

AIR BAND TRANSCEIVERS

**PRODUCT
CATALOG**

FTA-750L *Spirit* GPS

- ILS Navigation (Localizer & Glide Slope)
- VOR Navigation
- Integrated 66 ch GPS Receiver
- 1.7" x 1.7" Full-Dot Matrix Display
- 800 mW Loud Audio



FTA-550L FTA-550 AA Battery Version *Pro-X*

- ILS Navigation (Localizer)
- VOR Navigation
- 1.7" x 1.7" Full-Dot Matrix Display
- 800 mW Loud Audio



FTA-450L

- 1.7" x 1.7" Full-Dot Matrix Display
- 800 mW Loud Audio
- 200 Memory Channels
- PC Programmable



FTA-250L

- Ultra Compact
- Rugged Construction
- Certified to MIL-STD -810F
- 700 mW Loud Audio
- Noise Canceling Feature
- 250 Memory Channels



MIL-STD-810F

Professional Grade Yaesu's legendary rugged construction and



FTA-750L

Spirit VOR Navigation
ILS Navigation
GPS

Supplied accessories:

- Li-Ion Battery Pack • Charger Cradle • AC Charger
- Cigarette Lighter DC/DC Converter • Antenna • Belt Clip
- Headset Adapter Cable • Alkaline Battery Tray • USB Cable

Enhanced Performance Equipped ILS (Localizer & Glide Slope), VOR Navigation and Integrated GPS receiver

Features

- 5 Watts TX Output Power (Air Band: AM 5W P.E.P. typ, 1.5W carrier)
- Huge 1.7" x 1.7" (43.2 x 43.2 mm) Full-Dot Matrix Display (160 x 160 dots)
- ILS Navigation Display (Localizer and Glide Slope)
- VOR Navigation Display
- Integrated 66 Channel WAAS GPS receiver
- Waypoint Navigation
- Available GPS Position Logging operation^{*1}
- 8.33 kHz Narrow Band compatible
- NOAA Weather Channel Receive^{*2}
- NOAA Weather Alert^{*2}
- 200 Memory Channels with 15 alphanumeric characters
- Back-lit Keypad and Display with Dimmer
- Water Protection – IPX5 Rating
- Loud Audio (800 mW)
- Includes High-Capacity Rechargeable Li-Ion Battery Pack (7.4 V 1800 mAh)
- Includes Alkaline Battery Tray (6 x AA)
- External-DC input for operation and charging
- PC Programmable (Included USB Cable)

^{*1}The YCE01 PC Programming Software (available online) is required to view the GPS Log data.

ILS NAVIGATION (Localizer & Glide Slope)

Course deviation based on the received localizer signal and height deviation based on the received glide slope signal can be easily recognized on the CDI display. Superior visibility supports the landing approach under bad weather conditions.



Course deviation needle for localizer
Height deviation indicator for glide slope

WAYPOINT NAVIGATION

The navigation feature of the FTA-750 is presented as a compass that helps you to determine the destination and your bearing at a glance.



Course indicator
Destination indicator

VOR NAVIGATION

When the FTA-750 receives a VOR signal, the display will automatically switch to the NAV band screen which shows a CDI based on the received signal. The SOG (speed over ground) is displayed only when the internal GPS unit is activated and receives a fix in the FTA-750.



Course indicator (OBS direction)
Course deviation needle
SOG (speed over ground)



FTA-550L

Pro-X VOR Navigation
ILS Navigation
(Localizer)

Supplied accessories:

- Li-Ion Battery Pack • Charger Cradle • AC Charger
- Cigarette Lighter DC/DC Converter • Antenna • Belt Clip
- Headset Adapter Cable • Alkaline Battery Tray • USB Cable

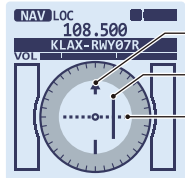
Professional Specifications Advanced Operation with ILS (Localizer), VOR Navigation

Features

- 5 Watts TX Output Power (Air Band: AM 5W P.E.P. typ, 1.5W carrier)
- Huge 1.7" x 1.7" (43.2 x 43.2 mm) Full-Dot Matrix Display (160 x 160 dots)
- ILS Navigation Display (Localizer)
- VOR Navigation Display
- 8.33 kHz Narrow Band compatible
- NOAA Weather Channel Receive^{*2}
- NOAA Weather Alert^{*2}
- 200 Memory Channels with 15 alphanumeric characters
- Back-lit Keypad and Display with Dimmer
- Water Protection – IPX5 Rating
- Loud Audio (800 mW)
- Includes High-Capacity Rechargeable Li-Ion Battery Pack (7.4 V 1800 mAh)
- Includes Alkaline Battery Tray (6 x AA)
- External-DC input for operation and charging
- PC Programmable (Included USB Cable)

ILS NAVIGATION (Localizer)

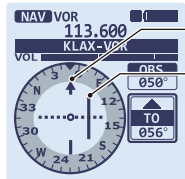
Course deviation based on the received localizer signal can be easily recognized on the CDI display. Superior visibility supports the landing approach under bad weather conditions.



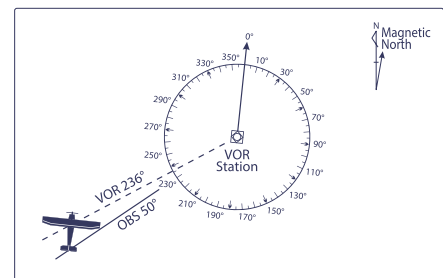
Course (runway) indicator
Course deviation needle for localizer
Deviation marks for localizer

VOR NAVIGATION

When the FTA-550 receives a VOR signal, the display will automatically switch to the NAV band screen which shows a CDI based on the received signal.



Course indicator (OBS direction)
Course deviation needle



FTA-550 AA Battery Version

Supplied accessories:

- Cigarette Lighter DC/DC Converter
- Antenna • Belt Clip • Headset Adapter Cable
- Alkaline Battery Tray • USB Cable

sleek styling



Advanced User Interface
Oversize 1.7" x 1.7" Full-Dot Matrix Display
ensuring intuitive operation

- Features**
- 5 Watts TX Output Power (Air Band: AM 5 W, P.E.P. typ, 1.5 W carrier)
 - Huge 1.7" x 1.7" (43.2 x 43.2 mm) Full-Dot Matrix Display (160 x 160 dots)
 - Loud Audio (800 mW)
 - 8.33 kHz Narrow Band compatible
 - 200 Memory Channels with 15 alphanumeric characters
 - Water Protection – IPX5 Rating
 - Includes High-Capacity Rechargeable Li-Ion Battery Pack (7.4 V 1800 mAh)
 - External-DC input for operation and charging
 - Includes Alkaline Battery Tray (6 x AA)
 - NOAA Weather Channel Receive*²
 - NOAA Weather Alert*²
 - Back-lit Keypad and Display with Dimmer
 - PC Programmable (Included USB Cable)

FTA-450L

Supplied accessories:
 •Li-Ion Battery Pack •Charger Cradle •AC Charger
 •Cigarette Lighter DC/DC Converter •Antenna
 •Belt Clip •Headset Adapter Cable •Alkaline Battery Tray •USB Cable

Ultra Compact and Rugged Construction MIL-STD-810F
700 mW Loud Audio and Noise-Canceling
Feature built into a Compact case



- Features**
- 5 Watts TX Output Power (Air Band: AM 5 W, P.E.P. 1.5 W carrier)
 - Compact Design, Measuring W2.1" x H4.1" x D1.2" (52 x 105 x 30 mm)
 - Rugged Construction: Certified to MIL-STD -810F
 - Loud Audio (700 mW)
 - Noise-canceling function for both transmit and receive audio
 - 8.33 kHz Narrow Band compatible
 - 250 Memory Channels
 - Includes High-Capacity Rechargeable Li-Ion Battery Pack (7.4 V 1950 mAh)
 - External-DC input for operation and charging
 - AF Pitch Control
 - Flip Flop Last Channel Recall
 - Dual Watch
 - NOAA Weather Channel Receive*²
 - NOAA Weather Alert*²
 - Back-lit Keypad and Display with Dimmer
 - PC Programmable (Requires Optional USB Cable :SCU-37)

FTA-250L

Supplied accessories:
 •Li-Ion Battery Pack •Charger Cradle •AC Adapter
 •Cigarette Lighter DC/DC Converter •Antenna
 •Belt Clip •Headset Adapter Cable



^{*2} Only available in NOAA weather service areas.

| Specifications | FTA-750L Spirit | FTA-550L/ FTA-550 <small>AA Battery Version</small> | Pro-X | FTA-450L | FTA-250L |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-------|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| General | | | | | |
| Frequency Range | TX: 118.000 to 136.975 MHz RX: 108.000 to 136.975 MHz (NAV and COM) 161.650 to 163.275 MHz (Weather Channels: US only) 329.150 to 335.000 MHz (Glide Slope) | TX: 118.000 to 136.975 MHz RX: 108.000 to 136.975 MHz (NAV and COM) 161.650 to 163.275 MHz (Weather Channels: US only) | | TX: 118.000 to 136.975 MHz RX: 118.000 to 136.975 MHz 161.650 to 163.275 MHz (Weather Channels: US only) | TX: 118.000 to 136.975 MHz RX: 118.000 to 136.975 MHz 161.650 to 163.275 MHz (Weather Channels: US only) |
| Channel Spacing | 25 kHz/8.33 kHz | 25 kHz/8.33 kHz | | 25 kHz/8.33 kHz | 25 kHz/8.33 kHz |
| Emission Type | TX: AM RX: AM & FM (FM: for receiving the Weather Channels) | TX: AM RX: AM & FM (FM: for receiving the Weather Channels) | | TX: AM RX: AM & FM (FM: for receiving the Weather Channels) | TX: AM RX: AM & FM (FM: for receiving the Weather Channels) |
| Supply Voltage | 6.0 to 9.5 VDC | 6.0 to 9.5 VDC | | 6.0 to 9.5 VDC | 6.0 to 9.5 VDC |
| Current Consumption (approx.) | 300 µA (power off) 80 mA (battery saver on, saver ratio 50%, GPS on) 110 mA (squellch on, GPS on) 300 mA (receive) 0.9 A (transmit 1.5 W Carrier) | 300 µA (power off) 60 mA (battery saver on, saver ratio 50%) 80 mA (squellch on) 300 mA (receive) 0.9 A (transmit 1.5 W Carrier) | | 300 µA (power off) 60 mA (battery saver on, saver ratio 50%) 80 mA (squellch on) 300 mA (receive) 0.9 A (transmit 1.5 W Carrier) | 300 µA (power off) 70 mA (battery saver on, saver ratio 50%) 90 mA (squellch on) 300 mA (receive) 0.9 A (transmit 1.5 W Carrier) |
| Temperature Range | +14 °F to +140 °F (-10 °C to +60 °C) | +14 °F to +140 °F (-10 °C to +60 °C) | | +14 °F to +140 °F (-10 °C to +60 °C) | +14 °F to +140 °F (-10 °C to +60 °C) |
| Antenna Connector | BNC Type | BNC Type | | BNC Type | BNC Type |
| Case Size (WxHxD) | 2.4" x 5.2" x 1.3" (62 x 133 x 34 mm) with SBR-12LI | 2.4" x 5.2" x 1.3" (62 x 133 x 34 mm) with SBR-12LI | | 2.4" x 5.2" x 1.3" (62 x 133 x 34 mm) with SBR-12LI | 2.1" x 4.1" x 1.2" (52 x 105 x 30 mm) with SBR-25LI |
| Weight (approx.) | 14.5 oz (410 g) with SBR-12LI, antenna and belt clip | 14.5 oz (410 g) with SBR-12LI, antenna and belt clip | | 14.5 oz (410 g) with SBR-12LI, antenna and belt clip | 10.6 oz (300 g) with SBR-25LI, antenna and belt clip |
| Receiver | | | | | |
| Circuit Type | Double-conversion superheterodyne | Double-conversion superheterodyne | | Double-conversion superheterodyne | Double-conversion superheterodyne |
| IFs | 47.25 MHz & 450 kHz | 47.25 MHz & 450 kHz | | 47.25 MHz & 450 kHz | 47.25 MHz & 450 kHz |
| Sensitivity | Better than 0.8 µV (for 6 dB S/N with 1 kHz, 30% modulation) | Better than 0.8 µV (for 6 dB S/N with 1 kHz, 30% modulation) | | Better than 0.8 µV (for 6 dB S/N with 1 kHz, 30% modulation) | Better than 0.8 µV (for 6 dB S/N with 1 kHz, 30% modulation) |
| Selectivity | Better than 8 kHz/-6 dB | Better than 8 kHz/-6 dB | | Better than 8 kHz/-6 dB | Better than 8 kHz/-6 dB |
| Adjacent CH. Selectivity | Less than 25 kHz/-60 dB | Less than 25 kHz/-60 dB | | Less than 25 kHz/-60 dB | Less than 25 kHz/-60 dB |
| AF Output (Internal speaker) | 0.8 W @ 16 Ohms, 10% THD | 0.8 W @ 16 Ohms, 10% THD | | 0.8 W @ 16 Ohms, 10% THD | 0.7 W @ 16 Ohms, 10% THD |
| Transmitter | | | | | |
| Power Output | 5.0 W (PEP), 1.5 W (Carrier Power) | 5.0 W (PEP), 1.5 W (Carrier Power) | | 5.0 W (PEP), 1.5 W (Carrier Power) | 5.0 W (PEP), 1.5 W (Carrier Power) |
| Frequency Stability | Better than ±1 ppm (+14 °F to +140 °F [-10 °C to +60 °C]) | Better than ±1 ppm (+14 °F to +140 °F [-10 °C to +60 °C]) | | Better than ±1 ppm (+14 °F to +140 °F [-10 °C to +60 °C]) | Better than ±1 ppm (+14 °F to +140 °F [-10 °C to +60 °C]) |
| Modulation System | Low Level Amplitude Modulation | Low Level Amplitude Modulation | | Low Level Amplitude Modulation | Low Level Amplitude Modulation |
| Spurious Emission | > 70 dB below carrier | > 70 dB below carrier | | > 70 dB below carrier | > 70 dB below carrier |
| Int. Microphone Type | Condenser | Condenser | | Condenser | Condenser |
| Ext Mic. Impedance | 150 Ohms | 150 Ohms | | 150 Ohms | 150 Ohms |

GPS Unit(FTA-750L)

| | |
|--------------------------|--------------------------------------------------------------------|
| Receiver Channels | 66 Channels |
| Sensitivity | Less than -147 dBm |
| Time to First Fix | 1 minute typical (@ Cold Start) 5 seconds typical (@ Hot Start) |
| Geodetic Datum | WGS84 |

















Applicable MIL-STD (FTA-250L)

| Standard: MIL-STD-810F | | | |
|------------------------|---------------------|--------------|---------------------|
| MIL Standard | Method / Procedures | MIL Standard | Method / Procedures |
| Low Pressure | 500.4 / I, II | Humidity | 507.4 |
| High Temperature | 501.4 / I, II | Salt Fog | 509.4 |
| Low Temperature | 502.4 / I, II | Dust Blowing | 510.4 / I |
| Temperature Shock | 503.4 / I | Vibration | 514.5 / I |
| Solar Radiation | 505.4 / I | Shock | 516.5 / I, IV |
| Rain Blowing/Drip | 506.4 / I, III | - | - |

Specifications are subject to change without notice or obligation.

About this brochure: We have made this brochure as comprehensive and factual as possible. We reserve the right, however, to make changes at any time in equipment, optional accessories, specifications, model numbers, and availability. Precise frequency range may be different in some countries. Some accessories shown herein may not be available in some countries. Some information may have been updated since the time of printing; please check with your Authorized YAESU Dealer for complete details.

ACCESSORIES & OPTIONS

| |  |  |  |  |  |  |  |  |  |  |
|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| FTA-750L | ● | ● | ● | ● | | | ● | ● | | |
| FTA-550/L | ● | ● | ● | ● | | | ● | ● | | |
| FTA-450L | ● | ● | ● | ● | | | ● | ● | | |
| FTA-250L | ● | | ● | | ● | ● | | | ● | ● |
| |  |  |  |  |  |  |  |  |  |  |
| FTA-750L | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| FTA-550/L | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| FTA-450L | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| FTA-250L | ● | | ● | | ● | ● | ● | ● | | ● |

*1 Requires SSM-10A *2 "B" for 120 VAC/"C" for 220-240 VAC/"U" for 220-240 VAC w/BF plug

YAESU

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