
BE RDi 20 RDS Encoder SETUP

2007/11

DESCRIPTION

Serial – RS-232/V.24
Ethernet – UDP/IP

The BE RDi 20 RDS Encoder must be configured properly before use with PADbridge. Proper initialization will insure connectivity and that after a power cycle, the RDS Encoder will not broadcast incorrect embarrassing data.

PADbridge may send data to the BE RDi 20 either through a Serial or Ethernet connection. All configuration and initialization is performed through the front panel Console Serial port, for either Serial or Ethernet connections.

Serial Configuration

Modem Cable – DTE-DCE Straight-Thru – Male to Female DB-9
Console COM – (Front Panel) - DO NOT USE any other COM port for Configuration.
115200-N-8-1 – No Flow Control

A terminal program such as HyperTerminal or PuTTY can be used.
For Serial operation using MPX IN (Rear Panel), both the Initialization and Serial sections must be completed. (Only BE would label a Serial Port: MPX. This is absurd! MPX normally refers to FM composite baseband signals.)

Initialize through Serial connection:

1. Using a computer, configure a terminal application configured for 115200-N-8-1 to the Serial port.
2. Connect a Modem Serial cable from the computer Serial port to BE RDi 20 front panel Console.
3. Initialize as described in Initialization section.
4. Configure Serial MPX as described in Serial Configuration section.

Ethernet Configuration

Modem Cable – DTE-DCE Straight-Thru – Male to Female DB-9
Console COM – (Front Panel) - DO NOT USE any other COM port for Configuration.
115200-N-8-1 – No Flow Control

A terminal program such as HyperTerminal or PuTTY can be used.
For Ethernet connectivity, both the Initialization and IP Configuration sections must be completed.

Initialize and Configure IP through Serial connection:

1. Using a computer, configure a terminal application configured for 115200-N-8-1 to the Serial port.
2. Connect a Modem Serial cable from the computer Serial port to BE RDi 20 front panel Console.
3. Initialize as described in Initialization section.
4. Configure IP as described in IP Configuration section.

Initialization

XENA=1↓	Enable Data Output
XEBP=0↓	Disable Output Bypass (Enable RDS Output)
XPTY=n↓	Default Program Type – See PTY Table – DO NOT USE 30/31!!
XPSS=xxxxxxxx↓	Default Program Source
XPSD=↓	Clear Dynamic Program Source
XTXT=<0...64max>↓	Default Radio Text Message
XFDI=x↓	Default Mono (0) / Stereo (1)
XFMS=x↓	Default Speech (0) / Music (1)
XUTC=20060101-000000↓	Time - UTC
XOFS=-480↓	Time Offset - Minutes (PST Shown)
XFBT=x↓	Broadcast Time (0) Disable / (1) Enable
XSAV↓	Save to Non-Volatile RAM
XRES↓	Reset

Serial Configuration

XMCP=- :232,9600,8,N,1↓	MPX Serial Ports Configuration
XSAV↓	Save to Non-Volatile RAM
XRES↓	Reset
After Reset - Verification	
XMCP?↓	Returns MPX Serial Ports Configuration

IP Configuration

XIPA=xxx.xxx.xxx.xxx↓	IP Address
XIPS=xxx.xxx.xxx.xxx↓	Subnet
XIPG=xxx.xxx.xxx.xxx↓	Gateway
XIPD=xxx.xxx.xxx.xxx↓	DNS (Optional)
XIPP=16550(:xxx.xxx.xxx.xxx)↓	Port (Default 16550) : IP Mask (Source IP Address) (Optional)
XSAV↓	Save to Non-Volatile RAM
XRES↓	Reset
After Reset - Verification	
XIPA?↓	Returns IP Address
XIPS?↓	Returns Subnet
XIPG?↓	Returns Gateway
XIPD?↓	Returns DNS (Optional)
XIPP?↓	Returns Port

Program Type (PTY)

PTY	Program Type – US – RBDS	Program Type – EU – RDS
0	None	None
1	News	News
2	Information	Current Affairs
3	Sports	Information
4	Talk	Sports
5	Rock	Education
6	Classic Rock	Drama
7	Adult Hit Music	Culture
8	Soft Rock Music	Science
9	Top 40 Music	Varied
10	Country Music	Pop Music
11	Oldies Music	Rock Music
12	Soft Music	Easy Listening Music
13	Nostalgia Music	Light Classics Music
14	Jazz	Serious Classics Music
15	Classical Music	Other Music
16	Rhythm and Blues Music	Weather
17	Soft R and B Music	Finance
18	Foreign Language	Children's Programs
19	Religious Music	Social Affairs
20	Religious Talk	Religion
21	Personality	Phone-In
22	Public Non-Commercial	Travel
23	College	Leisure
24	(unassigned)	Jazz Music
25	(unassigned)	Country Music
26	(unassigned)	National Music
27	(unassigned)	Oldies Music
28	(unassigned)	Folk Music
29	Weather	Documentary
30	Emergency Test	Alarm Test
31	Emergency!	Alarm!