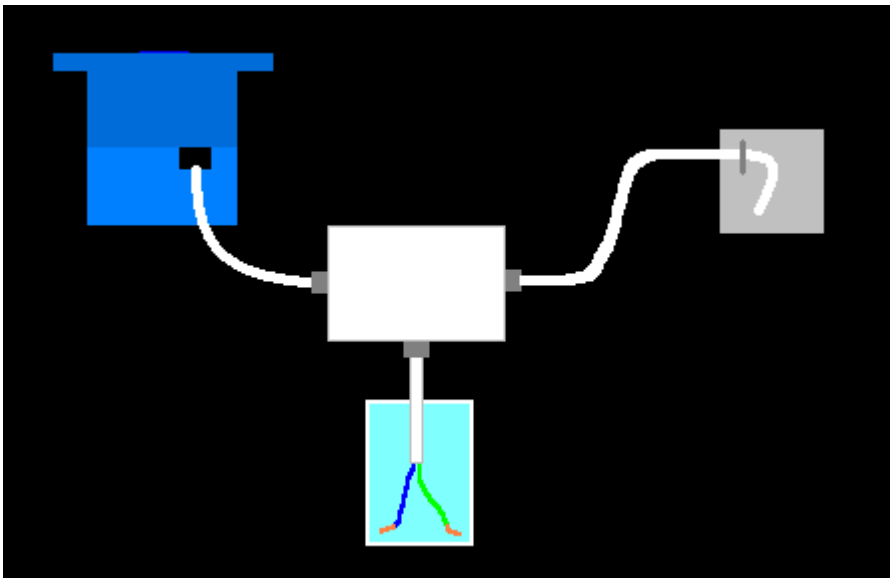
Halma Water Management



Technical Instructions:
Process for Installation of Pulse Splitter Boxes

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Record of Amendments

Keep this record in the front of the User Manual. When the document has been amended write the amendment number, the date, the paragraph numbers affected by the amendment and your initials in the table below.

Amendment Number	Amendment Date	Reason for Re-Issue (Paragraph Number (s) Amended)	Amended by
1.0	07 09 10	First Draft	TC

Process for Installation of Pulse Splitter Boxes

Contents

Introduction

Where a third party wishes to use the pulse output from a water company's meter it is necessary to install a splitter box in order to maintain system integrity for both parties.

This guide is intended to assist with the process where the sensor is connected to the data logger through a gland.

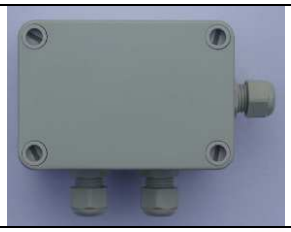
This process involves cutting through the sensor cable and so should only be carried out by a technically competent person.

This process should be carried out with the logger still recording to prevent data loss.

Tools Required

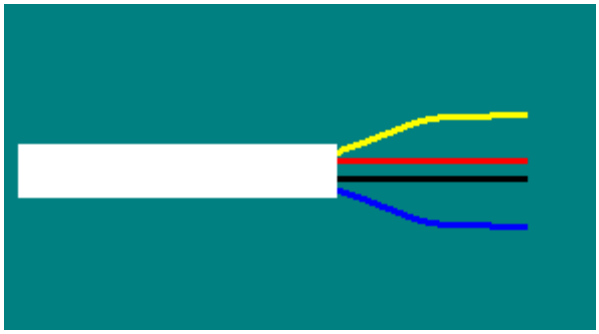
Lifting Keys	
Pliers	
Cable Strippers	
Flat Bladed Screwdriver	
Terminal Screwdriver	
Knife	
Magnet	
Digital Volt Meter	
2 Channel Data logger with Flying Leads	
Data logger Communications Cable	

Complete Bill of Materials (Not all items required for every install)

Splitter Box (CMPS01 Single or CMPS 02 Dual Channel)	 
Potting Compound (Approx 130ml per box)	
4 Core Cable	
Pulse unit (main meter)	
Pulse Unit (bypass meter)	
Cable Ties	

Notes

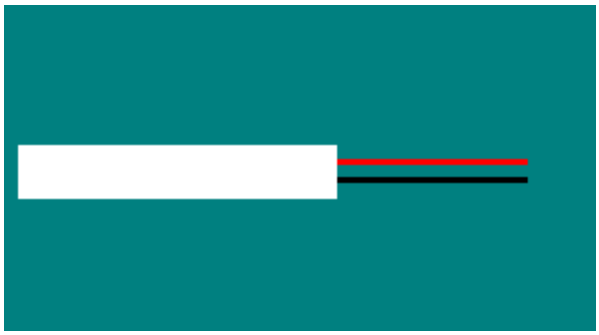
The splitter box should always be fitted in the original cable directly connected to the pulse unit.



The cable may have more cores than are necessary for operation.

Cores that are not required and should be cut back.

Refer to Page 6 of this guide for information about reed switch types and the cables they use.



Where a combination meter is fitted with a dual channel logger a junction box similar to this one may be already installed.

Check the polarity of reed switch wiring using a volt meter as not all loggers are wired the same.

Process for Installation of Pulse Splitter Boxes

Pulse Unit Types and Wire Colours

PSMT

Colours Used
RED and **BLUE**

MSM

Colours Used
RED and **BLACK**

V210

Colours Used
RED and **BLACK**

PR7 10:10

Colours Used
Black and Red

LRP

Colours Used
RED and **BLACK**

PR7 1:10

Colours Used
Black and Yellow

H4000

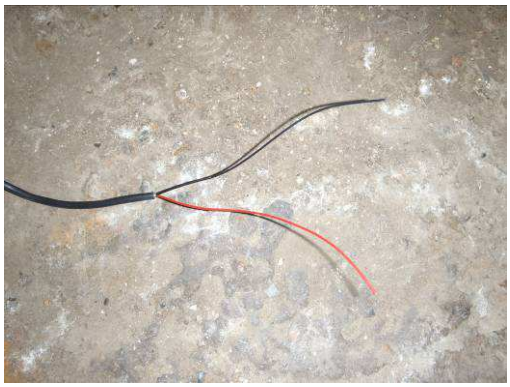
PD10/PD100

Colours Used
Green and Blue

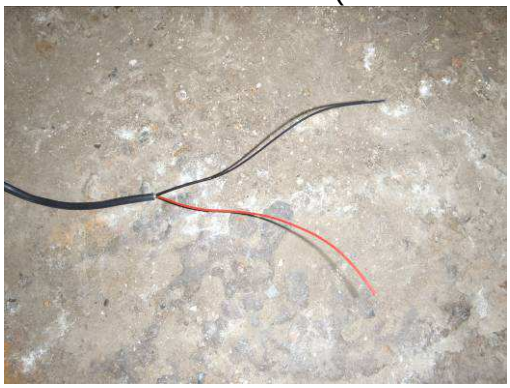
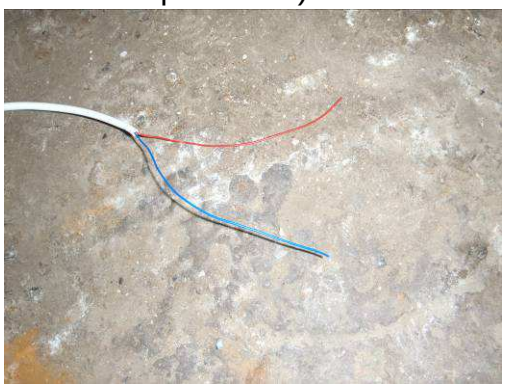
Splitter Box Installation Instructions

1. If Possible manually download data from existing data logger.
2. Cut the cable from the pulse unit remove excess cable length but leave enough to allow for repairs or remove splitter from meter chamber (whichever is greater).

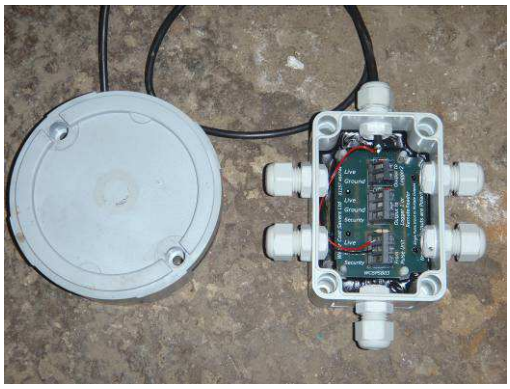

3. Strip back sheathing approximately 100mm of all cut ends.



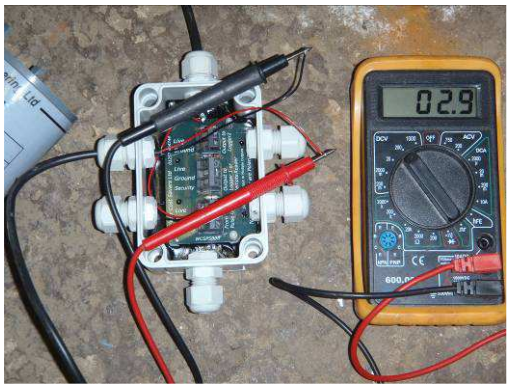

Remove unused cores (refer to instructions for pulse unit)

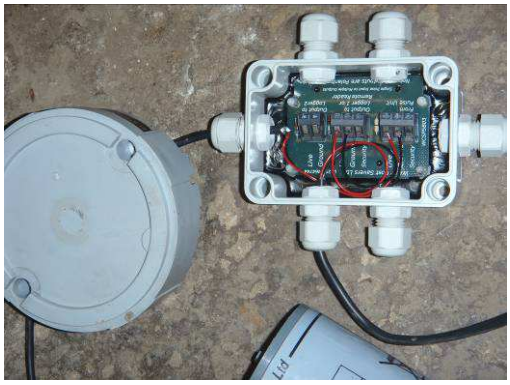
Connect main pulse unit to Splitter box (use gland at opposite end to terminal)



Check polarity of wiring from existing logger

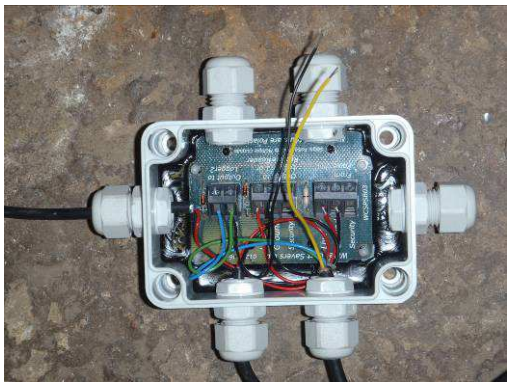


Connect main from existing logger to splitter box observing polarity (not logical core colours)

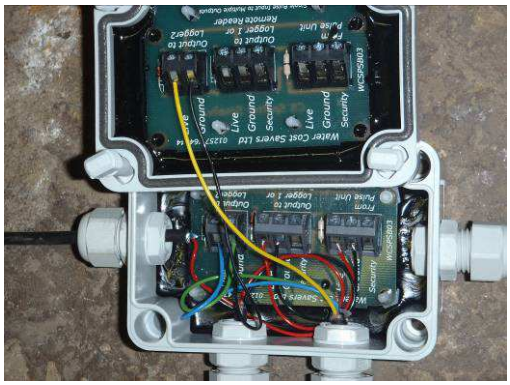


Cut four core cable to length (customer specification) strip sheathing 100mm on one end and 50mm on the other.

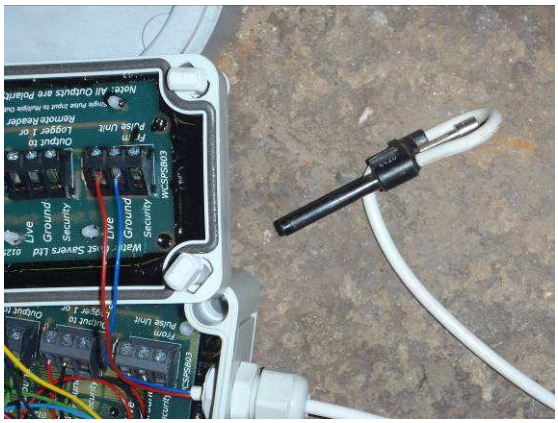
Connect long ends of cable to “output to logger 2 terminal” (Blue Signal / Green Ground) if dual channel connect an additional100mm of wire to link Ground terminal.



Connect Yellow Signal wire to “Output to logger 2” terminal and link Ground wire



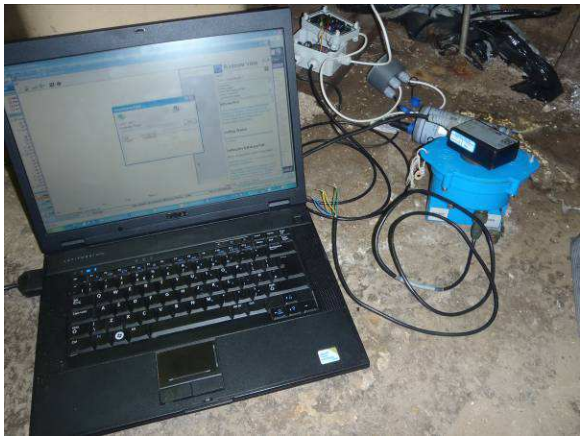
Connect bypass pulse unit to Splitter box



Check polarity of wiring from existing logger

Temporarily connect Data Logger to Flying Lead (observe polarity)

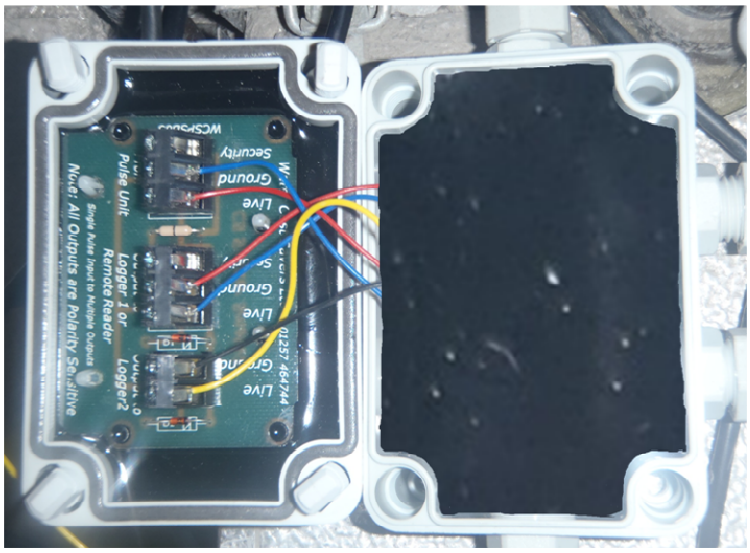
Using Radwin Check for Pulses on all channels (check meter is turning)
If possible check pulses are being received on all channels of existing logger.



Note Serial Numbers and Readings from Meters

Cut bare ends from flying Lead

If in damp conditions fill box to top with resin potting (keep box level for 24 hours to set)



Label and mount splitter box tidily and remove all rubbish