

MAGIC X MODULE - 60 X 40 MM

APPLICATIONS

- Internet radios
- SmartRadios
- Wireless speakers
- Portable radio
- Clock radio

OVERVIEW

The Magic X FS2260 module is a complete hardware and software solution for wireless radio and speaker applications, for example, SmartRadio, Bluetooth, DAB/DAB+ and FM-RDS products. It provides a simple and low-cost solution for high-quality audio streaming. Frontier Smart Technologies provides modules pre-installed with software which can be configured to customer requirements.

Frontier Smart Technologies provides the Magic X reference platform, which can be used to evaluate and assist development of a Magic X based system.

CONNECTIVITY AND SPECIFICATION

- 802.11b/g/n – WEP/WPA/WPA2/WPA3 security
- Bluetooth v5.3
- USB 2.0 High Speed device/host
- On-module audio DAC
- Analogue audio L/R
- SPI TFT interface
- I2C interface
- UART interface
- IO for keyboard and rotary encoder
- Infrared remote control
- 1 x Onboard PIFA antenna, supporting 2.4 GHz band (Bluetooth).
- Connector for external Wi-Fi antenna
- Single 5V power supply
- RoHS compliant
- Temperature range:
 - operation 0 to +70°C
 - storage -45 to +85°



MAGIC X NOW PLAYING DISPLAY



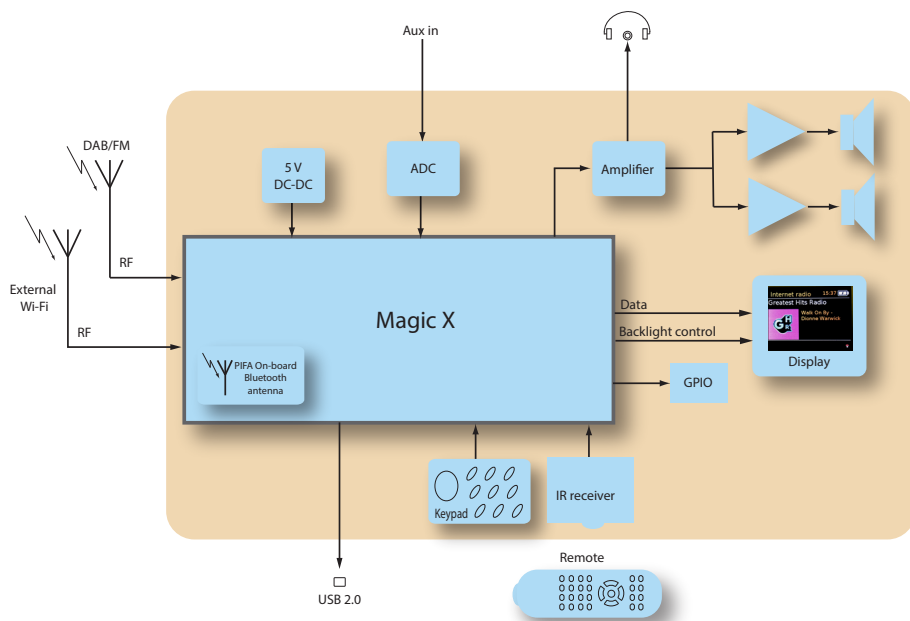
MAGIC X STANDBY CLOCK DISPLAY

SOFTWARE FEATURES

- Full master operation – no external MCU required
- Internet Radio service (provided by third party)
- Podcast service (provided by third party)
- Bluetooth 5.3 streaming
 - AVRCP 1.5 support
 - Metadata and status information display
- DAB+ radio
 - DAB (MPEG1), DAB+ (AAC) decoding,
 - Slideshow support and DAB alarm consistent with latest ETSI standard
- FM radio
 - Includes RDS
- USB playback
 - Supports MP3 and AAC file decode
- Clock with auto update
- Dual alarm
- Software upgradable over the air or USB
- Audio post-processor on-module EQ
- AirMusic smart app control (iOS and Android)

MAGIC X FS2260

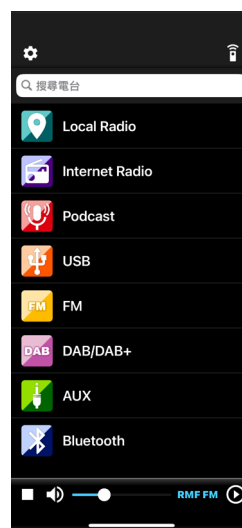
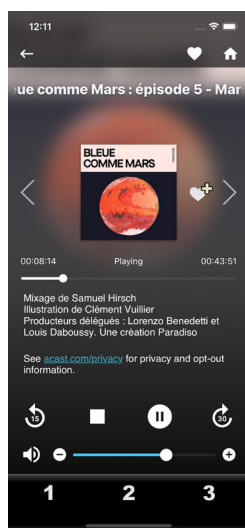
Wi-Fi/DAB+/FM/Bluetooth Connected Audio Module



TYPICAL MAGIC X APPLICATION

SECURITY

- Internet Radio / Podcast requests are encrypted using TLS1.2
- Over-the-air (OTA) upgrades hosted by encrypted servers in the UK. Firmware update process is encrypted using SSL
- Magic X SDK operates without needing a user to enter any personal information
- No personal data is captured or transmitted. No private security encryption keys are stored



SAMPLE SCREENS FROM THE AIRMUSIC CONTROL APP

STANDARDS AND CERTIFICATION

Magic X, and MX SDK have been designed to operate seamlessly with the broadcast and network ecosystems. The Magic X module is tested to comply with the Radio Equipment Directive (RED) to allow end-products based on this platform to obtain certification for industry standards. For more information, contact Frontier Smart Technologies.

