

On Air Digital & Analog Audio

D612 Console

8 channels with option AoIP



*Enter to the world of
AoIP connectivity.
High tech at a price
that your radio
can afford.*

*A new
landmark in
high quality
FM radio*



*You can install in half an hour
a complete study because the
D612 has everything you need,
including telephone hybrids
Its low silhouette type control
surface avoids the need to cut
the table.*



*Managing four microphone, a
PC, two balanced lines and two
telephone hybrids, the D612 can
work on studies that otherwise
would need consoles of high price.*

D612 Console

4 MIC inputs, 2 stereo line, 1 digital stereo USB, 1 Dual Hybrid = 8 channels



The Ethernet input of the **D612/AoIP** model connects directly to the LAN like a PC.



Advantages of working with Bluetooth

The console is the first at the international market to offer the remarkable possibility of having cellphone Hybrids with Bluetooth link.

This provides significant operational advantages for journalism because it is possible to connect the console in seconds with the journalist private cellphone. This allows doing an interview with people whose telephone numbers are confidential, and the journalist of course do not want to reveal.

We can imagine a lawyer who contacts your client or a Star Representative that wished to make an interview to one of his show business stars . Or multiple situations where we can obtain an exclusive communication.

A revolutionary product that only a highly innovative company as **Solidyne** can offer at a price so low.

Handles 4 microphones, one line input USB digital, 2 balanced line inputs and 2 telephone hybrids, one line and one cellphone, that can operate in conference.

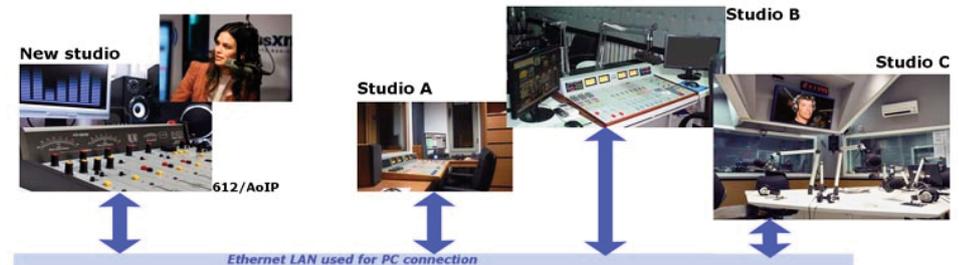
It has **2 analog stereo outputs (PGM and REC)** and a **USB digital output**. A complete monitoring system with separate outputs for speakers and

headphones of Study and Control, that includes logic output muting and tally lighth. The D612 connects a wireless cellphone with **Bluetooth** link. Any cellphone is connected in seconds and can be used up to ten meters.

The microphones have excellent **4-band equalizer** designed for the human voice. The announcers of the radio will have a new shine that will distinguish your radio from competition. Besides offering audio compression to get the same levels in all voices.

Connection between studios in model D612/AoIP

AoIP connection between studios using Ethernet LAN



Features advanced internal phone hybrids

The communication with the audience is now the essence of modern radio. The D 612 can handle calls from audience and talk privately with the caller.

Handles telephone and cellular communications and can perform simultaneous conferences. Also can do long distance calls, by Internet using Skype. No other console on the market offers these features!

D612 lets you using a telephone set next to the console. But if you do not use it, is also possible to answer incoming calls by pressing a button at console

The cellphone is connected by Bluetooth wirelessly. This achieves higher sound quality. The Bluetooth connection avoids cables and allows that the cellphone will be located several meters away from the console in a place that has better signal reception. **Any cellphone is connected in seconds to the D612!**



Technical features

Simple and quick installation

- **8 channels**, with 5 faders with connectors (used to change it without soldering).
- **12 stereo inputs;**
4 balanced MIC,
2 LIN balanced (DIN 5),
3 LIN unbalanced (RCA),
1 digital input USB,
2 Hybrid telephone (RJ11 & Bluetooth),
1 Monitor Air (Jack 6.35 mm).
- **4 outputs stereo;**
a) Digital: A digital stereo USB output, selectable PGM or REC
b) Analog: Program (PGM) balanced & Recordings (REC) unbalanced External Hybrid (In / Out).
- **5 Monitor Stereo Outputs, with muting logic;** Speakers Studio, Studio Headphones (with Distributor Amplifier), Control Speakers, Headphones Control, CUE mono (with amplifier and internal speaker).
- **4 Band EQ Mic.**
- **Microphone Audio Compressor.**
- **Low Silhouette**, flush mounting on any table without cutting it.
- **Hybrid with Bluetooth wireless cellphone.**
- **Professional Attenuators** 100mm Conductive Ceramic 15-year life.
- **Option AoIP** to transmit digital audio over Ethernet / Internet.
- **External switching power supply:** 90-240 V // 50 / 60 Hz Output: 28 V 0,55 A.



The optional cable assembly allows you to install in half an hour the full Radio Study.
The **optional Studio Box** can handle 5 handsets with individual, Timer / Clock and reverse Talkback.
The D612 due to its low profile do not require cutting your desk.

Unlike other consoles, the D612 uses **ETM-VCA**: indirect control on all audio channels. The faders do not handle audio; It only control a DC current which in turn commands a variable gain stereo amplifier. The use of conductive ceramic faders, along with this technology, allow their attenuators will last more than 15 years of use.



ETM-VCA The Conductive Ceramic technology of our faders lasts more than 15 years.



A **Master MIC** button triggers 4 mics at the same time.

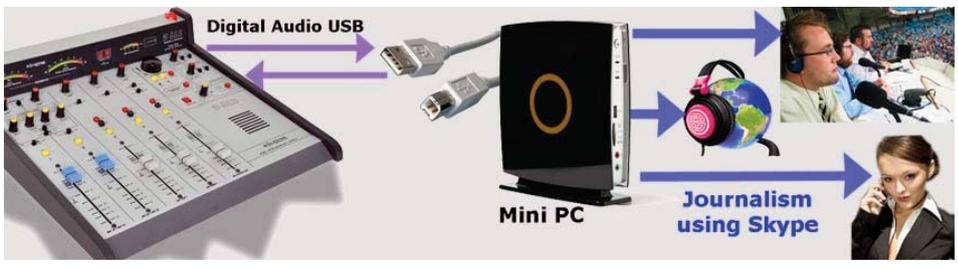
The D612 handles four dynamic microphones or two condenser 48V phantom.



When microphones are active a red light is switched on. External tally lights can be used at the same time.



Digital USB in/out. Eliminates expensive professional audio cards.



The D 612 connects to any PC that uses automation software or Skype to communicate anywhere in the world. You can make journalism with digital quality sound. Eliminating audio cards allows you to use the modern and small Mini- PC.

Rear panel



Technical Specifications

A new landmark in high quality FM radio

D612 Consola digital & analógica

AUDIO INPUTS

4 balanced MIC inputs (XLR)
2 balanced stereo Line inputs (DIN 5)
3 unbalanced stereo Line inputs (RCA)
1 Digital stereo Line input (USB)

INPUTS LEVEL & IMPEDANCE

Balanced MIC = -10 dBu / -75 dBu; 150 / 250 Ohms
Balanced LINE = -20 dBu / +26 dBu; 600~ 10Kohms
Unbalanced LINE = -15 dBu / +12 dBu; 600~ 10Kohms

PHANTOM POWER

Two MIC inputs have 48V phantom power supply, switchable ON / OFF

ANALOG OUTPUTS

2 bus stereo outputs; PGM (6,35mm, TRS plug) & REC (RCA connector)
Both at +4 dBm = 0 VU
PGM balanced: Max Level +26dBu (10K), +20dBm (600 ohms)
REC unbalanced, Max level 20 dBu
External Hybrid: unbalanced Mic-Minus out at +4 dBu

DIGITAL USB INPUT / OUTPUT

USB digital In/Out; Input to channel 5; Output to PGM or REC
It uses the K15 Overload recommendation for broadcasting;
Then, 0 VU is at -15 dB Full Scale level

ON-AIR SIGNAL

ON-AIR Tally Light output (turns on when MIC is open)
12 V CC @ 0,12 amp (two Solidyne On-Air lights)

MONITOR & HYBRID OUTPUTS

1 Stereo Studio, 0 dBu for active speakers, muted
1 Stereo Control, 0 dBu for active speakers, muted
1 Stereo Studio Headphones, with Distribution AMP
up to 5 headphones, +10 dBu
1 Stereo Control Headphones, +10 dBu
1 External Hybrid send (MIX-Minus) +4 dBu / 10K

CUE MONITOR

Internal CUE Monitor Amplifier; 250 mW, with speaker included

HEADROOM

22 dB @ LIN to PGM Ref + 4dBu/10 k

FREQUENCY RESPONSE

20-20.000 Hz +/- 0,25 dB (LIN to PGM)
20-20.000 Hz +/- 0,5 dB (MIC to PGM)

MIC EQUALIZER

Four Bands MIC EQ with In/Out switch; 80 Hz top flat curve, 160 Hz bell shaped,
4 kHz bell shaped, 8 kHz top flat curve
Action + 15 dB / -15 dB

MIC COMPRESSOR

Low distortion MIC compressor with In/Out switch. 20 dB max compression. Attack time < 10 ms. Threshold = 0 VU
Compression ratio: < 2 dB variation for 15 dB change MIC level

NOISE

MIC input, EIN = -120 dBu / 150 ohms
LINE input, S/N > 75 dBA

DYNAMIC RANGE

From Line to PGM > 90 dBA (CD quality)

CROSSTALK

PGM-REC > 65 dBA @ 1 kHz

DISTORTION

From LINE to PGM out < 0.03 % THD @30-15.000 Hz.

PHASE

From Line to PGM, < 3° L&R @50-10.000 Hz

STEREO TRACKING

Below 0.2 dB error L/R in fader range 0 to 40 dB

TELEPHONE HYBRID SPECS

Two channel telephone active Hybrid:
One phone line plus one cellular (Bluetooth linked)
Frequency Response: 200 - 5.000 Hz
Noise: > 60 dBA S/N
Rejection: > 35 dB rejection
NULL adjust in front panel preset
Preference attenuator: 12 dB local announcer interrupt priority

TELEPHONE INPUT LIGHTNING DISCHARGE SAFETY

Telephone Hybrid input is transformer floating to meet the Public Telephone Service isolation standards. It is protected with SIOV Varistors against soft lightning discharges.
External gas discharge protection is recommended

TALKBACK MICROPHONE

Included Talkback MIC, with Audio Limiter. Noise Cancelled PZM type.
Outputs to Phone Line Hybrid or Studio Speakers & Headphones.

VU-METERS & COMPRESSION LEVEL

2 x LED VUmeters for PGM. Cuasi peak reading
Microphone compressor level meter 0 - 15 dB

AoIP OPTIONAL TCP / IP DIGITAL STREAMING OUTPUT

Ethernet RJ45 connection to a standard LAN (Option /AoIP)
Used for sending D612 output to transmitter plant with MP3 Internet streaming or using a 5,8 GHz 802. Link
Also can be used for AoIP connection with another console located inside or outside studios
It can work in linear PCM at 44.1 & 48 kHz or MP3 VBR
On-Air information using GPIO for remote processors

AoIP Delay and user modes

- MP3 Layer 1 (32, 44.1 and 48 kHz)
- MP3 Layer 2 (16, 22.05 and 24 kHz)
- 16bit PCM uncompressed (8, 16, 32, 44.1 & 48 kHz)
Full duplex (transmitting and receiving)

Delay using PCM at 48 kHz Fs (recommended) Less than 5 mS
Delay using MP3 streaming. Average 100 mS

POWER

Switching external power supply 90-240 V, 20VA [28V@0,57A]

DIMENSIONS & WEIGHT

Wide: 405 mm; Deep: 385 mm; Height: 95 mm at rear turret
Net Weight: 4,7 Kg