pulsar
Radio Trigger System

IMPORTANT

MODIFICATIONS TO THE OPERATION OF THIS EQUIPMENT MAY VOID YOUR AUTHORITY TO USE THIS PRODUCT UNDER THE EQUIPMENT AUTHORISATION GRANTED BY THE REGULATING AGENCIES.

Bowens International Limited

Q89-5150

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.

PULSAR RADIO TRIGGER INSTRUCTIONS BWL-0340/1
BOWENS INTERNATIONAL LIMITED

355 Old Road
Clacton on Sea
Essex CO15 3RH UK

Tel: +44 (0)1255 422807
Fax: +44 (0)1255 436342

www.bowensinternational.com

BOWENS

User Guide

pulsar
Radio Trigger System

Operating Manual Contents

pulsar Radio Trigger System

Introduction

Congratulations on choosing the **Bowens Pulsar** Radio Trigger.

Designed using the latest technology to produce a unit that is simple to operate, **Pulsar** is capable of triggering the widest range of photographic equipment including studio flash, cameras and light meters.

Pulsar can be used as either a Transmitter or Receiver allowing the ability to quickly change your lighting settings. You can easily substitute one **Pulsar** with another by simply changing its mode or Channel settings. This is just one example of the versatility of **Pulsar**. In order to fully understand the many studio uses for your new **Pulsar** Radio Trigger, please take a moment to read through this user guide.

Included in box:

1 x Instruction Manual
1 x **Pulsar**
2 x AAA Batteries
1 x Fixing Bracket
1 x Elastic Cord with Ends
4 x Rubber Feet
1 x Sync Cord
1 x Jack Plug Adapter

pulsar Radio Trigger System

Channel codes and Switches

Sync-In and hot shoe Sync-In are internally connected.
Sync-Out is designed for camera trigger although will also trigger flash.
PC Sync-Out is used for flash trigger.

pulsar Radio Trigger System

Power Requirements

If the unit is left for long periods of time, the batteries should be removed.

When the indicator 'double flashes' the batteries should be changed at the earliest opportunity.

1. Remove battery cover.
2. Fit batteries observing correct polarity.
3. Replace cover.
4. Set mode switch to either Transmit or Receive.
5. Press Test button check indicator blinks.

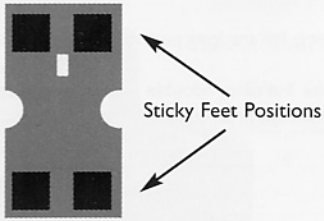
3V External supply if connected will disconnect internal batteries.
Centre pin is +V

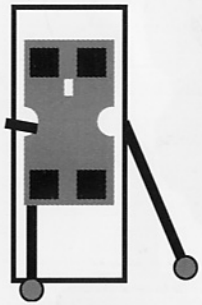
Warning:
Use an approved external supply to avoid damage to ***Pulsar****.*
Contact your distributor for availability and pricing information.

pulsar Radio Trigger System

Mounting Bracket

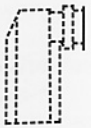
Attach rubber feet to flat side of mounting bracket (supplied). **Pulsar** mounts to top tabs (with slot and end-stops). Cord loops under lower tabs.

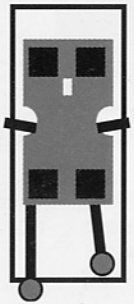




Place flat side of mounting bracket with rubber feet against pack, head or stand.

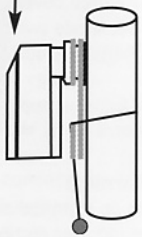
Insert one end of cord under one of the lower tabs. Loop free end around back of pack, head or stand.





Fix cord by pulling tight around second lower tab.

Finally, insert **Pulsar** into top tabs of mounting bracket facing down (as shown here at left) and tighten thumb knob to secure.



pulsar Radio Trigger System

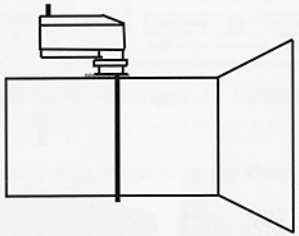
Mounting Pulsar

Positioning **Pulsar**

Make sure unit is firmly secured.

The higher the transmitter usually the better.

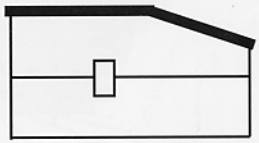
Keep away from large metal objects.



Suggested Monobloc Attachment

Keep away from devices susceptible to radio interference.

Keep away from areas of physical damage, including hot surfaces.



Suggested Generator Attachment

For camera fixing use hot shoe attachment

pulsar Radio Trigger System

Orientation

The **Pulsar** antenna should be kept clear of metal objects to ensure reliable operation.

Use the test button to confirm operation of the units in the chosen configuration before taking photographs.

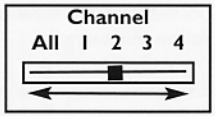
Due to the way radio signals are transmitted, moving a few centimeters in either direction can make a large difference.

For maximum distance the Transmitter and Receiver should be orientated in the same direction, although this is not essential.

pulsar Radio Trigger System

Using Channels

The Channel selector can be used to control various lighting equipment by setting the channel switch on the Transmitter and receiver to the same channel.



A **Pulsar** in 'transmitter' mode set to All will trigger all **Pulsars** in 'receiver' mode in that studio *(fig 1.0)*.

A **Pulsar** in 'receiver' mode set to All will be triggered by any **Pulsar** in 'transmitter' mode in that studio *(fig 1.0)*.

A **Pulsar** in 'transmitter' mode set to a specific channel (i.e. 2) will trigger any **Pulsar** in 'receiver' mode set to the same channel and also any **Pulsars** set to receive 'All' *(fig 1.1)*.

Fig 1.0

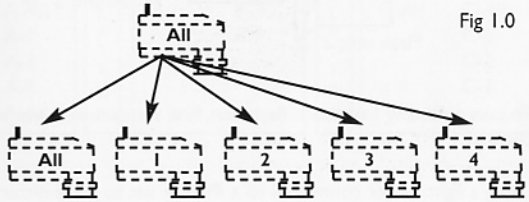
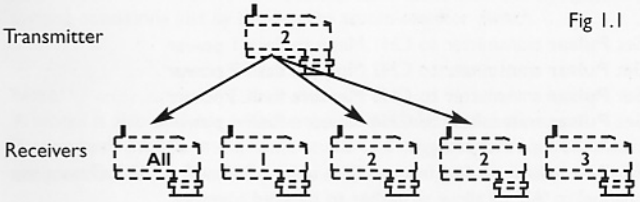


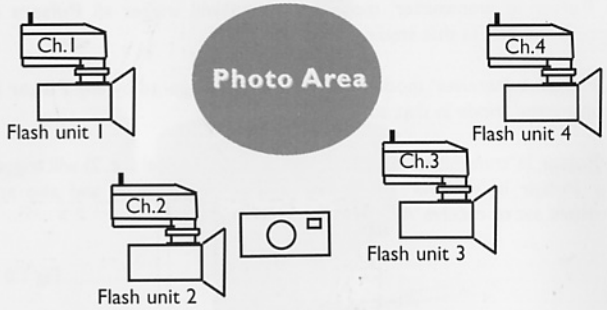
Fig 1.1



Metering Flash Settings

To measure the settings of multiple flash equipment using a light meter follow this example.

Example:- Using 4 flash units each with a **Pulsar** set as receiver.



To take a reading from each flash unit, first set each receiver to a different channel.

Using a light meter connected to a **Pulsar** set to transmitter mode (See page 12 for connection information).

Set **Pulsar** transmitter to CH1 Measure flash 1 power
Set **Pulsar** transmitter to CH2 Measure flash 2 power
Set **Pulsar** transmitter to CH3 Measure flash 3 power
Set **Pulsar** transmitter to CH4 Measure flash 4 power

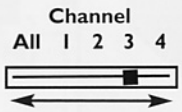
Finally to take a reading from all flash units combined, set the transmitter channel to 'All' to allow all flashes to be fired together.

pulsar Radio Trigger System

Studio Operation

The Studio selector provides isolation for separate lighting studios or users.

The Channel Selector provides a unique ID for each flash device.



Example.

User 1 Studio		ISOLATION	User 2 Studio		ISOLATION	User 3 Studio	
A-All	A-All		B-1	B-All		C-All	C-All
	A-1			B-1			C-1
	A-2						C-2
	A-3						C-3
	A-4						

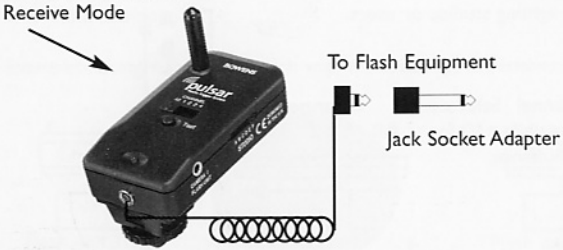
This feature can also be used to set up a number of completely separate lighting conditions just by moving the studio selector switch.

Note:
A model is also available without the Studio selector function.
If using both models in the same studio and triggering is required, always set your **Pulsar** to Studio F.

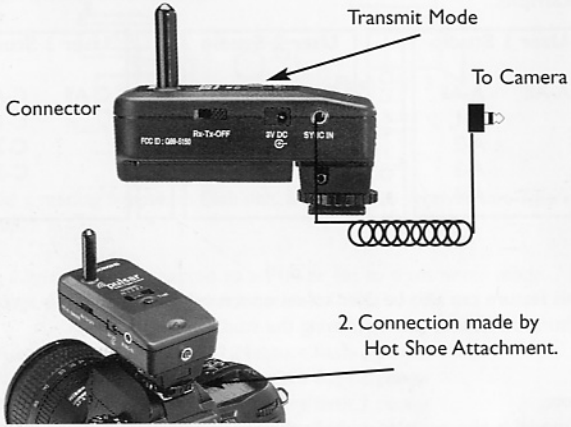
pulsar Radio Trigger System

Standard Connection

Receiver Connection



Transmitter Connections



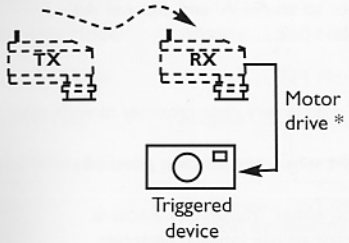
Warning:

*Do not connect a single **Pulsar** to more than one flash unit. Do not connect to older flash equipment that use a 25V or greater sync voltage.*

pulsar Radio Trigger System

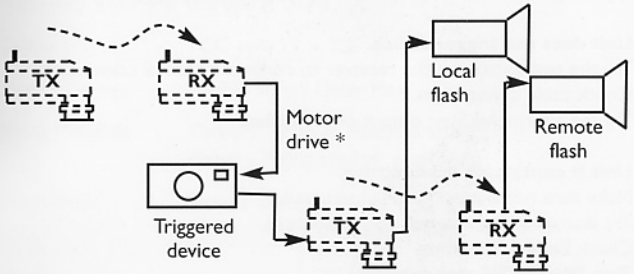
Advanced Connection

Triggering Remote Camera



* Optional 'Motor Drive' cable not included. This cable is camera specific. Please consult your camera manual for details or contact your distributor.

Triggering Remote Camera and Flash Sources



There may be a delay from pressing the button to the picture being taken; this is because most cameras have a wakeup/focus delay.

Troubleshooting

Try this first:
Check the indicator on each unit is 'single flashing' indicating that the unit is ON and the battery is OK.
Set both transmitter and receiver to studio 'A' and channel 'All'
Turn all units OFF then back ON.

Note:
Units may not operate correctly if used in very close proximity to each other.

Indicator on unit does not light when test button pressed.
Try replacing batteries.
Make sure power switch is set to either Transmit or Receive.
Remove external power connector, to use internal batteries.

Unit does not receive code.
Set both transmitter and receiver channel select to All.
Try using units in another area away from metal objects.

Unit does not trigger device.
Try the test button on the receiver to confirm electrical connection.
Check cable connections.
Try the alternative Sync output of the **Pulsar**.

Unit is continually transmitting.
Make sure test button is not obstructed.
Try disconnecting external trigger sources.
Check Battery condition.
Turn **Pulsar** OFF then back ON.

In the unlikely event of a problem or fault with your **Pulsar** please contact Bowens for additional help or to arrange a repair.

pulsar
Radio Trigger System

Specifications

Batteries	2 x AAA ,MN2400 or LR03
Battery Life Approx	(Before low battery indication)
Transmit Mode:	Alkaline.... 560 Hours Nicad..... 350 Hours
Receive Mode:	Alkaline.... 224 Hours Nicad..... 140 Hours
Typical Use:	Alkaline.... 200 Hours Nicad..... 125 Hours
Sync Voltage Out:	3.3V max
Size	(L) 90mm x (W) 49mm x (H) 44mm (Typical dimensions including hot shoe)
Weight	122g (4.3 oz)
Range	100m (333 ft)
Frequency 433 MHz	(Europe & USA)
Conformity	FCC part 15 - CE
Trigger Timings	1/2000 500µS Delay Max
Fixing Methods	Camera - **Pulsar** Hotshoe attachment. Other - Fixing adapter provided.
Accessories	**Pulsar** External Power Supply. Motor drive Camera Sync-Cord.

Due to our policy of constant product improvement Bowens International Limited reserve the right to change equipment specification without notice.

pulsar
Radio Trigger System