Microair Avionics

ENABLING YOUR DREAMS TO TAKE FLIGHT

microair.aero

9A / 23 Ashtan Place
Banyo, Queensland, 4014
AUSTRALIA
+61 (07) 3040 3840

ADMIN & SALES:
sales@microair.aero

TECHNICAL SUPPORT:
support@microair.aero

PASSION_ INNOVATION_ TIMELESS DESIGN_

Microair Avionics is a pioneering, technology inspired company designing and manufacturing avionic products for light aircraft for more than 25 years.

Sharing a passion for flight inspires us to create innovative avionics that combine modern technology with timeless design.

Our products are lightweight, energy-efficient and cost-effective, designed specifically for light aircraft including sport aircraft, experimental aircraft and unmanned aerial vehicles.

Our goal is to provide our customers with products that enhance their flying experience and safety without complicated setup or installation.

Products_

T3000
skySuite

T3000
Digital Pitot Static Probe

T3000
Engine System Interface

T3000
Autopilot

M760Q
TRANSCEIVER

T2000
ADSB - IN & OUT

T3000 SkySuite

Overview_

Experience next-generation avionics with the T3000 skySuite - a modular, integrated system designed to deliver exceptional performance, safety, and flexibility. Built to evolve with your aircraft, the T3000 empowers pilots to fly with confidence through streamlined integration of essential flight systems.

Core Capabilities and integrations include:

- VHF Communications
- VHF Navigation
- Precision Navigation Sensors
- Mode S Transponder with ADS-B Out and In
- Sunlight-readable 3.1" Instrument Displays (2.1" active area, high-resolution touchscreen)
- 30+ Pilot-selectable Instrument Faces
- Digital Intercom for up to 10 seats
- Pre-wired Headphone Plates
- USB-C 15W Power Outlet at Each Seat
- Digital Pitot Static Probe
- Through-firewall Engine and Systems Interface
- Autopilot

Whether you're installing a full suite or upgrading in stages, the T3000's modular architecture lets you customise your setup to suit your aircraft and flying needs - now and into the future. The system also features an optional 90-minute backup battery for continued display operation and a customisable digital intercom and audio system, setting new standards in modern avionics design. T3000 skySuite – Designed for today. Ready for tomorrow.

T3000 SkySuite

Technical Specifications_

MODULES

VHF COMM
8.33 kHz/25kHz
Selectable 6, 10, 16W TX power
Dual Channel Receiver

VHF NAVIGATION
Dual Channel VOR
ILS (LOC/GLS)
Marker

NAVIGATION SENSORS
GNSS Position Source
Attitude and Heading Reference System (AHRS)
- Airspeed (300 kts @ SL)
- Altitude (55,000 ft)
- OAT (-40°C to +70°C) (-40°F to 158°F)

TRANSPONDER
Mode S
ADSB In and Out
ADSB Diversity Out

BATTERY
90 min at full brightness
All navigation sensors
Radio receiver
Traffic receiver

INSTRUMENT DISPLAY FACES
Artificial Horizon
Altimeter
Air Speed Indicator
Directional Gyro
Turn Coordinator
Autopilot
Traffic Display
Clock with Timer
Horizontal Situation Indicator
Vertical Speed Indicator
Radio Magnetic Indicator
Engine & System Interfaces
- RPM, MAP, Fuel Flow
- Oil Temp, Pressure
- CHT & EGT + Leaning
- Electrical Voltage Current
- Fuel Qty & Totalizer

Standby EFIS
COMM Radio Controls
Transponder Controls
NAV Radio Controls
Mater Caution
Checklists
plus settings pages

DIGITAL INTERCOM AND AUDIO SYSTEM
Crystal-clear Digital audio
Personalized audio control
Bluetooth connectivity for entertainment
USB-C Power (15W)
Options for GA, LEMO and other connectors
Simplified audio cabling
One Audio Unit per occupant

DIGITAL PITOT STATIC PROBE
See page 6 & 7

ENGINE & SYSTEMS INTERFACE
See page 8 & 9

AUTOPILOT
See page 12

T3000
Digital Pitot Static Probe
NORSEE APPROVED

Overview_

The Fully Integrated Probe, containing an Air Data Computer and an Attitude and Heading Reference System, replaces any AN5812 Pitot Probe with no extra hardware or plumbing required. Simply use the supplied data harness or our installation kit.

The Digital Pitot Static Probe provides:
Airspeed, Altitude, Vertical Speed, Angle of Attack, Outside Air Temperature, Attitude, Heading and Clock - all visible on one or more T3000 skySuite instrument displays.

Key features_

- Optional120W anti-icing heater (available in either 12V or 24V) with digital temperature control.
- Triple redundant air data sensors provide optimised performance and enhanced safety.
- Digital technology with a timeless design.
- Available as a stand-alone system or a fully-integrated component of the T3000 system for Experimental and Light Sport aircraft.
- **FAA APPROVED as a backup system for Certified Aircraft.**

T3000 Digital Pitot Static AoA Probe

Technical Specifications_

TSO Equivalence	C-16 (AS8006A) C-54 (ASTM3011-21) C-106a (AS8002B, AS8005A) C-113b (AS6296) C-201 (DO-334) DO-160G
Operational Ranges	-1000 to +55,000ft 0 to 380kts
Input Power	8-33VDC Less than 1.5W Average
Anti-icing	Optional 120W Heater Available in 12V or 24V
Operating Temperature	-40° C to +70°C (–40°F to 158°F)
Probe Dimensions	Width 52mm Height 64mm Length 199mm Weight 200g (7oz)

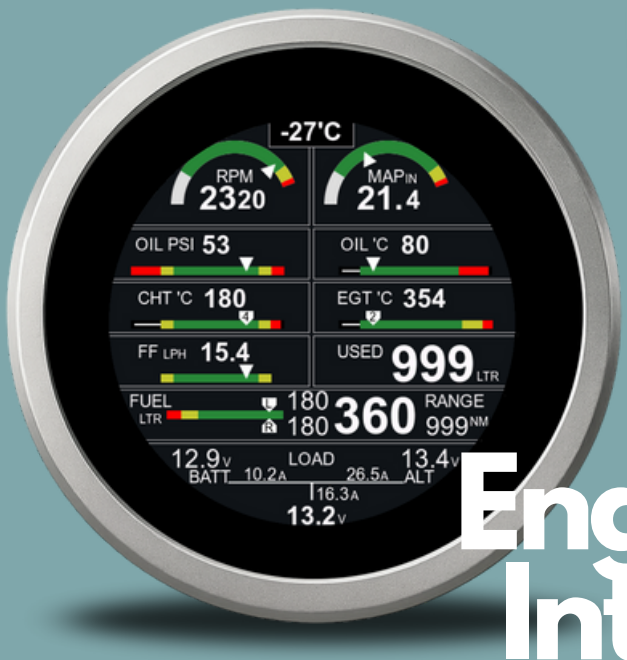
T3000
Engine System Interface (ESI)

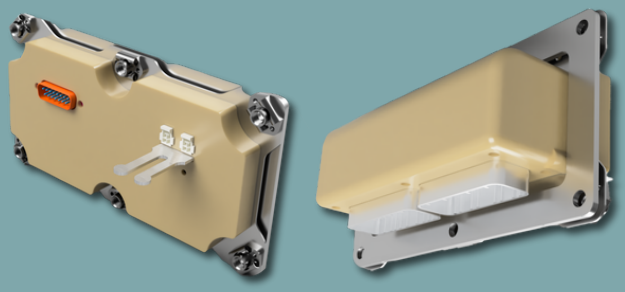
Overview_

The T3000 Engine and Systems Interface (ESI) is the heart of engine and aircraft systems data management for integration with your T3000skySuite. It captures real-time information from your engine, fuel, electrical, and sensor systems and delivers it seamlessly to your cockpit displays.
With the ESI installed, pilots gain a complete picture of engine health, performance, and critical systems status - supporting safer, more efficient flight operations.
Designed for flexibility, the ESI supports a wide range of engine types and sensor inputs, making it ideal for Light Sport, and Experimental aircraft.
Whether you're upgrading or building new, the ESI delivers streamlined integration, reduced wiring complexity, and intelligent system awareness.

Key features_

- Innovative “Through-Firewall” installation
- Hot-side connections for Engine Sensors including:
  - Temperature (CHT x 6, EGT x 6, Oil, +3 configurable connections)
  - Fuel Flow, Oil Pressure, MAP, Alternator and Battery Voltage and Current
  - Tacho x 2 and CAN x 2 (CANaerospace)
- Cold-side connections for Systems Interface Data including:
  - Fuel Qty x 4 and Fuel Flow
  - Battery Voltage and Current
  - 6 x System Discreet Inputs (Flap position, Gear position etc) or Switched Outputs





T3000 Engine System Interface (ESI)

Technical Specifications_

TSO Equivalence	TSO-C44c TSO-C45b TSO-C47a TSO-C49b TSO-C55a 14CFR 23.1192 firewall requirements
DC Power	8V to 33V <5W
Sensor Power	5V and 12V (+/-10%)
Over Current Protection	200mA (+/-30%) each
Exhaust Gas Temperature (EGT)	6 channels (1 per cylinder)
Cylinder Head Temperature (CHT)	6 channels (1 per cylinder)
General Input	6 discretes / voltages Ground-switch detection 0–32V
Outputs	6 x Open collector outputs
Dimensions	59mm x 190mm x 106mm (approx. 2 3/8" x 7 1/2" x 4 1/8")

Peripherals_

Available Separately


Fuel Flow Transducer


CHT Probe Bayonet Style Type K


Induction Air Probe


EGT Probe Type K


Oil Temperature


Pressure Sensor Abs 0 - 50 Hg 1/8 F NPT

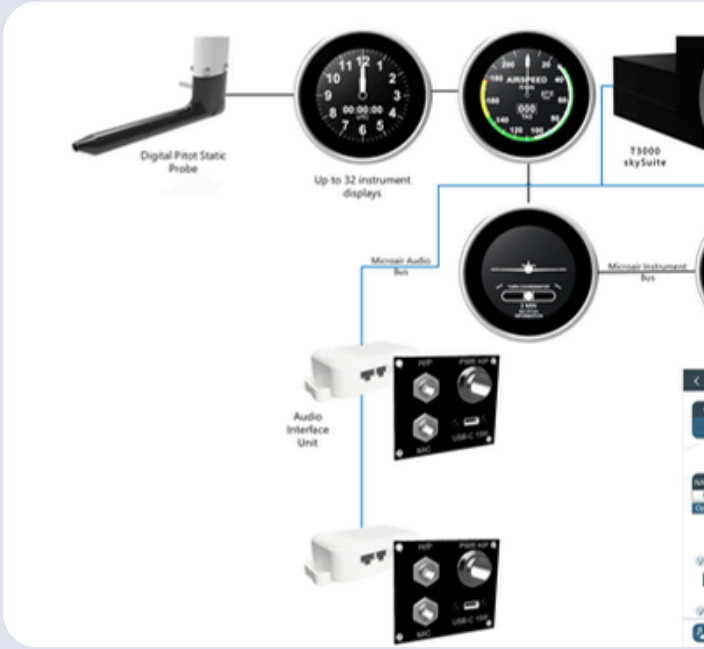

Type K Wire


Pressure Sender 150 PSI 1/8 F NPT


Current Bridge +/60Amps

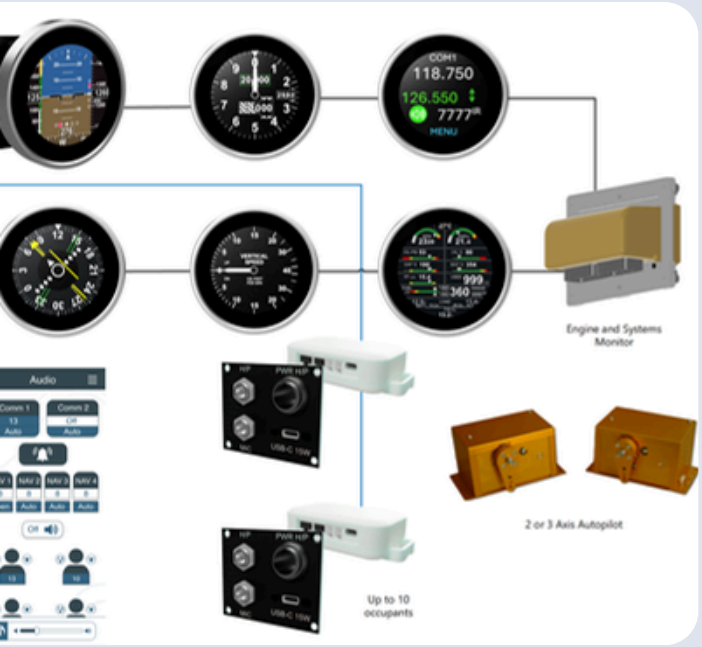
T3000 skySuite

The classic “six-pack” layout features six primary flight instruments, delivering essential information and forming the foundation of instrument flying for pilots with basic VFR or IFR needs.



A panel that combines a classic “six-pack” with a clock, VHF radio, transponder, and a dedicated engine and systems interface. Delivering integrated communication, and real-time flight data for enhanced situational awareness. Engine performance, fuel levels, and electrical status are all provided to support safer, more efficient flight.

System Architecture



A traditional “six-pack”, combined with a clock, VHF radio, and transponder, delivers all the core functionality required for flight in controlled airspace. Offering situational awareness, comms, and compliance in a compact, capable setup.

An advanced panel upgrade featuring 13 dedicated instrument displays, including a classic “six-pack” layout, VHF radio, transponder, engine and systems interface, and integrated autopilot- plus an iPad running your preferred EFB app for navigation and flight planning. With traffic displayed directly on the panel and real-time engine, fuel, and electrical data, it offers full flight awareness, and communication for modern, efficient operations.

T3000 Autopilot

Microair Avionics has partnered with Trio Avionics to bring advanced, safety-enhancing autopilot capability to the T3000 skySuite system. This powerful integration connects the intuitive control of the Trio Pro Pilot Autopilot with the flexible, modular design of Microair's T3000skySuite system.

The result is a feature-rich cockpit solution. Pilots can now access precision autopilot modes including altitude hold, vertical speed and airspeed control, GPS navigation and approach, Auto 180, envelope protection, and more, all from within a seamless, integrated suite. This collaboration delivers enhanced situational awareness, workload reduction, and elevated performance in a lightweight and retrofit-friendly package.

Safety features_

Auto 180
With a single press of either servo button, initiates a precise 180° course reversal and activates altitude hold, ideal for disorientation or unplanned course changes.

Recover
Automatically returns the aircraft to level flight if it detects an unsafe or extreme attitude, offering immediate assistance in upset conditions.

Automatic Servo Disconnect (Takeoff Protection)
Safeguards against inadvertent activation by disconnecting servos automatically during takeoff if left engaged.

Track Offset
Enables flight parallel to the programmed GPS route, offering flexibility to avoid congested airways while remaining within navigation boundaries.

Envelope Protection
Prevents the aircraft from exceeding safe airspeed limits by monitoring and limiting both minimum and maximum thresholds.

Intelligent Servos
Built-in fault detection shuts down the system if invalid data or internal errors are detected—ensuring safe and reliable operation at all times.

T3000
Digital Intercom & Audio System

Experience unparalleled in-flight communication and entertainment with the T3000 skySuite Digital Intercom and Audio Interface System, designed to provide seamless audio connections between crew, passengers, and radio systems.
The T3000 Audio Interface System redefines in-flight audio with its groundbreaking individual control features. Passengers can personalize their audio settings, choosing their preferred entertainment, who they talk to and which radios they listen to while allowing pilots to override at any time. A call system ensures pilots are informed when isolated.
Whether it's streaming music or sharing audio content, the Digital Intercom and Audio System offers a bespoke audio experience that enhances comfort and satisfaction for every flight.

Features:

- Crystal Clear Digital Audio: Enjoy superior sound quality for all communications and entertainment needs.
- Personalized Audio Control: Each passenger and crew member can tailor their own audio experience, while pilots retain the ability to override at any time.
- Bluetooth Connectivity: Effortlessly stream your favorite music or entertainment wirelessly. Share your entertainment audio with other passengers.
- Efficient USB-C Power (15W): Modern, fast-charging solution for all your devices.
- Versatile Connector Options: Compatible with GA, LEMO, and other industry-standard connectors for easy installation.
- Streamlined Audio Cabling: Reduces complexity, enhances reliability, reduces weight.

T2000SFL Transponder

Overview_

The T2000SFL is one of the world's smallest and lightest certified Mode 3A/C transponders, weighing just 600g. With over 5,000 units still in operation globally, it's a trusted solution for certified aircraft where space, weight, and efficiency are key.

Despite its size, the T2000SFL delivers low power consumption and advanced safety features typically found in larger, more costly systems. Certified to TSO C-74C, it integrates easily with any C88a-compliant altitude encoder, including the Microair EC2002.

CERTIFIED

Technical Specifications_

TSO Approval	C-74C
RTCA Compliance	DO-144 DO-160D DO-178B Level C
Transmitter	1090MHz +/-0.2MHz 200W Pulse Output 80nS Rise Time 120nS Fall Time
Receiver (1030MHz)	-7 to –71dBm Dynamic Range 1030MHz Centre Frequency +/-5MHz Pass band
Input Power	10-33Vdc 100-150mA @ 28V 150-200mA @ 14V
Operational Modes	Standby Mode 3A Mode 3A/C Mode 3A/C with Altitude Displayed
Dimensions	Length 169mm (6.65") Width 61mm (2.40") Height 61mm (2.40"
Weight	600g (21 oz)
Features	Encoder Altitude Display Option Altitude Alert Voltage Monitoring and Alert Switched Encoder Power Output Suppression In / Out Remote Standby Switch Option Remote Ident Switch Option Audio Beep Alert Tone

RANGE

Overview_

T2000ADSB-IO Transponder

The Microair ADSB-IN/OUT Transponder integrates Mode A and C, ADS-B Out, ADSB-In, GPS position source, and altitude encoder in one compact unit.

Designed for easy installation, the ADSB-IO Transponder enhances your situational awareness by both receiving transmissions from surrounding aircraft and making you visible to other aircraft. It streams traffic data to your preferred EFB App supporting GDL90 traffic, on an Android Tablet or iPad.

T2000ADSB-OUT version also available.

ADSB Upgrade options are available for T2000SFL Experimental & LSA customers.

EXPERIMENTAL & LSA

Technical Specifications_

TSO Equivalence	C74c Class 1a C88a (to 30,000 feet) C166b Class A0 (with B1S power output) Environmental DO-160G Software DO-178C DAL-C
Mounting	Panel mount 2 1/4" (57mm) round
Temperature	-20 to +55 Celsius
Altitude	55,000 feet, inbuilt encoder to 30,000 feet
Cooling	Not required
Power Input	10 to 33 volts DC negative chassis ground, 7W peak
RF Output	200 watts (nominal peak power)
SWR Tolerance	<5:1 or open feed line
Control/Backlight	LCD wiht rotary selector for setting Mode A code, Flight ID and settings. Push buttons for easy access to common features such as Ident and VFR
Dimensions	61 mm wide x 61 mm high x 160 mm deep (2.4" wide x 2.4" high x 6.3" deep)
Weight	600 grams (2.1 oz)
Connections	DB25 for power, Gillham code, serial, discrete inputs. Interchangeable with T2000SLF transponder and T2000ADSB without wiring changes. BNC – transponder antenna TNC – GPS antenna 1/8" NPT - static
Options	Wiring harness available

M760 Transceiver

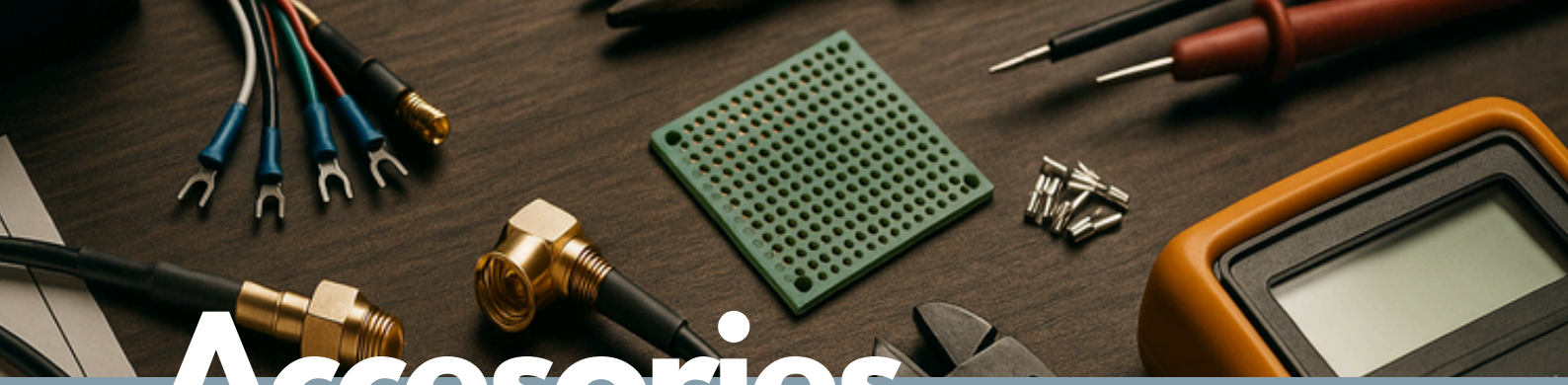
Overview_

One of the smallest panel-mounted VHF aircraft radios in the world, the M760 is packed with features.
Built on decades of dependable service, the M760 continues to set the benchmark for reliability and performance in VHF communications and is certified under an Australian PMA with formal recognition by FAA and EASA member states.

CERTIFIED

Technical Specifications_

Radio: Channels (Transmit)	760 channels, 25KHz spacing 118.000 – 136.975MHz
Channels (Receive)	1160 channels, 25KHz spacing 108.000 – 136.975MHz
Frequency Selection	Concentric dials for MHz and kHz
Frequency Display	2 line alpha/numeric LCD display (with back-lighting)
Memories	99 programmable memories
Dual Motor	100ms Scan Time
Power Consumption	Receive (no signal, no backlight) 140 mA Transmit 1.9 A
Input Voltage	10.7 – 16.0 Volts
Power Output	5 watts (nominal)
VSWR Tolerance	< 2:1 for best operation (5:1 without damage)
Receiver Sensitivity	-12dB SINAD @ 0.3uV (1KHz audio with 70% modulation)
Receiver Selectivity	70dBm
Squelch Range	0.5 - 10.0uV
Data Interface	RS232
Speaker Volume Output	Nominal 4 watts output to 4 ohms
Headset Volume Output	100mW into 150 Ohms (maximum audio output) 60mW into 300 Ohms 30mW into 600 Ohms
Auxiliary Audio Input	Line-level audio
Temperature Range	From -20 to +55 degrees Celsius
Dimensions	65mm wide x 59mm high x 135mm deep (2.6" wide x 2.3" high x 5.3" deep)
Exposed Dial Face	57mm diameter 2 ¼" diameter
Weight	416 grams (14. oz)



Accesories

Harnesses_

We offer a range of pre-configured and custom harnesses to support our full product line. Harnesses can be tailored to suit your specific installation needs, including custom lengths and connector configurations, making integration fast, streamlined, and reliable.

M760 Wiring Harnesses

T2000 Wiring Harnesses

Coax Cable Assemblies

T3000 Harness

Other accesories_

In addition to our flexible harness options, we offer a range of accessories to complement and support your Microair product purchase. This includes antennas, adaptors, noise suppression filters, audio amplifiers, and speakers - providing everything you need for a streamlined, reliable, and professional installation.

GPS Antennas

VHF Antennas

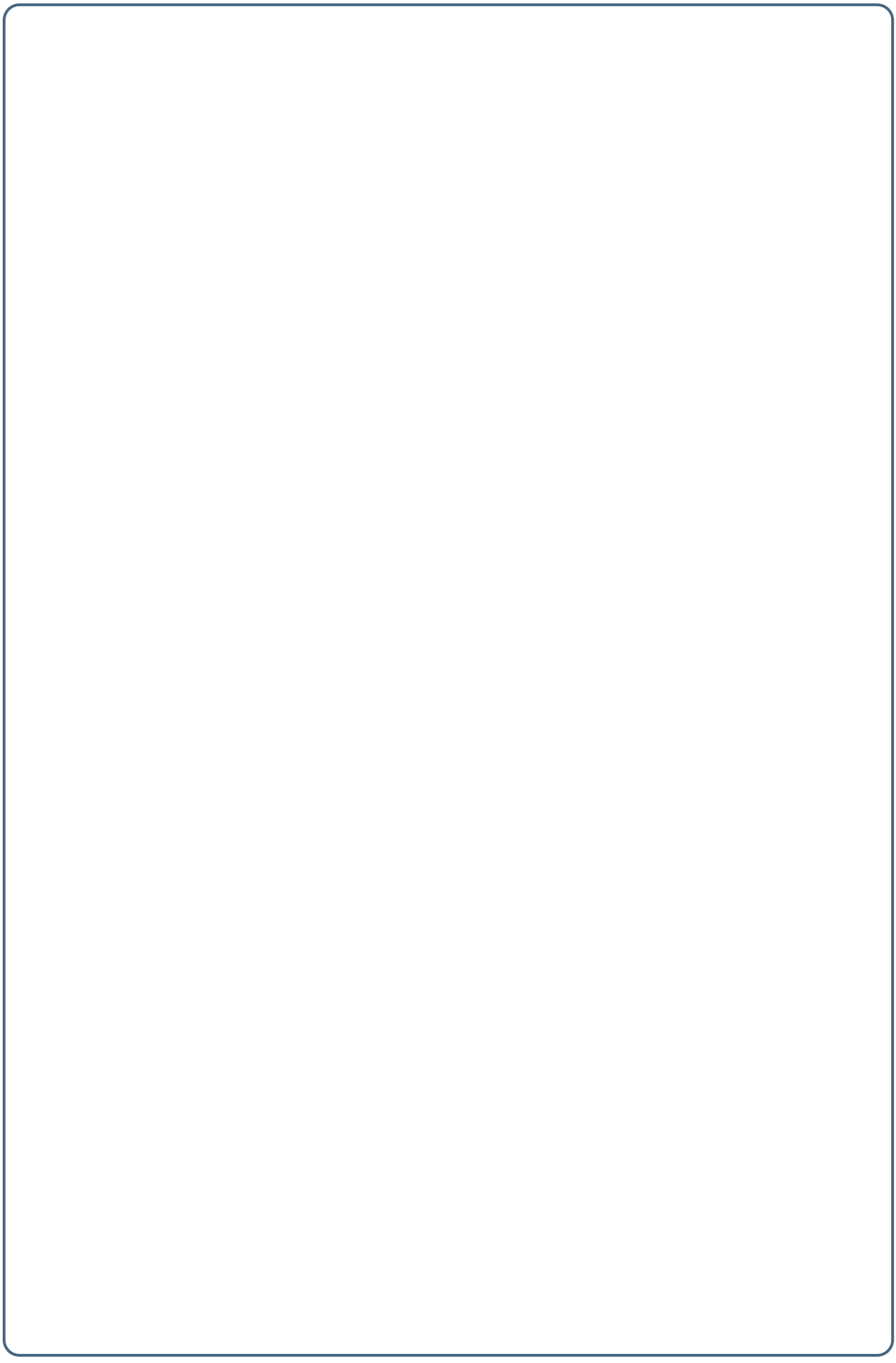
Transponder Antennas

Pre-Amplifiers

Adapters

Speakers

Notes_



YOUR LOCAL DEALER IS: