

GTN Background Information and Basics

Overview	i
Using the GTN 650 Physical Controls (a.k.a. "Real Buttons and Knobs") ..	ii
Switch control between the com and nav radio	iii
Adjust the volume of the active com radio	iii
Adjust the com squelch	iii
Tune a STBY com frequency with the knobs	iii
Swap the STBY com frequency to the active window	iii
Quickly tune the emergency frequency 121.5.....	iii
Adjust the volume of the nav radio	iv
Listen to the Morse Code identifier for a VOR or localizer	iv
Tune a STBY nav frequency with the knobs	iv
Swap the STBY nav frequency to the active window	iv
Return to the Home page from any page.....	iv
Return to the Default Navigation page from any page	iv
Navigate direct-to any waypoint with the buttons and knobs only.....	v
Using the Touch-Screen Controls	vi
General tips for the alpha-numeric keypad (on-screen keys).....	vii
Tuning Com and Nav Frequencies.....	vii
Tune a STBY com frequency	vii
Monitor both the active and STBY frequencies.....	vii
Find a com frequency	viii
Add a frequency to the User list.....	viii
Delete a User frequency	ix
Tune a STBY nav frequency	ix
Swap active and STBY com or nav frequencies	ix
Find a nav frequency	ix
Set a transponder code.....	x
Check the status screens on startup.....	x
Check the system status after startup	x
Check the GPS status.....	x

GTN Navigation and Control

Navigating Direct-To Anywhere	1
Navigate from the present position direct-to a new waypoint.....	1
Navigate direct-to a waypoint in the current flight plan	1
Navigate direct-to a nearby airport	2
Find a waypoint identifier you don't know.....	2
Navigate direct-to a map waypoint.....	3
Navigate direct-to a waypoint on a specific course	3
Using a Flight Plan to Navigate	4
Create a new flight plan and save it in the catalog.....	4
Activate a stored flight plan	4
Show the active flight plan.....	4
Delete the active flight plan	5
Invert the active flight plan.....	5
Invert and activate a stored flight plan	5
Preview a stored flight plan	5
Delete a stored flight plan	5
Add a waypoint to the active flight plan	5
Remove a waypoint from the active flight plan	6
Activate a leg in the active flight plan	6
Graphically edit the active flight plan	6
Load an airway	7
Collapse the waypoints in airways.....	7
Expand collapsed airways.....	7
Remove an airway	7
Using OBS Mode.....	8
Set a course with OBS mode and an external HSI.....	8
Suspend automatic waypoint sequencing.....	8
Resume automatic waypoint sequencing.....	8
Using User Waypoints.....	8
Create a User waypoint	8
Adding IFR Procedures (DP, SID, STAR, IAP)	9
Add a departure procedure to the active flight plan	10
Activate a departure procedure.....	10
Delete a departure procedure from the active flight plan.....	11
Add an arrival procedure to the active flight plan.....	11
Delete an arrival procedure	11
Loading and Activating Approaches.....	11
Load an instrument approach.....	12
Delete an approach from the flight plan	12
Change to a different approach to the same airport.....	13
Activate a leg of an approach.....	13
Proceed direct-to an intermediate fix.....	13
Types of RNAV approaches supported by the GTN.....	13
Specifics for ILS, LOC, and VOR approaches	14
Switch the CDI source sent to an external CDI.....	15
Fly the published missed approach procedure.....	15

Flying Visual (VFR) Approaches.....	15
Load and activate a visual approach.....	16
Customize when the Visual button appears.....	17
Flying Holds.....	17
Fly a charted hold in a procedure.....	17
Delete a hold (or course reversal) in a procedure.....	17
Activate a leg from a charted hold to the next waypoint.....	18
Create a hold at a waypoint in the active flight plan.....	18
Leave a hold and resume waypoint sequencing.....	18
Leave a hold and proceed direct-to a flight plan waypoint.....	19
Fly a published missed approach hold.....	19
Leave the missed approach hold.....	19
Flying DME Arcs and Radius-to-Fix (RF) Legs.....	19
Fly a DME arc in a published procedure.....	19
Fly an RF leg that is part of a published procedure.....	20
Using Vertical Navigation (VNAV) and Along-Track Offsets.....	21
Enable VNAV guidance.....	21
Disable VNAV guidance.....	21
Set up a VNAV altitude constraint (crossing restriction).....	21
Modify an altitude constraint.....	22
Remove a VNAV altitude constraint (crossing restriction).....	22
View or adjust the current VNAV profile or Flight Path Angle.....	22
Change the default Flight Path Angle.....	23
Create a parallel track.....	23
Cancel a parallel track.....	23
Use VNAV while flying approaches.....	23
Key points for using VNAV.....	23
Other GTN Features and Customization.....	24
Display the Home page and select a feature.....	24
Customize the Map page.....	25
Quickly control detail shown on the map (declutter).....	25
Configure the orientation and zoom levels on the map.....	25
Customize the User fields on the Map page.....	25
Customize the User fields on the Default Navigation page.....	26
Adjust traffic options.....	27
Adjust terrain options.....	27
Adjust weather display and options.....	27
View nearest airports, intersections, VORs, and more.....	27
Find waypoint information.....	28
Use optional services.....	28
Using the GTN Utilities.....	28
View the Utilities page.....	28
VNAV and V CALC Options.....	28
Use V CALC instead of VNAV.....	29
View trip planning information.....	29
View fuel planning information.....	29
Use the DALT/TAS/Winds calculator.....	30
Check RAIM.....	30

Set a generic timer to count up or down.....	30
Set a Trip Timer.....	30
Set a Departure Time clock	31
Create or edit a scheduled message	31
Use the Clean Screen utility.....	31
Configuring the GTN	31
Check the GTN system status	31
Check the GPS status and position accuracy	31
Check the status of external devices connected to the GTN.....	32
Configure the CDI scale, date/time format, keyboard type, and other settings.....	32
Configure airspace and waypoint arrival alerts	32
Change the default units	33
Change system audio volume.....	33
Adjust the GTN backlight level.....	33