



FEATURES

- **Unmatched baseband scrambling**
- **Low noise tuner**
- **Fully downloadable**
- **Two-way upgradable with internal modules**

The Motorola IMPULSE® 7000 (Model DPBB7300) is a 550 MHz (82-channel) baseband addressable terminal that offers the reliability, flexibility and control of the IMPULSE 7000 series.

BASEBAND SCRAMBLING

The DPBB7300 represents Motorola's fourth generation of baseband addressable terminals. The DPBB7300 descrambles Motorola's state-of-the-art, proprietary baseband scrambling schemes, including dynamic video inversion, dynamic sync suppression and subcarrier jamming audio privacy.

Baseband processing also provides volume control capability, allowing the subscriber to adjust the volume level through the remote control unit. The DPBB7300 passes BTSC stereo signals to subscribers with stereo TVs and VCRs.

LOW-NOISE FILTER

The DPBB7300 incorporates an AGC pre-amplified tuner with custom video and audio SAW filters for improved audio/video performance.

ONE- AND TWO-WAY IMPULSE MODULES

Motorola's store-and-forward technology permits instant authorization of terminals while a programmable credit limit allows operators to restrict the maximum purchases for each subscriber. Motorola's field-upgradable STARFONE® impulse modules allow one-way addressable systems to offer pushbutton subscriber ordering by using the cable system for downstream communications to subscriber homes and a telephone return path for upstream return messaging. The STARVUE® module, similarly field-upgradable, uses the same store-and-forward impulse technology. STARVUE, however, employs a cable return path for upstream communications. Both modules can handle event purchases with a 63-event limit. STARVUE is also capable of handling subscriber opinion polling.

DOWNLOADABILITY

Advanced downloading capability gives addressable computer control over each addressable terminal's parameters, key features and service authorizations. The built-in diagnostic capability provides valuable subscriber feedback on terminal functions, reducing truck rolls and offering excellent customer service via telephone diagnosis. The addressable terminal's downloadable channel assignment gives the cable operator maximum flexibility in channel allocation and downloadable channel output (2/3 or 3/4), reducing inventory requirements by encouraging exchange of terminals between systems. Up to six barker channels can be operator-programmed for such uses as marketing assistance, subscriber education, accounts receivable and parental control messaging.

SUBSCRIBER FEATURES

Popular DPBB7300 features include favorite channels, last channel recall and parental control. The terminals also feature a convenience outlet. The standalone time-controlled programming (TCP) feature allows a subscriber to videotape eight different events in one month's time or a series of single/everyday events. When used with the STARFONE or STARVUE internal modules, the terminal can even be programmed to purchase and record IPPV events while the subscriber is absent.

ADDRESSABLE SUPPORT

ACC-4000 addressable controllers can easily support all capabilities of this terminal.

GROWTH CAPABILITIES

The unit can be easily upgraded with any of the optional A/B or RF Bypass switches that Motorola offers. The RF Bypass switch allows the subscriber to bypass the terminal and tune non-scrambled programs directly with a cable-ready TV or VCR.



Specifications
Analog Set-Top Terminals Baseband Addressable Terminal[DPBB7300]

DPBB7300

MODEL	DPBB73*# (* = 1 way/2 way;# = output channel 2/3)
Input Frequency	54-550 MHz (excluding data carrier frequency)
HRC/IRC Frequency Assignments	Downloaded
Number of Channels	80 channels per cable; one or two cables (less 2 channels; one for data frequency and one for OSC.
Dual A/B Cable Switching	Optional A/B Switch (field upgradable)
A/B Cable Indicator	LED in front display
Input Video Level	0 dBmV to +15 dBmV
Input Sound Level	13 to 17 dBc
Data Carrier	FSK Modulated FM Carrier
Frequency	106.5 or 108.5 MHz
Bandwidth	±200 kHz standard
Level	-15 dBmV
Video S/N	48 dB @ 0 dBmV input level
Fine Tuning	Automatic
AFT Capture Range	±300 kHz @ input level of 0 dBmV
Output Frequency Accuracy	±150 kHz
Return Loss:	
Input	5 dB Min.
Output	8 dB Min.
Spurious:	
Output	-57 dBc Max., in band
Cross Modulation Distortion	-56 dB (82 channels, each @ +15 dBmV)
Composite Second Order Distortion	-56 dB (82 channels, each @ +15 dBmV)
Second Order Distortion	-60 dB (@ +15 dBmV input level)
Composite Triple Beat Distortion	-56 dB (82 channels, each @ +15 dBmV)
Converted Input Beats (with all Input Signals)	-25 dB (82 channels, each @ +15 dBmV)
Output Level	10 to 15 dBmV
Isolation (Input/Output)	70 dB Min.
Differential Gain	10 degrees Max.



Differential Phase	10 degrees Max.
Scrambling Method	Gated Sync Suppression or Dynamic Gated SyncSuppression, Video Inversion, Audio Privacy, Hamlin Compatibility (Unauthorized viewing is switched to barker channel)
Parental Control by Channel	100% user-controlled offering channel-by-channel selections
Mechanical Security	Std.: security screws; security pin; uni-chassis construction.
Downloadable Parameters	Output Channel Terminal Configuration Authorization Information Barker Channel(s) Consumer Feature Enable/Disable Channel Cross Reference Map
Two-way System Compatibility	Upgrade in field by addition of STARVUE® or STARFONE® internal module
Operating Temperature Range	59°F to 104°F (15°C to 40°C)
Operating Humidity Range	5% to 95% (non-condensing)
AC Voltage	105 Vac to 125 Vac, 60 Hz
Power Dissipation	16 Watts at 120 Vac
Surge Protection	Surge protection provided on power supply and RF ports
Size	10.25" x 8.25" x 2.7" (LxWxH) (260.4 mm x 209.6 mm x 68.6 mm)
Weight	5.5 lbs



DPBB7300 Handheld Remote Controls

MRC Transmission Range	Up to 25 feet in a direct line from the receiver/terminal or up to 22 feet at an angle of ± 20 degrees from receiver centerline	Power Requirements Weight Batteries	Two 1.5 V AAA batteries 3 Ounces (with battery) Included as standard
TVRC/D Transmission Range	Up to 25 feet in a direct line from the receiver/terminal or up to 22 feet at an angle of ± 20 degrees from receiver centerline	Power Requirements Weight Batteries	Two 1.5 V AAA batteries 10 Ounces (with battery) Included as standard
XRC Transmission Range	Up to 25 feet in a direct line from the receiver/terminal or up to 22 feet at an angle of ± 20 degrees from receiver centerline	Power Requirements Weight Batteries	6V 6.5 Ounces (with battery) Included as standard, Four 1.5V AAA