

# IMARK

## PRODUCT DESCRIPTION

### KYODO KG208 MOBILE TRANSCEIVER

Rugged 200 Channel 25 Watt Wide Bandwidth

Imark Stock # [91xxxx](#)

#### Features:

- One or two frequency simplex operation
- 12.5KHz and 25/30KHz Channel spacing
- Wide 22 - 35 MHz non-tuning bandwidth
- Field programmable with an IBM-PC™ or compatible computer
- Up to 200 channels or up to 100 channels with 8 digit channel labelling feature
- "Kill Mode" to disable the radio and prevent unauthorised use
- Emergency mode
- Key Lock facility
- CTCSS or DCS on a per channel basis
- Internal Voice Encryption unit
- 5 tone Selcall encoder/decoder with Automatic Number Identification (ANI) facility and DTMF Encoder/Decoder
- Transmit High or Low power settings on a per channel basis
- Transmit Time Limiter to prevent channel jamming
- Receive Time Limiter to conserve battery should the radio be left "ON"
- Several Scanning modes
- Large 8 digit alpha-numeric LCD display with backlight
- Self Diagnostics display on LCD in event of fault status.



#### DESCRIPTION:

The **Kyodo KG208** series of mobile transceivers are compact ruggedly constructed state of the art mobile transceivers. They feature an electronically tuned front end and therefore have a wide switching bandwidth of 22 MHz on VHF mid band, 26 MHz on VHF Hi band and 35MHz on UHF bands. Models can be supplied for all commercial and military FM frequency bands from 35 MHz to 520 MHz.

The **KG208** mobile transceiver is supplied with a 16 Key DTMF keypad that supports both DTMF encoding & decoding as well as 5 tone Selective Calling encoding & decoding. The **KG208** includes features such as ANI, Memory calling, Emergency calling, Transmit Time Limiter, Power Down Timer, Voice Encryption, Calling Party Number Display, Personal ID Number, and other security features all as standard equipment. Thus purchasers of the Kyodo **KG208** portable are purchasing a Japanese made product with "state of the art technology" which will have a longer useful service life before the product becomes overtaken by technological advances.

The RF Power Output is up to 25 Watts with two different power settings being available on a per channel basis. CTCSS is included and supports all EIA tones. Different encode and decode tones can be set on a per channel basis during radio programming. Various Scanning and Priority Scanning functions are also supported by the standard software.

The **KG208** features a rugged die-cast aluminium chassis & control head, with metal covers top and bottom. The detachable control head is "O" ring sealed to resist the ingress of dust and moisture. The control head can also be remotely mounted up to 5 metres from the radio part with the optional remote mounting kit. Internally, the **KG208** is constructed using Surface Mounting Technology components. Surface Mounted components are used throughout as their mass is much less than normal leaded components thus enhancing reliability and longevity. Additionally, the absence of troublesome leaded components and wires further enhance the reliability of the transceiver.

The **KG208** is fitted with a large LCD that can display up to 8 alphanumeric characters. All user interface keys and knobs are conveniently located on the front of the radio. All user entered functions are easily activated in a logical manner via the keypad.

The **KG208** is supplied with an antenna fly-lead with "N" Type connector to allow easy connection of the antenna feeder cable in congested vehicle installations.

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<b>SPECIFICATIONS:</b>	
<b>GENERAL</b>	
Frequency Range	All FM bands from 35 to 520 MHz
Channels	Up to 200, 500 available on special order
Channel Spacing	12.5kHz, 20kHz, 25kHz, & 30kHz on a per channel basis
Mode of Operation	Single or Two Frequency Press-To-Talk System
Antenna Impedance	50 ohms unbalanced
Power Supply	13.6 Volts DC (Nominal 12 Volts DC)
Current Requirements	
High Power: 25 Watts	6 Amps
Low Power: 1 Watt	1.5 Amps
Receive	450mA (50% Volume)
Standby	350mA
Environmental Conditions	Ambient Temperature: -30°C to +60°C Relative Humidity: 95% at +35°C
Dimensions (excluding protrusions)	166 (W) mm x 50 (H) mm x 195 (D) mm
Unit Weight	1.7 Kg's
Shipping Dimensions	235 (W) mm x 150 (H) mm x 290 (D) mm
Shipping Weight	2.65 Kg's
<b>TRANSMITTER</b>	
RF Power Output	1 to 25 Watts (2 levels) programmable on a per channel basis
Maximum Frequency Deviation	±5 KHz, ±4 KHz, ±2.5 KHz (depending on channel spacing)
Frequency Stability	±0.0005% (Wide Band Models), ±0.00025% (Narrow Band Models)
Frequency Response	Within +1dB, -3dB of 6db/Octave Pre-Emphasis from 0.3 to 3kHz, 1kHz Reference
Signal to Noise Ratio	More than 45dB at 1kHz 70% Modulation (Narrow Band Channels) More than 50dB at 1kHz 70% Modulation (Wide Band Channels)
Modulation Distortion	Less than 3% at 1 KHz 70% Modulation
Spurious and Harmonics	More than 70dB below rated power
<b>RECEIVER</b>	
Intermediate Frequencies	1 <sup>st</sup> IF: 48.5 MHz, 2 <sup>nd</sup> IF: 455 KHz
Frequency Stability	±0.0005% (Wide Band Models), ±0.00025% (Narrow Band Models)
Sensitivity	Better than 0.4µV for 20dB SINAD Better than 0.25µV for 12dB SINAD
Squelch Sensitivity	Less than 0.25µV
Bandwidth	More than 12 KHz for 6dB down (Wide Band Channels) More than 6 KHz for 6dB down (Narrow Band Channels)
Selectivity	Better than 70dB at 25KHz point
Blocking	Better than 90dB
Intermodulation	Better than 70dB
Spurious Response	Better than 70dB
AF Response	Within +1, -3 dB of 6dB/Octave de-emphasis from 0.3 to 3.0 KHz, 1 KHz Reference
AF Output	2W into 4 ohms (Internal speaker), 4W @ 4 ohms (external speaker)
AF Distortion	Less than 5% at 1KHz 70% modulation
Signal to Distortion	More than 44dB at 1kHz 70% Modulation 12.5kHz Channel Spacing More than 50dB at 1kHz 70% Modulation 25kHz Channel Spacing
Approvals	AS4295
Options	