



## DH20 Digital Telephone Hybrid

Are you looking for the very best, most affordable digital telephone hybrid available? You just found it. The DH20 Digital Hybrid incorporates the latest in DSP technology to provide you with the best sound and easiest installation.

The DH20 is a high quality single line telephone interface that interconnects a standard telephone line and your audio equipment, allowing you the ability to send audio to and receive audio from a connected telephone line. The DH20 is ideal when the very best audio quality is required for talk shows, news feeds, production, recording studios, and internet applications.

Our newest DSP technology delivers better and more reliable sound quality. The DH20 delivers the deepest and most stable hybrid null, ensuring maximum isolation between the send and caller audio. That means no echo and no "bottom of the barrel" sound.

In addition, we've added selectable automatic gain control (AGC) and caller ducking. With AGC, each call will be delivered to your equipment at the same level. Caller ducking reduces the caller's audio level when the announcer speaks, providing a more "controlled" environment. We've also added a speaker amplifier so you can connect a speaker directly to the unit and monitor callers without headphones.

Installing hybrids used to be a hassle. If your console didn't have a mix-minus bus, it was difficult to create one. The DH20 solves this problem with internal mix-minus. Simply take the mix output of your console and feed it to the DH20.



**The DH20 is a high quality single line telephone interface that features selectable AGC.**

### Features and Benefits

- The world's best, most affordable digital hybrid
- DSP digital technology ensures the very best audio quality and the deepest, most reliable hybrid null
- Easy to install, simple to operate
- Built-in speaker amplifier
- Balanced audio in and out
- Mic or line input
- Selectable AGC ensures every caller is at the same audio level
- Selectable caller ducking
- Selectable auto-answer/auto-disconnect compatible with most telephone central offices including loop current interruption and busy/reorder tones
- Remote control and status
- Automatically accepts all worldwide voltages
- Worldwide compliant, including FCC, CSA, CE and CTR21
- Dry line capability



## Specifications

### Dimensions (LxDxH)

17.125" x 10.125" x 1.75"  
43.6 x 25.7 x 4.44 cm

### Weight

6.35 lb/2.88 kg (dry)  
10.95 lb/4.97 kg (shipping)

### Operating Temperature

32–100°F/0–38°C

### Humidity

0–80 percent

### Controls

On/Off Buttons  
Volume Up/Down Buttons

### Status LEDs

On Status, Off Status  
Send Audio Presence  
Caller Audio Presence

### Adjustments

Send Input Level  
Caller Output Level  
Auxiliary Input Level  
Auxiliary Output Level  
Burst Adapt Select  
Mic/Line Select  
Caller Boost Select  
Momentary/Latching Select  
Auto Answer/Disconnect Select  
Caller Control Select (0, 6, 12, or 18dB)  
AGC Select  
Auto Mix-Minus Select  
Aux Mix Select

### Power: IEC Type

Auto Adjusting 100–240VAC, 2A,  
50/60Hz, 30W

### Remote: DB25 Female

Remote Send Input:  
0dBu nominal, adjustable,  
unbalanced, 20k $\Omega$  impedance

### Remote Caller and Aux Output:

0dBu nominal, adjustable  
unbalanced, 50 $\Omega$  impedance

Control Inputs: Remotely activate any  
of the following functions with a  
switch closure to ground: On, Off,  
and Monitor Mute

Status Outputs: Remotely check the  
status of the hybrid using the On  
and Off status outputs. Status out-  
puts are open collector outputs  
rated at 30VDC and 40mA  
maximum

### Monitor Output: 1/4" stereo jack

Tip= +phase, Ring=ground,  
Sleeve=ground, 1W output into an  
8 $\Omega$  load

### Send Input: XLR female

Mic/Line selectable, -55/0dBu nominal,  
adjustable, balanced, bridging,  
20k $\Omega$  impedance

### Caller Output: XLR male

0dBu nominal, adjustable, balanced,  
50 $\Omega$  impedance

### Aux Output: XLR male

0dBu nominal, adjustable, balanced,  
50 $\Omega$  impedance

### Telco Line: RJ11 connector

POTS (plain old telephone service) line or  
analog extension from a PBX or dry line  
(no DC offset voltage). A-Lead  
supervision provided

### Telco Set: RJ11 connector

A-Lead supervision provided

### Telephone Transmit

Nominal send input of 0dBu referenced  
to -15dBu onto the telephone line.  
Frequency Response: 250Hz to 3.5kHz,  
 $\pm$ 1dB

Signal to noise ratio: >56dB

Distortion: <0.2%

### Telephone Receive

Nominal telephone line level of -15dBu  
referenced to caller output of 0dBu  
Frequency Response: 250Hz to 3.5kHz,  
 $\pm$ 1dB

Signal to noise ratio: >56dB

Distortion: <0.2%

### Null

Send-to-Caller separation: 55dB nominal  
Tail time: 32 milliseconds

### Mix-Minus

Caller-to-Send separation: 50dB nominal  
Tail time: 32 milliseconds

## Typical DH20 installation

