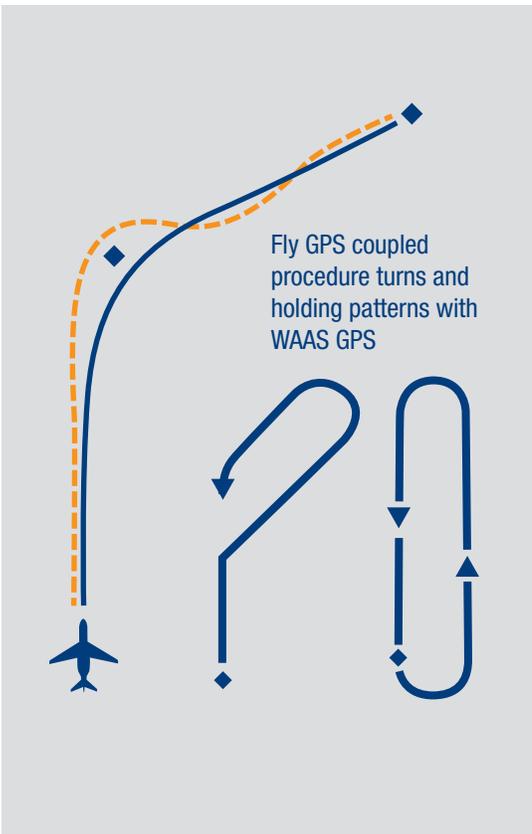




- With GDC31 Roll Steering Converter
- - - Without Roll Steering Converter



Fly GPS coupled procedure turns and holding patterns with WAAS GPS

## GDC31 Roll Steering Converter Product Sheet

### Get more out of your Autopilot With the GDC31 Roll Steering Converter

Now you can fly an entire flight plan hands-free with the cutting edge technology of the DAC International GDC31 Roll Steering Converter. This autopilot accessory produces a Roll Sum Steering (RSS) signal from the RS-232 or ARINC 429 data available from your GPS receiver. The GDC31 implements the same steering law used for years in Inertial Navigation Systems to guide air transport aircraft around the world. And with the advent of new and upgraded GPS that comply with the WAAS TSO, the GDC31 can provide roll steering outputs to fly procedure turns, holding patterns, arc approaches and direct-to functions.

Using the GDC31 annunciator/selector switch, simply select between heading mode and GPS mode. In GPS mode, the GDC31 continually provides the correct GPS enroute flight path and intercept angles to your autopilot's heading channel. You get pinpoint course accuracy with no more manual heading bug changes, no more course wiggles, no more overshoot when changing direction at waypoints. In the heading mode, the autopilot operates as always, tracking the heading bug wherever you set it.

The GDC31 interfaces with S-TEC, King, Century, and other autopilots, and provides our customers with an affordable way to retrofit existing aircraft systems with state of the art capability. The GDC31 comes complete with the annunciator / switch, connector and accessories.

So relax a bit, spend more heads-up time. Let the GDC31 smoothly guide you from enroute all the way through approach.

Fly into the future with DAC ECD. For more information about this and other DAC ECD products ask your favorite avionics dealer or visit our web site at [www.dacint.com](http://www.dacint.com).

### GDC31 now approved on more autopilots

DAC International's GDC31 Roll Steering Converter, has been approved for four additional autopilots with an extensive list of aircraft models on STC SA10236SC, Revision 4, dated September 10, 2015. Added were ARC300, ARC800, Century 2000 and KAP140 autopilots.

# Specifications

## PHYSICAL

Height  
Width  
*(includes mounting flange)*  
Depth  
Weight

## RSC LRU

1.25"  
5.22"  
3.54"  
0.4 lb

## ANNUNCIATOR

0.753"  
0.753"  
1.99"  
0.05 lb

## ELECTRICAL

Input Voltage  
Input Current  
Annunciator lamp current

14 / 28 VDC (10 VDC – 32 VDC operational)  
0.1 Amp maximum at 28 VDC  
0.04 Amp at 28 VDC, 0.08 Amp at 14 VDC

## DATA INPUT

RS232 or RS422  
Baud Rate  
ARINC 429  
Baud Rate

Serial Data in RNAV 0, RNAV 1, King 0 or King 1 format from a GPS navigation system  
Selectable (4800, 9600)  
Bank Angle Command, Label 121  
Auto-baud detect

## DATA OUTPUT

Roll Sum Steering

Analog bank angle command with program pin selectable scale factors to match most autopilot input levels. Program pin selection for position based or rate based output. Program pin selectable phasing.

## CERTIFICATION

PMA  
DO-178B  
DO-160D

Approved (STC SA10236SC)  
Level C  
D1/BADSXXXXXXABBBBAVB/A3E3/XXX

## RELIABILITY

MTBF

Greater than 50,000 hours.

## BLOCK DIAGRAM

