

Made By: AB 18/06/14

Version: 1.0

Title – Permanet LX Configuration

(Issue 1)

Question – How do I configure a single channel Permanet LX including setting up on Datagate and viewing on HWM Online

The general configuration for a Permanet LX is as per a normal Multilog LX – the specific requirements for this variant are as follows -

During logger configuration Channel 1 will be the 'Noise' channel Set the calibration value to 1.0 and ensure it is 'Enabled'

	Configure Logger Wizard					
Configuration Summary:						
 ↓ Logger Type: ↓ Connection Type: ↓ Baud Rate: ↓ Logger Type: ↓ Zone: ↓ Location: ↓ Connection Type: ↓ Baud Rate: ↓ Telephone Number: ↓ Channel 1: 	Multilog LX GPRS Direct (Cable) Baud Rate: 9600 Multilog LX GPRS EH2_: 4SD : GPRS Baud Rate: 9600 +447713369404	Channel 01 Configuration: Enable the channel if required and set the logging mode for digital channels. Select the required transducer type Enabled Transducer Analogue (Pressure) Calibration: 0.100000 Enter Calibration values Advanced				
<	>					
		<< Previous Next >> Cancel				

Channel 2 will be the 'Level' Channel Set the calibration value to 1.0 and ensure it is 'Enabled'

Configure Logger Wizard					
Configuration Summary: Configuration Option:					
Logger Type: Connection Type: Baud Rate: Connection Type: Connection Type: Connection Type: Baud Rate: Baud Rate: Channel 1:	Multilog LX GPRS Direct (Cable) Baud Rate: 9600 Multilog LX GPRS EH2_: 4SD : GPRS Baud Rate: 9600 +447713369404	Channel 01 Configuration: Enable the channel if required and set the logging mode for digital channels. Select the required transducer type Enabled Transducer Analogue (Pressure)			
¢	>	Calibration: 0.100000 Enter Calibration values Advanced			
,		<< Previous Next >> Cancel			



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Channel 3 is the 'Leak/No leak' channel – Set the calibration value to 1.0 and ensure it is 'Enabled'

Configure Logger Wizard				
Configuration Summary:		Configuration Option:		
Logger Type: Connection Type: Baud Rate: Logger Type: Cone: Location: Connection Type: Baud Rate: Eaud Rate: Telephone Number: Channel 1: Channel 1: Channel 3:	Multilog LX GPRS Direct (Cable) Baud Rate: 9600 Multilog LX GPRS EH2_: 4SD: GPRS Baud Rate: 9600 +447713369404	Channel 03 Configuration: Enable the channel if required and set the logging mode for digital channels. Select the required transducer type	< > >	
<	>	Calibration: 0.100000 Enter Calibration values Advanced		
		<< Previous Next >> Canc	el 🔤	

Select 'Next'

At the next screen configure the Sample rate to be '24 Hours' as below -



Select 'Next'

The logger start time needs to be set for 5.30am (as this defines the time the data will be downloaded from the Permalog to the LX logger each day)



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Configure Logger Wizard					
Configuration Summary:		Configuration Option:			
Logger Type: Connection Type: Baud Rate: Logger Type: Connection Type: Connection Type: Baud Rate: Baud Rate: Channel 1: Channel 1: Channel 1: Channel 3: Sample Rate: Record Start Time: Memory Mode:	Multilog LX GPRS Direct (Cable) Baud Rate: 9600 Multilog LX GPRS EH2_: 4SD : GPRS Baud Rate: 9600 +447713369404 24 Hours 05:30:00 23/10/20 ⁻ Cyclic Memory	Recording: Enter the recording start time. If a stop time is required, select enable stop and enter the stop time. Loggers are • Record Start Time: 05:30:00 ÷ 23/10/2013 • Record Stop Time: 17:06:16 ÷ 22/10/2013 • Enable Stop • Cyclic Memory • Stop Cyclic Memory • Cancel •			

Call in should be set at twice per day at 5.40am and 6.00am

Configure Logger Wizard						
Configuration Summary:		Configuration Op	otion:			
Logger Type: Cone: Conection: Connection Type: Baud Rate: Connection Type: Connection Type: Con	Multilog LX GPR EH2_: 4SD: GPRS Baud Rate: 9601 +447713369404	.		Times	< >	
Channel 1: Channel 2: Channel 3: Sample Rate:	24 Hours		all Times Table		•	
 Sample Frace. Record Start Time: Memory Mode: Data: [1] UDP: [2] UDP: 	05:30:00 23/10, Cyclic Memory GPRS UDP Igrudp.hwm-wate	Enable	Time 05:40:00 06:00:00 00:00:00	UDP [1] lgrudp.h [1] lgrudp.h [1] lgrudp.h	~ ~	
GPRS Call Times <	Call Times Table		<< Previous	Next >>	Cancel	

All other settings as per normal Multilog LX and then 'Upload' the settings to the logger -



Carry out a GPRS test to ensure you have communications to Datagate.

Configure Logger Wizard						
Configuration Summary:		Configuration Option:				
 ✓ Zone: ✓ Location: ✓ Connection Type: ✓ Baud Rate: Maud Rate: ✓ Channel 1: ✓ Channel 2: ✓ Channel 3: ✓ Sample Rate: ✓ Record Start Time: ✓ Memory Mode: ✓ Data: ✓ I11UDP: 	EH2_: ^ 4SD : GPRS Baud Rate: 960 +447713369404 24 Hours 05:30:00 23/10, Cyclic Memory GPRS UDP Igrudp, hym-wate	Finished: The logger has been uploaded and started. The location information has also been entered in the database. The Logger has now been uploaded The Database has been updated Zero Transducers: Image: Sector Sec				
I (1) UDP: I (2)	Call Times Table	Current Data Values GPRS Test Current Data Values GPRS Test Finish				

IMPORTANT

Now ensure the Permalog is 'woken up' from its transport mode by swiping the side of it using the magnetic base of the LX Antenna and ensuring there is a short sequence of Red and Green LED flashes visible in the winodw in the top of the yellow moulding -





Ref: FAQ0051	Version: 1.0
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Datagate /HWM Online

Open the correct Datagate account and locate the logger and 'open' it -

gate.mobifi.com/dgweb/logger	html2id=20026		 	🙁 * Google	م	I -
d 📵 Getting Started	annii:10=22030		1a * C	oudgie	1	ind "
HWM	DataGate				Current user: hwmsa01 Access level: Super admin Logout: logout	
Loggers	View logger					
Loggers Summary All Loggers Quiet loggers Loss loggers Upload loggers Create a new logger Send to loggers Logger Types Logger types New logger type Channel units Channel units	Serial number 25323197 Datagate number 29036 Mobile number 19047297540 GSM data number Site name Permanet HU Site id 11th St Yard Date created 14-Mar-2013 Network T-Mobile Type Wi5 Owned by Mism Dade C	Start date B End date Battery condition 02:35:38 Signal strength Version Type County1	-80.21185 21-Mar-2013 00:00 14-Mar-2018 23:59	ges	Edit logger	
Accounts	Incoming GPRS messages	Incoming SMS messages	Outgo	ing messages		
My Account My Account Change my password All accounts All accounts Create new account	Deduct credits false (togg) Credits 100000 Credits used 0 Number received 0 Waiting for credits 0 Last message	le) Deduct credits false (to Credits 1000 Credits used 0 Number received 0 Waiting for credits 0 Last message	v	Deduct credits Credits Credits used Number sent Vaiting for credits ast message sent	1000 0 0	
Logs	Alert after x days 0	Alert after x days 0		at measage sent		
Messaging logs Incoming SMS Incoming GPRS Incoming Alarms Outgoing messages Lost messages	Add incoming GPRS cree		s credits	Add outg	Add credits	

Select the 'Channels' tab -

🔜 🔅 View logger - HWM DataG	ite +									• I
agate. mobifi.com /dgweb/logger.ht	ml?id=29036#channels				∱. ∀ C	😗 + Goo	gle		<u>م</u>	•
eed 🧶 Getting Started	DataGate							Current user: hwmsa01 Access level: Super adn Logout: logout	nin	
Loggers	View logger									
Loggers Summary All Loggers Quiet loggers My Loggers Lost loggers Upload loggers	Serial number 25323197 Datagate number 29036 Mobile number 19047297 GSM data number Site name Permanet Site id 11th St Ya	540 HUB rd	Lon Heigh Star En Battery cor	atitude 25.78441 igitude -80.21185 at AOD rt date 21-Mar-21 id date 14-Mar-21 ndition 0.0v	5 013 00:00			Edit logger Edit logger channels		
Create a new logger	Date created 14-Mar-20	13 02:35:38	Signal str							
Send to loggers Logger Types Logger types New logger type	Network T-Mobile Type Wi5 Owned by Miami Dac	le County1	v	/ersion Type						
Channel units Channel units New channel unit	Credits Channels Account	nts Alarm responses	Incoming data	Incoming text	Outgoing mes	sages				
Accounts	Channels									
My Account My Account Change my password	Number Flow pulse factor	Meter read value	Meter read date	Analog low	Analog high	Name	Offset	Measurement De	lete	
All accounts	Nothing found to display.									
All accounts Create new account		<u></u>								
Logs		Add	i new channel	Edit logg	er channels					
Messaging logs Incoming SMS Incoming GPRS Incoming Alarms Outgoing messages Lost messages summary										

If no channels are showing then select the 'Add new channel' button



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Create the channels	Create the channels as follows –							
Ch1 = Leak/no leak	Offset 0.0	Cal = 1.0						
Ch2 = Noise	Offset 0.0	Cal = 1.0						
Ch3 = Spread	Offset 0.0	Cal = 1.0						

Incoming messages obifi.com/dgweb/addlogge

datagate

Cal = 1.0 then select 'Update logger channels' button

Visited 😻 Getting Started				合 ·			۵ م		
	ataGate					Current user: H Access level: S Logout: I	Super admin		
Loggers	Edit logger channe	els							
Loggers Summary	Channel 1			Channel 2					
All Loggers	Number	1		Number	2				
Quiet loggers My Loggers	Name	-		Name	-				
Lost loggers Upload loggers									
Create a new logger Send to loggers	Offset			Offset					
Logger Types Logger types	Channel type	Leak v		Channel type	Noise v				
Logger types New logger type	Calibration Multiplier	1.0		Calibration Multiplier	1.0				
Channel units Channel units	Meter read value			Meter read value					
New channel unit	Meter read date	27 v 4 v 2012 v	0 0 0 0	Meter read date	27 v 4 v 2012 v	v 0 v 0 v			
Accounts	Analogue low value			Analogue low value					
My Account My Account	Analogue high value			Analogue high value					
Change my password All accounts									
All accounts Create new account	Channel 3								
Logs	Number	3		•					
Messaging logs	Name								
Incoming SMS Incoming GPRS		- L.							
Incoming Alarms Outgoing messages	Offset								
Lost messages	Channel type	Spread v							
Lost messages summary Extended API	Calibration Multiplier	1.0							
Other logs FTP log	Meter read value								
API log Logs	Meter read date	27 v 4 v 2012 v	0 4 0 4						
Logins	Analogue low value								
Credits	Analogue high value								
Credits Global credits Credits	Analogue high value								
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Create a new logger Message statistics Statistics Statistics Statistics Statistics APT Create a new logger Send to logger ger Types Rew logger types Rew logger types Rew logger types Rew logger types Rew logger types Rew logger types Sends to loggers annel units Change my password accounts A Account My Account Sessing logs Incoming SMS Incoming Alarms Outging messages Card messages summary Exertistical APT her logs	Update logger channel Date created 24 Network vod Type L4 Owned by The Credits Channels Channels Number Flow pulse fa 1 1.0 2 1.0	Apr-2012 11:45:58 afone grpR5 mes Water Olympic Proje Accounts Alarm resp	set Incoming data alue Meter read d 2012-04-27 00:00 2012-04-27 00:00	Version 3.37 Type FW-102-002U ate Analog low An 100	aalog high Name C	Leak Noise	ment D	宜 宜	
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Once configured and calling in data you will be able to View the graphs on HWM Online – the longer the equipment operates the easier it is to understand the results. Following are examples of what you could see and how to interpret the graphs -



 This graph indicates a no leak situation – the leak line is at zero. The noise and spread lines shows the ambient level of noise recorded and the spread of the noise being comparatively consistant over a 3 month period.



 This demonstrates a leak situation developing following a no leak period – the leak line moves from zero to 1 to show the detection of a leak. Also notice how the noise increases when there is a leak and the

spread reduces. Generally the narrower the spread of noise the more likely it indicates a leak.





3. This demonstrates a leak situation – leak line at 1, high noise and narrow (low) spread then the leak has been corrected and the leak line goers to zero, reduced noise, higher spread.



4. This is a no leak situation – leak line at zero, level of noise moderate and spread of noise wide



5. Leak indicated by leak line moving to 1, noise increasing dramatically and spread reducing. Notice how a later increasing noise event is not a leak because the spread also increases indicating a general increase in ambient noise level.



6. Several leak conditions denoted by increasing noise but narrowing spread and then an ongonig leak event – again denoted by increased noise and lower (narrower) spread.



You will notice that in each of the above examples above a complete picture only emerges after the logger has been working for a period of time.

Document History:

Edition	Date of Issue	Modification	Notes
First	24/10/13	Release	
Second	18/06/14	Updated to FAQ format	Added HWMO section