC Remote Lighting Controller with optional Weather Station

Effective operator or pilot control of Helipad Lighting is critical to the safe operation of an installation and traditional Radio Pilot Controlled Lighting (PCL) solutions using the VHF radio is a tried and trusted method.

Now there is a new way to control your lighting and peripheral circuits using FEC's new Remote Lighting Controller (RLC) which integrates both traditional VHF PCL and adds SMS control and monitoring with the option of automatic weather reporting (wind speed/direction, temperature, dew point and pressure) right from your helipad.

FEC's Remote Lighting Controller is an all new, fully digital design that combines ease of installation and use with sophisticated yet simple and secure configuration via the IP65 rated keypad and LCD display or via SMS.



- Traditional VHF Pilot Controlled Lighting (PLC) configuration
- Simple radio, including frequency, setting through front panel – no fiddly switches
- Defined number of presses to activate Circuits 1, 2 or 3
- Programmable timeout period
- VHF operation can be remotely enabled/disabled for extra security
- Direct circuit control via keypad (with PIN)
- FCC/EU approved, Integrated tri-band GSM Telemetry Engine for SMS control
- Secure PIN code protected SMS commands to monitor and control your installation
- Secure SMS status reporting – check out your installation before taking off
- Remotely activate Circuits 1, 2 or 3 and have the status sent straight back to your mobile
- Remotely monitor and control via optional GSM linked Mimic Panel
- Optional weather station interface for meteorological information from your helipad
- Three 20 Amp heavy duty relays in the box – Enables linked peripheral shutdown
- Local and remote test and diagnostics integrated into the unit
- Very low power consumption – Approx. 2W (idle) and less than 30W max. (including optional internal winter heater)
- Operates from 110-240V AC 50-60Hz or 12V DC (ideal for solar and batteries)

For more information contact us at: [sales@heliportsequiment.com](mailto:sales@heliportsequiment.com)  
[www.heliportsequiment.com](http://www.heliportsequiment.com) - [www.fecheliports.com](http://www.fecheliports.com)



# FEC HELIPORTS & HELIPORT EQUIPMENT

Designed, Manufactured and Installed...we do it all.

The best of both worlds - FEC's all new Remote Lighting Controller takes a fresh approach to controlling your lighting installation – applying sophisticated microcontrollers to integrate and control a traditional PCL with the added ease and convenience of control and monitoring via any mobile device that can send and receive text messages (SMS).

There are three microcontrollers dedicated to making FEC's RLC both powerful but incredibly easy to use - everything can be securely configured (there are three levels of PIN code protection) through the front panel – frequencies, timeout periods, operating modes, relay testing and system diagnostics. Many parameters can be checked, monitored and changed via simple text messages (using the same secure PIN codes).

We are not just selling you a box but a service - forgot your PIN code? – no problem, call us up and we can reset it over the air. Over time we will be adding more functionality – remote diagnostics, web based logging and reporting – see who used the system and when.

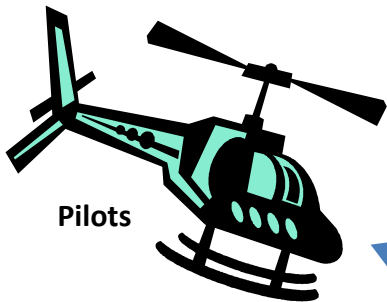
FEC's RLC is ideal for remote locations with limited or no mains power. The unit runs either from its internal 110-240V AC Power Supply Unit but can also run on 12V DC and with its incredibly low 2 Watt standby power consumption is ideal for operating from batteries charged by solar or wind generators.

## Summary of Specification

- |                                |   |
|--------------------------------|---|
| • Controller modes:            | 3 - Local keypad, VHF PCL or GSM/SMS or both      |
| • System security:             | PIN Code (keypad and GSM)                         |
| • VHF Frequency Range:         | 118 to 136 MHz                                    |
| • Channel spacing (current):   | 25kHz   |
| • Channel spacing (future):    | 8.33kHz   |
| • Frequency selection:         | Any channel or UNICOM                             |
| • VHF aerial:                  | External remote mounted                           |
| • GSM Bands:                   | Tri-Band  |
| • Network:                     | Operators choice subject to coverage              |
| • Tariff:                      | Account or pre-pay                                |
| • GSM aerial options:          | Internal to unit or remote mounted                |
| • Degree of protection:        | IP65 (general)                                    |
| • LCD and Keypad protection:   | IP65 and 'vandal resistant'                       |
| • Unit operating temperature:  | -25°C to +50°C                                    |
| • System Storage temperature:  | -25°C to +80°C                                    |
| • Compliance:                  | ROHC Compliant                                    |
| • Operating voltage (AC):      | 100-240V AC 50-60Hz                               |
| • Operating voltage (DC):      | 12V DC  |
| • Max voltage range (DC):      | 10V – 15V DC                                      |
| • Power (standby):             | 2 watts (approx.)                                 |
| • Power (GSM transmitting):    | 10 watts (maximum)                                |
| • Relay capacity:              | 3 off 20A Relays (1 NO, 1NC)<br>DIN rail mounting |
| • Max power consumption:       | 30 watts (including optional winter heater)       |
| • Size (Height, Depth, Width): | H - 11" (280mm), D - 6.5" (165mm), W - 7" (180mm) |
| • Weight:                      | 5.5lbs (2.5kg)                                    |
| • Warranty:                    | 2 years return to FEC (excluding relays)          |



# Remote Lighting Controller Systems Architecture



Pilots



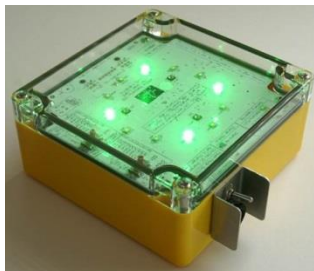
Facilities Monitoring and Control



Local Monitoring & Control



Remote Monitoring & Control



Battery/Wireless Lighting Control and Monitoring



Fixed Lighting Control and Monitoring



Weather Information



Data Logging/Charging



**Remote Lighting Controller  
Operational Architecture**



**Pilots/Flight Directors**



**Operations Management**



**Border and Security  
Agencies**



**Response Management**



**Facilities Maintenance  
(1<sup>st</sup> line support)**



**Supplier  
(2<sup>nd</sup> line support)**



**OEM  
(3<sup>rd</sup> line support)**

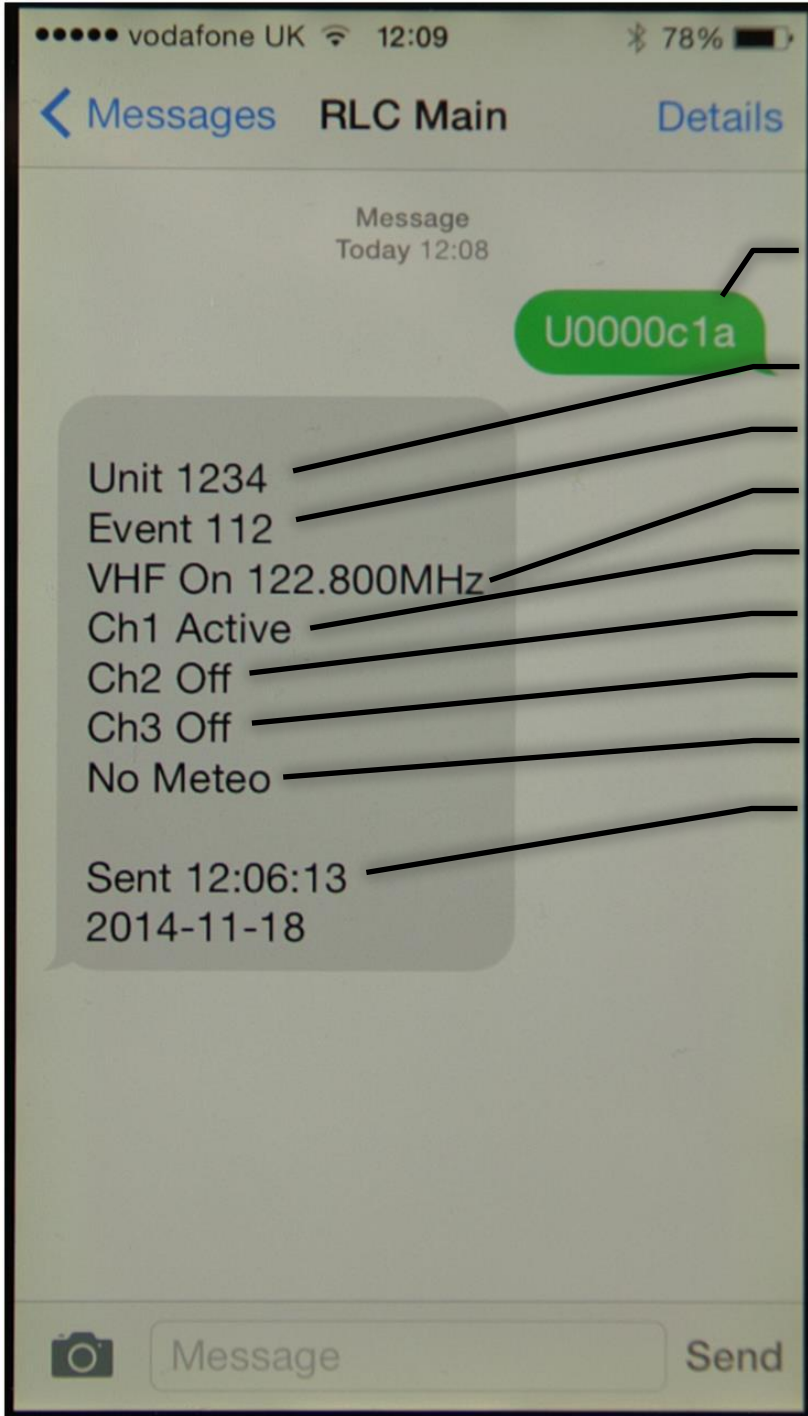


# FEC Remote Lighting Controller HP0656 User Installation and Operation Manual

## 4.6 System Response – To User – No Meteorological Pack fitted

The controller will respond to the caller (either User or Operator) with confirmation of the system status.

The standard response is shown in the screen shot of an iPhone below:



Command sent by User

Controller ID

Event Number

VHF Radio Active 122.8MHz

Confirmation: Channel 1 Active

Confirmation: Channel 2 Inactive

Confirmation: Channel 3 Inactive

No Meteorological Pack fitted

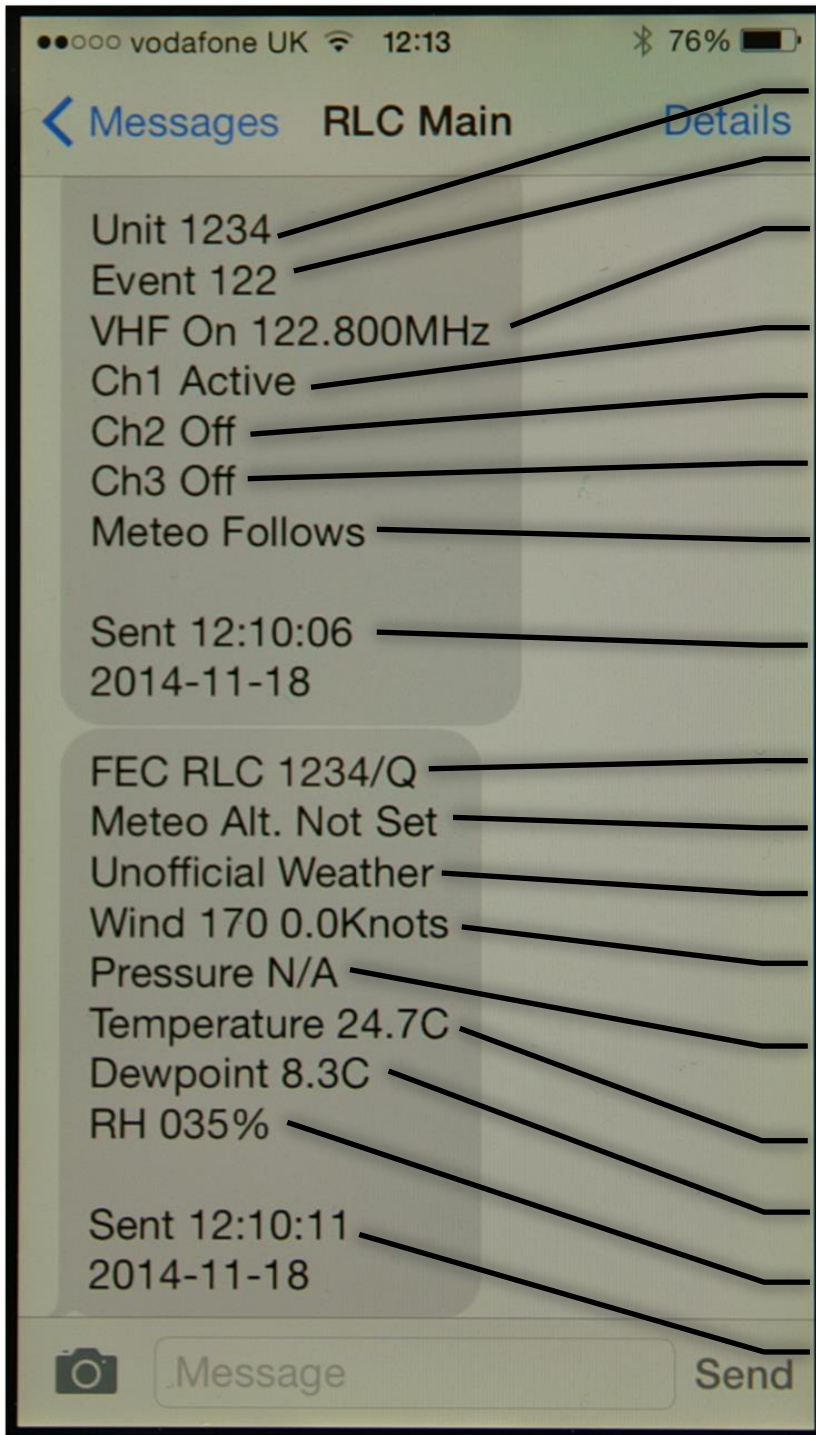
Time/Date stamp of transmission in international format



# FEC Remote Lighting Controller HP0656 User Installation and Operation Manual

## 4.7 System Response – To User – Meteorological Pack fitted – No Altitude Set

The standard response is shown in the screen shot of an iPhone below if a MetPak is fitted but altitude NOT set. If the meteorological station altitude is not set, no pressure information is sent.



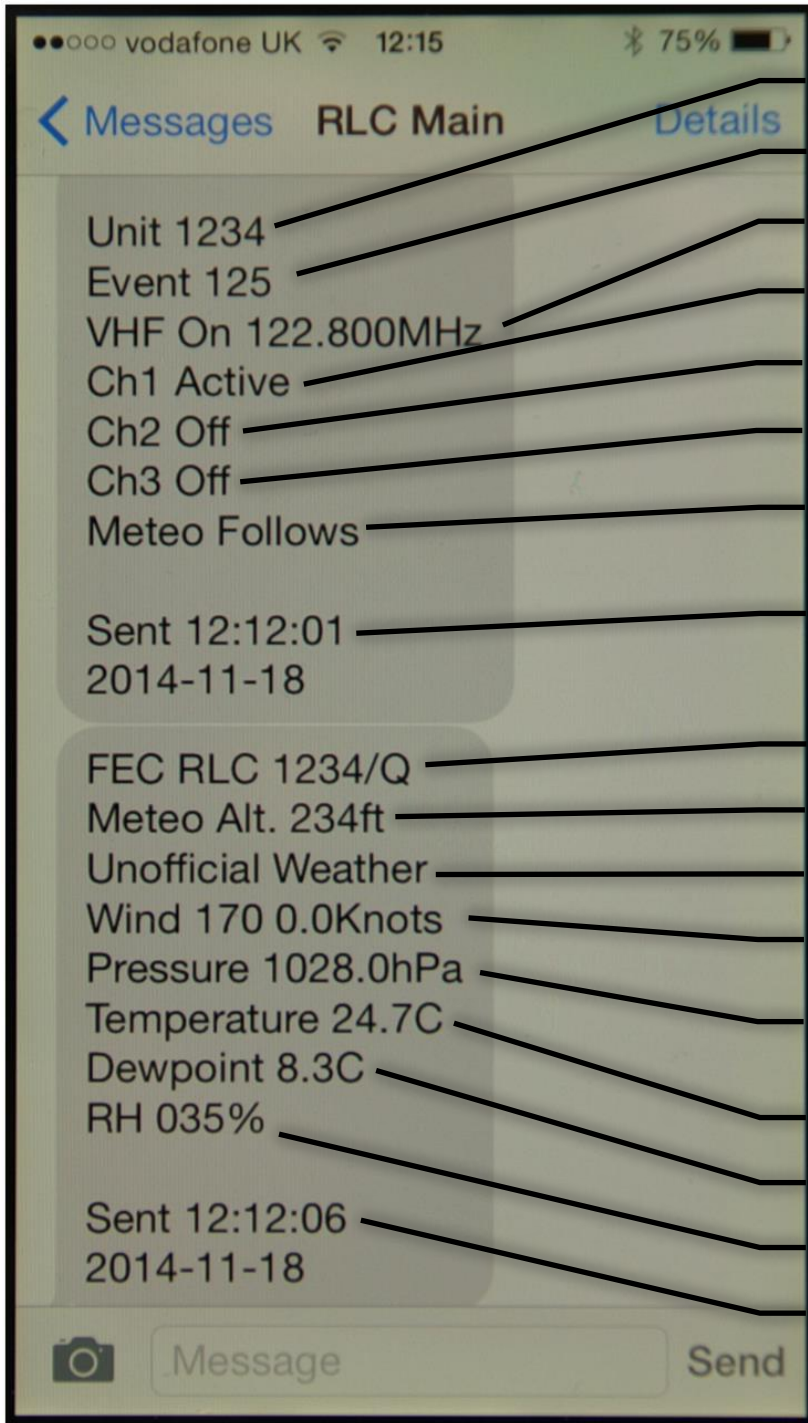
- Controller ID
- Event Number
- VHF Radio Active 122.8MHz
- Confirmation: Channel 1 Active
- Confirmation: Channel 2 Inactive
- Confirmation: Channel 3 Inactive
- Meteorological reporting option fitted – information to follow
- Time/Date stamp of transmission in international format
- Controller/Meteo ID
- Caution: Meteo altitude not set
- Caution
- Wind Direction and Speed
- Barometric Pressure not sent as Meteo Altitude not set
- Temperature
- Dewpoint
- Relative Humidity
- Time/Date Stamp



# FEC Remote Lighting Controller HP0656 User Installation and Operation Manual

## 4.8 System Response – To User – Meteorological Pack fitted – Altitude Set

The standard response is shown in the screen shot of an iPhone below if a MetPak is fitted and altitude is set. Pressure information is sent if the meteorological station altitude is set



Controller ID

Event Number

VHF Radio Active 122.8MHz

Confirmation: Channel 1 Active

Confirmation: Channel 2 Inactive

Confirmation: Channel 3 Inactive

Meteorological reporting option fitted – information to follow

Time/Date stamp of transmission in international format

Controller/Meteo ID

Meteo altitude set

Caution

Wind Direction and Speed

Barometric Pressure sent as Meteo Altitude set

Temperature

Dewpoint

Relative Humidity

Time/Date Stamp