



### AstroPlay - What is it?

AstroPlay! is a Digital TV stream broadcast environment, including video, audio and data streaming, which adheres 100% to the Brazilian standard.

With AstroPlay! it is possible to broadcast videos in high definition integrated with applications in LUA, NCL, JAVA and JAVA+NCL languages, according to the needs of broadcasters, manufacturers and developers, in test or professional environments.

AstroPlay! has a flexible architecture that can easily adapt to your company's Digital TV environment. The product is focused on the generation of interactivity through the creation of scenarios where applications are broadcast and controlled by AstroPlay! and configured according to the television content to which they are related.

Thus, applications can be programmed to answer to events sent by AstroPlay! while they are being broadcast. This enables several scenarios to be explored, such as solutions that require synchronization between audio, video and data.

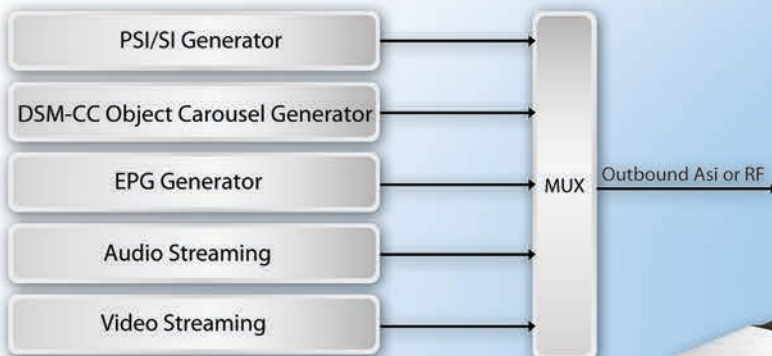
### Configuration and Hardware Profiles

AstroPlay! is available in two versions: Studio and Portable.\*

### AstroPlay! Portable

Directed at broadcasters and receiver manufacturers and Digital TV developers, this product generates a complete stream, with interactivity, audio, video and EPG support, making AstroPlay! Portable the ideal environment for tests and demonstrations.

This equipment is recommended for field tests, and can be easily transported to any location.



AstroPlay! Portable Diagram  
AstroPlay! Portable Diagram



AstroPlay! Portable ▶

## AstroPlay! Studio

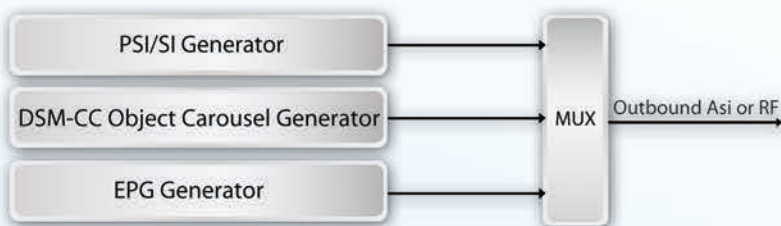
Directed towards broadcasters, this product is connected to an existing Digital TV production environment, commanded by an automation process, generating the transport stream with all the interactivity data.

AstroPlay! Studio is made up of transmission flow generators, where the interactive applications, flow events and appropriate interactivity tables are generated.

The equipment is available in rack format, ready for the production environment.



AstroPlay! Studio ▲



AstroPlay! Studio Diagram

### AstroPlay! Differentials

- ✓ It was developed to adapt itself to the needs of each client.
- ✓ It has several data generation components for Digital TV, and can be configured to meet your company's needs.

### StickerCenter Integration

Stickers are applications that you can download, install and use on your TV, just like you do on a computer. Each Sticker that you download turns into an icon on the screen and you can arrange them any way you want!

Sticker can be downloaded through the Internet and can be sent by the broadcasters. AstroPlay offers an integration with StickerCenter, providing the following functionalities to Broadcaster Stickers:

- ✓ Management and transmission
- ✓ Transmission Schedule
- ✓ Life-cycle control
- ✓ Automatic Download of updated versions



### Overall Features

- Audio, video and interactivity server;
- Transport stream (TS) repository;
- Version-oriented application repository;
- Upload support management interface;
- PSI/SI Server, Electronic Program Guide (EPG) ;
- PAT, PMT, AIT, EIT, SDT, TDT, TOT, BIT and NIT table generator.

### Multiplexer

- Recording support on outbound TS file;
- Broadcast scheduler;
- Supports broadcasts from a TS base, where a new content can be added – or substitute the existing one – to generate a new TS;
- Dynamic and static configuration of audio, video, PCR and application PIDs, respecting the Brazilian Digital TV standard;
- Broadcasting rate.

### Interfaces

- Outbound streaming via ASI and RF;
- Web Interface for direct access to AstroPlay! functions;
- BTS generator.

### Interactivity

- Generation for DSM-CC object carousel for Ginga standard applications;
- Generation of DSM-CC stream events for Ginga standard applications and support interfaces for all types of commands;
- Real-time insertion of new application versions;
- Real-time insertion of stream events;
- Stream events management for transmission according to the program;
- Application life-cycle control.