# PylonGDS-ENG3 : Broadcast Remote Control Software System



The Pylon GDS system is a general purpose, graphic display system for operator inter-action and control of intelligent plant equipment. The ENG variant has been configured for use with broadcast antennas and equipment, to fully automate the remote control of ENG receive sites from a central location.

### **Description:**

The Pylon software is connected to the receiver site via standard PC serial communication channels, which operate high speed streaming protocols to ensure the fast secure execution of commands in the outstation.

Complete control of both rotator and fan beam antenna systems is provided through both manual control buttons and a full set of automatic control facilities which include: -

- Goto preset targets
- Goto GPS Lat./Long targets
- Search facility for the peak signal
- GPS Auto-tracking system

Full previous transmit site recall from a stored database of 1000 records

## Features: -

- Industry standard IBM PC compatible
- Multi platform Windows GUI
- User configurable
- Full on-line diagnostics
- Complete manual and automatic receiver and antenna control
- GPS Location and Autotracking facilities
- Remote camera platform control
- Multi-Site User Interface
- Fixed or portable installation
- Comprehensive context sensitive on-line help
- Continuous alarm supervision

For Further Information: Web: <u>www.customelectronic.demon.co.uk</u> Tel:+44 (0) 1767 313167 Fax:+44 (0) 1767 313167



## PylonGDS-ENG3 : Broadcast Remote Control Software System

## Antenna Control:



A user friendly GUI allows the user to control both steerable and horn antennae using user-configurable Maps for convenience. In normal operation the user drags the azimuth pointer on the display to the correct area of transmission. The peak search and manual GUI (and keyboard) controls can then be used for fine-tuning. During this time the audible AGC facility can be used in multimedia PC's to give an audible guide to signal changes.

#### **Receiver Equipment Control:**

The receiver AGC signal at the receive site is monitored and displayed in real-time to the operator indicating the strength of the signal currently received. The receiver controls include complete control of the Channel, Mute, Video invert and SAW filters, together with the facility for three user definable spare relay outputs.

Receiver channel selection is from a database supporting up to 256 combinations with LNA selection and antenna polarisation also being available.

Continuous alarm monitoring is made available both on receive site summary alarms and also on communication failures with the remote sites.

# E:\P	YLON\EpcPEng3\	horwalk.cnf		_ 🗆 ×	
Signal	Antenna Configuration GPS Receiver Button Matrix				
	Reciever				
	Channel: 01+2	003.25 MHz 🛛 💌	LNA: 1 Selected	T	
·····	Polarization: Clock	wise 💌			
	Mute	Video -ve	SAW Filter		
	🗖 Spare 1	🗖 Spare 2	🗖 Spare 3		
57%	• ind 1	ind 2	🌒 ind 3		
AGC	Head PS So Wi	J Summary und deband C Mute tth	Control Alarms Sound PSU Video Mod Summary		
Channel:	01+ 2003.25 MHz	Azimuth: 115	Tilt: 0		
Comms O	к				

#### **GPS Location and Auto-Tracking:**

A user friendly GUI allows the user to make full use of GPS information. If the transmit site Lat./Long is given to the operator he can simply enter this into the control system to automatically point accurately at the source. As an alternative to mobile GPS receivers, PylonENG3 allows the use of popular CD mapping programs to obtain fixes from Street locations, area or zip codes.

Once acquired then Auto-tracking can be used to maintain direction to a mobile transmission such as from a helicopter.



#### **Camera Platform Control:**

PylonGDS-ENG3 allows the remote control of several popular camera platforms.



Facilities are available to Pan, Tilt, Zoom, Focus at variable speeds with a user-friendly joy-pad mouse area, as well as storing and recalling pre-set positions.



## PylonGDS-ENG3 : Broadcast Remote Control Software System

#### **Other Equipment Control:**

\* E:\PYLON\EpcPEng3\norwalk.onf

Block 1 Button 1

Block 2 Button 1

Button 5

Button 7

Button 13

Channel: 01+ 2003.25 MHz

Comms OK

PylonGDS-ENG3 allows the control of other equipment and system functions using userconfigurable pushbutton grids. The buttons have configurable colours, bitmaps and operating scripts when activated. These facilities are normally reserved for project specific operations.

Antenna Configuration GPS Receiver Button Matrix

Button 3

Button 7

Button 3

Button 9

Button 15

Azimuth: 0

Button 4

Button 8

Button 4

Button 10

Button 16

Button 5

Button 11

Button 17

Tilt: 0

Button 6

Button 12

Button 18

Button 2

Button 6

Button 2

Button 8

Button 14

Context sensitive on-line help is available throughout the operator's use of the package, which includes full documentation on how to use the package and control all aspects of its operation. A demo install facility and guided tour are available for evaluation purposes.

### **On-Line User Configuration:**

All aspects of the Pylon GDS configuration are available on-line and all communication parameters, site contents and databases are fully selectable and editable through this online configuration system.

	?			
ignal Antenna Configuration GPS Rec	eiver Button Matrix			
Site Name: Receiver Site 1				
Recieve Site Location		Custom		
Direction Degree	es Minutes Seconds	Spare 1 Caption: Spare 1	_	
Latitude N 1	2 3	Spare 2 Caption: Spare 2	-	
Longditude W 4	5 6	Spare 3 Ception Spare 3	-	
Communications				
Port Con 3 💌 Baud: 9600	💌 🗖 Dial Up 🗖 Local Gateway	V Indicator 1 Caption Ind 1	Tag 8	
Hodem Startup: ATZ		V Indicator 2 Caption and 2	Tag	
Modern Disk ATD		F Indicator 3 Caption and 3	Tag: 5	
Phone Number 25				
Dutstation		Map 1: VPYLON/EpcPEng3vft.bmp	🔁 Select	
S7X Type: S8000 💌 Anter			np 🔁 Select	
Database		Map 2 VPYLON/EpcPEnp3/map16.b		
Site: VPYLDN\EpcPEng3\Sites.5	Sk 🖸 Select 👸 Edit	Compass Needle: 🔳 Black 💌 S	lignal Gauge: 📕 Navy 👱 🧹	
Channel VPYLON/EpcPEng3/Channel	rels.cha 🚯 Select 🚯 Edit	Alarm		1
Diagnostics		Increase: VPYLON\EpcPEng3\AGCup.v	rav 🙆 Select 💽 Test	J
Charles Contraction	Test	Decrease: VP/LDN/EpcPEng3/AGEdow	n.wav 💽 Select 💽 Test	1
40 60	Comms RX Quality	Security	GPS Map	1
20 80	X	Password custom	Setup	
Percent 10	o <b>^  </b>			
	🖲 Start	Receiver Tupe: UCL	Button Mahrix	
		Type: UCL	🚮 Setup	
4GC	Azimuth: 115		Tilt 0	

Complete diagnostics of the Pylon GDS software and its communications with the remote sites are easily available through the use of the Pylon Test Meter, which provides on-line testing of all elements of the communication system, including the intervening modems and also provides facilities to exercise the relay and control functions in the distant outstation.

Note: Product revisions may vary from the details given here.

For Further Information: Web: <u>www.customelectronic.demon.co.uk</u> Tel:+44 (0) 1767 313167 Fax:+44 (0) 1767 313167