

Subscriber



Model 8634 PAL D1 Addressable Home Terminal with On-Screen Display



FEATURES

- Dual language on-screen display in Polish or English provides the subscriber with an easy-to-use interface.
- Pay-per-view event confirmation reduces unnecessary subscriber telephone calls to the cable operator.
- Operator-defined, on-screen channel programmer ID (PID) improves channel navigation.
- On-screen volume display allows optimal audio control.
- Eight-event, 14-day, on-screen program timer simplifies unattended recording.
- Group and individual message capabilities expand cable operators' marketing and revenue-generating opportunities.
- Multi-mode RF and baseband scrambling enhances system security.
- Motorola secure microprocessor is highly tamper resistant and enables a unique permanent digital address for each home terminal.
- 860 MHz tuning is a standard PAL D1 video-format feature.

In 1991, Scientific-Atlanta led the cable TV industry by introducing the Model 8600 Addressable Home Terminal with an integrated 256-character, on-screen display. Recognized as the highest in quality and performance, the 8600 Home Terminal family has become the cornerstone of addressable CATV markets. Today, cable operators who want to add or upgrade addressable services still deploy the 8600 and the 8634 addressable home terminal. These terminals are the solution to greater revenue opportunities.

The Model 8634 Addressable Home Terminal is easy to use for both subscribers and cable operators. Subscribers value the easy control the 8634 Addressable Home Terminal provides them for access to their cable services. Operators value the ease of system deployment, operation, and maintenance —benefits that result from a premier, quality product.

EASY FOR SUBSCRIBERS

Self-Revealing Navigation Simplifies Subscriber Interaction

When subscribers press the menu key, the 8634 addressable home terminal displays a self-revealing main menu. The arrow key enables subscribers to navigate easily through menu choices that apply only to the level of service and options to which they subscribed. Subscribers can use the remote control or the keypad on the home terminal.



Subscribers simply press the Select key to choose the option to which the on-screen arrow is pointing. For enhanced ease of use, the remote control keys are colored and grouped according to function.



Automatic Pay-Per-View Event Confirmation

The Model 8634 Addressable Home Terminal lists those pay-per-view events and movies for which subscribers are authorized, reducing unnecessary telephone calls to cable operators to confirm pay-per-view orders. When subscribers select this option, authorized events are listed by channel, event number, and event description. A description up to 24-characters long can be downloaded from the pay-per-view schedule through the billing system.

Identify Cable-Exclusive Programming With Channel Names

When subscribers change channels or press the Display key on the remote control, the home terminal indicates the channel number, the current time (in 12-hour or 24-hour format), and the program ID. This information is automatically downloaded from the headend to each home terminal even after power outages.

The program ID instantly differentiates cable-exclusive channels from broadcast channels, increasing subscribers' awareness of the range of programming services offered. Displaying the program ID also makes it easier for subscribers to navigate in cable systems with large numbers of channels.

Mute and Volume Control Display

The 8634 Addressable home terminal presents an intuitively clear graphic display of relative volume level and mute, virtually eliminating subscribers' confusion over volume settings.

"Mute" is displayed when the Mute key is pressed, reducing subscribers' unnecessary telephone calls concerning lack of volume.

OTHER FEATURES SUBSCRIBERS VALUE

- An 8-event, 14-day program timer facilitates unattended VCR recording of premium programming.
- The optional factory-integrated IPPV option provides the subscriber with easy, one-touch purchasing of pay-per-view events from either the remote control or the home terminal.
- The easy-to-use parental-control capability allows subscribers to clearly designate channels under parental control. The 5-digit access code can be changed from either the on-screen display or the System Manager Control System.
- The favorite channel control allows a list of up to 128 channels to be easily scanned, selected, and reviewed.
- The helpful sleep timer feature turns off the home terminal after the time designated by the subscriber—either 15, 30, 45, 60, 90 or 120 minutes.
- The four-digit LCD displays time of day when enabled by the subscriber.



EASY FOR OPERATORS

Welcome On-screen Barker Distinguishes Your Cable Service From Competitors

A customized welcome on-screen barker of up to 256 characters reinforces name identification of your cable service with subscribers and allows promotion of pay-per-view and other revenue-generating services. This branding message helps set your cable service apart from competitors. As your marketing strategy dictates, you can change your welcome message as often as you like.

Other On-Screen Channel Barkers

On-screen channel barkers solve the problem of dedicated video barker channels. When subscribers tune a channel for which they are not authorized, the home terminal can display an operator-defined barker message explaining, for example, how to order the channel. The barker message for a particular premium channel can be up to 256-characters long and includes the channel number and name with a color background. System operators can display different barkers for PPV, premium, unused, and parentally controlled channels.

Value Added Group and Individual Messaging

The 8634 Addressable Home Terminal messaging capabilities create flexible marketing opportunities for cable operators. Message applications include: cable system promotions, past-due reminders, public service announcements, and targeted advertising. System operators can define up to 64 different home terminal groups and send messages to all terminals within each group. Operators may also individually address messages

to one or more home terminals. When the 8634 Addressable Home Terminal receives a message, an alert is overlaid on the video to inform the subscriber "You have a message." If the home terminal is turned off, the message LED on the home terminal's front panel will flash until the subscriber retrieves the message.

Baseband Scrambling for Maximum Security

The Model 8634 Addressable Home Terminal provides optimum security. Dynamic video baseband and RF sync-suppression scrambling techniques protect premium and PPV channels from theft of service. Signal security is further enhanced through the use of inband conditional access. Provisioning transactions are transmitted as part of the program signal, making it virtually impossible to block network control transactions to the terminal.

Expanded Tuning Range

Standard 860 MHz tuning bandwidth provides operators the flexibility to offer expanded analog channels.

Complete Addressable Control

Scientific-Atlanta's proven System Manager 20 controls all Model 8634 Addressable Home Terminal functions, including:

- Premium service and PPV event authorization
- Individual channel authorizations
- Program timer
- Volume control
- IPPV purchase capability

Operator Ease and Flexibility

Downloadable frequency assignments and output channels provide continued flexibility for cable operators. The 8634 Addressable Home Terminal allows the association of any channel number with any frequency, and allows the terminal's frequency output to be assigned to UHF channel 31.

All critical home terminal data is stored in sealed, true, non-volatile memory that does not require a battery and is not affected by power outages.

Set-Top Control

Set-top control is a new feature that allows subscribers to control home terminal features and provides a status screen for easy diagnostics. Subscribers can control whether the on-screen display appears or not, and whether the power outlet is on or off.

SPECIFICATIONS

Environmental

Temperature
0°C to 40°C
Relative humidity
5% to 95%

Electrical

Electrical Input Bandwidth
55 MHz to 863 MHz
Number of Channels
101
Output Channel, Downloadable
Channel 31 (551.25 for Video, 557.75 MHz for Audio)
Channel 31-40
Video Carrier Output level
+6 to +15 dBmV
Video Depth of Modulation
85% \pm 3.5%
Video S/N
42.8
Distortion at +15 dBmV Flat Input
Composite second order -57 dB
Cross modulation (67 channels) -57 dB
Composite triple beat -57 dB
Operating Input Level
-7 dBmV to +20 dBmV
Noise Figure
10 dB
Return Loss
Input 7 dB
Output 10 dB
Spurious Response
Output -57 dBc
Output Frequency Accuracy
 \pm 100 kHz, VHF or UHF
Isolation
-57 dB
Audio Carrier Level
-14 dB below video carrier \pm 3 dB
Audio Carrier Deviation
50 kHz \pm 5 kHz nominal
Audio Distortion
THD 2.5% max
Audio Signal-to-Noise
50 dB
AC Input Voltage
220 to 230 V AC, \pm 10%
AC input Frequency
50 Hz, \pm 5 Hz
Power Consumption
15 Watts, max
Surge Protection
AC Spark gaps and transformer isolation
RF Inductor shunt to ground

Mechanical

Dimensions
265 mm x 200 mm x 65 mm
Weight
1.95 kg
Keyboard Type
11 keys (front access)
Display Type
LED 4-digit, 7-segment with decimal point
On-Screen Display
24 Characters by 10 lines w/ 128 character set
Baseband Video Output
1 Vpp into 75 ohms
Baseband Audio Output
1/2 VRMS into a 47 Kohm load

IPPV MODULE SPECIFICATIONS

RF Return (Optional)

Frequency Range
15.45 MHz to 17.75 MHz
Modulation Rate
20 kbps
Modulation Technique
BPSK
Maximum Output Power
+60 dBmV
RF Return Frequency Range
15.45 MHz to 17.75 MHz
Modulation Rate
20 kbps
Modulation Technique
BPSK
Maximum Output Power
+55 dBmV

Note:

System Release 4.6 and related components must be used with your System Manager for this product to continue to operate on and after December 31, 1999, substantially as it did prior to that date.

Unless otherwise noted, specifications are typical.

Specifications and product availability are subject to change without notice.

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