

# MAXIMISE THE EFFICIENCY AND PRODUCTIVITY OF YOUR EARTHMOVING FLEET





# **CONTENTS**

PAYLOAD MANAGEMENT PRODUCT RANGE OVERVIEW	4
PRODUCT ARRANGEMENT ON A TYPICAL FLEET	5
FEATURES & BENEFITS	6
PAYLOAD MANAGEMENT PRODUCTIVITY GAINS	7
PAYLOAD DISPLAY INTERFACE	8
REMOTE PAYLOAD DISPLAY	9
EXTERNAL PAYLOAD DISPLAY	10
PORTABLE REMOTE PAYLOAD DISPLAY	11
REMOTE PAYLOAD SYSTEM SETUP	12

## PAYLOAD MANAGEMENT PRODUCT RANGE OVERVIEW

The Payload Management range of products consists of production monitoring tools designed to maximise the efficiency and productivity of your earthmoving fleet. The products are designed to increase productivity by utilising payload data to increase production efficiency and to enable safer loading practices.

#### THE PAYLOAD MANAGEMENT RANGE INCLUDES:

- Truck Payload Interface
- External Payload Display
- Remote Payload Display

#### Support Tools

- Portable Remote Payload Display
- Remote Payload Diagnostics Unit (For remote payload display systems)

#### THE PAYLOAD MANAGEMENT RANGE OF PRODUCTS ARE COMPATIBLE WITH TRUCKS FITTED WITH:

- Caterpillar TPMS
- Caterpillar VIMS
- Komatsu PLM I,II,III & VHMS
- Leibherr PWS

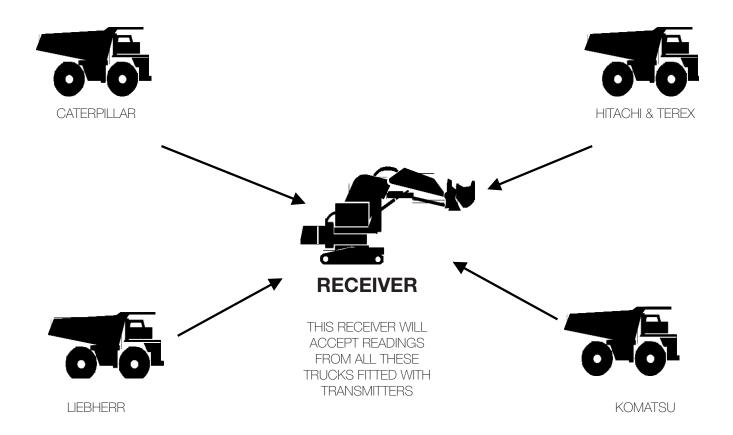
- Hitachi CONTRONIC
- Leibherr LWS
- Terex Trips

The Remote Payload system works by transmitting payload data between the truck and loader, allowing the loader operator to see the trucks weight to enable them to fill the optimal load onto the truck's every time.

#### SIMULATED UNIT OPERATION

The Receiver Unit fitted to loader displays weight being loaded into Trucks.

This payload data is transmitted to the loader via radio link.



## PRODUCT ARRANGEMENT ON A TYPICAL FLEET

PAYLOAD INTERFACE & CHANNEL SELECTOR FITTED TO TRUCKS

EXTERNAL PAYLOAD DISPLAY FITTED TO TRUCKS



REMOTE PAYLOAD DISPLAY UNIT IS FITTED TO THE LOADING MACHINES



PORTABLE REMOTE PAYLOAD
DISPLAY
FITTED TO SUPERVISOR'S VEHICLE
& USED BY TECHNICIAN





## **FEATURES & BENEFITS**

The EarthTrack® Payload Management products give you greater control over the productivity of your earthmoving fleet. The payload information allows you to better manage the efficiency of your fleet to gain greater productivity and engage in safer loading practices.

#### PRODUCT FEATURES INCLUDE:

- Strut Indicators display the distribution of the load (Remote Payload Display only)
- Weight display repeats the POD weight of the truck in the digger
- Integration with the trucks onboard OEM payload system
- Off the shelf kits allow fast set up
- Optional large external LED display

- Universal components suit all trucks of the same make and model
- Detailed product documentation
- Operator and maintenance training available
- Optional portable supervisors units
- Minimum spare parts needed
- Australian made for universal application

#### CUSTOMER ADVANTAGES INCLUDE:

- Preserve OEM weight related warranty
- Increase Bench Cubic Meters moved per shift/ per truck
- Weight properly and safely distributed on truck every time
- Extend life of power train
- Reduced strut damage

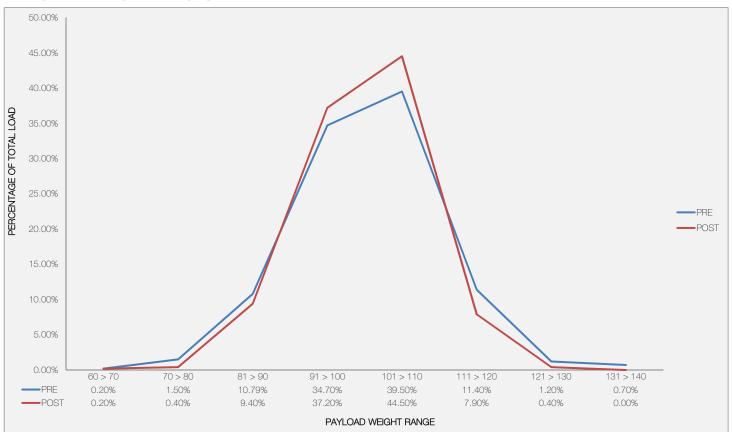
- Prevent over loading and under loading
- Reduce tyre wear
- Better return from fuel consumption
- Less clean up of spillage from over loading
- Enables site managers to monitor fleet and operator productivity



## PAYLOAD MANAGEMENT PRODUCTIVITY GAINS

The curve indicates payload results when a EarthTrack® Payload System is installed. The curve shows when the system is installed the optimal payloads increase. This results assists with reduced down time on trucks by decreasing excessive stress by reducing overloading. (Representation of data obtained from payload system).

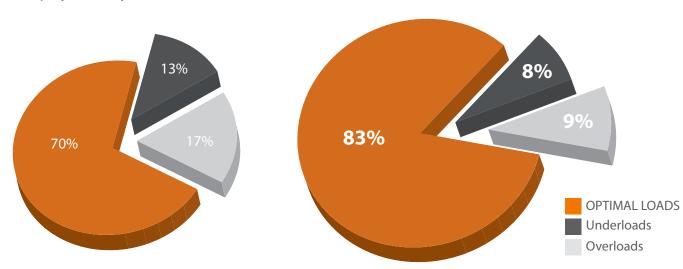
## COMPARISON BETWEEN LOADING WEIGHT AVERAGES BEFORE AND AFTER THE INSTALLATION OF A PAYLOAD MANAGEMENT SYSTEM



The system was fitted on a trial basis with data collection over a 3 month period. Therefore all the results were obtained fitting the system minimal operator training. With full operator training continued improvement of optimum loads can be achieved. (Representation of data obtained from payload system).

## Before payload system Installed

## AFTER PAYLOAD SYSTEM INSTALLED



## PAYLOAD DISPLAY INTERFACE

The EarthTrack® Remote Payload Display system truck interface communicates with the OEM payload system. The payload weight and the four strut pressures are read from the OEM payload system and fowarded onto the digger's remote display via the radio channel

Payload weight is displayed remotely on any remote payload displays within range that is on the same channel.

Payload Display Truck Interface can be installed to all major off road haul trucks including:

- Caterpillar VIMS
- Komatsu PLM I, II, III & VHMS
- Leibherr PWS
- Hitachi
- Terex

#### **PRODUCTS**

PART NO. 12082 CONTROL TRUCK PAYLOAD (470MHZ))

PART NO. 11594 CHANNEL SELECTOR

(EXTERNAL DISPLAYS OPTIONAL)

(PLUS MACHINE INTERFACE CABLES)

Overseas Payload interface units available

- please inquire with RCT.





## REMOTE PAYLOAD DISPLAY

The EarthTrack® Remote Payload Display (RPD) system works by transmitting payload data from the truck being loaded to the loading tool, displaying the truck's load status inside the loading machine. This process increases production efficiency by allowing the loader operator to load the optimal weight onto the truck every time.

The RPD system also allows the loader operator to monitor the payload distribution on the truck's loading tray. The system visually displays to the operator if over loading occurs on one side or in one particular corner of the truck. This feature helps to increase safety and minimise operating costs by reducing wear on the truck's struts, suspension and tires. This process also ensures the trucks are safe for transporting the load.

The RPD system automatically communicates with the truck being loaded when the first load is placed in the tray. If more than one loading tool is being used, the trucks can communicate between the different loading tools by the operator switching their channel selector to the desired loading tool channel as it docks in to be filled.

# EVEN LOAD, EVERYTIME! INCREASE PRODUCTION EFFICIENCY!

SWITCH LOADING MACHINES, AT THE FLICK OF A SWITCH



#### FEATURES & BENEFITS

- Displays the weight information inside the loading tool
- The system automatically communicates with the truck that is being loaded
- Strut indicators display the distribution of the load on the truck
- A channel selector is required to run multiple loading tools
- Displays second gear re-weigh figure when connected to VIMS

- Optional load count output to suit EarthTrack® DLD
- Easy to use with minimal set up required to operate
- Increases productivity by preventing over loading or under loading of trucks
- Increases safety by allowing the loader operator to monitor the weight and distribution on the truck's loading tray
- Reduces maintenance costs due to wear and tear as a result of over loading

#### **PRODUCTS**

PART NO. 12208 DISPLAY

PART NO. 12175 CONTROL LOADER PAYLOAD (470MHZ))

PART NO. 11594 CHANNEL SELECTOR

(PLUS MACHINE INTERFACE CABLES)

Overseas Payload receivers units available

- please enquire with RCT.

## **EXTERNAL PAYLOAD DISPLAY**

The EarthTrack® External Payload Display kit (EPD) is designed to allow loader operator's to view the truck's payload weight whilst they are loading. The EPD kit connects directly into the truck's onboard Payload Operator Display (POD) unit and is mounted onto the truck's exterior so it can be easily viewed by the loader operator. This simple solution increases production efficiency by allowing the loader operator to load the optimal weight onto the truck's every time.

In some instances a truck may be loaded on the opposite side preventing the loader operator from viewing the display. This problem can be easily overcome by using the Dual External Payload Display Kit, which allows the display to be positioned on both sides of the truck.

#### FEATURES & BENEFITS

- Large readable external payload display
- The transmitter unit connects directly into the payload transmitter unit with minimal modifications
- Easy to use and no maintenance required
- Increases production efficiency by preventing over loading and under loading of weight on the trucks
- The large external display allows the site production manager to monitor fleet productivity
- Connection to EPD transmitter (part numbers to be confirmed prior to purchase)



#### **PRODUCTS**

PART NO. 11484 CONTROL (PLUS INTERFACE LOOM)

PART NO. 4557 DISPLAY X2 (PLUS DISPLAY LOOM)



## PORTABLE REMOTE PAYLOAD DISPLAY

The EarthTrack® Portable Remote Payload Display (PRPD) is designed to allow mine site supervisors to monitor the productivity of their fleet from the comfort of their regular site vehicle.

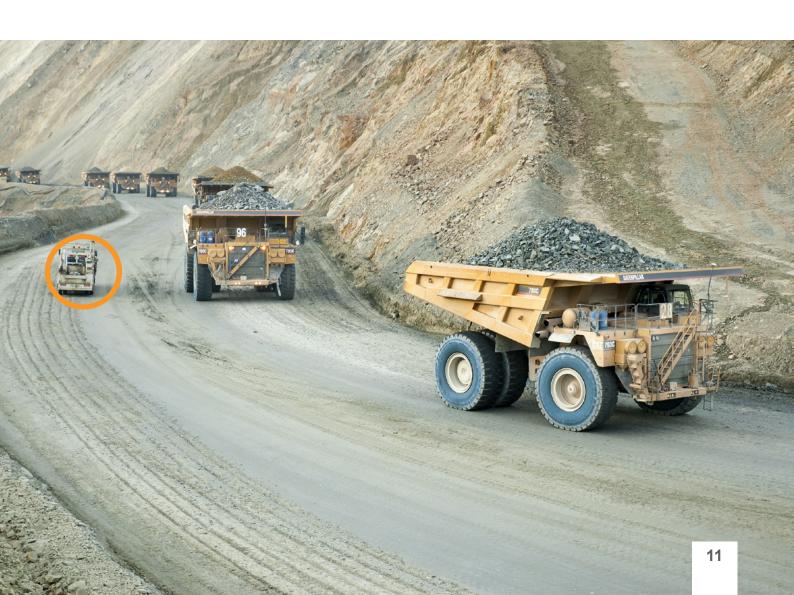
The PRPD comes in a solid metal case for ease of portability and is powered by the lighter socket on the dash of the vehicle.

The PRPD communicates with the trucks via radio link and comes with a channel selector to allow the supervisor to select the loading circuit they wish to monitor.

This unit displays the exact information as seen on the loading machine.

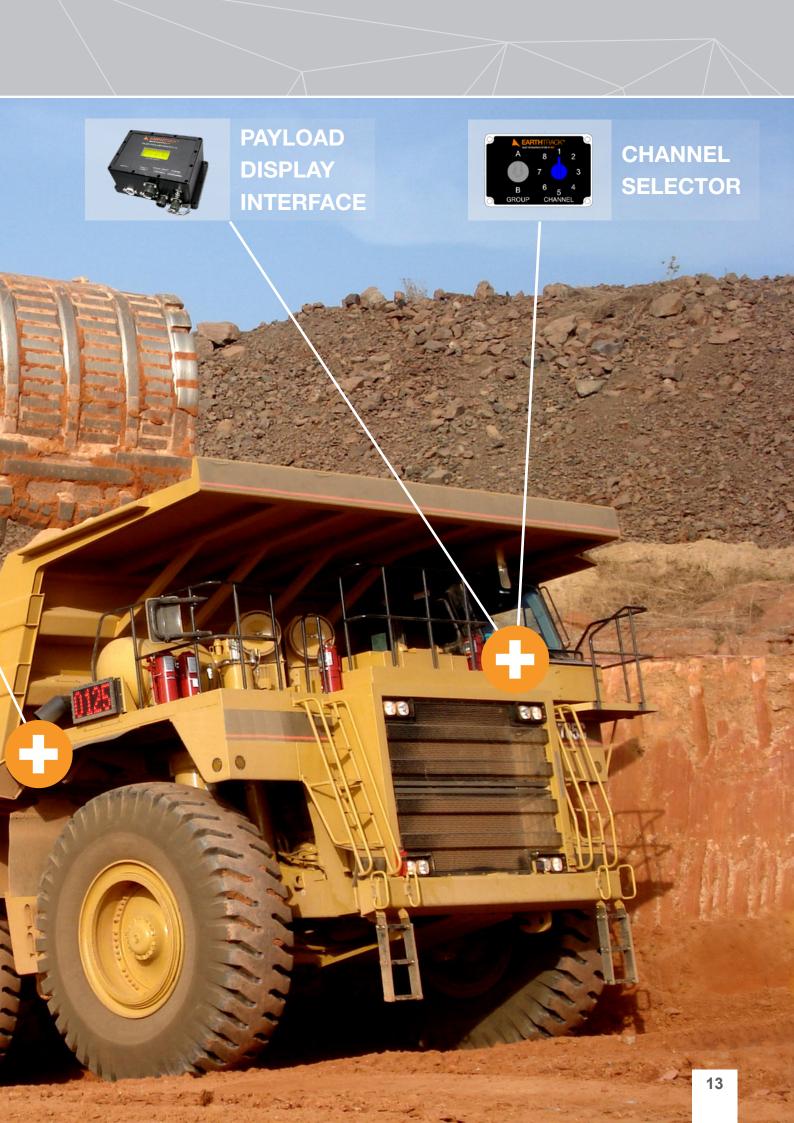
#### FEATURES & BENEFITS

- Displays the trucks live payload weight during loading
- Channel selector allows the site manager to monitor different loading circuits
- Displays the truck's load distribution information
- Extremely easy to use
- Allows the site manager to monitor the productivity of the entire fleet and also the performance of individual loader operators
- Allows the site manager to enforce safe loading practices by establishing regular safety checks



## REMOTE PAYLOAD SYSTEM SETUP











### Discover more: rct-global.com

## sales@rct-global.com

AUSTRALIA: +61 8 9353 6577 AFRICA: +27 83 292 4246 CANADA: +1 705 590 4001 RUSSIA / CIS: +7 910 411 1174 SOUTH AMERICA: +56 3 5229 9409 +1 801 938 9214



Discover more: tecwise.com.br tecwise@tecwise.com.br

